![GBN Global Benchmarking Network logo]

A GLOBAL BENCHMARKING NETWORK PUBLICATION

BENCHMARKING 2030
THE FUTURE OF BENCHMARKING

PUBLISHER'S IMPRINT

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EXECUTIVE SUMMARY

The Global Benchmarking Network (GBN) is an alliance of leading benchmarking organisations worldwide who share a common vision, mission and values. This research project aimed at predicting the future of Benchmarking until 2030 and the future role of the GBN. The study comprised desktop research, a questionnaire of benchmarking practitioners and GBN Members of more than 25 countries and international Roundtable discussions involving benchmarking experts and practitioners. The study reveals that there is a variety of global megatrends that human society reflects and will have to face. Regarding Benchmarking and the GBN, the significant outcomes of this research are:

1. Benchmarking has a strong future

- Informal benchmarking will continuously be used, enhanced by new social media and other technology. It is an important lead indicator for establishing more formal benchmarking, e.g. it can help you to find benchmarking partners for formal benchmarking
- Structured formal benchmarking needs to be given more emphasis, particularly involving face to face human interaction in order to learn and share details of best practices that can be implemented through effective and learned change management
- The GBN has a major role in making sure that more formal benchmarking to share and learn best practices is done well to maximise benefits for customers and communities

2. Benchmarking and the GBN need to take a higher ground

- Benchmarking has the opportunity to provide a network of knowledge exchange and innovation between megatrends and across countries for the benefit of progressing lifestyles as well as sustaining humankind and our environment
- Extending benchmarking to greater involvement within and between the public sector and not-for-profit sectors, while continuing participation and involvement with the private sector

- GBN needs to move towards facilitating the network of opportunity, emphasising the positive aspects (improvement incentives, speed) and the negative aspects (common megatrend issues) that will create the desire for change through benchmarking
- Benchmarking needs to "speak the language" of leaders – and trend towards the language of future leaders who are the youths of today

3. GBN needs to review and implement benchmarking values

- Contributors to this project tend to reinforce the need for the GBN to encourage the implementation of core values in benchmarking towards the greater good of mankind and the sustainability for future generations
- New values that may need to be promoted are co-operation, transparency and selflessness

4. Role of GBN needs to be reviewed

- Issues which have to be focused on are education, dissemination, promotion and mentoring in its role as a provider of global benchmarking resources; also committed leadership to provide essential co-ordination and continuity is of importance
- Assisting the government and not-for-profit sectors as much as the private sector
- Be a facilitator of benchmarking (create connections and collaboration) between countries as well as between professions and technologies for transfer of knowledge and innovations.

- Examine potential use of rapidly evolving social networking technology, combining some of the features of social networking sites that are currently used for other purposes into a virtual benchmarking network for informal benchmarking
- Examine how the integration or connectivity of benchmarking and other improvement tools and approaches such as innovation, business excellence (including GBNs interaction with business excellence peak bodies) and business clusters could be leveraged

- Emphasise the role of people in benchmarking because it is people who need to access others' knowledge and experiences in such a way that they can adapt what they find to their specific needs, culture and systems. Technology cannot manage this!
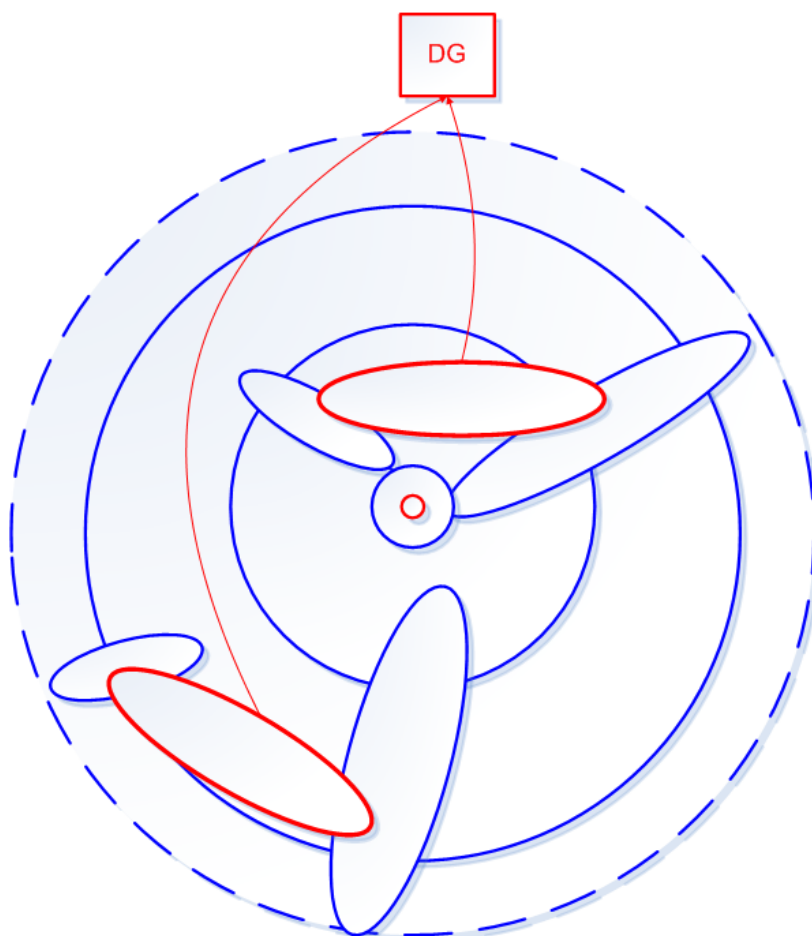

Fig. 1: **GBN Creating** Connections and Collaboration to share **Best Practices Between Countries and Professions / Technologies in Support of the GBN Vision**

(DG = GBN Doing Global Benchmarking)

Global Benchmarking Network

Key Questions concerning GBN

- How do you validate best practices?
- How do you make benchmarking information and best practices readily accessible and immediately useable?
- How do you still ensure self-innovation rather than cloning/copying by organisations?
- How do you ensure that organisations review and evaluate the benefits from benchmarking and share the findings?
- How do you use the opportunities and developments in technology to facilitate the finding of best practices and benchmarking partners while recognising that face to face networking needs to follow in order for benchmarkers to understand the necessary details of what to improve and how to implement the changes effectively to gain and sustain strategic improvements?

The Global Benchmarking Network

The Global Benchmarking Network is an alliance of leading benchmarking organisations worldwide who share a common vision, mission and values. The GBN was founded in 1994 by representatives from benchmarking organisations in Germany, Italy, Sweden, the United Kingdom and the United States. Currently the network comprises more than 25 benchmarking organisations from five continents. The GBN vision is "to be recognised as the global hub for benchmarking with active representation in all countries". The idea is that all members of the GBN continuously supply the network with their knowledge and gain the valuable opportunity of learning from each other. The GBN mission is to build a global network of organisations and experts focussed on promoting and facilitating the use of benchmarking by sharing of best practices and working together

.
The **GBN Values** are:

- Helping each other – as evidenced by participation in team or group activities, projects as appropriate and attendance at the annual meeting
- Working Together – as evidenced by willingness to share and assist other members, participation in team or group activities and projects as appropriate and attendance at the annual meeting
- Professionalism – as evidenced by handling all relations between GBN members in a professional manner
- Excellence – as evidenced by developing expertise in benchmarking, leading or managing benchmarking activities and promoting the role of benchmarking in performance improvement
- Ethical behaviour – as evidenced by following the Benchmarking Code of Conduct and respect for confidentiality

Over the last few years the GBN membership has grown substantially in recognition of the increasing importance and popularity of benchmarking (refer to the GBN's Survey Report http://www.globalbenchmarking.org/gbn-survey-results-business-improvement-and-benchmarking)

To align the future activities of the GBN with the needs and aims of all members the GBN initiated the Benchmarking 2030 Project.
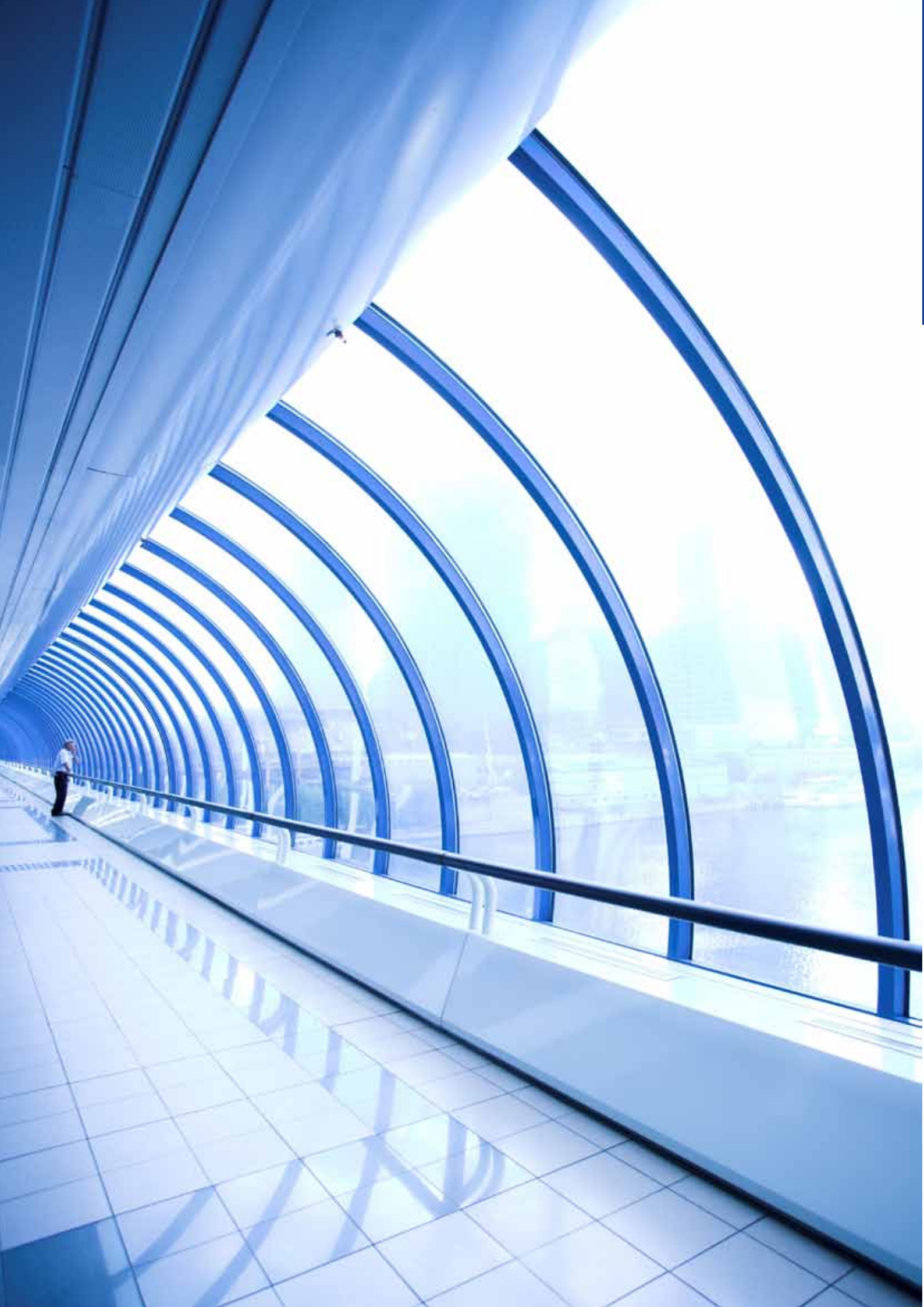
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THE BENCHMARKING 2030 PROJECT

Background

The GBN embarked on a project to look at the future for Benchmarking. Inputs were sought from past, existing and potential GBN members and organisations that practise benchmarking. The project took into account new technologies, social networking opportunities as well as issues such as global financial crises and megatrends like governance, political, social and environmental trends and changing natural characteristics.

The project aimed at answering the following questions:
What will Benchmarking look like in 2030 and in between?

What are the tools, methodologies and technologies that Benchmarkers can use now to help organisations and economies to improve their outcomes?

The project investigated the use of benchmarking and the future use of benchmarking through considering global mega-trends and the views of benchmarking experts and practitioners. Research methods used were a literature review, surveys, a Delphi study, and roundtable discussions. Key parties to the project were Bruce Searles (project leader), Australia, Benchmarking Partnerships, Dr Robin Mann, Centre for Organisational Excellence Research, New Zealand, and Dr Holger Kohl, Fraunhofer IPK, Germany. They undertook considerable desktop research, prepared and delivered presentations and facilitated discussions as part of the roundtable at the 2010 and 2011 GBN Annual General Meeting and the GBN Annual Conference.

The initial stage of this project was to do desktop research to look for current and future global trends as well as changes that may threaten or create opportunities for benchmarking in the future. This research helped to form the project platform and also helped to frame an initial questionnaire of GBN members and benchmarking practitioners in many countries.

Additionally, the GBN also set up a blog as well as content for feedback on the GBN website and advertised a request for feedback from the customers of GBN members. The feedback received is incorporated in this report.

BENCHMARKING DEFINITION

Benchmarking is a relentless strategic discovery process. It is a search for identification, understanding, adaptation and implementation of solutions leading an enterprise to far superior performance, which is based on best practices.

The main value added from benchmarking compared to other **improvement tools is to learn HOW to improve from others**. At first a comany needs to decide what to do benchmarking on, then other benchmarking partners will teach the company how to improve and then the appropriate changes need to be implemented. *What are the trends and opportunities and threats over the next 30 years regarding this key differentiator that is called benchmarking?*

The basic methodology (see figure 2) and the main categories of benchmarking are also defined in the following paragraphs. The most ideal for making vast and sustainable improvements is Best Practice Benchmarking. The GBN classifies benchmarking into two main categories: **informal** and **formal** benchmarking.

Informal Benchmarking can be defined as an unstructured approach to learn from the experience of other organisations; therefore not following a defined process.

Formal Benchmarking is conducted consciously and systematically by organisations. It is divided in two categories: **Performance** Benchmarking and **Best Practice Benchmarking**.

Performance Benchmarking compares the performance level of a specific process to identify opportunities for improvement and to set performance targets.

Best Practice Benchmarking is searching for the best way or solution by studying other organisations that are high performers in particular areas of interest. The knowledge gained is then analysed and in cases that the practice is feasible and appropriate, it will be adapted and incorporated in the organisation's own process.
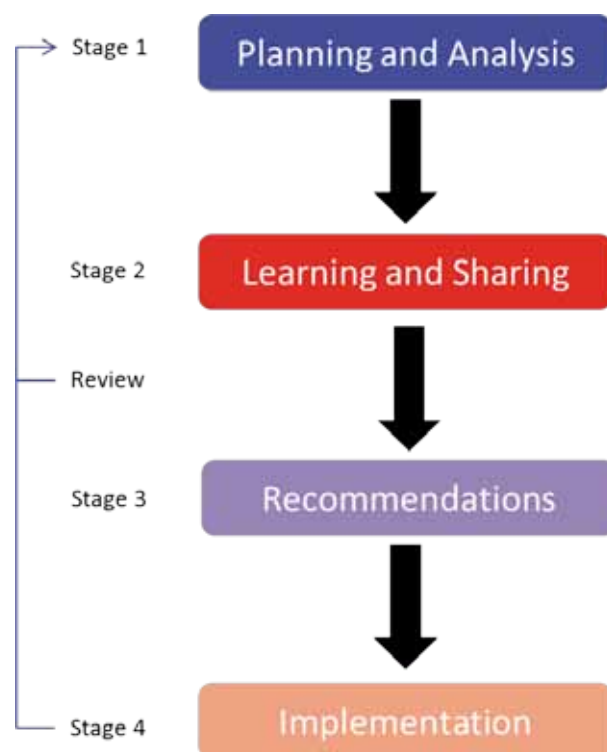

Fig. 2: Basic Methodology of Benchmarking

3 GLOBAL MEGATRENDS

Key Trend Areas	Megatrends	Questions
Society	• Urbanization and demographic change • Women on the rise • Cultural diversity • New patterns of mobility • Migration patterns • Welfare and disaster recovery	• How are countries and organizations responding? • Is the GBN sufficiently diverse? • Is triple bottom line enough? • Would not-for-profits/charities benefit from benchmarking?
Consumers	• Next level of individualism • New consumption patterns • Thriving health sector and individual responsibility • Converging health markets e.g. food and pharmacy/self dependency	• Should the GBN have a health project – is western health in disarray? • Who will be the benchmarking consumers? • What might be the successor of business excellence? • What are the benefits from converging markets?
Business	• Knowledge-based economy • Change in the world of work • Business ecosystems • Management systems trended to public sector (not-for-profits and NGOs) • Business Clusters	• What about governance? • What about business greed and moving from one financial crisis to another? • How can the GBN ensure responsible business? • How does GBN help the growing NGO sector and SMEs? • Are clusters a benchmarking opportunity?
Technology	• Digital lifestyle • Convergence of technologies • Learning from nature • Ubiquitous intelligence • New technologies (e.g. nano- & biotechnology, robotics, internet) • Mass rapid customization	• Is social networking merely a intermediate in the ongoing changes? • How do we make sure technology is not the driver of change? • How can benchmarking take advantage of new technologies?
Globalized World	• Globalization 2.0 • Urbanization • New political world order • Shift in economic power • Increasing security threats • Knowledge economy/Innovation focus	• Should GBN set the example? • What about developing countries/poverty? • How can benchmarking increase global security? • How does benchmarking need to support the fast sharing of knowledge and Innovations globally?
Environment	• Energy and resource reversal • Climate change and other environmental impacts • Natural disasters increasing and more help needed to communities • Scarce resources • Industrialized centres increase productivity of resources	• How can benchmarking reduce environmental risks? • Is the GBN sufficiently focused on a future for next generations? • Are charitable donations achieving the best for those in need after disasters? • How can we cope with rising energy demand?

Table 1: Megatrends and Questions related to Benchmarking

A megatrend is a large, social, economic, political, environmental or technological change that is likely to influence a wide range of activities, processes and perceptions, both in government and in society, possibly for decades.

In Table 1 (page 10) a variety of megatrends are categorized in six key trend areas while questions relating to benchmarking and the megatrends are noted in italics.

A number of reports have been written on megatrends. The content of a report by *Alexander Schellong (2009)*, which deals with megatrends in the public sector, is described in the following passages.

Another report by *Ronald Orth (2010)* describes the trends in more detail, in particular what these trends mean for benchmarking and the GBN (see Appendix A). This topic was the focus of a roundtable discussion at the GBN's 2010 5th International Benchmarking Conference.

Megatrends in the public sector

The report by *Schellong (2009)* describes how megatrends are likely to affect the public sector. The megatrends are shown below with questions from the authors of this Benchmarking 2030 report shown in italics.

Rising public sector spending – Ageing populations will lead to an increase in healthcare and pension budgets, apart from current government economic stimulus spending. A shortfall in tax revenue and additional budget constraints through debt payments, both resulting from the economic crisis will further put government budgets under stress. Information and communication technology (ICT) will be considered as a facilitating element to further reduce costs.

How can benchmarking help here? What about the les-

sons from the past and the oscillating financial global fortunes and their impact on ability to fund ageing populations? What about the recent and current economic crises and the shift in world economic power?

Trade off between free market and regulation – The economic crisis and concerns about social welfare and equity will lead to further calls for greater government intervention. At the same time, other non-government actors will be seen as having more appropriate solutions. ICT will be used for oversight, analysis or reporting.

Should the GBN facilitate benchmarking between the non-government and government sectors? Does regulation really work in the long run?

New consumer groups – Increasing numbers of singles and women in the workforce and a generation of "digital natives" expect society to take advantage of ICT for a flexible lifestyle. Immigration, religious diversity and ageing society will require new ways of public service delivery and identity management.

What is the role of Benchmarking / GBN?

Information economy – The information economy is powered by digital infrastructure. ICT is flattening communication, markets and hierarchies and is contributing to disruption of business and organisational models. ICT facilitates the speed of communications and more selectively controls access to, and participation in, information exchange. Technologies once used only by experts are now available to everyone. Successful organisations are those that harness the data available to them both internally and externally. Decisions are driven by digital data that can be combined or reconfigured so as to provide new information. Networks and resources of knowledge workers can be adapted and are more flexible.

How can Benchmarking / GBN help people to access the right data and knowledge at the right time?

Networked Government / Open Government / Government 2.0 – Top-down democracy is fading and government by network has emerged. Issues like immigration, trade, financial markets and global warming transcend national boundaries. Government will neither be able to solve many issues itself nor collectively. Broader networks of government, the private and the public sector as well as networks of NGO's / not-for-profit organisations are needed. Web 2.0 provides the opportunity for open government as espoused by the Obama administration. Information and services are provided to citizens seamlessly when and where they need it. Government will collaborate with intermediaries who have solutions in place. Governments are more open because the democratisation of data drives accountability, engagement and performance. Balancing privacy and citizen participation will have to be carefully managed. Technology is not the only answer. Benchmarking as a tool and proven methodology is well placed to facilitate networking solutions.

How can the GBN help?

Cyber security – The term refers to the protection of all internet-based issues, from networks to data on computers. The protection requires identity management (e.g. validating individuals' access to networks), risk management (identifying vulnerabilities and threats and determining appropriate countermeasures) and incident management (responses when security threats occur). This will impact on the level of trust in public services and information.

How can the GBN help to make life safer and more secure to allow people to do what they want without unnecessary intrusion?

In general – the authors of this Benchmarking 2030 report comment that Humankind keeps making mistakes and ignoring the lessons of history and the experience of others, take the global financial crises, the lack of financial governance by banks, the regular environmental disasters, cyberstalkers, etc.

How can GBN help society to avoid repeating the same mistakes and becoming complacent again in future?

Moving some of the management techniques to the public sector has reached a relatively new audience and depending on the region, the public sector is now performing better than the private sector in terms of customer service for instance. Not-for-profits need to be considered – so much funding is going into social welfare and disaster recovery that efficiencies and effectiveness may be improved significantly in the way support is provided to those in need by charitable and volunteer type organisations. The charities are in intensive competition with one another for funds – does this impact on social support? Benchmarking would certainly help with innovations, improvement and business focus.

CURRENT TRENDS IN BENCHMARKING

The key trend noticed amongst people in organisations is their lack of time to undertake Benchmarking well and hence they are not able to reap the benefits from a systematic approach to benchmarking. Sometimes they undertake quick benchmarking without properly following a methodology, which reflects poorly on the method of benchmarking.

This response is reflected in the GBN Survey of Improvement Tools in 2008. The majority of the 450 organisations responding to the survey were not deriving substantial improvements from Benchmarking. The survey indicated that this result was generated because they were not undertaking benchmarking properly. Those organisation that were undertaking Benchmarking properly were reaping substantial improvements in business outcomes as a result. At the same time, the survey also revealed that Benchmarking is a tool for the future and

will be one of the most commonly used improvement tools. Supporting the results of the survey, Benchmarking has been researched by Bain & Company as the top management tool for 2010 and 2011.

The above GBN survey examined the use of business improvement tools and Benchmarking worldwide. Some of these frequently used techniques (e.g. quality management, different excellence approaches / models like EFQM) suggest or even dictate the use of benchmarking or similar concepts. GBN could examine how the integration or connectivity of Benchmarking and other improvement tools as well as business excellence should or could look like. This is important because established tools may serve as key methods for the future use of benchmarking in private and public companies. In addition to that, the GBN has embarked on a series of Bench-
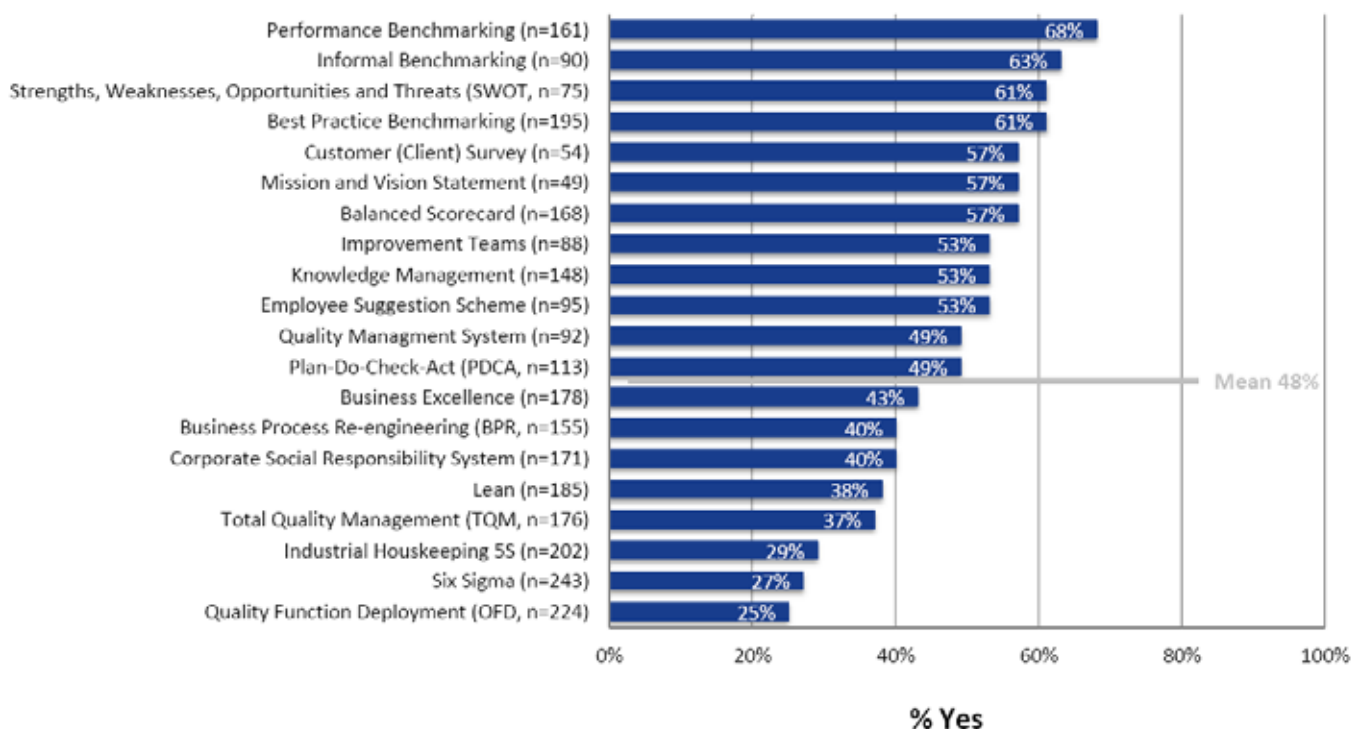

Fig. 3: Future Use of Improvement Techniques - Worldwide

marking roadshows to teach people how to do Benchmarking properly and to encourage active participation rather than passive benchmark information and media.

Organisations are tending to reduce functional boundaries so that co-ordination and work of importance is increasingly occurring through networks of informal relationships rather than channels tightly prescribed by formal reporting structures and detailed work processes. Will this be a trend for benchmarking too? In this case, a problem may arise because executives generally pay little attention to assessing and supporting informal networks within their organisations.

Some organisations are coming together in Clusters for commercial or other reasons. This indicates an ideal opportunity for them to benchmark each other by sharing best practices to improve together. Care has to be taken to avoid apparent collusion by competitors. Some Benchmarking providers have offered services to help resolve this dilemma e.g. web services, which include Benchmarking on behalf of the client. In general, Business Clusters are like-minded groups of co-operative businesses and supporting organisations with common business objectives that work collaboratively for economic growth. Clusters can include businesses with complementary capability or businesses involved in the same supply/value chain with common suppliers and distributors and can include related organisations that support these businesses such as industry associations and knowledge providers (eg universities and research institutions). Clusters are emerging for small to medium enterprises and this may give them an opportunity to carry out benchmarking by sharing financial and other resources. Clusters as well as Benchmarking are often seen as catalysts for knowledge sharing and innovation.

Another key gap area is the failure of organisational leaders to effectively implement the changes arising from the recommendations phase of Benchmarking. This is sometimes due to

leaders not being involved or consulted throughout a Benchmarking project and therefore their buy-in to project recommendations is hard to obtain. Leadership, or lack of it, is a key hurdle to the initiation and closure of effective Benchmarking.

The trend towards quick Benchmarking is also leading to a lack of understanding of the details of Best Practices and how to effectively implement the changes. Hence quick/informal Benchmarking does not directly lead to organisations being able to adapt and effectively implement the best practices learned from the Benchmarking partners.

Another difficulty faced by many organisations in benchmarking is to identify, access and create trusting relationships with benchmarking partners.

One respondent to the Benchmarking 2030 blog emphasised the need for evaluation of innovations. *"I have developed a framework to integrate Benchmarking with innovation and evaluation. You need to **monitor and evaluate** to measure the benefits of any innovation. This process involves the development of a plan to establish measures and a regular reporting system to set a baseline and record change at regular intervals. How are you going to know if you have had a win if you cannot measure the impact of your change program and its outcomes? There will be an increasing government imperative to report on outcomes to demonstrate accountability. Evaluation is the tool for this. Global trends are towards more and more innovation BUT we need to demonstrate that our new idea 'adds value' and provides a solution for the initial issue or problem. How better to do that than to evaluate the outcomes and impact of that idea. Evaluation is the systematic process of collecting information (qualitative and quantitative data) that focuses on the impact of a change process at any stage. The findings of an evaluation will give you information about your performance so you can identify opportunities for improvement and focus **benchmarking** efforts."*

Also another key difficulty faced in Benchmarking is to encourage organisations to start undertaking benchmarking. Most are afraid of the potential consequences of losing competitive advantage or intellectual property. These people ignore the benefits that can far exceed any risk of potential losses. In some cases organisations really "don't know what they don't know" – they have not experienced the far-reaching potential of Benchmarking. The organisations which undertake Benchmarking represent only a small percentage ("the tip of the ice berg") compared to the majority of organisations.
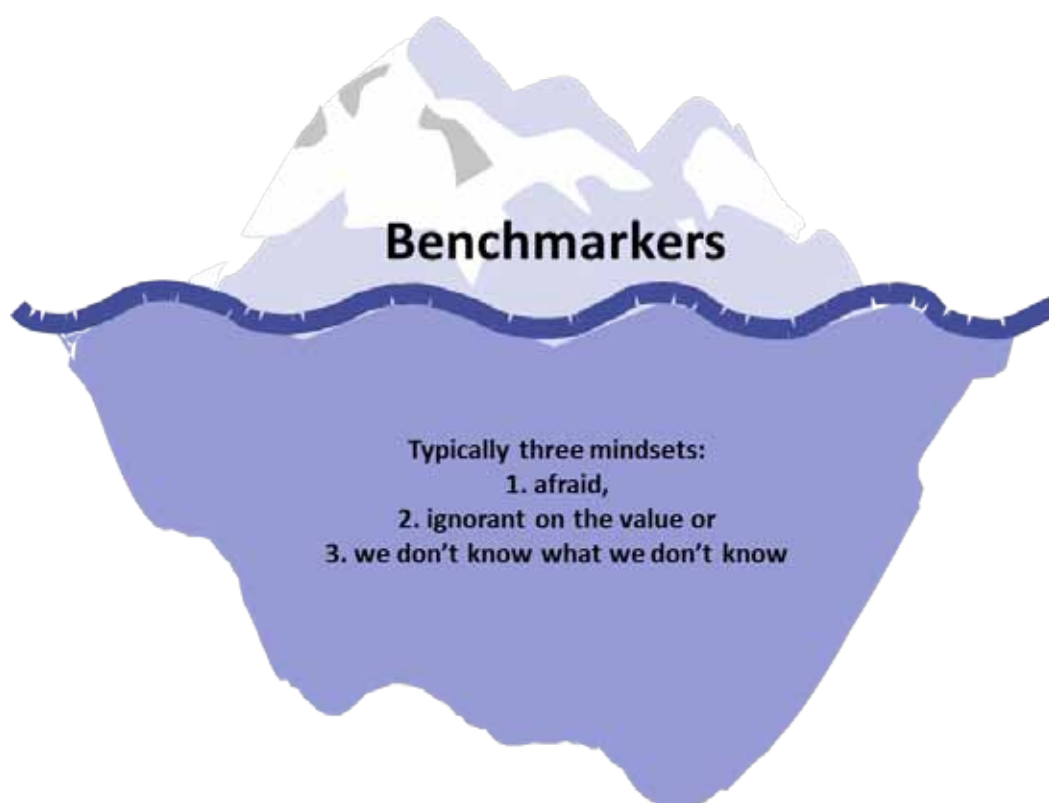

Benchmarkers

Typically three mindsets:
1. afraid,
2. ignorant on the value or
3. we don't know what we don't know

Fig. 4: Benchmarking-Barriers

TOWARDS SOLUTIONS –
POTENTIAL USE OF TECHNOLOGY

Social networking, dating services and other quick networking services along the lines of 'speed dating' offer opportunities to enhance benchmarking productivity. Benchmarkers can take some of the social networking concepts and tools and apply them in a benchmarking context. Examples include:

• **Dating services** – the core of benchmarking is a trusting relationship between two or more parties wanting to learn and share best practices in a well defined scope. The internet dating services tend, in a similar fashion, to match people with similar or desirable characteristics
• **Intranet benchmarking/knowledge management facilities** – exist within some organisations. Benchmarkers may consider extending these concepts to the Internet facilitating the exchange between different organizations
• **Face-to-face networking** – New methods are developed such as Round Tables and World Café

Benchmarking essentially differs from alternative improvement tools in the learning of how to learn from other organizations and industries. The most common tool is a structured network amongst benchmarking partners who are sharing and learning best practices. Hence, it is inherently logical that relatively new social networking may offer some opportunities for benchmarking.

In the following some key opportunities from the social networking environment will be illustrated.

Social Networking

Social networking websites are defined as platforms allowing people to connect with others to share common interests and provide a forum for interaction between them. The social networking sites also allow people in these groups to keep track of what is happening in other groups of the network.

Fig. 5: Social Media Application

Global Benchmarking Network

Some social networking sites as of 2010/2011 whose concepts could be useful in a benchmarking context are displayed below:

- **LinkedIn** is a concept which may help to overcome one of the key dilemmas of benchmarking: initiating a trusted relationship with companies in order to carry out a bench-marking project. Through LinkedIn it is possible to identify a known person who has a relationship with someone in the desired benchmarking partner company. Also of po-tential interest are plans revealed in October 2008 to open the social network of 30 million professionals globally as a potential sample for business-to- business research .
- **Livemocha** is a social network service where users can learn languages through audio-visual lessons, peer tutoring tools and support systems. Users can aid others in learning the languages that they are proficient in while learning other languages themselves. This is achieved through peer reviewing of submissions, live text and audio conversations, and other learning systems. Maybe this could have some interest for benchmarking training?
- **MEETin.org** or the MEETin group, is a web-based social community providing a casual social environment for peo-ple. The platform is completely free of charge. The MEETin group's general culture and attitude is represented by the MEETin "Vibe". Local volunteers are runnig each chapter in order to bring people together to find new friends in their city. The MEETin group also serves as a hub to connect cities around the globe, and enables members to quickly re-establish their social network across various MEETin cities. As an integral part of the MEETin "Vibe", members are encouraged to organize and take part in social events in any given MEETin city, without the pressures of business networking or "pick-up" scenes.

Events can be created by any member for free by posting it on the local group's web site. This may also be interesting in a benchmarking context.

- **MyLife** is a social network service founded in 2002 by Jeffrey Tinsley after meeting his wife at their high school reunion. The company began with the acquisition of high-schoolalumni.com and PlanetAlumni.com. The website wants to help members in finding and keeping in touch with friends, relatives and lost loves. A similar system would be useful to benchmarkers for keeping track of each other when they move from one organisation to another.
- **Netlog** is a Belgian social networking website specifically targeting the European youth. The network uses a localisa-tion technology allowing that all content is geotargeted and personalised to each member's profile. This concept would be very useful for benchmarking, since it could help to target benchmarking partners to each other's specific needs.
- **Ravelry** is a free social networking website, established in May 2007. It functions as an organisational tool for a variety of fiber arts including knitting, crocheting, spinning, and weaving. The network enables members to share pro-jects, ideas, and their collection of yarn, fiber, and tools via various components. As of February 2012, Ravelry had over 2 million members worldwide.
- **ResearchGATE** is a free social networking site and col-laboration tool aimed at scientific researchers from all disciplines of science. It provides web applications including semantic searching (whole abstract searching), file-sharing, publication database sharing (e.g. endnote libraries), forums, methodology discussions, groups etc. Further-more, members can create their personal blog within the network. Since May 2008, ResearchGATE has gathered a user base of more than 1,4 million researchers from 196 countries.

Among other tools, ResearchGATE has developed a semantic search engine that browses internal resources and major ex-ternal research databases including PubMed, CiteSeer, arXiv, NASA Library and others to find research papers. The search engine was developed to analyze a larger string of terms than

in standard keyword searches. It will analyse entire abstracts with the idea that more terms will allow more precise results. The same kind of semantic matching is also used by the platform to support member networking. Through analysing the information provided by the user on his or her profile page, the platform will suggest groups, other members and literature with similar research interests that the user might be interested in. In total, more than 1,100 groups have been created within ResearchGATE. These can be open to all users or set up as private groups and any member can create a new group at anytime. Every group also has collaborative software, for example, a file-sharing tool allows users to collaborate with colleagues on writing and editing documents . Other tools include an appointment scheduler and a polling/survey option. Several scientific organisations and conferences use ResearchGATE as a meeting place to list details, collaborate and communicate. The platform has also developed private Subcommunities for larger organizations, open only to members of the respective institution.

The platform has set up a job board for scientists that lists international research jobs. The jobs can be filtered by keyword, position, field and country. In 2009, ResearchGATE also entered the open access scene when it developed a tool to help researchers upload previously published papers while respecting copyright agreements. The uploaded papers are among the internal resources that are searched by the semantic search engine. Users can read and download these publications for free This idea could be adapted for benchmarking projects.

- **Ning** has the facility to create unique social networks on its site that are completely separate from each other. This may be useful for different processes and issues groups in benchmarking.
- **Google Groups** has been set up to discuss special interests. Groups can start discussions, post topics and replies, create web pages to discuss them and upload files.

Some of the above sites have a search facility to find a group/ topic of interest but others do not. LinkedIn for instance has a facility to search by keyword, narrow down by category etc. and groups are also suggested. Google Groups seems to have a very powerful mechanism to search and join a group and it is also fairly obvious what is new since someone visited the group.

- **Sakai** has set up a benchmarking study comparing how different social networking sites deal with groups.
- **BPIR Ltd**. belongs to the number of organisations that not only provide benchmarking but also social networking services. This website provides benchmarking information such as case studies and benchmarks, but also enables its members to:
  » Create a personal or organisational profile
  » Search for and make valuable contacts with other organi-sations that have best practices or use improvement tools of interest
  » Submit "Requests for Assistance" when looking for con-sultancy help, general advice, benchmarking partners, request for tenders or working on joint projects

The GBN should examine potential use of rapidly evolving social networking technology, potentially combining some of the features of social networking sites that are currently used for other purposes into a virtual benchmarking network. Although these social networking concepts could resolve some of the difficulties benchmarkers face, they do not take away the need to include face-to-face discussions at some stage of the benchmarking process. Once the partners have been narrowed down to those with known value-add, each partner then needs to understand details such as cultural context and process steps in order to be able to successfully adapt the information to their own context and systems in their company. This can only be done through actual experience and asking relevant questions about intricate details of relevant issues to each inquiring partner. **Face-to-face meetings, workshops and site visits will therefore still be an important part of the benchmarking methodology.**

THE FUTURE OF BENCHMARKING AND GBN

Maturity of Benchmarking

In spite of all of the above and in view of the megatrends explained in the previous chapters the following questions have to be asked:

- Is the GBN and Benchmarking relevant for the future?
- Are we too tactical?
- Do we need to be more of a global influence?
- Is Benchmarking easily understood, applied and practical?
- Do we need a GBN methodology for the future rather than the methodology by each GBN member?
- Should GBN members work together, rather than separately?

Figure 6 describes the current benchmarking maturity model, positioning social networking and other elements in the maturity scale. So the future for benchmarking up to 2030 needs to be looked at in the context of the various elements of maturity, in order for the GBN to lead people and their organisations up the maturity scale - or do we need to invent a more relevant maturity scale?

The Search for Information

Despite an extensive research of the Internet, periodicals and journals and information above, any recent commentary on the future for benchmarking can not be found. This emphasises the importance of this current GBN Benchmarking 2030 study.

The GBN

The GBN has extended its influence from the solid platform created, e.g. running conferences to generate income, the GBN Roadshow, the capability for members to bid for projects, the formation of a board, the ability for members to have their membership fee cancelled if they attract a new member.
Has the GBN become much more commercial and success-

ful? How far it is desired to go in this direction? How can GBN address the challenges of the future and leverage off future opportunities for the global benefit of benchmarking?

Below are questions the GBN is currently considering:
In our minds, is the GBN more important than each GBN member's individual services and practices? How can GBN members collaborate? Are GBN members using GBN as a vehicle to promote individual services? Are GBN members duplicating skills? How can GBN promote and deliver benchmarking more? How can GBN take advantage of a presence in more than 20 countries? Why are there so many different benchmarking approaches amongst members?

Next Steps

The next stage of the Benchmarking 2030 Project was developing and undertaking a qualitative survey through GBN Members in the lead up to the roundtable at the 2010 GBN AGM and Annual Conference.
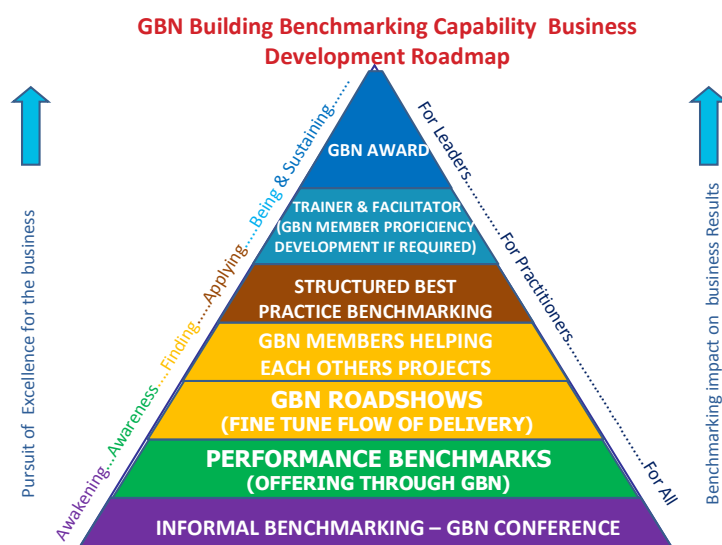
GBN Building Benchmarking Capability Business Development Roadmap

Fig. 6: The Benchmarking Maturity Model

7

FEEDBACK FROM BENCHMARKERS

Prior to the roundtable, feedback was sought by the GBN from Benchmarkers across the globe. A questionnaire was placed on the GBN website and promoted – the questionnaire which contained five key questions:

- What do you see as the key global challenges/megatrends over the next 20 years?
- How can benchmarking support/influence the global challenges/megatrends?
- What would you like the future of benchmarking to be? (Does benchmarking have a future?)
- What methods, tools and technologies do you think will be used for benchmarking in five years?
- Considering all of the above, do you have any views on what the future role and function of the Global Benchmarking Network should be?
- Other comments

Responses were received from 38 Benchmarking practitioners across 20 countries (see Figure 7). The full report by Ahmed Abbas from Bahrain Quality Society is in Appendix B.

The GBN was felt to have a strong role in making sure that benchmarking was done well so that the innovative results that can be achieved from proper benchmarking can be realised. The role of the GBN was also felt to be expanded to ensure the use of developing techniques and social media and to ensure that benchmarking helps the use of other models and tools like business excellence, lean and vice versa.

As discovered at the roundtable, benchmarking is the instrument that can link megatrends, sectors, countries and organisations together and is the fabric for cross-fertilisation of innovative "how-to" and knowledge between them. In this context, the GBN feels that it needs a more global and higher-ground positioning and yet offer the transfer of best practice knowledge through the interconnecting strands of the Benchmarking Web. Benchmarking will be even more needed if society trends back to sustainable, more tribal communities so that they do not develop in isolation of each others' best practices. Key features of the future values required were felt to be honesty , transparency and selflessness.
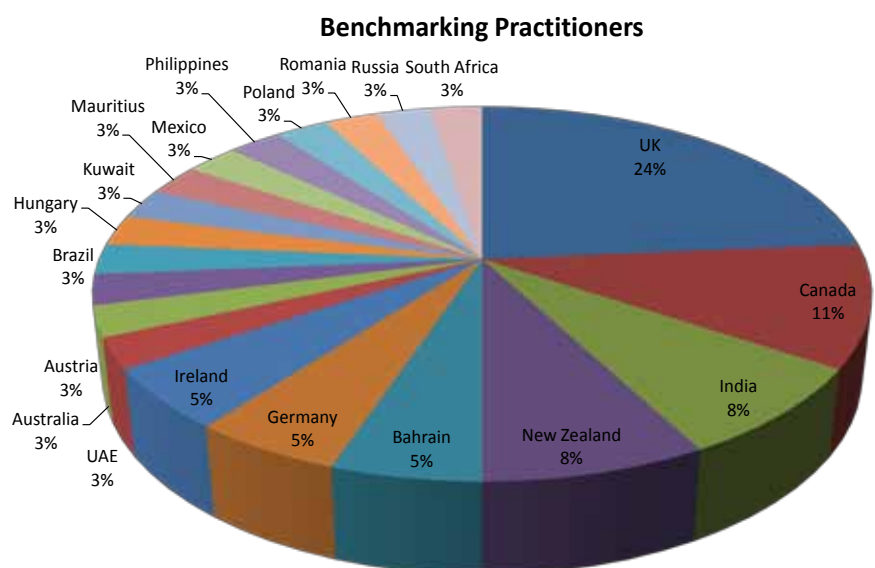
The respondents to the questionnaire raised many global issues and opportunities and in the majority felt that Benchmarking had an important role to play in providing best practice solutions and for the development of:

- countries
- private sector companies
- the public sector
- the social sector

Benchmarking Practitioners

Fig. 7: Distribution of Benchmarking practitioners by countries in the survey

Global Benchmarking Network

A summary of the comments received regarding each question is described below:

What do you see as the key global challenges/ megatrends over the next 20 years?

A whole range of challenges and issues were presented, most of which are covered in the previous sections of this report.

How can benchmarking support/influence the global challenges/megatrends?

Only one of the 38 answers to this question felt that benchmarking did not have a strong future role. Some comments are below:

- A company which is seen as sustainable will be seen as successful. Benchmarking can speed up the proliferation of best practice and also speed up the progress made on each megatrend
- Benchmarking can assist in giving companies the best practices necessary to survive and to flourish
- If somebody invented a new and great product, service or process - why do I have to invent it again?
- Benchmarking cannot be considered as a tool for business only
- In the next 5-10 years, prosumers will produce and consume locally. For example, businesses will produce and consume their own energy and water requirements and they will grow and consume our food requirements locally

What would you like the future of benchmarking to be? (Does benchmarking have a future?)

The following comments relate to the potential future role of benchmarking.

- I would like to see it hand in hand with the internal audit function of a business. So the existence of the function is given and it is seen as vital to the success of the business rather than just nice to have
- The market is changing like 10X speed; the benchmarking

will be in breakthrough range
- For companies to survive and flourish nowadays they need to keep track with the developments globally. This can be achieved through benchmarking which is all about learning from others and they learn from you
- Greater sharing of information that is useful across broad geographic areas
- Provide access to useful quality assessment tools for general application
- Provide solid data on tested Best Practice approaches
- How will issues such as the global financial crises, governance, political, social and environmental trends impact on benchmarking?
- Yes, but less structured and more informal on the one hand (stimulated by social media and the 'open' movement & sharing) and collaboration business models, more structured and regular on the other (internet, specialist platforms, ongoing, closed group etc.)
- It does have a future if it is fully understood. Today it is not, except by a selected few
- The GBN assists more proactively in international benchmarking projects
- An "honesty" benchmark would be useful for governments, regulators and consumers. If that benchmark could be applied across all businesses, we would have higher levels of transparency enabling more informed choice for consumers/customers
- Benchmarking has a strong future in support of various initiatives such as Business Excellence, ISO 9000, Lean etc. which all need benchmarking to function. They need benchmarking and benchmarking needs them (for implementation, "do something with it", "Applied Benchmarking")
- I would expect benchmarking to become more widely used in public sector, especially in higher education as a means for improving performance and dealing with growing competition.
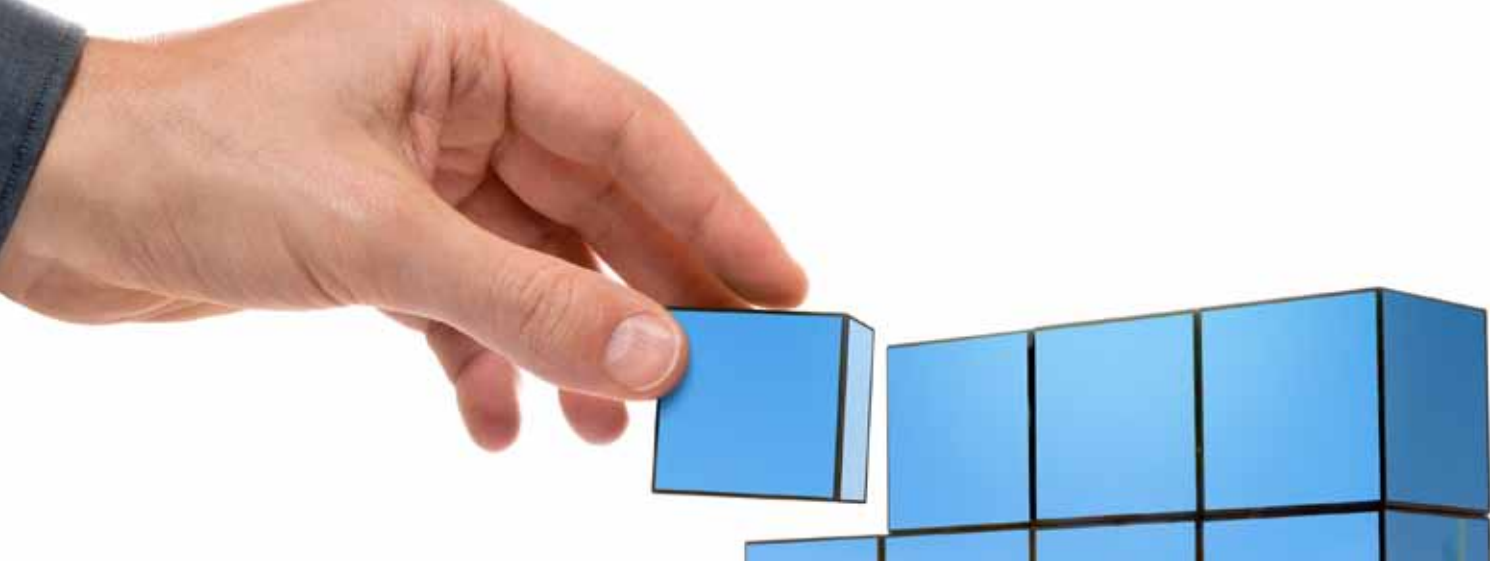
- Just like moving some of the management techniques to the public sector has engaged a new audience and boosted interest in business excellence, moving benchmarking the same way can enhance results

What methods, tools and technologies do you think will be used for benchmarking in five years?

Most respondents saw social media and technology developments generally as enhancing benchmarking. They expected software tools to be more readily available to analyse and report data.

What methods, tools and technologies do you think will be used for benchmarking in 20 years?

Less people responding had a view of the long term future than for previous questions. The general thoughts from some were:

- More reliance on soft skills and people interactions
- Best Practice Facebook
- Internationally recognised norms/standards to provide best practice references
- Data available will be mind-bending
- Retain face-to-face meetings – no technology can substitute this

Considering all of the above, do you have any views on what the future role and function of the Global Benchmarking Network should be?

There are some challenging roles put forward for the GBN.

- More collaboration between members and a voice of global benchmarking to ensure greater understanding and take up around the world educational, disseminative, promotional and mentoral provider of global Benchmarking resources, committed leadership to provide essential co-ordination and continuity

- Help define and create the future and be prepared to evolve with Benchmarking, which may become a redundant term in the light of technology and business trends
- There needs to be a network that brings everyone together to discuss ideas and best practice (Hosting capacity). Although I think technology is the future, we still need that face-to-face contact to understand the potential of global benchmarking and how it can help us all.
- The GBN needs to grow if it addresses the megatrends. It needs to run benchmarking projects for each megatrend. It needs to professionalise the benchmarking field in terms of training/understanding of benchmarking through certification/standards, e.g. through a membership association for benchmarking professionals. GBN is for benchmarking competency centres, we need something for individuals too
- Implementation of world "honesty" benchmark standard and need for transparency in benchmarking
- GBN has a huge responsibility to educate businesses and individuals on the power of structured Benchmarking & innovation (twins for ideation)
- A greater networking between communities of practice will likely see specialist benchmarking practitioners fade away. However 'proven' change agent experts - independently recognised for their bottom line success at benchmarking initiatives - are likely to stay busy
- Mondial networking needs to be the tool of the future
- Communication of how benchmarking can be more affordable for SMEs
- Growth of Framework Benchmarking to address the big issues facing society now and in the future. The key challenges for the GBN are to somehow get their names, goals and focus out to more organizations to have a better rapport with more areas of industry

Global Benchmarking Network

KEY QUESTIONS FOR THE ROUNDTABLE

In 2010 and 2012, discussions and presentations were given by benchmarking experts on the 2030 issue at the GBN's International Benchmarking Conference. This event was called a Roundtable as it prompted much discussion and debate from many experts and also enabled delegates at the conferences to ask questions and propose what the future of benchmarking would be in 2030.

Six key questions were addressed at the Roundtable:

1. What are the global challenges/global megatrends?
2. How can benchmarking support/respond to such global challenges/global megatrends?
3. What kind of Benchmarking methods do we need to answer such questions and how can we use new communication technologies to bring the best practices to public, not-for-profit and private sectors? Are we aiming for the Best Practices or the best known practices?
4. How should integration or connectivity of benchmarking and other improvement tools (e.g. business excellence) look like?
5. How do we proceed further on getting all countries to think and do benchmarking? (Noting that Benchmarking is the tool emphasized in various business excellence frameworks and award processes in over 80 different countries)
6. What is the role of the GBN? What should the GBN do? In three years and in 20 years?

Roundtable at the 5th GBN International Conference (Kuwait)

9

THE ROUNDTABLE

The lead-up and conduct of the roundtables was as follows:

1. Interim report compiled by Bruce Searles with input from Dr Robin Mann and Dr Holger Kohl
2. Feedback to the questionnaire (see Appendix B) by GBN members and from Benchmarking practitioners
3. General feedback from selected GBN members
4. GBN Annual General Meeting:
   a. Status and interim report presentation by Eng. Bruce Searles (Director Business Development)
   b. Summary of feedback from GBN members and Benchmarking practitioners by Ahmed Abbas (BPIR Ltd. and Bahrain Quality Society)
   c. Roundtable discussions engaging all GBN members present at the AGM
   d. Update presentation developed for the International GBN Conference by Eng. Bruce Searles, Dr Holger Kohl, Dr Robin Mann and Ahmed Abbas
5. 5th GBN International Benchmarking Conference

- Roundtable facilitated by Suresh Lulla (Director GBN)
- Presentations by:
   i. Eng. Bruce Searles – findings from the research for the interim report (see Appendix D)
   ii. Ahmed Abbas – summary of feedback received from GBN members and Benchmarking practitioners (see Appendix B)
   iii. Ronald Orth – global Megatrends (see Appendix A)
   iv. Dr Robin Mann and, Dr Holger Kohl – personal views on the future for Benchmarking (see Appendix C)
   v. Discussions with delegates at the Conference through a panel of GBN experts
   vi. Notes taken throughout by Eng. Bruce Searles (see Appendix E and video recording of the proceedings by Gulf Lead Consultants)
6. Assimilation of all of the findings and conclusions and compilation of final report by Eng. Bruce Searles assisted by Dr Holger Kohl and Dr Robin Mann

Roundtable & Panel Discussion
at the 5th GBN International Conference (Kuwait)

KEY FINDINGS
FROM THE ROUNDTABLE

Does Benchmarking have a future?

- Benchmarking certainly has a future
- Benchmarking should be positioned to be a charter for sustainability for mankind – weaving sustainability through the megatrends
- "Benchmarking is a natural thing to grow civilizations"
- We need to be wary of "cloning" as distinct from real development through Benchmarking – standardisation is important for compatible products and services across nations but not at the expense of innovation – cloning may give you current best practice but not next practice
- Transparency will need to increase for a sustainable future – Benchmarking can encourage transparency to certain limits so that competition is not adversely affected
    a. Need of confidence between businesses – there are cultural and political factors to consider but there is a future
    b. Comparison between the need to do things differently and to do different things. What is the willingness of others to share?

- We need to create the desire to improve and do benchmarking, particularly amongst CEOs
- Benchmarking is a multiplier for innovation

These were the thought-provoking views of Russia's GBN representative **Yury Samoylov** on benchmarking in the future:

It is important to get special international status for GBN. I think that we have to force these activities and try to state GBN as a unique international organisation which can be considered as new way of humankind development. Only Co-operation but not Fighting! In Tokyo I made a speech „Quality is vital and moral Category!". So I think benchmarking can be named as a „Benchmarking is a Tool for Humankind Survival!". Only that approach can push active benchmarking development in future!

Roundtable & Panel Discussion
at the 5th GBN International Conference (Kuwait)

How should Benchmarking be done?

- Informal Benchmarking is a natural starting point and whilst the informality is easy to do there is a need for more formal benchmarking. If it is done properly, it will produce the desired outcomes for a sustainable future
- The need of co-operative approaches to renewable re-source development
- The need of ways to formally and transparently capture and transfer the best practice knowledge required
  a. Start internally/locally
  b. The need to consider best practices in the context of place and time
  c. In the long run it is the people who have to adapt the best practices to their own culture, systems and processes
- There is a cooperative approach to renewable resource development in North Africa and the Middle East. This will bring best practice knowledge to this region
- How do we validate whether they are best practices or not?
- Be careful what drives human behaviour, e.g. more publications may measure increased low quality publications
- Focus not only on what others have done but also on what they plan to do
- Convert the code of conduct to a simple partnership agreement focused on transparency
- Focus on a triple bottom line and not just economic justification but also social and environmental justification and morals for a sustainable future

Key Questions for GBN

- How do you validate best practices?
- How do you make benchmarking information and best practices readily accessible and immediately useable?
- How do you still ensure self-innovation rather than cloning by organisations that get their information illegitimately?
- How does benchmarking speak the language of leaders to engage them?
- How do you ensure that benchmarking continues to be people-oriented so that they can learn in sufficient detail to adapt yet do it speedily?
- How do you enable people to free up their time for benchmarking and to get them involved in benchmarking in the first instance so they see for themselves the large benefits and then want to spend more time at it – to learn and adapt
- How do you create an environment for much greater co-operative and friendly sharing?

" I think benchmarking can be named as "BENCHMARKING IS A TOOL FOR HUMANKIND SURVIVAL!". Only that approach can push active benchmarking development in future!
Yury Samoylov

CONCLUSIONS

This Benchmarking 2030 Project has engaged a significant number of benchmarking practitioners and experts and has also merged well researched information on global futures and directions from industry, government, society and nature.The project has led to a number of significant recommendations regarding the future for benchmarking and the role of the Global Benchmarking Network. These recommendations are summarised in the Executive Summary.

The feedback received confirms Benchmarking certainly has a future, extending its reach across private, government, not-for-profit sectors and business clusters. Therefore, Benchmarking has a strong role to play for a global, sustainable society by creating connections for collaboration and the exchange of Best Practice knowledge between countries and professions. This will enhance innovative solutions to big issues currently facing society e.g. repeated financial crises, global warming.

GBN and Benchmarking therefore need to be able to speak the language of current and future leaders so that they do participate and engage/influence their people and their communities. The GBN has a very important part to play to ensure that benchmarking can perform these essential roles, which include education, dissemination, promotion, mentoring and the provision of global Benchmarking resources as well as a committed leadership to ensure an essential co-ordination and continuity.

The GBN should consider this report in development of its strategic plan for 2013 and beyond.

We would like to thank all people for their participation and inputs and in particular people who responded to the GBN Survey, the organisers and participants at the Roundtable held at the GBN Annual Conference in Kuwait in December 2010, GBN Members across all 26 countries as well as the participants at the GBN AGM in December 2010 and last but not least, the GBN Board of Directors and my colleague Anton Benc (Co-Managing Partner, Benchmarking Partnerships).

Further roundtables will be held as part of future GBN Annual General Meetings and GBN Annual Conferences. The aim will be to keep the megatrend issues and findings from this report up to date and to assist in the strategic planning by the GBN. Results of future roundtables will be published on the GBN website.

For further information do not hesitate to contact the project leader, Bruce Searles.
(bruce@benchmarkingpartnerships.com.au)

APPENDICES

APPENDIX A
GLOBAL MEGATRENDS
by Ronald Orth (Fraunhofer IPK)

Megatrends – what are they?

Megatrends are long-term processes of transformation with a broad scope and a dramatic impact. They are considered to be powerful factors which shape future markets. There are three characteristics in which megatrends differ from other trends (Z-Punkt):

1. **Time Horizon:** Megatrends can be observed over decades. Quantitative, empirically unambiguous indicators are available for the present. They can be projected – with high probabilities – at least 15 years into the future.

2. **Reach:** Megatrends impact comprehensively on all regions, and result in multidimensional transformations of all societal subsystems, whether in politics, society, or economy. Their precise features vary according to the region in question.

3. **Intensity of impact:** Megatrends impact powerfully and extensively on all actors, whether it is governments, individuals and their consumption patterns, or corporations and their strategies.

The term "Megatrends" was coined by John Naisbitt, who, 25 years ago, published a book of the same title. Today, megatrends have become a relevant strategic issue in many companies and public organisations. Experience shows, however, that businesses differ in their evaluation of specific megatrends – their relative strategic significance being determined by a company's focus on specific markets, products, and customers.

1. Globalisation

Two crucial developments have pushed globalisation further:
1. Political conditions: With the liberalisation of foreign trade and capital movement, the internationality and interdependence of (capital) markets have increased. In addition, much of the emerging nations opened up to the market economy.
2. Technical innovations have reduced the costs for communication and transport. This enabled companies to split up their value chains and to use regional location advantages. By the spread of the internet, some services have become globally mobile as well.

Partly because of energy dependences, **power differences between industrialised and developing countries decrease**. The BRIC states (Brazil, Russia, India & China) are still the major players in terms of global growth, but countries as Turkey, Mexico, Egypt, Iran and Vietnam have the potential to become serious rivals. China has replaced Germany as world export champion already. The new global middle class and their needs will shape the markets of the future.

International cooperation increases. Global economic or political problems as the financial crisis and terrorism need global solutions. The trend is going towards more internationally consistent regulation such as the IFRS (International Financing Reporting Standards) in order to reduce administrative costs.

Migration to western regions like Europe and the USA will rise. The increasing mobility of people and (cultural) products is currently characterised by a diffusion of Western values and lifestyles and fusion of different cultural traditions. Thus, cultural globalisation also means homogenisation and hybridisation.
As a result of globalisation, local and regional points of reference have become important.

Impacts on companies:

- Strategic direction is towards glocalisation: Global strategies with local adjustment.
- As companies become more international, diversity management is essential.

- Knowledge society: In developed countries, commodities and capital investment are increasingly replaced by knowledge, ideas and creativity.

2. Demography

The demographic change affects the global balance of power. Geopolitical upheavals are to be expected. Especially Western states are facing a major social change. However, if the current downward trend in the global birth rate continues, a slow decline in population may be expected after 2050.

Growth in developing countries vs. decline in industrial nations

Global population growth (up to 9 billion people in 2050) takes mainly place in developing countries. As a consequence and because of shortage in commodities such as water, migration from poorer to more wealthy countries will increase. The tendency of urbanisation can be observed particularly in developing and emerging countries where the growing population flows from rural to urban areas.

In contrast, the population in industrialised and some developing countries will age and decrease. The consequences are financial deficits in pensions and welfare systems, while healthcare costs and care-giving-expenses increase. Immigration and family support programs can dampen the transformation of the population pyramid to a "population pillar".

Economic Threats & Opportunities

- **Commodity supplies** as in hydrocarbon reserves for example, cannot keep pace with the higher demand, which leads to higher prices.
- This trend can be compensated through the development of **environmental technologies**.

- **Growth** is expected in the sectors of ambulatory and especially inpatient care. The investment and health insurance industry will also benefit from private precautions for health and elder care.
- Opportunities lie in an increase in **consumption** especially in the silver markets: Older people become the most important group of consumers. Main growth is expected for products and services in the field of health and leisure.
- **Down-aging phenomenon:** As people live longer, their perceived age and social behaviour is often younger. Therefore, silver surfers do not necessarily fancy products that are designed for their age class. This problem can be solved by using universal product design for several age groups.
- **Companies** are challenged by brain drain, know-how deficits and (age) diversity management.
- The number of people of working age sharply declines while the mean age of employees increases. This leads to a decrease of productivity and innovation. The result in the long run is a **reduction of economic growth**. From an economic point of view the most essential question is therefore how the increased life expectancy can lead to an extension of healthy working life.

3. Environment

The high level of air pollution, erosion, often caused by massive deforestation, reduced biodiversity, scarce resources and climate change require sustained action urgently. Carbon emissions caused by production and consumption have to be reduced by 50-80%. Politics and the economy both need to take action. If countermeasures are not taken rigorously, the economic losses due to climate change are estimated to reach 5-20% of global GDP in 2050.

changing-of-the-socio-culture (1) clean-environment (1) climate-change (2) communications (1) connected-business-processes (1) connectivity (2) demography (4) downaging (1) education (1) energy-and-commodities (1) energy (2) environment (5) environmental-boom (1) female-shift (1) globalisation-of-the-regulatory-environment (1) globalisation (7) globalised-world (1) growing-market (1) health (4) healthcare-system (1) increasing-challenges-of-managing-and-developing-talent (1) individualisation (3) innovation (2) macroeconomics (1) miniaturisation (1) mobility (3) moving-to-a-multipolar-world (1) nanotechnology (1) neo-ecology (1) new-education (1) new-values (1)

Impacts on countries

Governments respond to the acute need for action with a mixture of incentives and regulation for the economy. In high-tech countries with a good scientific environment and inter-disciplinary research, environmental technologies can become **key drivers for economies**. Green technology and especially the renewable energy industry create jobs because on average more staff is required as in conventional power plants. Potential for growth have:

- Sustainable water management
- Sustainable mobility
- Green power generation
- Efficient technologies
- Recycling technology will be one of the main industries

Electric vehicles still face some obstacles concerning price, usability, operating distance caused by insufficient battery capacity and lack of infrastructure. Even so, the future perspective is positive.

Solar power is the most important energy source on the globe. Solar plants in the North African desert are supposed to cover 15% of European electricity demand in 2050. Projects like this are an important step towards secure energy supply and reduce carbon dioxide emissions. The side effects are new energy dependencies and a change of power and relations between Europe and Africa.

The **advice for Europe** is to concentrate on a decentralised energy supply system and their core resources: power production based on wind and water. In general, countries have to be aware that energy dependence should be replaced with technology dependence

A **tough competition** between countries and regions for the cutting edge in green technologies is assumed. Mainly China and South Korea are strongly developing the green technology sector.

Impacts on companies

- Companies face greater environmental responsibility. CO2-emission needs to be treated similar to a commodity.
- Scarce resources (fossil fuels, clean water, metals and minerals) lead to increasing commodity prices. Techniques that enhance energy and resource productivity, development of optimised materials, new technologies and efficient production need to be implemented.
- Companies are advised to realise first-mover-advantages in green technologies.
- Consumer preferences push politics and business in a green and socially responsible direction: 30% of consumers in the US are LOHAS (Lifestyle of Health and Sustainability). Similar numbers are assumed for Germany.

4.   Health

The level of medical care increases worldwide. As a result, the average life expectancy continues to increase as well. The topic health is essential from two different angles.

Economic point of view

The demographic change leads to **financial deficits** in the welfare and pensions system.
Eldercare and an augmentation of **chronic diseases** such as adiposities, diabetes and allergies raise healthcare costs. However, in comparison with demographic change, the impact of **technological progress** on rising expenses is much higher. New diagnostic methods, therapies and nanotechnology increase expenditures. Therefore it is of economic interest, that

people are healthy and capable of working as long as possible. Competition increases due to the **economisation** of the health sector. The deficits in public healthcare systems lead to more privatisation of medical services. Private health offers serve as role models for public suppliers. The health industry is and will be strong in growth and serves as an important employer.

Health management becomes an important issue for companies in the future. It includes:

• Cooperations between health insurers and companies
• Joint financing of additional insurances by employers and employees
• Optimal arrangement of work places

Personal point of view

The trend is going towards more **individual responsibility** for the own medical condition. On the one hand in terms of financial security and on the other hand regarding disease prevention and health preservation. Being well and fit is in vogue. People try to keep healthy to enjoy their life after retirement and to remain independent as long as possible.

The increase of health awareness has lead to the **convergence of markets** and many new products, especially in the areas of nutrition, pharmaceuticals, and cosmetics. Demand is increasing for products and services that promote physical and mental wellbeing in the fields of:
• Work-life-balance and life-design
• Holistic approach to nutrition: gen food, novel food, functional food, organic products
• Age appropriate sports as Nordic walking
• Health tourism and wellness offers
• It is estimated that health reasons influence 80% of consumer decisions, whether for cars or kitchen accessories.

5. Technology

(Technological) innovation is mainly seen as a sub trend of sustainability. The **convergence of technologies** and research fields is becoming more important, such as the „NBIC"-discipline (**n**ano- und **b**iotechnology, **i**nformation technology & **c**ognitive sciences). Particularly profound changes are expected in the fields of robotics, genetics and nanotechnology.

1. Miniaturising of technologies / nanotechnology

The further development of micro-electronic systems leads to continuously smaller, more complex and intelligent units that can be placed in different everyday objects. Micro-electronic systems also serve as an interface to other technical areas. They are especially important for the use of nanotechnologies. The **fields of application are numerous** and go from automobile construction to medicine.

2. Biotechnology and genetic engineering

Because of climate change, the increasing world population and especially in developing countries, more affordable and healthier **food** is needed. The ambition of biotechnological innovations is to cultivate desired genetic characteristics as a high nutritional value and new and more resistant plants. More advantages are an increase in production and less use of pesticides and herbicides.

In the **medical sphere**, genetic engineering has led to new diagnostic possibilities and pharmaceutical substances. Great hope is placed in cell and tissue engineering outside the human body. For a sustainable production, industrial biotechnological methods (**white biotechnology**) are essential such as biocatalysts, environmentally friendly chemicals or biopolymers as substitutes for plastic.

3.   Robotics

Robot technologies are mainly used for **monotonous or dan-
gerous activities**. Typical fields are monitoring, for example of
health and safety conditions, clean-up work and support for
sick people to cope with everyday tasks.

Medical research aims to connect robots with the human
nervous system in order to develop new wheelchairs and pros-
theses. In the micro dimension, robot bacteria can be injected
in the human bloodstream to take over cleaning duties, the
removal of harmful cells, or exact placement of medication

The newest robot generation is supposed to **learn through
imitation or verbal request** instead of being programmed.
The biggest challenge remains in the imitation of human intel-
ligence.

4.   Other important fields of technological innovation:

• Bionics
• Cloud computing
• Individualisation leads to mass customisation
• Ambient intelligence
• Green technologies

6.   Summary

Megatrend	Key Facts	Advantages/ Chances	Risk/ Threads	Beneficiary Markets & Branches	Challenges for Companies
Globalisation	• change towards a Knowledge Economy • shift in economic power	• utilisation of geographical/ locational advantages • new customers: middle-class society newly industrialised countries • homogeneous regulations, e.g.: regulation of financial markets	• increased competition at the goods and capital markets • technology competitors in Asian		• high company efficiency and rate of return requirements • enhancement of the innovative capacity • globalisation- strategy • Diversity-Management
Demography	• growth of the population worldwide, but declining and aging of population in industrialised countries • rising migration streams • stabilisation problem of social systems	• elderly people become the most important group of customers	• scarcity of resources • curbed economic growth	• pharmacy • care • medical technology • financial services • recreation/ culture/ travelling	• brain drain • (age) diversity management • health management • new work
Environment	• industrial societies have to increase their productivity of resources and energy • scarcity of strategic resources	• environmental engineering as key position for economic growth • target group LOHAS • political appeals • positive environment for innovations	• rising energy demand • rising prices in the commodity markets • movement from energy dependence to technology dependence • under pressure to act	• efficiency technologies • water supply and distribution • sustainable mobility • energy production • recycling	• creation of efficient and sustainable manufacturing and delivery methods • early and high market penetration
Health	• worldwide rise in level of medical care • high health expenditures • economising of the healthcare market • movement: self dependent healthcare	• private healthcare market • convergent markets in the sectors food, pharmacy, health and cosmetics	• increasing competition for suppliers	• health care and prevention • organic products • functional food • health tourism • sporting goods • food • technology	• close collaboration with health funds/ insurances • Medical Savings Account
Technology	• mass customisation (rapid manufacturing) • microsystems technology • nano-technology • robotics • ambient intelligence • bio-engineering • genetic engineering	• interdisciplinary research • convergence in technology • sustainability: decrease in consumption of resources and energy • medical progress	• technology scepticism (monitoring, reliability on robots) • health risk not excludable (genetic engineering and nano-technology) • heterogeneous demand-patterns	• medicine • electronic engineering • information and communication technology • chemical industry • industrial/white bio-technology	• cost pressure resulting from globalised competition • effective data protection provisions • politics of biosafety

APPENDIX B

QUESTIONNAIRE RESULTS SUMMARY

by Amhed Abbas (Bahrain Quality Society)

Survey Statistics

Number of respondents: 38

Countries:
- Austria, Germany, Hungary, Ireland, Poland, Romania, UK
- Bahrain, India, Kuwait, Mauritius, UAE, Philippines, Russia
- Brazil, Canada, Mexico
- Australia, New Zealand
- South Africa

1. What do you see as the key Global Challenges/Megatrends over the next 20 years?

- Ageing population, fuel shortages, sustainability
- Global Challenges - various environmental challenges, food production costs, energy, reducing national debts, international conflicts, rapidly changing business models, dealing with resource scarcity, growing population, housing challenges, restructure of developed world commercial competitiveness Megatrends - increased social awareness/activity, increasing use of technology, growth of biotechnology, aging population, shifts in global wealth, greater social conscience
- The economic trend may show the S-curve in near future, hence it must be cost oriented initiatives.
- Trends: The impact of global debt will drive the need for more organisations to look closely new ways to improve productivity. Lean and six sigma will be recognised as key enablers for performance improvement. Mobile technology will develop further. People will want to access more complex on line services via hand held devices China will increase global influence as they continue to develop their innovation / technology competencies.
- Global warming, this has a direct impact on a wide range of sectors such as industry, social and economy financial

crisis, recession might have passed but there is still a possibility of a second dipping hitting the world economies this will have an adverse effect on business as a result businesses will need to up their game with regards to business management
- The changing role of the emerging markets
- Competing with emerging countries
- The greater impact of financial powers management on local and regional and zonal economies and life.
- Population change and age of workforce Skill development and mobility of skills across sectors Ability of organisations to adapt to rapid change Ability of organizations to gather useful analytical data as they require it for decision making
- The economic recession currently is a worry for most business owners and operators at present. Moving beyond this to a state of business confidence will be the challenge for the future. Also having confidence in systems that will ensure we do not create another global recession.
    a) Focus on resource use efficiency and a major global effort on extracting more from less.
    b) Services en masse, to individual customers
    c) The growing contrast between lifestyle and diet-related health problems, and high fertility rates and problems of not enough food for millions in poor countries.
    d) More and more of the world's people on the move, changing jobs, moving house and travelling more often and commuting further to work.
    e) everything in the natural world will have a digital counterpart.
- How will new technologies and social networking shape the use of benchmarking?
- Innovation. I think this is the most important challenge for the companies and organisations. The European companies are able to survive the Far-East pressure only with the help of innovate products and services.
- Growth of China and BRIC, relative decline of Europe & USA, decline of oil-based power, demographic population growth, ageing western populations, growth of genetics

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and increased virtualisation, accelerated cycle-times

- Financial crises and environmental trends
- More specific benchmarking of key areas and industries
- Large corporations will dominate the economy. Production will be based on a unique commodity or service. Highly specialised and trained staff
    1. Environmental Issues
    2. Technology
    3. Ageing population
    4. Terrorism
    5. Movement to world community (without national borders)
    6. Tribalism,
    7. proliferation of handheld communication tools within the younger generations
- Greater emphasis on transparency, openness and above all honesty in business. Increased regulatory overhead on businesses and higher levels of enforcement activity by the regulators.
- Aging Prosperity (or lack of same - poverty) Environmental Issues - continuing trend
- More stringent environment standards for countries and organizations; water scarcity in the MENA region and possibly other regions; floods and natural disasters due to record high temperatures; blended, virtual, and e-learning will become the norm; totally open and globally accessible media.
- Development of Smart Mega Cities Development of Knowledge Economies Innovation Management(Open Innovation)
    a) Knowledge Society (increasing services incl. information technology),
    b) Globalisation (goods and financial),
    c) Sustainability (economic, environmental, social development)
- Higher competitiveness
- Civilization has to choose what way to go to survive. Otherwise there will be domination of international consortiums and companies but people will play a role of slaves.

Please look at my speech in Japan ANQ Congress September 2009, Waseda University. From my point of view BENCHMARKING is called to improve people's life being all other variants are crafty.

- Environmental issues, Creating new jobs (Unemployment)
- Competing with emerging manufacturers
- As things speed up and the world becomes smaller decisions will need to be made based on as much information as possible. However, this needs to be provided in a simple and meaningful way.
- Innovative products and their life cycle Cost competiveness Market fluctuations
- Further consolidation - mega corporate. Tesco+ perhaps. A gradual move away from the 'accountant view' of efficiency being paramount (over value creation) to a more visionary compelling 'life style' business model
- How to retain your valuable customer & employees with knowledge. In general the shortage of man power.
- Increased complexity of regulations, protection, health and safety, environmental issues, taxation increased availability of information: national, global, industry, companies, communities increased interactions among communities on a global scale - there may be "fuzzy" authorship as information, data mining can be done remotely and could become anonymous - see wikileaks as a precursor of things to come increased networking among professionals and communities will rapidly
- Economic crises - health scares such as H1N1
- Demographic challenges, focusing on energy efficiency issues, dealing with water and food shortages, development of IT

2. How can Benchmarking support/influence the Global Challenges/Megatrends?

- Desired business traits are going to be influenced by mega trends. for example a company which is seen as sustainable will be seen as successful. Benchmarking can speed up the proliferation of best practise and also speed up the progress made on each mega trend
- Use of trends to support future predictions, help prepare for change Provide base for planning at macro and micro levels Learn lessons fast and share best practices
- It will able to judge the difference and highlight the crunch area to meet the global challenges.
- (Global) Web based Benchmarking tools + (Local) Best Practice clubs = and effective way to achieve world class performance. See examples: www.leanbenchmark.org www.knowlton.org.uk/index.php?id=17
- On global warming, many countries in Europe for example have been successful in implementation of renewable energy sources while most of the developing countries rely mainly on non-renewable resources for their energy needs. benchmarking can be valuable to developing countries to learn from those developed countries with renewable energy utilisation already in place financial crisis- companies need to put in place processes and systems that will ensure high efficiency and high productivity in order to survive under the current financial situations, benchmarking can assist in giving companies the best practices necessary to survive and to flourish
- Benchmarking is a useful instrument for these new powers to recognize the potential that could still be exploded.
- Maintain a sustainable edge
- Provide innovative processes to leverage talents to maintain competitiveness Share key information to support survival of essential economics element Support international learning and growth
- Standardisation of outputs and production globally. Ensuring that products produced in any part of the world are

of the same quality. This will enable all manufacturers to compete at the same level and aid to provide customer satisfaction.
- Benchmarking can support showing us best practices around the world. (How to learn and how to do)
- Will benchmarking become more or less prominent in tools like business excellence and knowledge management?
- If somebody invented a new and great product, service or process - why I have to invent again? The companies have to study and implement the great ideas. Of course, this is not a product copy! The companies who are able to communicate each other will grow faster than other.
- Increased transparency, open sharing & collaboration, especially x-industry and informal
- Best practices for increased efficiencies and use of technology to support global communications
- by demonstrating who are the companies and organisations to beat
- If used correctly it could help/assist in a continuous improvement program. Need to learn that "benchmarking" is espionage, spying on the enemy. How to outperform ones biggest competitor.
- It can help organisations/countries to more quickly identify and implement solutions to solve problems.
- Benchmarking can only help when added bottom line value is realized by the parties doing the benchmarking.
- By developing an "Honesty" benchmark all interested parties would have access to an objective measure. This would enable them to make more informed choices about whether to do business with the organisation.
- Benchmarking can identify trends which if tackled at the correct level can help to predict / forecast / identify possible methods of tackling these issues in a proactive way.
- Developing a global benchmarking resource with a robust search tool and competent area benchmarking teams.
- On Demand Best Practices Globally Accessible Best Practice Processes Quick and Easy Innovation Support
a.   Systematic method to capture and describe these devel-

opments (especially getting structured information about the external situation)

b. Based on this (clear picture regarding external conditions), benchmarking can help to bridge the gap between these externalities and the internal goals of an organisation (defining business vision and strategy). Therefore benchmarking should be a part of the strategic management; supporting the learning process of organisations

c. Benchmarking should help to deal with the megatrends and therefore should offer information and solutions regarding the knowledge society and sustainability (e.g. KPIs and best practices)

- Be able to benchmark new trends
- We have start as many as possible benchmarking projects to explain people the right way for salvation. Benchmarking cannot be considered as a tool for business only.
- In the next 5-10 years PROSUMERS will be born: produce and consume locally. Eg businesses will produce and consume their own energy and water requirements; we will grow and consume our food requirements locally.
- Benchmarking is structured learning process from other and therefore it can help in learning from good performers.
- Identify areas for process improvement leading to reduced costs
- Benchmarking can support the trend outlined above but the various types of benchmarking need to be clarified and focused in the right way. The results also need to be presented in a way which makes them easily implemented.
- Learning from a dynamic environment to improve own practices
- To provide a more balanced analytical approach to comparison - producing a richer picture for best practice.
- Find the best practice to keep customer & employees
- Benchmarking can help organizations become more productive through sharing of principles, practices and techniques
- It will establish gold standards companies can strive for and identify what is a benchmark organisation in time of

changes
- Learning from others will be always needed

3. What would you like the future of Benchmarking to be? (Does Benchmarking have a future?)

- I would like to see it hand in hand with the internal audit function of a business. so the existence of the function is a given and it is seen as vital to the success of the business rather than just a nice to have.
- More flexible Instant results Intelligent links to answers Much broader than simply a means to manage efficiency, a strategic tool
- The market is changing like 10X speed, the benchmarking will be in breakthrough range.
- Most definitely! for companies to survive and flourish nowadays they need to keep track with the developments globally. this can be achieved through benchmarking which is all about learning from others and they learn from you
- Benchmarking has definitely a future if it allows innovation to grow in parallel.
- Concepts to be understood by more businesses and the benefits recognised
- I think that benchmarking will be challenging but especially in the research area. The real benchmarking services will grow slowly in the real economy market. I would like to have mistaking.
- Greater sharing of information that is useful across broad geographic areas Provide access to useful quality assessment tools for general application Provide solid data on tested Best Practice Approaches
- In manufacturing benchmarking is just one of the tools that can be used to improve production and performance and, of course, should not be used in isolation. The introduction of activity based accounting (as opposed to cost based accounting) along with the other quality tools available and

movement towards global measures across an organisation would be a holistic approach to continuous improvement for an organisation.

- More data, more sharing.
- How will issues such as the global financial crises, governance, political, social and environmental trends impact on benchmarking?
- Some company and organisation are not really like benchmarking. My opinion the benchmark have a great future: the big problem is the thinking about it. The governments and EFQM must support the companies in this cooperation.
- Yes but less structured and more informal on the one-hand (stimulated by social media and the 'open' movement & sharing)/collaboration business models and more structured and regular on the other (internet, specialist platforms, ongoing, closed group etc)
- Sharing of process management tools, best practices for a total quality culture including employee well being
- It should but people misunderstand it now
- It does have a future if it is fully understood. Today it is not except by a select few.
- Better understanding of benchmarking and the different types. Increase in professionalism for the benchmarking field e.g. certification/standards. Benchmarking competency centres in all countries working with the private and public sectors. The GBN assists more proactively in international benchmarking projects.
- I do not see benchmarking having a lot of future, simply because what worked for someone may not necessarily work for others. I see benchmarking developing into a methodical approach to analyze root causes and work on their solutions. In addition people in many places are confused between benchmarks and benchmarking.
- An "Honesty" benchmark would be useful for Governments, regulators and consumers. If that benchmark could be applied across all businesses we would have higher levels of transparency enabling more informed choice for consumers / customers.

a. More accessible for enterprises: through not only bench marked figures but also the possibility to learn from the best in the sector/ industry –
b. To be among the best, it is imperative to know what are the best doing . Hence benchmarking has a lucrative.

- I would like Benchmarking to be recognized to be the tool of choice in national and organizational strategic and operational planning
- Globally Connected More Standardized Tools Easy to be accessed via online services One Central Hub for available information (One-Stop-Shop)
- Benchmarking to support strategic and operative management in organisations, b) Most important kinds of benchmarking (now and in the future): Indicator benchmarking (KPIs), process benchmarking and best practice benchmarking
- More safer and more companies participating
- Let's start Benchmarking project "OPERATE LIKE TOYOTA!" If interesting I will send terms and conditions. This project we will start soon in Russia.
- Each local market will want to aggressively learn green practices from others, globally.
- Yes, technological advancement will make benchmarking easier to do.
- I'd like to see clear comparison data more readily available
- Benchmarking has a strong future in support of various initiatives such as Business Excellence, ISO 9000, Lean etc. which all need benchmarking to function. They need benchmarking and benchmarking needs them (for implementation 'do something with it' 'Applied Benchmarking')
- Play an important role in shaping the business of the future
- Immediate future = metrics (fast and systematically produced) WWW provides such a rapid platform for dissemination of ideas and practices, I think there is less opportunity to discover radically 'new' best practices through current benchmarking methodologies.
- I think that benchmarking will become a more important tools in the future.

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- Yes, increasingly peoples, communities and organizations will share, depend on each other to deliver their products and services. Newer models for business have to evolve and so would be "taxation" adopted to a wider community. I guess, as organizational barriers become fuzzy and countries and borders follow, then what is the future for supporting governments?
- Yes, definitely for social and service based companies
- I would expect benchmarking to become more widely used in public sector, especially in higher education as a means for improving performance and dealing with growing competition.

4. What methods, tools and technologies do you think will be used for Benchmarking in 5 years?

- It is hard to imagine much different from today, however I am relatively new to benchmarking and still getting my head around it
- Technology will allow faster, more cost effective deployment of tools and knowledge Medium of delivery and development of benchmarks on line
- Breakthrough excellence model can be use for benchmarking
- Benchmarking association are easy to use for information sharing including the sensitive information as it can be shared in blind format thereby ensuring effectiveness of the benchmarking process.
- Social media will have a great contribution in simplifying the benchmarking.
- NLP and specific tools and techniques from Lean, Six Sigma, 7 Statistics and Advanced Management Tools and Techniques
- I think that would be available software tools to help analysis and reports.
- Applying economic indicators to forecasting service and staffing needs Applying root cause analysis, and process

mapping techniques to improve efficiencies Using software data systems- to compare outcomes Search engines for Best Practice Research
- A mixture of all that is available on the market at present, combined with any ERP programmes the organisation may be running
- Best practices index with specific data: process steps, humans involved, cycle time and installed capacity.
- Which type of benchmarking will become most popular?
- Internet. Clusters.
- Mobile web and web, integrated with social media platforms and ERP such as SAP, Salesforce.com etc, an 'add-on' optional component, lots of public and industry benchmarking via industry associations, wide scale personal benchmarking and comparison, gaming analytics software will be adopted for corporate use, data sharing standards slowly evolve and adopted in public sector
- More on-line surveys, eforms, webex, use of technology to support benchmarking and sharing of information
- The WWW data mining
- Whilst some desktop audit can take place it has limited results. Team site visits will be the way to go. Why team you ask? Well the team will be made up of subject matter experts each with their own field of expertises . Each member of the team will have a particular aspect of the process to focus on and report back on.
- Greater user of the benchmarking databases/forums/on-line communities Greater professionalism in benchmarking. Face to face meetings still important
- Visits
- Global "Honesty" standard available to / for all businesses.
- Social media and spin off elements of same will be used for benchmarking.
- Databases, Visits, Conferences, KPIs
- Face-To-Face meetings (e.g. site visits, discussion groups for best practice sharing and learning), b)increasing use of technology (e.g. apps); social networks to support best practice sharing

- Internet, best practices
- Comparison of people life being. That it is the main reason for benchmarking pursuing.
- Communication & Information Technology will be an asset for knowledge storage and capture.
- Web-based applications
- More internal benchmarking used
- Simple diagnostic tools, best practice benchmarking visits, process benchmarking, strategic benchmarking in that order.
- Benchmarking process automation, use of web enabled tools to dialogue and share practices
- A greater networking between communities of practice will likely see specialist benchmarking practitioners fade away. However 'proven' change agent experts - independently recognised for their bottom line success at benchmarking initiatives - are likely to stay busy!
- With the arrival of mondial networking this need to be the tools of the future.
- I think the tools developed would continue to be used from simple observation techniques to data-mining. The techniques for drawing principles and effective systems, procedures and practices will be more demanding for statistical evaluation
- Ranking - case studies

5. What methods, tools and technologies do you think will be used for benchmarking in 20 years?

- I think it will move further and further to the soft skills. So very much focussed on employee engagement, and people interactions
- Products vs its life model can be use for benchmarking
- Business social networking and best practice sharing 'Best Practice Facebook" will become second nature to enlightened business leaders

- The evolution of social network will make it easy to share information and to conduct benchmarking exercises. In 20 years time benchmarking is expected to be practiced wider than it is nowadays
- What do you think about it?
- Internationally recognized norms (standards) system, similar to ISO or others, to provide best practices references.
- I have no idea- other than taking advantage of the broad use of social media
- Technical instruction (for documentation), digital supports, chat/ twitter/ facebook worldwide collaboration .
- How can organisations obtain more value from benchmarking?
- Unfortunately I am not an augur....Sorry
- No idea, way too far ahead but as everything can be connected to everything then the possibilities for 'real-time' regular or ad-hoc benchmarking increase all the time, the data available will be mind-bending!
- Really don't know
- Specifically designed checklists and recording devices. Electronic surveillance devices designed for the gathering of information
- Use of mobile phones to participate/gain access to benchmarking information. Video technology used to share best practices. Greater use of on-line conference facilities Worldwide database/collection of benchmarks/best practices Greater sharing internationally Face to face meetings still important
- Video conferencing
- Publically available benchmarking results with agreed background measurement criteria.
- ICT, PDAs, HP, Business Intelligence Solutions, New Open Platforms (Web 2.0 - Web 3.0), Social Semantic Networks for Benchmarking
- Still face-to-face meetings (no technology can substitute this), However, increasing use of technology; especially mobile applications
- No idea

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- The same as mentioned above.
- Sub-consciously, we will all be benchmarking and innovating for strategic and tactical advantage.
- Don't know
- More external benchmarking used
- I see no reason for change interms of the types of benchmarking however technological developments will make things more portable and instant, virtual visits will be possible, provess benchmarking could be done for you by technology etc.
- Don't know
- Greater use of inter business CoPs. Analytical software tools in support of searching and determining where best practice is provising results. Robotic access to public domain / analyst sources 'crunching' the numbers to provide insights. Greater use of remote communication media.
- Mondial networking
- Scorecard methods

6. Considering all of the above, do you have any views on what the future role and function of the Global Benchmarking Network should be?

- Similar to today. assisting companies to build up capability to do their own benchmarking, and remaining the centre point for new developments in benchmarking techniques
- More collaboration between members and a voice of global benchmarking to ensure greater understanding and take up around the world Much greater use of the web alongside more traditional workshops/road shows
- Can't say
- To promote and share Best Practice benchmarking methodologies. To encourage growth in 'local' practical best practice sharing networks. To look at innovative ways to help organisations to improve productivity
- Organisations such as GBN are important for facilitation of

benchmarking projects and for ensuring information sharing
- Communication of how benchmarking can be made effective and affordable for SMEs
- Educational; Disseminative; Promotional; Mentoral;
- Provide comparative data and up to date information on benchmarking practices
- To get their names and their goals and focus out to more organisations. To somehow have a better report with more areas of industry.
- Committed leadership to provide the essential coordination and continuity. The GBN provided this leadership; Can GBN provide too the World Benchmarking Performance Index (WBPI)?
- Help define and create the future and be prepared to evolve with 'benchmarking', which may become a redundant term (already is?) in the light of technology and business trends?
- Hosting capacity. There needs to be a network the brings everyone together to discuss ideas and best practice. Although I think technology is the future we still need that face-to-face contact to understand the potential of global benchmarking and how it can up us all.
- Benchmarking has its place in the tool box. I am not sure that it is the most used tool in the box. Most organisations have a long way to go before they can even think of using this tool. There is so much self improvement that could take place without resorting to expenditure on benchmarking
- The GBN needs to grow if it is to address the Megatrends.. It needs to run benchmarking projects for each Megatrend. It needs to professionalise the benchmarking field in terms of training/understanding of benchmarking through certification/standards e.g. through a membership association for benchmarking professionals. GBN is for benchmarking competency centres - we need something for individuals too.
- Implementation of world "Honesty" benchmark standard

- Play a leading role in the development of a global benchmarking resource.
- The GBN should be the information centre for accessible benchmarking methods and tools. The GBN should be the organisation to standardize Benchmarking Methods and Tools on a global level.
- Yes, I am sure that benchmarking has a future and I hope that the GBN can contribute to and design the future of benchmarking. The GBN has an outstanding global spread (members from all continents of the world); this is one of our strength. We should use this to conduct regular surveys on benchmarking and related topics (besides other projects, e.g. conference, Roadshow which support the face-to-face contact as mentioned above). All members should take actively part in this surveys/projects; this will be a win-win-situation – for the GBN and its members individually.
- GBN can be considered as a network for people to initiate and control the process of comparisons.
- GBN has a huge responsibility to educate businesses and individuals on the power of Structured Benchmarking & Innovation (twins for ideation).
- Acts as an un-official regulatory body
- Define methodology, provide usable comparison data
- The Global Benchmarking Network should continue to promote the use of benchmarking in all of its forms as it develops using some of the new approaches to promote the concept.
- There should be more of exchange among member companies
- Evidence tracking of success, promotion of research into tools and techniques to equip business specialist communities.
- Should expand to rejoin as many organisation as possible.
- Be the global repository for information and best practice which should be accessible to a wider audience so that our communities could benefit. Ultimately, everyone progresses to higher and higher levels of performance, success and satisfaction.

- Webinars that create Forums across different countries to exchange knowledge and dialogue - develop reports on easy to implement tools and methodologies for benchmarking - share best practice
- I think there is a need to provide potential benchmarking users with more precise guidance on how to actually use it. Especially in public sector where there is little money to spend on staff training.

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APPENDIX C

Benchmarking Past, Present and Future

by Dr Robin Mann
(Centre for Organizational Execellence Research)

Why use benchmarking? Dr Robin Mann, Chairman of the Global Benchmarking Network, will explain why and what it is as he reviews the history of benchmarking, the present postion, and the future.

The Past

It is now over 20 years since the publication of the first book on benchmarking by Dr Robert Camp (1989): Benchmarking: The Search for Industry Best Practices that lead to Superior Perfomance.

This was a ground-breaking book. It described a new methodogy called "Benchmarking" and how to apply it based on Dr Camp's experience of managing the benchmarking programme within Xerox. The uniqueness of Xerox's approach was that they moved from "competitive benchmarking", which was principally used to examine manufacturing costs through product comparisons, to "non-competitive benchmarking" which encompassed a 10 step methodology. Xerox recognised that in order to survive and grow they needed to do more than compare against competitors – what they needed to do was to develop superior practices from learning from best practices wherever they exist.

Between 1981 and 1989, Xerox undertook over 200 benchmarking projects, learning from the best irrespective of which industry they came from. These included American Express (for billing and collection), Cummins Engines and Ford (for factory floor layout), Florida Power and Light (for quality improvement), Honda (for supplier development), Toyota (for quality management), Hewlett-Packard (for research and product development), Saturn (a division of General Motors) and Fuji Xerox (for manufacturing operations) and DuPont (for manufacturing safety). Xerox transformed itself from an organisation which was in danger of going out of business (their market share had plummeted from 86% in 1974 to just 17% in 1984) to one that became recognised as a world-class. Xerox became the first company to win both the Malcolm Baldrige National Quality Award in 1989 and the European Quality Award in 1992. This transformation process from "crisis point" to "world-class" took 8 years.

Due to Xerox's success, benchmarking became known worldwide. Figure 2 shows the rise in popularity of benchmarking from 1990 when there were only a few publications on the subject to over 350 per year in 1993. This number of publications has been maintained each year. This is quite unusual – most quality management techniques have followed a "fad cycle" where they are popular for a few years and then their popularity declines.

Stage	Step	Camp Model
Planning	1	Identify what is to be benchmarked
	2	Identify comparative companies
	3	Determine data collection method & collect data
Analysis	4	Determine current performance 'gap'
	5	Project future performance levels
Integration	6	Communicate benchmark findings and gain acceptance
	7	Establish functional goals
Action	8	Develop action plans
	9	Implement specific actions & monitor progress
	10	Re-calibrate benchmarks
Maturity		Leadership position attained Practices fully integrated into processes

Fig. 1: Xerox's 10 Step Benchmarking Methodology

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The reason for the continuing popularity of benchmarking stems not only from it being a valuable improvement tool but also because key institutions actively promote it. The developers of both the EFQM Business Excellence Criteria and the Baldrige Criteria for Performance Excellence position benchmarking as a key component of business excellence – therefore bringing greater awareness of benchmarking to leading organisations around the world. Also, the Global Benchmarking Network (GBN) was created in 1994 to promote and encourage its use worldwide. The GBN was formed by experts from benchmarking centres in Germany, Italy, Sweden, the United Kingdom and the United States (with Dr Robert Camp serving as President). Since 1994, the GBN has helped countries around the world to learn about and use benchmarking methods and has now grown to a membership of 25 benchmarking centres representing over 20 countries.
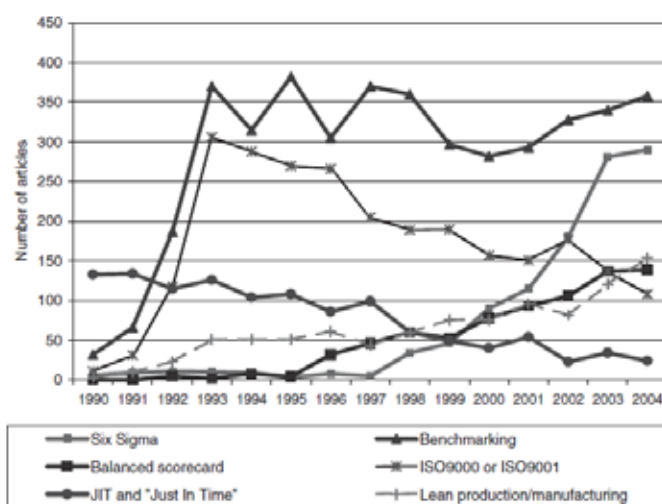
Fig. 2: Number of articles published in ProQuest (1990–2004) on tools and techniques (Thawesaengskulthai, N and J. Tannock, 2008.)

The Present

In the last 20 years, benchmarking methodologies have evolved and technology has helped to make it easier to undertake. Most research studies in the last few years have identified benchmarking as a top five tool in terms of popularity whilst respondents of the 2009, Bain and Co. study (Rigby et al, 2009) rated it as the No.1 tool in terms of usage and average in terms of satisfaction – see Figure 3.

	Usage	Satisfaction
Benchmarking	76%*	3.82
Strategic Planning	67%*	4.01*
Mission and Vision Statements	65%*	3.91*
Customer Relationship Management	63%*	3.83
Outsourcing	63%*	3.79
Balanced Scorecard	53%*	3.83
Customer Segmentation	53%*	3.95*
Business Process Reengineering	50%*	3.85
Core Competencies	48%*	3.82
Mergers and Acquisitions	46%*	3.83
Strategic Alliances	44%	3.82
Supply Chain Management	43%	3.81
Scenario and Contingency Planning	42%	3.83
Knowledge Management	41%	3.66**
Shared Service Centers	41%	3.68**
Growth Strategy Tools	38%**	3.87
Total Quality Management	34%**	3.80
Downsizing	34%**	3.59**
Lean Six Sigma	31%**	3.87
Voice of the Customer Innovation	27%**	3.88
Online Communities	26%**	3.69**
Collaborative Innovation	24%**	3.71**
Price Optimization Models	24%**	3.75
Loyalty Management Tools	17%**	3.79
Decision Rights Tools	10%**	3.68

*Significantly above the overall mean
**Significantly below the overall mean
(usage = 42%, satisfaction = 3.82)

Fig. 3: Usage and satisfaction of Management Tools and Techniques (over 9,000 respondents worldwide) (Rigby et al, 2009)

Research by the GBN (Mann et al, 2010) identified a potential reason why satisfaction rates for benchmarking were average. It seems that organisations have widely different opinions on what benchmarking is and how to apply it, leading to a sizeable % of organisations recording poor returns from benchmarking. According to the GBN study almost 30% of organisations that

use benchmarking obtain an average return/saving per project of less than £6,500. This is in contrast to 20% obtaining an average return/saving per project of greater than £157,000 per project with some obtaining returns in the millions of pounds. The reasons for this disparity in success, was reported as:

- 25% of respondents that used benchmarking had not been trained in benchmarking and another 30% of respondents indicated that "only a few of the employees had received training or that training was rarely given".
- 30% of respondents that used benchmarking do not follow a particular benchmarking methodology when conducting benchmarking projects.
- 25% of respondents do not follow (or rarely follow) a benchmarking code of conduct when undertaking a benchmarking project.
- 30% of respondents "do not, rarely, or sometimes" develop a project brief for their benchmarking project specifying the aim, scope, sponsor, and members of the benchmarking team – thus indicating poor project planning.
- 35% of respondents do not (or rarely) undertake a cost and benefits analysis of the project once it is completed.

One of the common problems is that many people consider benchmarking to be solely about comparison rather than learning from the practices of other organisations and adapting and implementing these practices. In recent years, the GBN has been promoting the following definitions of benchmarking to assist in its understanding.

Informal Benchmarking refers to benchmarking that does not follow a process or a procedure. It refers to the type of benchmarking that everyone does at work, often unconsciously, involving comparing and learning from the behaviour and practices of others. Learning from informal benchmarking typically comes from the following:

- Talking to work colleagues and learning from their experience.

- Consulting with experts who have experience of implementing a particular process or activity in many business environments (Figure 4, shows a photo of Dr Robert Camp).
- Networking with other people from other organisations at conferences, seminars, and Internet forums.
- On-line databases/web sites and publications that share benchmarking information provide quick and easy ways to learn of best practices and benchmarks.

Fig. 4: Informal benchmarking can be used by everyone

- **Formal Benchmarking** consists of two types – Performance Benchmarking and Best Practice Benchmarking.

- Performance benchmarking describes the comparison of performance data obtained from studying similar processes or activities. Performance benchmarking may involve the comparison of financial measures (such as expenditure, cost of labour, cost of buildings/equipment) or non-financial measures (such as absenteeism, staff turnover, complaints, call centre performance).

- Best Practice Benchmarking describes the comparison of performance data obtained from studying similar processes or activities and identifying, adapting, and implementing the practices that produced the best performance results. The Xerox methodology can be described as a best practice benchmarking methodology.

Both Informal and Formal benchmarking can be used internally (learning inside the organisation), externally (learning from other organisations) or competitively (learning from competitors).

A recent development has been the move to professionalise the field of benchmarking. New benchmarking methodologies are emerging that provide in-depth guidelines and instructions on how to do benchmarking well. One such methodology is the TRADE best practice benchmarking methodology which focuses on the exchange (or" trade") of information and best practices to improve the performance of processes, goods and services.

The TRADE methodology, see Figure 5, is not dissimilar to Xerox's but the difference lies in its prescriptive nature. Underneath each of the 5 key stages are 4 to 9 steps that clearly describe what needs to be done before proceeding to the next step and stage. Due to the clarity of the methodology benchmarking teams are able to focus on the learning from the project rather than "what should be done next" as the methodology ensures that a professional research approach is undertaken. Without this discipline, projects are unlikely to be as successful due to project teams focusing on issues without conducting a cost/benefits analysis or specifying clearly what they want to learn, and without obtaining buy-in from key stakeholders (projects often fail even when best practices are identified as key stakeholders have not been involved in the project and their commitment cannot be gained for implementation).

Another point of difference is the certification scheme for TRADE. This certification scheme ensures that individuals are adequately trained and can demonstrate their learning if they wish to facilitate or lead benchmarking projects.

Fig. 6: TRADE Certification Levels

Technological advancements have transformed communications and opened up a whole new information based world. Any organisation can now access low-cost internet-based benchmarking services and opportunities such as consortia, surveys both on and off line, virtual common interest groups, best practice information resources and social networking sites for contacting potential benchmarking partners. These resources are a real boon to organisations that want to access best practices and expert advice/opinion but do not have the resources for full-scale benchmarking projects.

The Business Improvement Performance Resource (BPIR.com) is one of the new resources that provides valuable support to benchmarking projects. It is a vast knowledge repository containing databases with thousands of benchmarks, measures, best practices, benchmarking partners and case studies that cover virtually every aspect of business. In addition, the

Fig. 5: TRADE best practice benchmarking methodology

resource provides networking facilities enabling users to create their own personal profile, and record and share best practices directly in textual, photo, or video format.

Fig. 7: Users of the BPIR.com can add and search for best practices

Due to the advances in benchmarking we now have organisations which have become world-class in 3 years (in comparison to Xerox's 8 years). One such example, is Boeing Aerospace Support which transformed itself from an average company in 2000, scoring 300 points against the Baldrige Criteria, to over 700 points (a world-class score) in 2003 when they won the Malcolm Baldrige National Quality Award.

In December 2009, I was lucky enough to talk to David Spong, who led Boeing Aerospace Support during this period. He described how benchmarking was central to Boeing Aerospace Support's achievements. He explained that firstly best practices were transferred from the Boeing Airlift and Tanker Program, winners of the 1998 Malcolm Baldrige National Quality Award, to Boeing Aerospace Support. Secondly, a system was set up so that all the business units within Boeing Aerospace Support could benchmark their performance and learn from each other. To do this, he had all the business units undertake assessments against the Baldrige Criteria. All the assessment scores were

then compared. This enabled the business units to identify which business units to learn from for each Baldrige category. Lastly, the business units were encouraged to look outside their industry and learn from the best in other industries. By being able to utilise the new communication technologies this was much easier to do for Boeing than for Xerox.

The Future

So how will benchmarking develop in the next 20 years? This question is currently being asked by the GBN as part of a 2010 research project. This project is exploring the likely role of benchmarking in the future through considering Megatrends affecting governance, political, social and environmental issues. The project intends to answer the following questions: What will benchmarking look like in 2030 – and in between? What are the tools, methodologies and technologies that benchmarkers will use to help organisations and economies to improve?

Undoubtedly technology will play an increasing part in benchmarking enabling organisations to share benchmarks and best practices more quickly and all over the world. With advances in communication technology it will be interesting to see how individuals and organizations cope with the increase in data and information. Some commentators have indicated that our attention span will become shorter because there will not be enough time to review each piece of information. In my own experience of managing a best practice resource, www.bpir. com, we have seen this already. To cater for this the BPIR.com has moved from solely written content to on-line networking and now to video content. With video content, best practices can be more quickly understood and assessed for relevance.

The speed with which businesses want solutions/best practices is expected to accelerate. The providers of benchmarking services need to acknowledge this. I was recently in India attending a BestPrax Club event that was tremendously successful. At this event 16 organisations were given 10 minutes to share

three best practices. At the end of 10 minutes a buzzer sounded and the presenter had to leave the stage. In a few hours, 48 practices were shared! These were then judged, and seven best practices were selected as the winners. This type of "X Factor" event undoubtedly appeals to the masses and is a great way to quickly learn of good to best practices.

Fig. 8: Castrol's best practices being judged

The other innovative aspect of the India event, was that Suresh Lulla of the BestPrax Club had visited each organisation to "harvest" best practices prior to the event to help each organisation identify what they were good at. This harvesting process was seen as of tremendous benefit to all the participants as it was rewarding and motivational to be told that they had a good practice. Usually, consultants, evaluators and auditors search for non-compliance or opportunities for improvement and managers and employees are often on the defensive as it can be uncomfortable to receive negative feedback. The GBN plans to explore the harvesting and nurturing of best practices further and see how these concepts can be used more widely.

In the future, it is envisaged that benchmarking will help organisations/economies to improve at a faster rate. Whilst the speed of exchanging information (and therefore benchmarking) will increase we need to ensure that organisational decisions are based on sound judgement. I am convinced that a disciplined approach using a benchmarking methodology will always have its place alongside an informal approach to bench-

marking. The challenge for organisations will be to decide which type of benchmarking to do. It is likely that a disciplined approach will be required for the largest opportunities for improvement where speed to identify benchmarks and learn from other organisations (say for instance through site visits) is not as critical but where breakthrough improvements could have a huge impact on the bottom-line. Faster approaches will be used for issues/opportunities that need to be tackled in a shorter period of time, with the understanding that faster approaches are riskier and less likely to produce as large a gain.

Readers of this article are invited to share their views on the future of benchmarking and obtain a FREE Interim Report at www.bpir.com/component/option,com_mojo/Itemid,99/p,73. In December, at the GBN's International Benchmarking Conference, http://www.kuwaitbenchmarking.com/, there will be a Roundtable discussion to explore these issues further.

Dr Robin Mann, r.s.mann@massey.ac.nz, is the Head of the Centre for Organisational Excellence Research, New Zealand, www.coer.org.nz, Chairman of the Global Benchmarking Network, www.globalbenchmarking.org, and Co-Founder of BPIR. com Limited, www.bpir.com – a leading benchmarking website resource that is used by many organisations in the UK. Robin is originally from the UK but has been living in New Zealand since 1998.

APPENDIX D

BENCHMARKING 2030 PRESENTATION

(Kuwait, 2010)
by Bruce Searles (Benchmarking Partnerships)

You can download this Presentation at our website:

http://www.globalbenchmarking.org/publications/papers-and-presentations

Agenda for this Presentation

1. Introduction
2. Why Benchmarking 2030?
3. How?
4. Findings so Far
5. Next Steps

Aim of Benchmarking 2030 Project
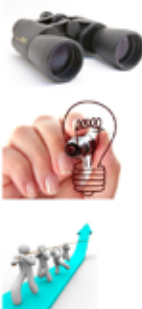
- What will Benchmarking look like in 2030 – and in between?
- What are the tools, methodologies and technologies that Benchmarkers can use to help organisations and economies to improve their outcomes?
- How should the GBN lead and respond?

Agenda for this Presentation

1. Introduction
2. Why Benchmarking 2030?
3. How?
4. Findings so Far
5. Next Steps

Outcomes From Benchmarking

Productivity +40%, Defects -65%, Lead times -50%

Key KPI +89%, Defects -62%, On time +44%

Key KPI +80%, Productivity +70%, Costs -30% to -50%, Losses -69%

Key KPI +35%, Productivity +300%, Costs:Income = 33%
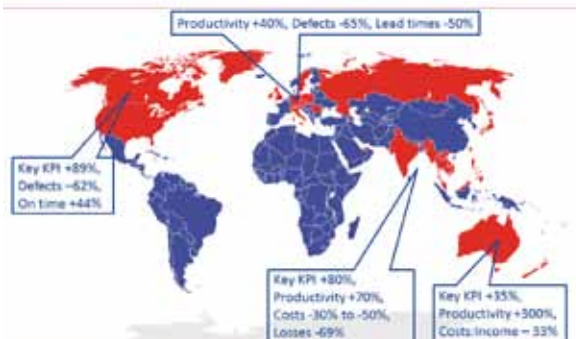
Looking Outside

- Benchmarking looks OUTSIDE the Organization
- Benchmarking partners will show you the INNOVATIVE HOW TO's
- Benchmarking accelerates improvements – you don't have to invent the best practices yourself
- You can avoid the implementation pitfalls and thus achieve results more quickly – further ACCELERATED IMPROVEMENT

Other Examples

Australia's largest General Insurer & Roadside Assistance

- Costs of processes reduced by 30% to 50% - staff freed from back office to serve customers and to cross sell to escalate profit
- Lean Manufacturing applied to Service Industry

Productivity Improved 300% - Train Maintenance Learning from Camera Co.

Iceberg of Benchmarkers

Benchmarkers

Typically three mindsets:
1. afraid,
2. ignorant on the value or
3. we don't know what we don't know

Future Use of Improvement Techniques - Worldwide

Challenges

1. Doing Benchmarking Well/Properly/Resource

2. Finding Partners & Building Relationships

3. Evaluation / Recognition

Basic Benchmarking Methodology

Stage 1 — Planning and Analysis
Stage 2 — Learning and Sharing
Review
Stage 3 — Recommendations — 100%
Leaders' Challenge
Stage 4 — Implementation — 50%

Summary

- Benchmarking produces large improvements – when done well
- Benchmarking implements strategy
- Benchmarking is done by the aware few
- Benchmarking is the only tool required of Business Excellence across over 80 countries
- What is the future for Benchmarking?
- How should the GBN lead and respond?

Face-to-Face is Best!

Agenda for this Presentation

1. Introduction
2. Why Benchmarking 2030?
3. **How?**
4. Findings so Far
5. Next Steps

Benchmarking 2030 – How?

1. **GBN Project** Team – Dr Holger Kohl, Dr Robin Mann, Bruce Searles (project leader)
2. **Desktop Research Report** – Interim Report
3. Input from **GBN Members** & **Targeted Others** – globally – survey questions linked
4. Blog
5. Roundtables
6. Final Report

Agenda for this Presentation

1. Introduction
2. Why Benchmarking 2030?
3. How?
4. **Findings so Far**
5. Next Steps

Interim Desktop Research Report

1. The Benchmarking 2030 Project – vital to our future
2. Benchmarking Definition – does GBN really have a relevant one
3. Global Megatrends – some challenging questions from the author
4. Trends in Benchmarking – is GBN & benchmarking too tactical?
5. Potential Technology Solutions – is current technology just a blip?
6. Maturity of Benchmarking – is it relevant for the future?
7. The Search for Information – not much out there on our future.
8. The GBN Itself – are we relevant for the future?
9. Next Steps – towards the Roundtable
10. Key Questions for the Roundtable – what should we ask?

Questions for GBN

1. Does Benchmarking have a future?
2. Is the GBN relevant for the future?
3. What should GBN do?
4. How will we look?
5. How will we know?

Next Steps

1. Roundtables

2. Questionnaires on GBN Web until January 2011
   www.globalbenchmarking.org
   (Free Interim Report)

3. Assimilate Inputs

4. Final Report – early 2011

www.globalbenchmarking.org

Your Key Basic Questions Towards 2030

1. Whether?

2. What?   Why?

3. How?

www.globalbenchmarking.org

GBN Member - Russia

"I think benchmarking can be named as "BENCHMARKING IS A TOOL FOR HUMANKIND SURVIVAL!".
Only that approach can push active benchmarking development in future!

Yury Samoylov

www.globalbenchmarking.org

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Fotolia – gunnar2000 slide 8; Bruce Searles slide 9, 29, 22, 15; Fotolia – pressmaster slide 12, 27;
Fotolia – Pumuckl slide 12; Fotolia – Mindwalker slide 12; Fotolia – Kurhan slide 22; Fotolia – Yuri Arcurs slide 23;
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Fred Cavazza slide 26;

www.globalbenchmarking.org

APPENDIX E

Notes - GBN Roundtable Discussions (Kuwait, 2010)

by Bruce Searles (Benchmarking Partnerships)

Notes from GBN Roundtable Discussions regarding Benchmarking 2030

by Bruce Searles (Managing Partner, Benchmarking Partnerships, Australia)
GBN Annual Conference (Kuwait, December 2010)

Megatrends

- General shift to Asia
- Ageing population
- Will we have more consumption or back to village life? – is village life more sustainable
- Key Questions asked by Roundtable moderator – Suresh Lulla, Director, Membership Engagement and Retention, GBN
  » Whether we will have Benchmarking?,
  » What will Benchmarking look like and What should be benchmarked?
  » How will Benchmarking be done?
- We could analyse each Megatrend with a PEST (Political, Economic, Social and Technological) impact analysis – maybe we should also carry out an analysis across and between the Megatrends
  » The connection is sustainability between the Megatrends
- Benchmarking to help standardise the world eg standard e plug
- GBN could work on a benchmarking framework that can be applied worldwide
- Benchmarking is a tool to change – from current practices to sustainable practices

Global Megatrends
by Ronald Orth (Fraunhofer IPK)

- Megatrends need to consider time horizon, reach, and intensity of impact
- The author took into account the following publishers - Fraunhofer Society (2010), Ernst and Young (2009), Credit Suisse (2009), Horx (Future Institute) (2009), Z_Punkt Foresight (2009), Roland Berger (2009), Allianz Dresdner, Economic Research (2008), Gundlach Consulting (2008), Steria Mummert (2007)
- 5 Megatrends – Globalisation, Demography, Environment, Health, Technology
- Key Points -
  » Economic output is shifting to Asia
  » There is a Migration from poorer to richer countries
  » Increase in people aged over 60 in industrialized, emerging and developed countries – brain drain, health management and diversity management – while society is shrinking in the west
- Selection, exploration, anticipation, and transformation process for organisations should be related to global Megatrends – how can benchmarking support this process
- Different Megatrends are relevant for different industries

Global Benchmarking Network

Benchmarking 2030 Survey Results by Ahmed Abbas (Bahrain Quality Society)

- 38 responses from 20 countries

Some Key Points from the responses:

- Global Challenges - ageing, competing with emerging countries, environmental
- Benchmarking can support future predictions and development of renewable energy
- Benchmarking has a future
- Benchmarking should be more accessible to organisations and more used in the public sector
- Methods – social media, online communities / forums / databases
- Tools – standard based framework, social media, mobile applications and video conferencing
- Face to Face also has a real future for structured benchmarking
- GBN has a role – collaboration between members and educating businesses

Personal Views on the Future of Benchmarking Dr Holger Kohl (Fraunhofer IPK)

- Population increase – need 3 Globes to feed expected 7 to 10 billion people
  - » Increased standard of living can stop this population growth
  - » This in turn causes problems of natural resources
  - » Thus need higher productivity of natural resources
- Knowledge resource – for school knowledge after 10 years only 50% is still relevant (university Knowledge the same), technical and professional knowledge is non-existing after 5-10 years –
  - » New knowledge needs to be transferred fast otherwise it will become obsolete

- How can benchmarking ensure knowledge is captured and stays in the business as people move jobs, there is a risk of losing knowledge, and the tacit 'head space' knowledge is distilled over time,
- Need fast new knowledge generation
- Globalisation of firms means need for knowledge transfer through benchmarking
- Employees are the bearers of knowledge and best practices – employees are the dealers / appliers of knowledge and best practices
- Interoperability (sustainable connection of IT solutions) – a major challenge of the IT industry – if solved could reduce 30% of IT costs
  - » What indicators of balanced scorecard will be useful for us in future – what we get is historical – we need visual business intelligent systems – forward looking - a challenge for benchmarkers – what is the role for benchmarking
  - » Need easy visibility, complex analysis and transfer of information
  - » Font plane, cross plane and backplane – to command and control
  - » HP Cockpit – is used at various levels – available away from the office on mobile technology at any time – NATO use such systems – developing now for business
  - » Johannesburg transit system is an example, elaborate maybe…..
  - » Need also transparent best practices business processes
- Need business intelligence systems for benchmarking
- Modern communications technologies include -
  - » Social networks
  - » TV – best practice on demand
  - » Mobile devices
  - » Include virtual reality for most effective best practice transfer
  - » You tube – Servlab

Personal Views on the Future of Benchmarking Dr Robin Mann (Chairman, Global Benchmarking Network)

- Reference to use of Business Excellence Frameworks across Asia
- Singapore – Business Excellence helps companies to address macro challenges at the micro level eg Strategic Planning helps address financial crisis – combined affect of many companies is addressing the macro challenges at the micro level
- Benchmarking is the No 1 tool to address Macro challenges
- To get best results from benchmarking need to do it well (see GBN Improvement Tools study)
- Benchmarking needs to be applied professionally – need certification role by GBN for training providers and an institute for benchmarking professionals
- Social networking tools are required – move from text to videos
- More national level benchmarking is needed– country to country
- More public sector benchmarking – increasingly tourists will benchmark the public sector and force change – Ontario municipal services standards are world class
- World Class development is needed in 1 year – Rank Xerox took 8 years in the 1980's , British Aerospace 3 years the early 2000's, next 1 year?

Roundtable Discussions at the Global Benchmarking Network Annual Conference in December 2012

Whether Benchmarking has a Future?

- Future for informal benchmarking is emerging – it will be across the Globe more – more people will aim for informal than formal benchmarking
- Formal benchmarking is also needed– but to do this we need a transparent society and partner confidence/trust that is more about how we can help in our community and less about self gain to out position each other – more transparency will lead to more formal benchmarking. Confidence is needed between businesses – there are cultural and political factors to consider but there is a future
- Formal benchmarking when properly done is what gives the major benefits – but benchmarkers need clarity in what they are after, not only in their scope but also being very clear on their outcomes for focusing improvement
- Maybe only train people in benchmarking who already have a need / project, this way the knowledge and process gets applied into useful deployment, and becomes less of an academic exercise where competency gain may be quickly lost.
- Benchmarking is a natural tool to grow civilisations
- In order to compete, people need to do things differently or do different things – what is the willingness of others to share? What baselines are common?
- Issue of cloning – will we all end up doing the same thing in the same way?
  » Will we become clones?
  » Cloning – they'll tell you what they have done – not what they are about to do
  » The real risk of positioning benchmarking to follow and aspire to good practice, which with all good intent, can lead to cloning.
  » Diversity is needed to study the underpinning principles

applied in action through benchmarking, This should inspire organisations to strategically think to adapt and improve their own systems/processes for their OWN businesses
- We need a charter for human kind issues that are not secret or proprietary – exchange a limited number of (agreed) practices
- Transparency is increasing

How to do Benchmarking?

- Effective storage of best practice information may lead to more informal benchmarking – need to reduce competition by increasing transparency
- Cooperative approach to renewable resource development in North Africa and Middle East is an example– this will bring best practice knowledge to this region
- Need ways to more formally capture the best practice knowledge
- How do we validate whether they are best practices or not?
- What is happening – product recalls in automotive and aviation sectors seem to be increasing
- Main barrier is transparency – need transparency to engage people in 6 Sigma – we spend money to export the methodology outside the company – the biggest challenge is the desire to improve (to do benchmarking)
- Need to look local in benchmarking eg internal within our organisations - not just overseas
- Sustainability is a big issue
- PDCA (Plan, Do, Check, Act)– Check the best practice before implementation
- Be careful what drives human behaviour – more publications measure results in increased low quality publications. Publications need quality outcome measures to drive the impact and value of the publication for its intended purpose, its not about volume of publications. The world is already saturated with lots of 'average' publications.

- Best Practice – can be another place or another time?
- Knowledge Management is all about sharing
- Top management – where are the CEOs and MDs – are we just talking to ourselves? Benchmarking needs CEO backing not just words but visibility and active support to embellish the value gained. Benchmarking is probably the CEO's greatest tool to leverage competitive advantage for the business- maybe we need to position benchmarking better with CEO's and very senior management?
- Need a willingness to do benchmarking and learn
- People need to be there to adapt and fit to your own organisation
- Need to be friendly
- A project will show people that the impossible can be achieved
- Need positive reinforcement to get people engaged, there are other ways eg carbon tax is a negative reinforcement
- Driver is human survival – catastrophes can bring people together

Summary of Roundtable Output

Key Points from Participants and the Panel

- Best practices for some may not apply to others - Germany
- We need to create a desire for benchmarking using a "carrots" and sticks approach – a "carrot" example given was payment to researchers for citations of their research rather than volume of research published – Germany & Middle East
- Sharing needs to be friendly – we need a responsibility for sharing - Chile
- People need to be encouraged to take the time and to be persistent about benchmarking – they need to take the time to learn from others' experiences and to adapt their learnings to their own needs – Egypt
- We need to get people involved in benchmarking projects so that they experience first hand the benefits – New Zea-

land
- We need a "carrots" and "sticks" approach – Kuwait
- Speed it required – this may be a future driver for benchmarking – it's like a spiraling cone – similar to the way the GBN is evolving – UK
- Practise and then go ahead – social media can help increase the speed – Bahrain
- Confidentiality doesn't stop benchmarking – we need to talk the language of senior managers – Middle East
- We also need to talk the language to inspire future generations of leaders who are the youths of today – Middle East

Summary - Australia

Whether

- Definitely - Benchmarking is here to stay at least informally – its natural
- Depending on ability to store and access best practice data formal benchmarking is going to be needed too
- Concern was expressed that organisations will be clones with no variation but this was countered by "they will only tell you current best practice and not next practice"
- Co-operation around major issues facing society is needed

What

- The general tone of discussion was towards benchmarking to assist humankind development, perhaps through co-operative projects like renewable energy in North Africa & the Middle East
- This will need greater transparency to resolve the issues we all face
- We need to create the desire to improve and do benchmarking, particularly amongst CEOs and other leaders
  » Pressing humankind issues may create the desire ("Carrots") eg Carbon Tax and similar are "Sticks" that can also lead to Benchmarking – are these and similar carrots

» and sticks the language of leaders?

How

- Start internally / locally
- Need to consider best practices in context of place and time
- In the long run it is the people who have to adapt the best practices to their own culture, systems and processes – technology cannot do this – thus we need to engage people in benchmarking from the outset and create a desire for them to want to do benchmarking
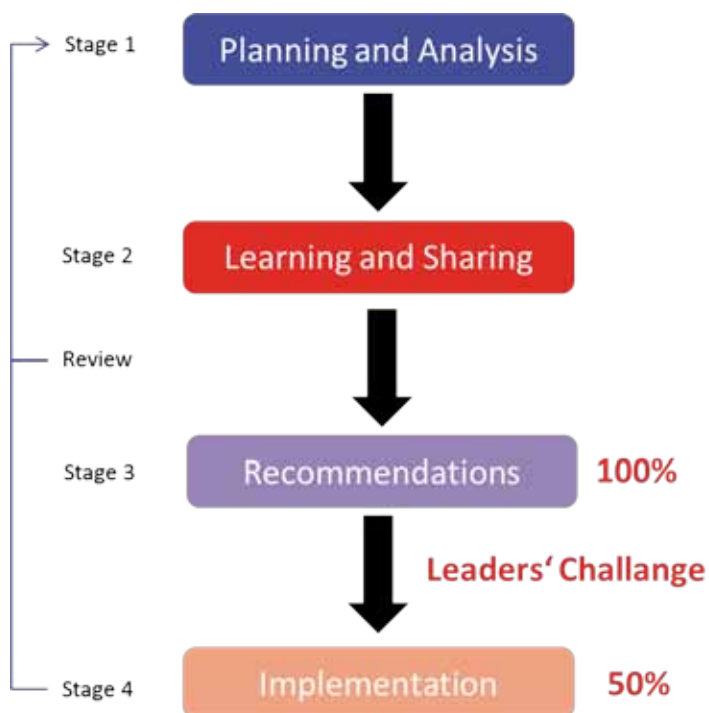
The Fig. „The Basic Benchmarking Methodology" illustrates the Challenge for Top Management to set the Direction for Benchmarking and Ensure that Improvements are Implemented – on average at the moment only about 50% of recommendations made are actually implemented.

APPENDIX F

Benchmarking 2030 Questionnaire

Benchmarking 2030 Questionnaire

Survey of GBN Members and Benchmarking Practitioners

The GBN is embarking on a project to look at the future for Benchmarking. We are seeking inputs from existing, past and potential GBN Members. This project will take into account new technologies and social networking opportunities as well as issues such as global financial crises, governance, political, social and environmental trends and changing natural characteristics.

This project will answer the following questions - What will Benchmarking look like in 2030 – and in between? What are the tools, methodologies and technologies that Benchmarkers can use now to help organisations and economies to improve their outcomes? The main outcome will be to report on results of a Roundtable at end 2010 – as part of the next GBN AGM and Annual Conference.

The project will investigate the use of benchmarking and the future use of benchmarking techniques: It will connect Benchmarking experts with people from politics, science and companies and discuss the use and future use of benchmarking (e.g. survey, roundtable discussion, delphi study). Key parties to the proposal are Bruce Searles, Benchmarking Partnerships (project leader), Dr Robin Mann, bpir.com and Dr Holger Kohl, Fraunhofer. These three people will be doing considerable desktop research and preparing for their presentations and facilitated discussions as part of Roundtables at the 2010 GBN AGM and Annual Conference.

A major part of the project is this qualitative survey of all GBN Members about the future for benchmarking, including how benchmarking can influence the global megatrends. Members are encouraged to also ask specific clients or associates to participate in the survey.

Bruce will discuss with GBN Members like BestPrax Club India how they do Roundtables so that the GBN's first Roundtables will be successful. The Roundtables will be designed to encourage all GBN Members to attend the AGM this year. It is intended that a report of the outcomes from this Project will be published by the GBN in early 2011.

By completing this survey you will receive a free copy of the results.

Please read the GBN's Benchmarking 2030 desktop Research Report before completing the survey. We look forward to receiving your response to the survey.

Your organisation/country/name/role/email /phone

1. What do you see as the key Global Challenges / Megatrends over the next 20 years?

2. How can benchmarking support / influence the Global Challenges / Megatrends?

3. What would you like the future of benchmarking to be?

4. Considering all of the above, do you have any views on the future roles and functions of the GBN (Is the GBN relevant for the future? Does benchmarking have a future? How will we look? How will we know?)?

5. What methods and tools do you think will be used for benchmarking in 5 years?

Any other comments would be greatly appreciated –
Your support for this important survey is greatly appreciated –

6. Who else will you ask to complete this survey?

APPENDIX G

Notes - Benchmarking 2030 Roundtable (Dubai, 2012)

by Bruce Searles (Benchmarking Partnerships)

Questions Asked
- What is the future role of benchmarking?
- How might benchmarking be done in future?
- What is the role of the GBN?

Role of Benchmarking in Future
- The fundamental future role of benchmarking as found by the GBN Benchmarking 2030 study was not questioned
- Rather the audience was looking for ways to support the future role for Benchmarking

Benchmarking Role to 2030
- Benchmarking certainly has a future
- For a Sustainable Global Society
- By creating connections and exchange of best practices - Across and between Contries, Professions, Disciplines, Sectors and Clusters (not just companies)

Discussion Points
- Benchmarking can and should be done between undeveloped and developed countries
- But with current technology there would not be enough resources eg food to support on a more global scale the current lifestyle experienced by people in developed countries
- Then again, birth rates may decline with increasing affluence
- Nevertheless, there is an opportunity for benchmarking of happy undeveloped countries by developed countries to learn how to be happy and have good lifestyles with less consumption
- Benchmarking can also be done on how to change attitudes of people eg towards drinking recycled water
- Benchmarking can also be used to help us to retain knowledge as human knowledge loss is quite rapid once it has been learned
- The discussion reinforced the role of benchmarking in knowledge management and in encouraging innovation by learning new ways from other disciplines / professions, countries, cultures, sectors and industries

How Might Benchmarking be Done in Future
- Benchmarking needs to be done properly and in a professional manner to be successful
- GBN could possibly establish a Global Institute for Benchmarking Professionals
- Possibly supported by a benchmarking competition or benchmarking aware
- There was a suggestion to establish a benchmarking standard (ISO) or Guidelines
  » Benefits and disbenefits of this were discussed with some thinking it could lead to a common level of mediocrity in the use of benchmarking

Benchmark Data
- There was discussion regarding the future use of technology to share benchmark data
- There is a need for people to share their data as well as to learn from others
- Data should be considered as qualitative (best practices) as well as quantitative metrics
- Databases need to be combined well
- Data needs to be better organised and made accessible
- Data also needs to be globally focused eg in different languages
- We not only need to understand what to improve through benchmarking: The gaps
- But also how to improve: The best practices
- And also how to manage the changes / implementation well: The people buy-in through good leadership and communications – this maybe difficult to achieve without personal interactions amongst benchmarkers
- A key message – don't get paralysed by the data – the best practices and implementation know how or what we want to improve

APPENDIX H
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Websites and other Resources:
- Business Performance Improvement Resource, www.bpir.com – Website of benchmarks and best practices. FREE Interim Report at www.bpir.com/component/option,com_mojo/Itemid,99/p,73.
- www.benchmarkingpartnerships.com.au, our networks enable you to partner and accelerate your improvement
- Global Benchmarking Network, www.globalbenchmarking.org – Provides a listing of those organisations that are the main promoters/ experts in benchmarking from over 20 countries.
- www.benchmarkindex.com Benchmarking remains the number 1 management tool to improve business performance. Since 1996 benchmarkindex® has brought performance benchmarking to SMEs around the world and is continually shown to increase turnover, grow profits and improve productivity.

The undersigned

On behalf of the C

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