Proposed applicable structure for benchmarking in holding organizations

Iraj Masoomi Baran
Mahdavi, Reza
Karimi Gavareshki, Mohammad Hosein
Iran

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Abstract

Successful and excellence organizations are constantly learning from their experiences and other organizations. So, to institutionalize the learning process systematically and consistently within the organizations, using tools such as benchmarking can actually be very useful. Benchmarking is an increasingly popular approach in the quest for increased performance, both by manufacturing and service organizations. But many others think that benchmarking is an industrial tourism or a copy and paste activity. There is a key question: "what kind of applied structure is required for alignment, synergy and coordination of learning activities in organizations to achieve higher quality and productivity?" and this paper presents how holding organizations, can apply their learning and practices effectively and efficiently based on an applicable structure of benchmarking including identification, selection, evaluation, consolidation and dissemination of experiences in organizations, in order to promote benchmarking culture, and improve organizational learning capacity in Iranian holding organizations.

In this respect we used focus groups, expert viewpoints and field study and we collected the required data through face to face interviews, questionnaire distributed by mail and review of the scientific documents. Finally we present the applicable structure and related system of benchmarking in the holding organization and subordinate units based on a field study, expert's opinions and focus groups discussions.

Keywords: Benchmarking, benchmarking structure, benchmarking center, learning

1. Introduction

In today's world and competitive market conditions, products and services quality, and productivity are two essential factors for the preservation and survival of organizations and they have greater market share and will be lasting with quality and higher productivity. Therefore, continual informed of market conditions, quantity and quality of competitors' products, systems and methods of how competitors work is also inevitable for a competing company and institutes in order to benchmark their superior advantages and features so make
it better than them. Therefore organizations should pay attention to their global competitors and best practices.

There is a key question: "what kind of applied structure is required for alignment, synergy and coordination of learning activities in organizations to achieve higher quality and productivity?" Based on indicators such as the type, size, strategy, technology, culture and etc of organizations, there can be several ways for increasing alignment, synergy and learning activities in them that one of these methods is the benchmarking. benchmarking is a systematic method that organizations can measure their activities by based on best industries or organizations; This method provide framework for organizations that diagnosis specific aspects of differentiation existing organizations with the best organizations, show how existing gaps can be filled (USPTO, 2000; Camp & DeToro, 2000). It identifies the best in class and the methods behind it that make it best. (Juran, 2010)

2. Methodology
The purpose of the field study is providing an applicable and efficient structural to identify best practices in the organizations. Due to development of implicit and explicit knowledge, it resolves organizations need to effective learning. Therefore, in this context, research on "applied research" was considered. Data were collected from 10 holding organizations and 102 related industrial, service and research units. All the managers of benchmarking in these organizations, 53 benchmarking specialists of holding organizations and relevant units and 17 experts and their consultants helped us.

In the process of planning and implementing, the following activities were recognized:

- Four case studies of four units that were run a successful benchmarking was studied.
- The three action research of the Iranian National Productivity and Excellence Award, the benchmarking EFQM entity, the MBNQA benchmarking entity were studied that they are responsible for creating a culture in the benchmarking field for organizations.
- Document study (Library study) and documents related study to the planning and benchmarking management was done.

On the above findings, the initial plan of benchmarking structure was designed. At last in order to complete functional aspects of the subject, we interviewed with 36 knowledge management experts, benchmarking consultants and EFQM excellence model experts. Then all Comments, criticisms and suggestions, were collected. We sorted, combined and analyzed all findings of the interviews, and focus group meetings. After all, a technical committee was held and we applied the technical comments on the prototype. At this meeting, 20 of those experts were invited. We use their expertise comments and reformed the initial plan of benchmarking structure. It was approved by all of them.

3. What is Benchmarking?

1 Here, the unit is every section of the business such as: a company, an industrial and ....
Performance benchmarking, the comparison of internal operations at one firm with the best practices at others, was popularized in the late 1980s when significant improvements in performance were realized by Hewlett-Packard and Xerox (Camp R. C., 1989). Benchmarking is a method of measuring and improving our organization performance by comparing ourselves with the best (Stapenhurst, 2009) and a systematic comparison of approaches with other relevant organizations that gains insights that will help the organization to take action to improve its performance (Camp R. C., 1989). As reported in Wall Street Journal poll benchmarking is one of the top three important and popular tools for continuous improvement (Lancaster, 1998) (Bell & Morey, 1994). Benchmarking studies can provide several benefits such as:

1. Allowing firms to learn from others’ experiences;
2. Helping firms to analyze their levels of performance relative to the competition;
3. Identifying those firms with the highest (lowest) levels of performance which can then be studied to gain insights about the activities that correlate with high (low) performance (Johnson & McGinnis, 2010).

4. Methods of Benchmarking

It is true to say that there is no one single right method to benchmark, there are so many benchmarking methods is both important and useful: it is important because it helps us to avoid the trap of thinking that there is only one way to benchmark and therefore force-fitting our needs into a method that may not be appropriate for us, and it is useful because it encourages us to focus on using the most appropriate method to achieve the objectives of our own particular project.

There are the following benchmarking methods: (Stapenhurst, 2009)

4.1. **Public Domain benchmarking** as, for example, published in consumer magazines or newspapers.

4.2. **One-to-one benchmarking** where one participant visits one other participant.

4.3. **Review benchmarking** which is typically carried out by a team visiting each participant, identifying relative strengths and weaknesses, best practices and perhaps making recommendations and even facilitating improvement activities.

4.4. **Database benchmarking** in which a participant’s data are compared to a database of performance levels.

4.5. **Trial benchmarking** is carried out by trialing and/or testing products and services from other organizations and comparing them against your own products and services.

4.6. **Survey benchmarking**, usually carried out by an independent organization surveying customers to ascertain customers’ perception of relative strengths and weaknesses compared to competitors.

4.7. **Business Excellence Models benchmarking** in which an independent assessor scores aspects of the organization according to a business excellence model such as the Malcolm Baldridge quality award (MBQA) or the EFQM excellence award (EEA)

5. The necessity of benchmarking from the perspective of EFQM excellence model Business excellence models (BEM)
A business excellence model is a set of interrelated criteria that aims to capture all key aspects of any successful organization. The model is designed so that the extent to which an organization adheres to these criteria reflects its success. Excellence models provide a mechanism for comparing the performance of any group of organizations by scoring each one against a standard and comparing the scores. However, direct comparison between organizations is seldom if ever carried out.

5.1. Business excellence model in Iran

Iranian national productivity and excellence award based on EFQM excellence model was founded in 2003. Implementation of it since the year, it made many Iranian organizations got familiar with the excellence model and it has acted as a tool for modern management techniques to use in their organization (IPHRD, 2013). Some organizations use EFQM\National excellence model for domestic awards or applying in the process of national productivity and excellence award. This indicates that top Iranian organizations are planning to compare themselves with other organizations. Thus they increase their competitive power and stability to achieve greater success. So after EFQM excellence model is expanded within different organizations, they have the ability to use it for the following purposes (Forstner & Fisher, 2010)

- Assess where they are on the path to excellence; helping them to understand their key strengths and potential gaps in relation to their stated vision and mission.
- Provide a common vocabulary and way of thinking about the organization that facilitates the effective communication of ideas, both within and outside the organization.
- Integrate existing and planned initiatives, removing duplication and identifying gaps provide a basic structure for the organization's management system.
- It can also be used by organizations carrying out self-assessment and wishing to use a score for benchmarking or other purposes.
- Create a competitive environment for organizations\units to achieve excellence (IPHRD, 2013)

5.2. Excellence Models and Benchmarking

From a benchmarking perspective, some or all of these criteria and criteria parts can be used to develop metrics for benchmarking purposes. The most common use is for organizations to assess the degree to which they meet the criteria. Areas in which their performance is weakest (i.e. their scores are lowest) can then be targeted for improvement, possibly, but not necessarily, with the help of benchmarking. Assessments are carried out against the criteria and points awarded depending on the extent to which the criteria are fulfilled (Stapenhurst, 2009). If the organization wishes it can enter for the corresponding award and if it receives the highest score it wins the award for that year. Assessments usually include not only a score against each criterion and sub-criteria but also a report discussing performance against the criteria. As the assessment criteria are published and public training courses available anyone can assess a company against the model. Some organizations train their own staff with the aim of self-assessment, while others use independent consultants to carry out the assessment.
Figur1: The EFQM model- 2013, www.efqm.org

Figur2: The INPE model- 2013, www.iranaaward.org
Systematic comparison of approaches, method of related deployment and desirable results with other organizations in EFQM excellence awards is highly important and benchmarking is one of the most powerful tools to achieve learning, creativity, innovation and continuous improvement (Forstner & Fisher, 2010).

But one of the obstacles for benchmarking is refusing to give information to other organizations. Some organizations do not share their information easily. Also ignorance, pride and poor commitment to excellence can prevent benchmarking or they think benchmarking is industrial tourism whereby companies visit one another; it is planned research with a high return on investment, it is a staff appraisal tool, it is a copy and paste activity (Stapenhurst, 2009) and etc. Also a true classical benchmarking study usually involves four phases and it can take up to 9 months to complete (USPTO, 2000). So to help the organizations to perform benchmarking, learning and sharing specific issues, using practices and etc, benchmarking structure is proposed. It is designed for effective implementation of benchmarking process, including identification, selection, evaluation, consolidation and dissemination of organization practices, to promote benchmarking culture, and improve organizational learning capacity.

The purpose of developing a benchmarking structure is creating a dynamic database for organizations and their subsidiary units to benchmark. The system is performed to compare products, services, processes and strategies in the benchmarking process, facilitate and optimize. This opportunity will be for members who place their organization/unit’s data in each of the indicators studied in comparison with the best practices. The benchmarking system will be suitable for partner selection. Generally, advantages of this system are as the followings: (benchmarking, specialists, experts, & consultants, 2012)

- Increasing individual and organizational learning for building knowledge based organization and supporting knowledge sharing and benchmarking programs
- The possibility to achieve successful experiences and best practices
- Improve in planning, strategic planning and processes of organization
- Determine areas for improvement and clarify the gap from best practices
- Create opportunities for identification partners
- Provide insight and new ideas
- Registration information and practices with successful preservation of intellectual property related

And:
- Founding that the solution lies in comparing organization processes and performance with that of other organizations and making significant improvement based on the learning from benchmarking projects. (EFQM, 2009)
- Free benchmarking & performance improvement resource (bpclub, Membership Benefits & Features, 2013)

6. Proposed structure
The proposed structure can be used in holding organizations have various units; have implemented excellence models and each holding organizations that want to develop their organizational learning at various dimensions. But this study was carried out in the excellence-oriented holding organizations, so the proposed structure is based on excellence literature.
One of the most important steps of benchmarking is determination the areas of benchmarking as well as identifies successful practices in this area. Any organizations spend too much time for it. Existence a specific owner can facilitate the process of benchmarking in the organizations based on applicable benchmarking structure and system. Therefore, the following approach is suggested: (benchmarking, specialists, experts, & consultants, 2012)

- Develop benchmarking systems and relevant database
- Develop intellectual property system and incentive\motivation system
- Consider Systematic approach to identify practices
- Consider Systematic approach to dissemination of practices
- Capacity to identify and use internal, national and international excellence awards
- Interaction with national and international excellence awards
- And
- Establish benchmarking centers in the organization and subsidiary units (Figure3)²

In these organizations a benchmarking office usually exists or they might have a benchmarking coordinator. These offices or individuals will be able to assist you in your study or request for information. Seek them out (USPTO, 2000).

It should be noted the proposed structure was offered to all ten holding organizations, and most of them are creating platforms for deployment of the structure in themselves and their units.

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² Dark green boxes are staff departments and yellow boxes are line departments
6.1. Benchmarking structure:
The excellence secretariat is under supervision of the CEO and the excellence secretariats in subordinate units are under supervision of their CEOs. The excellence secretariats in subordinate units coordinate their activities with the excellence main secretariat align with determined policy and strategy. We recommend developing a benchmarking main center, along with the departments of the excellence secretariat such as assessment center, research and improvement and innovation (R&I²) and training. In order to institutionalize the benchmarking process and development of organizational learning, excellence secretariat of each unit interacts with the excellence secretariat of the holding organization. So benchmarking sub centers can interact with each other and they can interact with benchmarking centers out of their organization. Also, in order to create synergy in the activities of the main and sub secretariats, Process approach is needed to establish in all parts of main and sub secretariats.
Based on figure 3, main center coordinates within and outside benchmarking. In the center, all benchmarking information of holding organization, in compliance with organization security policy is collected, recorded, stored and published. Before implementation benchmarking process in BSCs, all necessary coordination with main center is done and the application form provided by the center for stakeholders. BSCs run benchmarking with approach to knowledge and performance management, along the major strategies of main Center, needs and conditions of their business. So learning is used to identify improvements, generate new or changed approaches and saved to share with others and partners.

Benchmarking main Center is a total benchmarking center (TBC) and a department in the excellence secretariat of holding organization and units and its duties are culturing, facilitative, coordinating and developing benchmarking in subset levels and also creating dynamic database for benchmarking. Other tasks can be cited as the followings:

- Registration, evaluation and recognition of successful practices of holding organization and its units (good and best practices)
- Coordination between related units and excellence secretariat of other organization (the benchmarking applicant and benchmarking partner)
- Planning and managing the process above
- Promote, encourage and develop benchmarking culture
- Promoting and facilitating the use of benchmarking and sharing of best practices by helping each other, and working together. (Camp R., 2011)
- Prepare comprehensive reporting of benchmarking

6.2. Benchmarking system

Benchmarking system has three dimensions by knowledge management approach:

(benchmarking, specialists, experts, & consultants, 2012)

1. Benchmarking club
2. Best practice award
3. Benchmarking information system

An appropriate benchmarking and learning environment is created by these pillars. Benchmarking club is included: consultant’s network, meetings for exchange experiences and tours of excellence and provides a Suitable environment for organizational learning and process benchmarking. Benchmarking information system provides a database to facilitate the benchmarking, especially functional benchmarking. In best practice award, best practices are identified and introduced, they are presented in the benchmarking club and they are recorded in the benchmarking information system.

6.3. Benchmarking club (BC)

It is a Web-base or a face to face society; it wants to create a grid pattern with high synergy and success. Its members are organizations / individuals; they want improve their processes, strategies and achieve greater efficiency and effectiveness in performance. Members are interested in and committed to help other organizations / individuals to achieve success. These clubs are formed in holding organizations and their BSCs. They support benchmarking
information systems, and the best practices award. The club runs communication and learning through these approaches:

**6.3.1 Workshops / meetings to exchange experiences**

Success\ failure stories and good\ best practices are offered in these workshops\ meetings. Organizations present their experiences and knowledge in specific subjects for club members. These workshops are organized by the club.

**6.3.2 Tour of Excellence**

Tours of Excellence as learning days are held periodically at benchmark organization based on good\ best \ worst practices. The tours are held with the presence of club members for one day or a few days.

**6.3.3 Consultants Network of benchmarking**

Effective benchmarking system is implemented through a network of specialized consultants. Consultants as facilitator can play an important role, with appropriate experience and knowledge in relevant areas in organizations. The club Selects senior consultants, establishes Network of consultants and provides interaction between them and the members for practices sharing.

**6.3.4 Expert Working Groups**

Expert working groups are composed of several members. They are elected for partnership and the understanding of specific issues. Achievements of the group are informed to the club members by the benchmarking club.

**6.3.5 Reactive events and one to one benchmarking**

Reactive events are any events that occur in response to requests from members. They are usually one to one Benchmarking. Events often start with requests by members that the other members can respond to them. This communication may be performed between two or more members.

**6.3.6 Website**

Members can be related through the network. They can send request(s) and respond to request(s) of others through the website. It is essential to ensure the security of website information.

**6.3.7 Access to databases**

Benchmarking club members can access to a database of benchmarking. The database includes related articles, journals, reports, books, summary of subjects and ....

**7. Best practices award (BPA)**
The purpose of doing best practices award is focus on institutionalizing improvement approach, excellence and reinforces organizational learning. That is achieved through identify best practices and transferable practices of units. Benchmarking club and benchmarking information system can be good sources for introduction of successful experiences and best practices award.

8. Benchmarking information system (BIS)

The purpose of this system is creating a dynamic database of benchmarking for holding organizations and their BSCs. Best practices award and benchmarking club provide and support its information resources. The system compares products, services, processes and strategies to facilitate the process of benchmarking and members have opportunity to compare their indicators with together. So they can find their gap(s) and improve it (them). Benchmarking information system has three main databases, consists of best practices, benchmarking indicators and information of excellence assessment. They are regularly updated.

Benchmarking system has three main categories, including assessment of excellence, good\best practice database and benchmarking index. Benchmarking categories are updated and informed the changes to the stakeholders in each round of awarding.

8.1. Assessment of excellence

Excellence national\domestic awards can be an appropriate source of information. Submissions and feedback reports statements contain rich information which can be used in benchmarking. The information includes excellence score of unit, criteria score\ criterion parts score, approaches taken in each of the criteria for enablers and achieved results.

8.2. Good and best practices

Excellence secretariat of holding organization in each round of excellence award assessment process chooses superior practices according to each criteria of excellence model and introduces them. One of the categories of benchmarking system contains documented
organizational practices which are updated in each round of award assessment. In addition, the benchmarking main center (BMC) interacts with BSCs, national and international awards, but each BSC could just interact with other BSCs and benchmarking main center (BMC). Good and best practices issues in this area could be as follows: (Masoomi Baran, Mahdavi, & Gavareshki, 2009)

1- Leadership Development
2- Planning and implementing strategies form the excellence roadmap
3- Human resourcing capital and knowledge workers
4- Suppliers management
5- Engineering costs and improve consumption patterns
6- Technology development management
7- Knowledge and information management
8- Management and process improvement
9- System engineering (design and product development)
10- Marketing and sale engineering
11- Project management system
12- Customers focus
13- Suppliers relationship management
14- Creativity and innovation management system
15- Energy management system
16- And ...

8.3. **Benchmarking** index

Another main category of benchmarking information system is benchmarking indicators database including performance indicators of units. It contains indicators such as: (BCS, 2002) (Forstner & Fisher, 2010) (APQC, 2012)
• Customer indicators
  ➢ Customer satisfaction index
  ➢ Returns and complaints
  ➢ Delivery
  ➢ Value created
  ➢ loyalty
• people Indicators
  ➢ Staff satisfaction index
  ➢ Manpower productivity index
  ➢ Employee health and safety management
  ➢ Education, Development and Involvement
  ➢ Data management and information staff
  ➢ Career management and promotion
• Community\environment indicators
  ➢ Energy consumption
  ➢ Reducing and eliminating waste
  ➢ Recycling
  ➢ Pollution and dissemination poisons
• Performance indicators
  ➢ Financial indicators
  ➢ Productivity indicators
  ➢ Obligations performed
  ➢ Innovation products and services
  ➢ Knowledge management
  ➢ Network management and suppliers
• And etc.

9. Suggestions:
  ➢ To succeed in implementing of benchmarking, excellence main secretariat of holding organization should prepare a benchmarking policy package.
  ➢ It is necessary for excellence main secretariat of holding organization to prepare a benchmarking roadmap (BRM). It conducts benchmarking activities effectively and efficiently.
  ➢ According to structures of excellence main secretariat and the excellence sub secretariat, holding organization needs to promote a process approach for assessment, training, benchmarking and research, improvement and innovation activities.
  ➢ The excellence main secretariat of holding organization should benchmark related benchmarking strategies, processes and activities of excellence secretariat and units in other holding organizations.
  ➢ According to the culture, structure, technology and strategy of holding organization, excellence main secretariat should establish a creativity and innovation system to support and customization of ideas.
To strategic and management decision-making, excellence main secretariat of holding organization should consider economic perspective and cost benefit of benchmarking projects in all benchmarking centers.

10. Conclusion
Benchmarking is an important factor in the excellence of an organization. Excellence models particularly the EFQM model, emphasize on doing benchmarking (Forstner & Fisher, 2010). Benchmarking is the methodology uses in search of best practices. A true classical benchmarking study can take up to 9 months to complete and this does not include implementation of the findings (USPTO, 2000).
In addition, there are several obstacles for benchmarking which is noted. So benchmarking system is proposed for effective implementation of benchmarking process, including identification, selection, evaluation, consolidation and dissemination of practices organizations, to promote benchmarking culture, facility in benchmarking process and improve organizational learning capacity.

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12. Corresponding Author
Masoomi Baran, Iradj; Management Student of Tehran University, Iran
masoomi50@yahoo.com
No 44, East 188 Street, Tehranpars, Tehran, Iran
Postcode: 1655855151

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