Current Position and Future Development of Benchmarking

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ABSTRACT This article presents a survey conducted to assess the current position and likely future development of the tool of benchmarking. A questionnaire asking the respondents to indicate the importance rating and priority ranking of eight issues within benchmarking was sent to a wide range of organizations. Analysis of the survey responses revealed some findings. The need for mechanisms for transfer of best practice within organizations was clearly expressed and represented the most significant conclusion. The use of computers for various purposes in benchmarking seems to be growing, although first hand contact and observation still seems to be preferred. Finally, formal efforts for benchmarking and benchmarking training were rated highly important, perhaps signaling that benchmarking is about to be increasingly institutionalized and an integral part of business.

Interest in benchmarking has virtually exploded since 1979 when Xerox first introduced it.[1] Today, benchmarking, as a tool, is widely used. It has spread geographically to large parts of the world and proliferated in a variety of manufacturing and service businesses, including health care, government, and education organizations.[2]

Along with the increased use of benchmarking, some changes in its practice have occurred. The focus of benchmarking studies has gradually shifted. In early studies, the focus tended to be on performance measures, often of competitors, and for the purpose of setting more ambitious targets. Recent studies have examined how noncompetitors and industrial outsiders learn how to improve business processes. Comparison of performance measures has developed into learning about best practices.[3] In fact, some authors have used the term *benchlearning*.[4]

There has also been a trend to use benchmarking in a more coherent fashion and to more closely link it to an organization's strategy. Some large organizations have established formal benchmarking programs. Benchmarking training is offered by numerous sources. On the practical side, the use of computers has been introduced to benchmarking. Several software packages have been launched that are supposed to lead users through the steps of a benchmarking study.[5] For establishing external contacts, some on-line databases and benchmarking services have been established.[6]

Assessing the current position and projecting future development

To establish the current state of benchmarking, and to attempt to project its future developments, a survey was conducted among a cross-section of organizations.[7] The survey questions and respondents were purposely structured to gain some insight into emerging benchmarking developments. Among these were the capture, sharing, and dissemination of best practices and the influence of technology--including computers, databases, and networks--on benchmarking. A two-page questionnaire was designed and mailed to benchmarking managers or persons responsible for benchmarking in a sample of 59 organizations. Based on the authors' personal knowledge of the organizations and previous dealings with them, they were known to be active in benchmarking. The sample was composed to display large differences among the businesses in terms of size and type of industry. Included in the 59 organizations were both large, medium, and small companies, ranging from manufacturing and service industries to health care and government institutions.

The survey response rate was 39 percent, which for this type of surveys should be considered quite good. Previously conducted similar surveys had displayed response rates down into the teens and twenties percent. Of the 23 returned questionnaires, 5 had not been properly completed and were excluded from the analysis. The final data set consisted of completely answered questionnaires from eighteen organizations. Of these, twelve were manufacturing companies, five were service groups, and one was a government institution.

Survey respondents were asked about the current and future use of benchmarking. Questions covered areas such as the existence of a formal benchmarking program, benchmarking training, mechanisms for transfer of best practices, and the use of PCs, software, and on-line services for benchmarking. A summary of the questions is provided in Table 1.

The questions were selected and sequenced to first ask about the current and easy-to-implement procedures and then to ask about the future and difficult-to-implement benchmarking practices. Questions were grouped into eight topics, and respondents were asked to rate the importance of the issues raised in the topic. A 10-point scale was used for this purpose, where 1 represented the least important and 10 represented the most important. Thus, researchers gained a sense of the importance, to the organizations, for every issue.

Furthermore, the questionnaire instructed the respondents to force rank the topics from 1 (high priority) to 8t (low priority). This exercise was included to reflect where additional benchmarking efforts and resources were likely to be spent or believed worthwhile.

To illustrate the differences between the importance rating and the priority force ranking, consider the following example. The questions covering benchmarking training are given a score of 9 in importance; but benchmarking training, as a topic, was given a priority of only 6—that is, having a rather low priority. Such an outcome would probably mean that respondents regarded training as essential for benchmarking success. From the low priority, however, it can be interpreted that training is already sufficiently covered and would thus not receive any further resources.

Overall findings

The eight topics were sorted according to ascending mean importance rating. This resulted in the chart shown in Figure 2. Some immediate observations were that all eight topics were rated fairly highly in importance, the lowest being 5.6 on a scale from 1 to 10. The highest rated item scored 7.8. Thus, the difference between high

and low was a mere 2.2 points. Some of this evenness could probably be attributed to the fact that such importance rating scales are rarely fully utilized.

An equivalent chart, displaying the mean priority ranking of each topic, is shown in Figure 3. Compared to the importance ratings, a higher degree of discrimination was found in the priority ranking data. The highest-priority item scored 2.9, and the lowest scored 5.9. This was expected, however, as the questions had to be force ranked.

Looking closely at the importance ratings, two issues stand out on the high-importance end. The existence of a formal program for benchmarking was perceived as essential. This issue was also given a high priority, which was a little surprising, as about three-fourths of the organizations said a formal program had already been established. On the other hand, many of these were said to have been just recently formed, which might explain why it is an area considered likely to receive additional resources.

The other highly important topic addressed mechanisms for transferring best practices found through benchmarking. About 75 percent of the respondents indicated a need for a formal process in this area. This question also elicited the strongest wording in the entire questionnaire, including terms like *tremendous need* and *one of the top three priorities of the organization*. The issue was given the highest priority, 2.9, thus probably representing one of the most significant findings in the survey. Developing a process and mechanisms for transferring best practices is an area of high concern. Some work has been done to address the issue,[8] but there is clearly a need for further development.

Of the moderately important topics were other initiatives, including total quality management (TQM), business process management, and linking benchmarking to strategy; benchmarking training, and the use of networked PCs for benchmarking;. These items were also force ranked in the middle in terms of priorities, except for other initiatives, which was, in fact, ranked lowest. A possible explanation of this seeming inconsistency is that many of the respondents who

answered that no other initiatives were considered a priority failed to rate this question. The negative answers could also be interpreted to mean a very low importance rating. This would have brought the score down to 4.1, which is in line with the low priority ranking.

On the low end of the importance rating were the issues of other requirements before proceeding with benchmarking and the two questions covering the use of on-line database and dialogue services. These, however, were priority ranked higher than the respective importance ratings. These services were said to be used infrequently and of medium usefulness, which might explain the low importance. The higher priority ranking might reflect an expected increase in the use and benefits of such services as they are further improved and extended.

Findings for the individual questions

The following observations were made after reviewing the survey answers, question-by-question, and the priority ranking order.

As noted, an overwhelming majority of the respondents indicated that there was a compelling need for establishing a formal process for the transfer of best practices. The reasons were stated to be avoiding duplication and replicating best practices globally. The issue was recognized as a top priority that had not yet been seriously addressed. No respondent claimed to have solved the problem. Mechanisms currently used included informal exchange during meetings and other networking activities, Lotus Notes, newsletters, and stored documents. As this is a priority issue that many organizations indicated they would put resources into, this is probably an area within benchmarking that is likely to be further developed during the next few years. This belief is also substantiated by the fact that academia has taken an interest in the issue.[9]

With regard to formal benchmarking programs, again as much as 75 percent claimed to have formed such programs, albeit some of these just recently. For those without a formal program, benchmarking activity was reported to be sporadic, part of a larger initiative, and used when needed, often as a fact-finding tool. In the

organizations where formal programs had been established, some sort of central competency functioned as a driving force. Tasks completed by such a competency included benchmarking training, project tracking, search for and maintenance of databases on best practices, facilitation, communication, and implementation of incoming benchmarking requests. The high priority ranking might indicate that the practice of formal programs will be further developed, thus more strongly linking benchmarking to strategy and other improvement efforts in organizations.

Most of the respondents claimed to have established formal benchmarking training programs. Two major types of training identified were manager awareness training and benchmarking team training. Most of the training was of two days' duration and was given on a just-in-time basis. About half of the organizations had developed training course material in-house while the rest mainly relied on external consultants for delivering training. The availability of both training and benchmarking literature is high. Only a medium priority ranking might reflect that this area is not likely to undergo dramatic changes. Any development will perhaps be aimed at establishing benchmarking training as an integrated part of employee training in line with other, more widely used TQM tools.

Another medium-ranked question in terms of priority was the one pertaining to the use of on-line, internet-type services for internal or external dialogue on best practices. Only four respondents reported not using any such services, thirteen were accessing the International Benchmarking Clearinghouse (IBC) Network, nine The Benchmarking Exchange, while five had access to other internal or external services. Many organizations, however, pointed out that these services were used very infrequently. Other mechanisms used included internal networks, electronic bulletin boards, Lotus Notes, the Best Manufacturing Practices, and the Internet. The relative high priority ranking of this issue could indicate an expected increase in the use of such services, perhaps as a consequence of an increased need for finding benchmarking partners for various business processes.

The next question in order of priority ranking covered the use of networked PCs for benchmarking. A predominant finding was that most of the organizations had a high number of PCs connected to both internal and external networks. About half were using some groupware software, mainly Lotus Notes, but some were using Mosaic and E-mail systems. Furthermore, approximately two-thirds were, in some capacity, using these items for benchmarking—mainly for information sharing and dialogue handling, information requests and responses, and outside information searches. Again, a medium priority ranking could be interpreted to mean an expected increase in the use of computers in benchmarking. Further rapid development of global networks and software could contribute to this trend.

When asked about the use of on-line databases, only one-fourth of the respondents answered that they were not using any such services. The predominant use was of the IBC database and The Benchmarking Exchange, mainly for contacts, partnering, and data searches. But there was also access of performance measure benchmark data, partner contact, and matching and library access. Most respondents were neutral with regard to the usefulness of these services, while a small minority found The Benchmarking Exchange to be very useful. Many people have expressed doubts about the benefits of such best practice databases, and the low ranking seemed to confirm that this is not an area of high importance to benchmarkers.

There were some selected use of specialty-type services. These included CompuStat, Dun and Bradstreet, and secondary searches on best practices and performance indicators to quantify the magnitude of gaps.

The second-to-last priority ranked issue dealt with requirements, other than benchmarking training, that had to be satisfied before proceeding with benchmarking. The major emphasis was that the process in question had been mapped, that the benchmarking team was trained, and that a management sponsor was present. Also, some emphasis was put on confidentiality agreements and the existence of a project plan. Training in information research and project management were also among the requirements. There was some mention of the need for information searches, cycle

time analysis, and survey design. The low priority ranking probably reflects that resources already have been committed to this area, and no further developments have been predicted.

The last and lowest priority ranked question addressed any other initiatives of priority. About half of the respondents indicated none, the other were evenly distributed among TQM, business process management, linking benchmarking to strategy, and the Malcolm Baldrige National Quality Award. This item was included in the questionnaire to spot any other trends in the development of benchmarking that were not covered by the other questions. No single issue did, however, turn out as an important trend.

Summary and conclusions

The most significant conclusion was that determining the mechanisms for the transfer of best practices within an organization is truly a high-priority issue. Large organizations seem to have experienced major problems in disseminating best practices found in benchmarking studies to other areas of the organization. Such problems limit the outcome of benchmarking, and result in a less-effective use of resources put into benchmarking studies and a loss of opportunity from the adoption of best practices throughout the organization. This is obviously an area for further work and research.

Formal programs for benchmarking in general, and for benchmarking training specifically, were also highly important areas likely to be further developed. These might be signals that benchmarking is about to be increasingly institutionalized and become an integral part of running businesses.

The use of computers in benchmarking, both for information sharing internally and externally, and for partnering and searching for best practices seems to be of some growth. On the other hand, direct contact with other companies and firsthand observation of best practices still seem to be the preferred methods. Some development within this area does, though, seem to be expected.

References

1. Robert C. Camp, *Benchmarking: The Search for Industry Best Practices that Lead to Superior Performance* (Milwaukee, Wis.: ASQC Quality Press, 1989).

2. Robert C. Camp, *Business Process Benchmarking: Finding and Implementing Best Practices* (Milwaukee, Wis.: ASQC Quality Press, 1995).

3. The development of benchmarking, from competitive benchmarking focused on performance measures to functional and generic benchmarking focused on business processes, has been described by several authors. For example, see Gregory H. Watson, *Strategic Benchmarking: How to Rate Your Company's Performance Against the World's Best* (New York: John Wiley & Sons, 1993) and Mohamed Zairi and Paul Leonard, *Practical Benchmarking: A Complete Guide* (London: Chapman & Hall, 1994).

4. Bengt Karlöf and Svante Östblom, *Benchmarking: A Signpost to Excellence in Quality and Productivity* (New York: John Wiley & Sons, 1993).

5. Examples are LearnerFirst Benchmarking 1.0 from ASQC; The Benchmarking System from The Edmund Gunter Corp.; Qbench from Qsoft Solutions Corp.; and Benchmarker Plus from Fleet and Partners.

6. For example, The Benchmarking Exchange, International Benchmarking Clearinghouse Network, and the U.S. Navy Best Manufacturing Practices.

7. Robert C. Camp developed this survey, which was conducted during March through May 1995.

8. Gabriel Szulanski, *Transfer of Best Practices Project: Executive Summary of the Findings* (Houston: INSEAD-The European Institute of Business Administration/American Productivity & Quality Center, 1994).

9. Ibid.

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Question	Issue
A	Is there a formal benchmarking program?
B	What type of formal benchmarking training is provided?
C	What are the other requirements before proceeding with benchmarking?
D	What are the need for, and the process for, transfer of best practices?
E	Are any on-line services for dialogue on best practices currently being used?
F	Are any PCs, networks, or software for benchmarking currently being used?
G	What on-line databases and services are available and used?
H	What other benchmarking initiatives are important?

Figure 1. Issues Covered by the Survey Questions

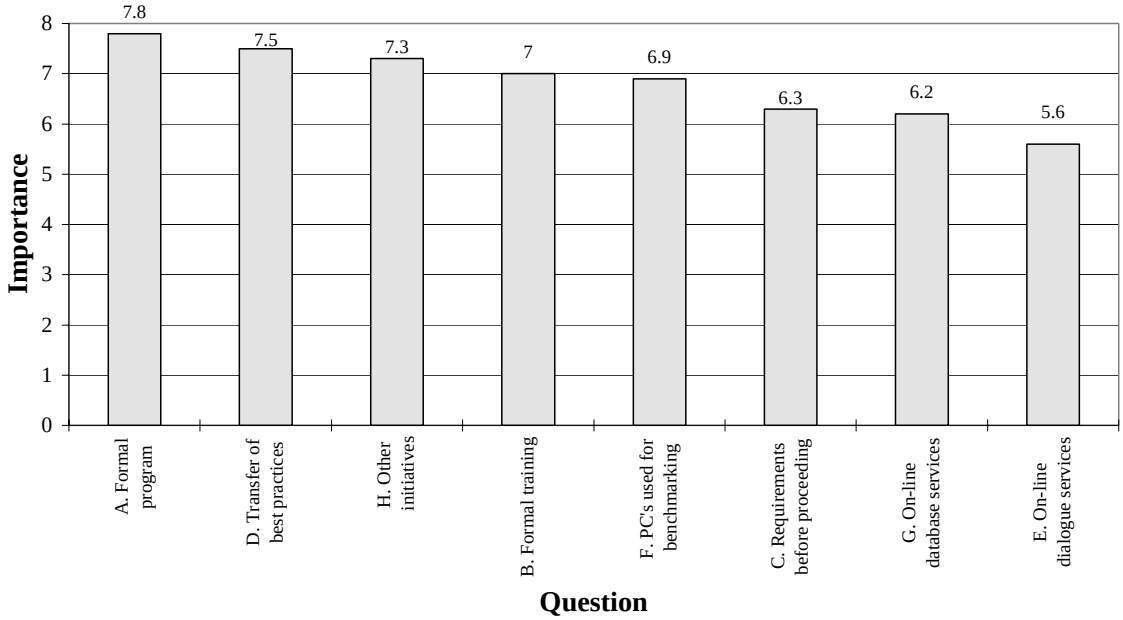

Figure 2. Importance Ratings for the Survey Questions

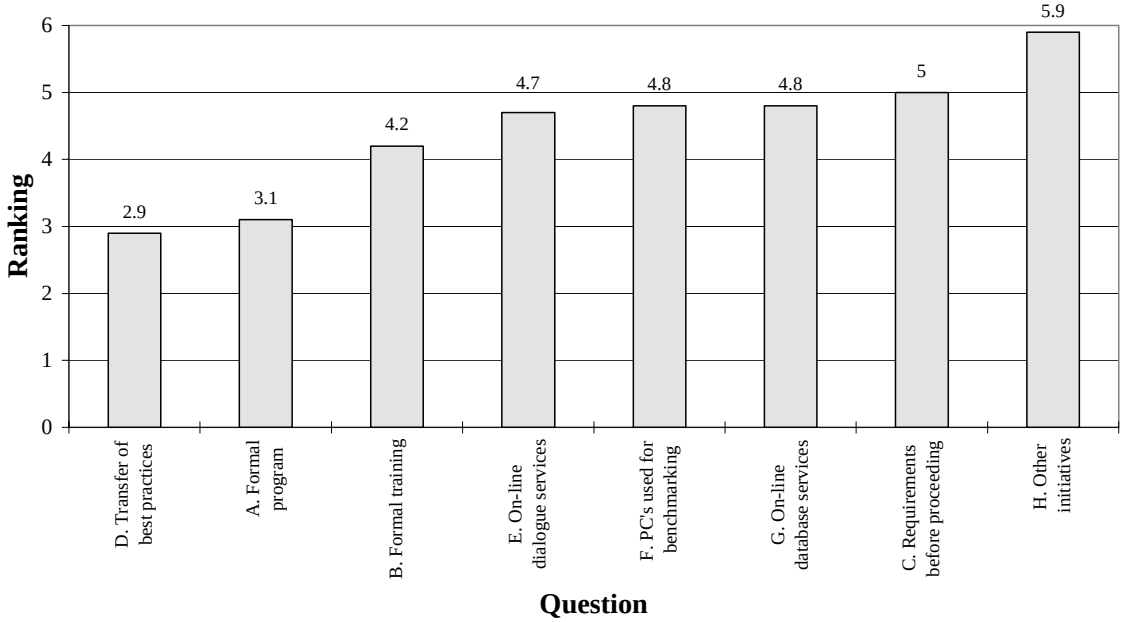

Figure 3. Ranking of the Survey Questions