Computer-Based Training for Corporate Entities—What CBT can (and can't) do for your Organization?

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Abstract

While it is still its infancy, training on the Internet is already a reality & there seems to be no doubt that firms will soon be relying on the Internet to offer at least some of their training programs through the Internet platform. At present, most Internet training programs are aimed at teaching Internet users how to use the Internet with a heavy focus on awareness building in the Internet domain. However, there is a gradual shift in emphasis from the training being of fundamental nature of trainings that are imparted on more selected disciplines in specialized areas. With the proliferation of advanced technology & management skills, these Computer-Based Training (CBT) & Web-Based Training (WBT) are slowly being materialized in the ranks of better-managed organizations in Bangladesh. In our findings, we find mostly the trainings offered through CBT & WBT as opposed to traditional training results in better corporate performance & in the development of the overall human resource skills in the country.

In this article, we have shown the distinctiveness of CBT & WBT & how these technology driven training programs assist organizations to achieve quantum leaps in their office productivity. Efficiency, motivation & in helping management in promoting the culture of class room guided training & self-paced training.

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Introduction

Business advantages lies in developing core competencies. In today's
skills driven corporate, organizational environment, companies are
constantly reinventing modalities for achieving success. Traditional
trainings have advanced organizations; however, the pace of advance-
ment efficiency envelope have been moved further by new techniques
& approaches in Computer Based Training & Web Based Trainings.
Organizations, including reputed Universities all over the world have
introduced many On-line training courses via Internet. In many ways
the courses are likely correspondence courses that lands in users' E-
mail boxes one new lesson a day that extent over a few week.

Trainees get to work through each new lesson & some lessons include
assignments that send trainees off into the outer reaches of the Internet
to practice what they have learned about using the Internet & to
retrieve information pertinent to the course. Companies can use the
same approach for delivering training programs inexpensively nation-
ally & internationally, but that is not all. As propriety networking
software like Lotus, Novell or Microsoft becomes complimentary to
the Internet, firms will be able to provide training programs on a more
secure basis.

In reviewing the current trends in Bangladesh, we explored some of
the multinationals & local corporates in Bangladesh. From a sample
of nine (9) large organizations, it was found that mostly all of these
organizations have engaged in some form of CBT trainings; however,
none of these organizations had any programs on WBT trainings. So,
we can infer that CBT as a methodology has been accepted in
Bangladesh; however, due to lack of infrastructure & orientation to
Internet based trainings, the WBT methodology has not gained curren-
cy in Bangladesh. The organizations from which we received infor-

mation were: Standard Chartered Bank PLC, lever Bangladesh Ltd., British American Tobacco, American Express Bank Ltd., Bangladesh Oxygen Ltd., Square Pharmaceuticals Ltd. Beximco Pharmaceuticals Ltd., Reneta Ltd. & ACI ltd.

Survey Methodology

In our empirical study, we used several criteria in selecting the organizations that we surveyed. We initially selected twenty (20) corporates in Bangladesh meeting these criteria & then further reduced the list to nine (9) entities that matched our criteria to the fullest. These criteria for selecting the organizations were:

a. It should have at least 10 years of business exposure in Bangladesh.

b. It should have at least 300 full- time employees,

c. It should maintain some form of [1]Total Quality Management (TQM) practices,

d. It should at least have nationwide exposure.

In carrying forth our survey, we also depend on finding pertinent CBTs & WBTs organized by these entities through their websites.

The State of CBT & WBT Training

Although computer-based training has been used in corporate training for more than 15 years, it has only come into its own in the last three to five years. As is the case with most technology, the early adopters spent a lot of money on equipment and dealt with a variety of issues that the average training manager couldn't handle from a technology standpoint or couldn't afford from a budgetary angle.

CBT is completely different today since tremendous advances in hardware & software technology. For one thing, most CBT products can run on nearly all computers. And due to the increased accessibility to

fast hardware, more companies are developing CBT programs. No longer just for abroad topics with universal appeal, such as safety and supervisory skills, today's CBT software also focuses on much more specific topics such as manufacturing quality and productivity improvement. And, with Web-based training (WBT) quickly becoming the fastest-growing segment of the computer-based training market, it won't be long before companies can provide a variety of quality-related training topics at home, at work or on the road.

If, when it comes to training, company is still languishing in the dark agesóstill conducting in-house classroom training or sending employees away to outside seminars–it's time to consider the benefits of CBT and WBT. However, before firing all training staff, there are some things that should be known about what CBT and WBT can and can't do for your company.

What CBT can do for your Company?

CBT increases both productivity and learning. Significant productivity gains are generated with CBT because it's extremely flexible. Classroom training requires a trainer, a room, materials and enough learners to make the training worth the investment. With CBT, each learner can access training exactly when it's needed at a time and location convenient for that particular learner. This means no more shut down production lines during training and no more cancelled or postponed training sessions due to production emergencies.

CBT also takes less time than classroom training. Some studies have shown it to reduce training time per learner by 40-60 percent. Most CBT programs enable the training to be customized to meet a particular learner's needs. So instead of sitting in a full-day training session where only half of the information is relevant to any one learner, employees can focus on what's most important to their specific jobs. Less time spent in training means more time applying new skills on the job.

Another reason for CBT's efficiency is that people learn at different speeds. In a classroom, everyone proceeds at the same speed (usually determined by the trainer), but with CBT, learners can work through training at their own pace.

The productivity gains realized with CBT require that learning and retention be sacrificed; in fact, learning retention is typically higher with CBT than it is with classroom training. One reason for the increased retention is that learners don't feel embarrassed to spend extra time on topics more difficult for them. In addition, CBT can provide interactive exercises with which learners can test their knowledge, practice applying the skills acquired and experiment with what they have learned in a safe, non judgmental environment. Some training programs even offer built-in features that adapt to different learning styles. For example, some programs give learners the choice of hearing audio, reading text or doing both. Other programs allow learners to chart their own learning paths or to work through the training sequentially. This type of adaptation to individual learning needs simply isn't possible in a traditional classroom setting.

Regardless of the training approach, however, it's easy to lose sight of training's true objective, which is to develop or modify skills, attitudes and behaviors on the job. Instruction should always be secondary to actual on-the-job application, whether classroom training or CBT is used. Unfortunately, the objective of getting enough people in the classroom is often given priority over when and how the learners are to apply what they've learned. By the time some of the learners have the opportunity to apply what was learned in the classroom, the skills might already be rusty. With CBT, learners can immediately apply what they've learned because they take the training at the exact time they've ready to use it, not when the organization is ready to provide it. In addition, because fewer people are needed to conduct CBT, quality engineers and other subject matter can be spend more time helping learners use what they've learned to make tangible improvement to quality and productivity.

From the perspective of skills development, organizations might need to give CBT a second look. In order to push the growth curve of an organization, CBT & WBT trainings provide a cost effective solution to achieving a greater benefit due to the inherent structural benefits of these approaches to training. It is also true that off-the-shelf CBT is typically much less expensive than classroom training. Developing CBT in-house can be expensive and time-consuming, but a variety of off-the-shelf CBT exists that addresses manufacturing quality and productivity topics such as SPC, dimensional metrology, Six Sigma, ISO 9000 and QS-9000, to name a few. Some programs come with a site license, which means that once you purchase the program, you can train as many employees as you wish at one location without any individual fees. Other CBT and WBT programs charge a per-user fee. However, compared to the cost of attending a seminar or holding an in-house training session, even CBT/WBT with a per-user fee can cut your training costs by at least 50 percent.

What CBT can't do for your Company?

Despite all of CBT's benefits, it, like traditional classroom training, will yield disappointing results if delivered in a vacuum. How many times are people sent to classroom training only to have the manger observe six months later that the training hasn't had any impact on productivity or quality? This type of problem usually has little to do with the actual training/instructions and a great deal to do with the environment in which the skills are to be applied. CBT cannot be treated as an independent event unconnected to an application on the job. Don't do CBT just for the sake of training.

CBT and classroom training alike need to be linked to specific business objectives. Learners need to be held accountable, not only for going through the training, but also for using what they learned in their jobs. And processes must be put into place to enable people to use what they have learned and to help them if they're having

difficulty applying their newly acquired knowledge or skills, a system that must be in place prior to rolling out a CBT program.

Selecting CBT

In the area focusing on consumer products manufacturing, quality managers & a training manager grapple with the best techniques to implement training to support organizational Six Sigma processes. Through observations, it has found that, due to cost savings & flexibility, CBT can be better used for the bulk of the training. However, faculty speaking CBT does not relieve the quality professionals of their responsibilities in implementing Six Sigma standards but helps these managers in a multiatitude of decision process is by considering the five key points while developing a CBT initiative before launching:

- Provide a face-to-face introduction to the training either one-on-one or in groups to demonstrate supports for the training and to convey a sense of importance in developing new knowledge, skills and behavior.

- Set a deadline for learners to complete the training. The deadline should convey a sense of urgency. In other words, don't give people six months to complete a program. That sends a message that the training isn't really all that important.

- Review the key points of the training with employees, either one-on-one or in a group, once they've completed the training. Encourage them to ask questions about how employees will be expected to use what they've learned.

- Ensure that learners have opportunities to immediately use the skills gained in their jobs, and follow up with one-on-one to review how they're progressing.

- Make the training available to learners as a refresher even after they've completed it.

With a commitment to a process that embrace these five points, you can begin your search for CBT programs that meet your training needs. More quality-related training programs are becoming available everyday. Although it's nice to have more choices, this variety makes it even more important that you develop well-defined criteria for evaluating your options. Here are several basic questions you should ask when selecting off-the-shelf training products. Use these as the basis for developing your own list of musts and wants to ensure that you achieve your training objectives:

- Was the training developed by quality professionals who are able to convey sometimes-complicated quality concepts simply and clearly? Is the content accurate, consistent and presented in such a way that employees at all levels can understand it?

- Because you are making an investment that should be able to benefit your company for the next several years, is the training-tool provider going to be around in the future to provide ongoing support?

- Does the developer have a suit of products, and is the company committed to developing new titles that will make it easy for you to add additional training options as new needs arise?

- How does the company handle technical support and product upgrades?

- What other organizations are using the company's programs? Are companies similar to yours using the program, and can you talk to their representative as references?

- Can you review the program in its entirety before purchasing?

- Will the program run on a variety of different computer configurations or does it require specialized equipment?

- Are the programs offered in a variety of formats such as CD-ROM-based, LAN-based and Web-based?

● Does the CBT provide testing and tracking to document that learners have successfully completed the program?

Successful Web-based training (WBT)

The concept of WBT is appealing because it makes training even more accessible and flexible than more traditional CBT methods. Pure WBT programs run through a browser independent of the operating system, so employees on Macs and PCs can have access to the same training.

Hybrid WBT programs require plugins in order to run. These programs run over the Web but may not run through all browsers. With these types of programs, runtime files are installed on the user's computer and the media and text files are delivered over the Internet or an intranet through the Web server. Programs requiring plugins may be more complicated to install and run but may enable more functionality and interactivity. The downside of plugins is that information technology departments in many large corporations ban their use.

With either form of Web-based training, bandwidth is still a major concern for developers. Although audio, video and animations work great with programs running locally, over the Internet or intranet they can bring performance to a sudden halt. Compression technology for graphics and photographs has come a long way in recent years, so these are no longer major problems for WBT developers. The biggest limitation today for WBT is with compression technology for audio and video because there's still a significant trade-off between quality and speed. Even though most large corporations have high-speed Internet connections, media-rich WBT programs can take up precious bandwidth. In addition, employees who use WBT programs from home through a dial-up connection or employees who use WBT at satellite facilities with slow Internet connections might find the speed of the program painfully slow. Consider a paragraph of audio with the three average-length sentences in an MP^3 format: The size of the

audio file would be about 234 KB. At best, data transfers at 3.6 KB per second on a 28.8 KBPS dial-up connection, so it would take more than a minute to transfer that file over a 28.8 KBPS Internet connection. The issue with audio and video compression has led many developers to use text instead of audio for their WBT, at least for the time being. However, with the pace of technological advancements and the wide-scale implementation of broadband technology, it could be a very different story a year from now.

When selecting WBT, therefore, you need to modify your expectations and requirements to fit technology's current state. Don't expect media-rich programs; in fact, beware of them, because they may prove to be a big hassle for many of your learners. Five additional questions you need to ask when evaluating WBT are:

- How are training records maintained, and will you have access to that information?

- Will the WBT communicate with an existing learning management system?

- Does the WBT require plug-ins, special media players or other software that may be a hassle for learners to use or install?

- How do learners access the training? Can your company purchase a block of seats and assign learners to specific courses?

- How long do employees have access to the WBT?

CBT and WBT present exciting alternative to classroom training that can save your company time and money while at the same time increasing retention and employee enthusiasm for training. However, training with CBT or WBT will only be as good as the planning and preparation that goes into it. Using CBT technology will be most effective when its implementation is well-thought-out and when the training is carefully selected to ensure it meets the needs of the organization.

Conclusion

In the final analysis, we found that organizations in Bangladesh are only marginally utilizing the true benefits of CBT & WBT due to various economic, logistical & cultural reasons, compounded by such important factors as lack of understanding of the potentialities of these media, lack of clarity of tangible training benefits received from these trainings & lack of proper knowledge of developing CBTs & WBTs. Other additional impediments were: inadequate infrastructural facility, inefficient & inadequate skill sets among human resource staff, not able to develop comprehensive CBTs & WBTs, poorly equipped IT training facility in Bangladesh, almost no market for selling CBTs & WBTs by IT training & management firms, gaps in vision in how CBTs & WBTs can be of benefit for personal & organizational development, and almost no support from public & private sectors. In order for organizations to offer CBTs & WBTs, it may be recommended that text incentives may be accorded to organizations which have advanced forms of such trainings, enabling them to push ahead the productivity curve & allow other organizations to follow their lead in Bangladesh & compete with global players on the same footings. It may be also given [5]venture funding for creating a market for these kinds of trainings that will ultimately enhance the productivity of Bangladesh in line with developed nations.

Appendix:

- ❑ [1]**Total Quality Management (TQM):** It is enhancement to the traditional way of doing business, which is a proven technique to guarantee survival in world- class competition.

- ❑ [2]**Statistical Process Control (SPC):** It is a system created for tracking variations & identifying its causes using statistical techniques initially developed by Walter Shewhart.

- ❑ [3]**ISO 9000:** The international organizations for Standards (ISO) completed the quality management system in 1987 which

is a series of international, volutary environmental management standards, guides & technical reports.

❑ [4]**QS 9000:** This standard was developed in September 1994 by Chrysler, Ford, & General Motors to define their fundamental quality expectations for suppliers of productions & service parts & materials. QS 9000 uses the ISO 9000 as its foundation but its requirements are much broader.

❑ [5]**Venture Funding :** It is a form of financing where insignificant or no collateral is pledged to secure funding for projects initiated by an organization.

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