

CHAPTER – 7

DISCUSSION

"The next big killer application on the internet is going to be education. Education over the internet is going to be so big it is going to make e-mail usage look like a rounding error."

John Chambers, CEO, Cisco Systems

7.1 Discussion

7.1.1 Convergence of demand and supply has enabled growth of e learning: The growth in e learning in recent times has been enabled by a convergence in the demand and supply side of e learning. The following factors have increased the **demand** for e learning:

- The realisation among nations and organizations that improving the quality of their people and empowering them is necessary for progress.
- Rapid obsolescence of knowledge and training in a globalised world
- Need for training delivery methods that provide training 'just-in-time'
- Search for cost-effective ways to meet learning needs of geographically distributed populations/personnel.
- New learning models to quickly reduce skills gap
- Demand for flexible access to lifelong learning

On the **supply side**, the following factors have been the facilitators:

- Internet access is becoming more widespread. In India, the Internet usage is reported to have increased from 4 million in 2003-04 to 60 million presently and the connectivity is being taken to the Gram Panchayat level.³⁵
- Advances in digital technologies have enabled creation of interactive, media-rich content. Technology for producing digital content is now available in 12 Indian languages. The Department of IT has distributed 7 lakh CDs on software tools freely.³⁶
- Increasing bandwidth and better delivery platforms have make e-learning more attractive. The SWAN being established upto Block level would have 2 Mbps bandwidth.
- High-quality e-learning products and services are more easily available.
- Technology standards have emerged on the scene and facilitated compatibility and usability of e-learning products.

All in all, it can be said that the time for exploiting the potential of this medium of education and training delivery has arrived and the advantage must not be lost.

7.1.2 Advantages of e learning far outweigh its disadvantages: The disadvantage of e learning is that initial development costs could be high particularly for interactive programs and these also demand larger bandwidth. Computer based training is criticized by some as being socially exclusive and not very effective as there is no instructor staff available to which the trainees can

³⁵ Sunday Times, 1 March Ibid

³⁶ Ibid.

ask questions and get direct feedback. Information on CDs cannot be updated unless a new version is released. However, many of these disadvantages are easily obviated. **On balance, the advantages of CBT far outweigh its disadvantages.** Moreover, the proposition is not for replacing traditional training methods with CBT, but rather, supplementing them and complementing them with e learning and using it innovatively to enlarge training capacity and effectiveness. Seen in this light, the scope for CBT is enormous and its potential, that of transforming organizations.

7.1.3 E learning is a viable and cost effective training option for the Railways to meet the increased training needs in all areas. The Railways would benefit by an enterprise wide application of e learning instead of adopting it piecemeal.

7.2 Key takeaways for successful e learning on the Indian Railways

7.2.1 An organization like the Indian Railways, by reason of its size and complexity requires a unique approach. However, having studied the e learning experience across organizations, the following ingredients appear to be a must.

I An enterprise wide e learning solution requires **political will and committed leadership.**

II Strategic thinking and meticulous planning are a must. Planning and handholding throughout the life cycle of the project would require the best brains of the Indian Railways who are domain and subject experts and know the climate and ethos of the organization.

III A core team of officers and employees from different departments of the Railways would need to be formed and trained, to first plan and then implement the e learning programme. The core group should be headed by a capable project champion. However, it should not be dependent on one 'idolised' officer as such projects tend to fail with his/her transfer to another post.

IV Involvement of all stakeholders is necessary as the programme is meant for the employees. Employees across the organization should be associated with all stages of development and implementation, including preparation of course content. There should be a sense of ownership among the employees and they need to see it as something that is beneficial for them. There should be incentives in the programme. These could be the form of

- Certification/ increments/awards at the individual level for successfully completing a module or a set of modules and even for preparing the best course content.
- Awards at the Railways/Zonal/Divisional levels for best adoption of e learning, content preparation etc.
- Linking promotions to completing the training (this could be controversial; hence may be introduced only after initial success of e learning)

- E learning programmes should contain content that is of personal benefit to employees, such as compensation and benefits as has been suggested elsewhere in this dissertation.

V The e learning programme should put the learner at the centre.

Assessment and curriculum design and development should take into account:

- Both organizational and individual needs
- Set standards of performance for e learning, goals and incentives
- Roadmap for achieving the goals

VI The quality of the training content should be excellent. It is particularly

important that the first roll out of modules should be of the best quality, easy to operate, accessible, and have some content of personal use of employees.

Content should be kept current and refreshed. A few modules that will have the strongest impact and largest reach can be rolled out first and others can follow after assessing the strength and shortcomings. The content should ideally have:

- Rich multimedia experience
- Realistic simulations and role playing, animated case studies and examples
- Advice and explanations from experts/mentors
- Interactive games, activities, and music
- Practical exercises and application
- Facilitated workshops and discussion groups

- Desktop advice and special events
- Weekly newsletters and relevant articles

Some of this content could be introduced as the programme matures. For Group D employees content could be made **bilingual/multilingual**

VII **Access to information should be easy.**

- Multiple technology-based delivery methods can be adopted
- Both synchronous and asynchronous learning should be available
- Should in due course provide access to fellow learners, instructors and experts

VIII It should have a **monitoring mechanism** for evaluating the progress of learners including their behavioural changes, needs and goals and measuring return on investment.

IX Technology should be **scalable, flexible**, leverage existing open industry standards and allow **integration** with the other applications of the organisation