

FACTORS THAT IMPEDE THE SUCCESSFUL IMPLEMENTATION OF E-LEARNING STRATEGY

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Abstract: E-learning is now widely recognised as a viable vehicle for education in institutions of higher learning, as evidenced by the number of renowned academic institutions that now offer e-learning courses. Corporate South Africa has realised this, and has embarked on a similar course of action. On the basis of a study involving a number of South African organisations, some factors were found to be crucial for the successful implementation of e-learning strategy, and the performance of the organisations selected for the study was measured against requirements for the successful integration of e-learning. The purpose of the study on which this paper is based was to investigate the integration of e-learning into the corporate training environment of a number of South African organisations. The research question that the study set out to answer is: *What are crucial issues for the integration of e-learning into the corporate training environment in South African organisations?*

Introduction

A number of authors claim that e-learning will ultimately become the new training paradigm, taking its place alongside traditional contact situation training and changing the face of training generally. A number of trends, which include technological developments and the growth of the Internet, legislation and business imperatives have accelerated the move to e-learning in the corporate world. This paper will focus on the legislation and business drivers that have implications for the successful introduction of e-learning in this environment. Although various research reports have provided a body of general information about e-learning, very little research has been conducted into the requirements for the successful implementation of an e-learning strategy in the corporate training environment in South Africa. Although the study reported on in this paper focused on the South African corporate environment, the findings may prove equally relevant to institutions of higher learning, the public sector and even other countries. The purpose of the study on which this paper is based was to investigate the integration of e-learning into the corporate training environment of a number of South African organisations. The research question that the study set out to answer is: *What are crucial issues for the integration of e-learning into the corporate training environment in selected South African organisations?* This paper will report briefly on the performance of the selected organisations as measured against the requirements for the successful implementation of an e-learning strategy. The study on which this paper is based required in-depth research into factors that impede the successful implementation of e-learning strategy, and was conducted under the auspices of the University of the Witwatersrand.

Research Methodology

Research approach and sampling

A qualitative approach, involving observation and legislation analysis in addition to focus group and key informant interviews (Merriam, 1998), was adopted. A qualitative methodology was deemed most suitable for this study, as respondents themselves would constitute a rich and valuable source of information (Hammersley, 2000). This study “went beyond numbers” (Greenhalgh & Taylor, 1997), and took the form of a generic study to investigate issues crucial to the integration of e-learning into the corporate training environment. A number of corporate trainers and trainees at a range of South African organisations in the banking, insurance, mining, telecommunications, energy and services sectors were selected as participants in this study. The organisations selected all use e-learning as a training delivery mode. Convenience sampling was used (Merriam, 1998), with the above-mentioned organisations being selected because both they and the researchers are based in Johannesburg, resulting in a considerable saving in terms of cost and travelling time.

Data collection and analysis methods

The study relied on generic techniques for qualitative data collection and analysis. Because multiple data gathering methods and sources were employed, the requirements for triangulation were fulfilled (Camp, 2000). Data gathering methods included individual interviews, focus group interviews, observation, and analysis of legislation and policy documents. A constant comparative method was applied to data within and between interviews (Merriam, 1998).

The Framework of the Study

The study reported on in this paper was conducted within the framework of the requirements for the successful implementation of any e-learning strategy as identified from the literature. This section constitutes a brief overview of these factors, against which the performance of the selected organisations was tested.

Dealing with change management

When an organisation introduces e-learning, it is advisable to manage change (Thorton, Lewis, Millmore & Saunders, 2000). These authors explain that change management may involve various activities, including assessment of the environment, determining the performance gap, diagnosing organisational problems, identifying sources of resistance, reducing resistance, implementing change and following up on the change.

Integration of business planning and e-learning strategies

No e-learning strategy should be formulated in isolation from the business planning function, as doing so may affect the implementation of the e-learning strategy (Premkumar & King, 1994). Business objectives and plans should play a role in the initial phase of any e-learning strategic planning process. In most instances, transforming business information into e-learning planning is difficult. On the one hand, there are times when business information lacks some crucial detail that is necessary for e-learning planning. On the other hand, business managers may fail to see how e-learning can assist them to enhance their strategy. This should be attributed to a lack of understanding of the potential of e-learning within the organisation. In addition, e-learning co-ordinators may not appreciate how important business plans are to e-learning (Segars & Grover, 1998).

Adequacy of resources

Resources are vital to any e-learning strategy, and Premkumar and King (1994) caution that the lack of human and infrastructure resources may impede the implementation of an e-learning strategy. In some instances e-learning managers are compelled to proceed to implementation without sufficient resources. This, however, affects the scope and quality of the planning process. The quality of resources is a further issue for consideration. The absence of training programmes will impede the success of e-learning because implementers will not be effective in the planning process (Igbaria & Zinatelli, 1997).

Bringing planning down to earth

The fact that managers find it difficult to bring e-learning down to earth is an obstacle to the successful implementation of an e-learning strategy. Green (1991) reports that translating the strategy into practical implementation is a difficult endeavour, and that there are significant danger attached to a misapplied strategic effort. E-learning co-ordinators can solve this by addressing practical issues right at the start of the planning process. Both internal and external stakeholders should reach consensus on the focus of the strategic plan before the actual implementation takes place. Edelhart (1987) advises that e-learning planning must be a practically oriented exercise during which problems and opportunities associated with implementation must receive proper attention.

Focusing on strategic issues

The success of the e-learning strategy will be jeopardised if strategic planners fail to focus on critical strategic issues. Green (1991) reports that most e-learning strategic planning endeavours are “too open-ended”, and thus lose focus. Cohen (2001) warns of the dangers of focusing on non-strategic issues, as performance derived from strategic planning cannot be sustained. It is on these grounds that e-learning planners should avoid being preoccupied with operational activities. Green (1991) refers to this operational decision-making as “business as usual”, and goes on to argue that when scoping an e-learning project, non-strategic issues should be handled by business-as-usual line of responsibility structures.

Sponsorship for the implementation

According to Flower (1997), the success of e-learning strategy implementation will not depend only on the involvement of the organisation experts in both business and information systems, close alignment with business partners and the integration of the systems units, but also on the presence of a sponsor among top management. Flower (1997) does not regard e-learning planning and implementation as being confined to the e-learning function and to e-learning experts, but instead views it as a responsibility of top management. E-learning experts therefore fulfil an operational role. According to King (2000), organisations that are proactive in e-learning planning and implementation ensure that end users are also involved. The dedication of resources to e-learning is an indication of top management commitment.

A stable and conducive environment

Environmental uncertainty impedes the success of e-learning strategy implementation (Cohen, 2001). As a result of environmental pressures, organisations are putting less and less effort into strategic planning. In times of environmental uncertainty, management may abdicate from formal strategic planning altogether. Environmental uncertainty may also lead to poor strategic decisions, which the organisation attempts to avoid by postponing its strategic planning and trying to deal with operational challenges without strategic decision-making. A rapidly changing environment can lead to efforts being channelled into “immediate survival” (Cohen, 2001).

A proactive approach

King (2000) found that firms that are proactive in their implementation have fewer problems and are more successful than those that adopt a reactive approach.

Using e-learning strategy to gain competitive advantage

According to Rackoff, Wiseman and Ullrich (1985), an e-learning strategy should not be confined to operational and training issues. These authors report that although the implementation of e-learning may not lead to market domination, it could be utilised as a significant weapon in an organisational strategic arsenal. Despite this, most organisations implement e-learning strategy in an ad hoc fashion, without aligning it to competitive advantage (Morrison, 2003:113). However, the speed of competition will lead organisations to realise the benefits of implementing an e-learning strategy (Earl, 1993).

A smooth process of implementation

Constraints on the actual process of implementation will impede the success of any e-learning strategy (Gottschalk, 2000). Lederer and Sethi (1991) identify the constraints that may impede the success of e-learning strategy implementation as being the following:

- The unavailability of a hardware plan will lead to system incompatibility, resulting in management refusal to implement an e-learning strategy.
- E-learning strategic planning consumes vast quantities of resources, and is thus costly. Management will be reluctant to increase costs by implementing a plan that will soon be outdated.
- The unavailability of data will affect the implementation of an e-learning strategy. Without the relevant data, management will be reluctant to implement an e-learning strategy, and implementation would in fact be pointless.

Findings of the Study

The study revealed that that not all the requirements for the successful implementation of an e-learning strategy identified in the previous section were met in all the participating organisations, and that in some cases this may have been the reason for the failure of the implementation of e-learning. On the other hand, being aware of the pitfalls and managing the problems enabled most of the organisations to succeed in integrating e-learning into the corporate learning environment.

The findings below show how a number of South African organisations responded to the factors outlined in the previous section.

Dealing with change management

Most of the organisations that participated in the study dealt with the culture and change management issues reasonably well. However, these organisations still had to sell e-learning to internal stakeholders. These organisations were in the process of introducing a learning culture into the workplace, and line managers encouraged their subordinates to participate in e-learning courses. Some organisations actively promoted e-learning courses. Some e-learning co-ordinators reported that on implementing their e-learning strategy, they initially experienced resistance. They attributed this to their failure to diagnose organisational problems prior to implementation, and expressed the belief that diagnosis would have enabled them to identify and eradicate problems before the integration of e-learning for human resource development. Nevertheless, they were able to ascertain and understand why people were resisting change.

Reasons for the resistance to the implementation of e-learning included the following:

- Some employees felt that they lacked the skills and behaviours required in the e-learning environment. Organisations solved this problem by introducing pre-training, which acquainted employees with computer literacy, general literacy, Internet skills and the use of a learning management system.
- Some trainers who had been responsible for traditional face-to-face training resisted e-learning, fearing that they would become redundant, and sabotaged the implementation of the e-learning strategy. Organisations solved this problem by offering training to the trainers who were responsible for e-learning. Organisations also assured stakeholders that e-learning would not replace traditional learning, but that the two would be integrated. During the interviews conducted during the course of the study, the concept of blended learning was mentioned several times. In South African organisations, blended learning refers variously to combining Internet technology with the virtual classroom, self-paced learning, collaborative learning and online videos; combining various training methods; combining instructional technology with face-to-face trainer-led training; and combining learning with real job tasks.

- Some people did not understand the benefits and other implications of implementing e-learning, and so resisted it. In some instances, this resistance was dealt with through the development of business cases for e-learning, the development of the business case being preceded by a pilot project in some cases. However, most of the organisations implemented e-learning without a business case, and the resistance continued.
- In some instances people resisted the implementation of e-learning because they thought they would be at a disadvantage because of the lack of resources. This happened mainly in branches in underdeveloped areas where employees lacked access to computers and/or the Internet. This problem was solved through the introduction of computer centres, corporate learning institutes, virtual learning centres, corporate campuses and one corporate university.
- Inter-organisational agreements are sometimes a cause of resistance. Labour contracts and agreements with unions affect the implementation of e-learning both positively and negatively. Although unions in South Africa support training initiatives (and e-learning in particular), the question of when e-learning should be carried out remains unresolved. Questions that unions are asking include when employees should participate in e-learning activities, and whether managers will allow employees to use work time for e-learning.

Some of the organisations dealt with change management by assessing the business environment and determining their enterprise's performance gaps. This made it possible to implement e-learning to close the performance gap.

Integration of business and e-learning strategies

In most instances, organisations did not integrate their e-learning strategies with business strategic planning. In fact, most organisations lacked an e-learning strategy, and were trying to implement e-learning without having a strategy at all. This is one of the factors that led to the failure of e-learning on more than one occasion in one large South African-based international conglomerate. The absence of an e-learning strategy and/or the lack of integration between the e-learning strategy and the business strategy makes e-learning vulnerable to failure, and business unit managers and the executives find it difficult to support e-learning strategy implementation. In the organisations that participated in the study, the lack of strategy integration was exacerbated by the lack of business cases for e-learning. However, during the course of this study, one banking organisation was in the process of integrating its e-learning strategy with business and knowledge management strategies.

Adequacy of resources

The South African organisations that participated in this study had reasonable human and infrastructure resources. Nevertheless, bandwidth constraints and lack of telecommunications in certain parts of the country remain a serious stumbling block when it comes to e-learning strategy implementation. In some parts of South Africa people hardly have access to electricity, let alone computers and the Internet. Other resources that could hamper the implementation of e-learning include classroom capability, presentation apparatus, and the lack of software, networks and security firewalls. Budget limitations and the unavailability of qualified e-learning personnel reduced the effectiveness of instructional technology, courseware design and development, training, assessment, and evaluation. (E-learning personnel include subject matter experts, instructional designers, graphic designers, audio/video specialists, qualified online learning facilitators and information technology specialists.) Most of the organisations that participated in the study also had less than optimum information technology infrastructure, with aspects such as bandwidth, low browser capabilities, low computer capabilities, and low operating system capabilities needing attention. Naturally this has implications for e-learning, which cannot be implemented as an instructional method if the target audience lacks access to computers and a network.

Procedural and data constraints that had a negative effect on the organisations that participated in the study were:

- lack of standardised content production and management procedures
- lack of format standardisation throughout the business
- content discrepancy across many solutions — no main focus or content repository

In the companies that participated in the study, the situation was exacerbated by the fact that important resources such as time, infrastructure, budget, contribution of top management and end users are not within the control of e-learning co-ordinators or the human resource development department.

Bringing planning down to earth

Most of the organisations that participated in the study were eager to translate the e-learning strategy into practical implementations, and the e-learning implementers were more interested in practical aspects of e-learning than in lengthy theoretical documents. On the other hand, some organisations had no documented strategy or business case, and so were unable to implement anything. Yet other organisations, possibly having sized up the situation, had workable, focused e-learning strategies that were practically oriented, crisp and brief.

Focusing on strategic issues

Most implementers of e-learning in the South African organisations selected for the study did not allow non-strategic issues to distract them from focusing on strategic issues. During the interviews, most participants indicated that the future of their e-learning implementations lay in the integration of e-learning applications with other systems within the organisation. They also saw portals as playing a prominent role in e-learning implementations initiatives. In the future, no application will survive without a portal, and portals will serve both as platforms and as the glue that holds different applications together. The movement towards integration is motivated by the fact that organisations do not regard e-learning as a magic bullet. Some experts in South Africa believe that stand-alone learning content management systems (LCMSs) have no future. They base this opinion on the fact that organisations that are leaders in electronic resource planning (ERP) are also entering the e-learning market, which will mean that LCMSs will be one of the modules in the ERP system. Other experts, however, do not subscribe to this view because they believe that most stand-alone LCMSs have been upgraded to be integration friendly. The South African organisations that participated in the study have relevant structures and processes to deal with the maintenance and enhancement of existing infrastructure and operational issues. The banking sector in particular is very future-oriented when it comes to e-learning. The credit for this should go to the Bank Sector Education Training Authority (Bankseta), which is very supportive and has dedicated considerable funds to e-learning conferences and research. By contrast, other SETAs are very naïve about e-learning endeavours.

Sponsorship for the implementation

Most of the South African organisations that participated in the study have the support of their top management. However, in some instances where both an e-learning strategy and business case were lacking, top management were reluctant to release resources. The support of business unit managers, branch managers, line managers and employees for e-learning implementation was generally satisfactory. In most instances, line and branch managers adopted the role of promoter and encouraged their staff to participate in e-learning courses. They also assessed their progress, which contributed to good completion and pass rates.

A stable and conducive environment

Environmental uncertainty did not feature as a factor hampering the efforts of the selected organisations to implement e-learning strategies. This should be attributed to the fact that legislation in South Africa compels organisations to train their employees. In fact, failure to implement an e-learning strategy could result in an uncertain future for these organisations. They will face considerable pressure from government, unions and prospective employees. Potential employees will not be prepared to work for an

organisation that will not upgrade their skills through training; instead, they will favour an organisation that offers e-learning because of its convenience.

A proactive approach

In most instances, the selected organisations were not really proactive in terms of the implementation of e-learning. Most had neither an e-learning strategy nor a business case. Some gave the impression of implementing e-learning so as to look fashionable. It is for these reasons that some e-learning implementation initiatives in the South African corporate environment have failed, since organisations that adopt a reactive approach when implementing e-learning experience more problems than organisations that are proactive.

Using e-learning strategy to gain competitive advantage

Most of the participating organisations, especially those in the financial sector, use e-learning to gain a competitive advantage. The linking of e-learning with electronic performance support systems and knowledge management applications is motivated by the desire to gain a competitive advantage. Organisations in the mining sector in particular are using e-learning to accelerate employee performance. E-learning is also being used to educate customers, which further contributes to competitive advantage. In fact, there is a move towards linking e-learning with customer relationship management (CRM), although this is encountered mainly in the business-to-business (B2B) interaction. In order for B2B relationships to be effective, customers need to be educated, and so online learning is used to educate customers about real-time solutions. South African organisations are also using e-learning to acquaint their employees with innovations within the business and customer-facing activities. E-learning enables executives to explain to employees how suggested changes and expertise solutions affect their business units, departments and their work activities. In South Africa, some organisations use e-learning to attract employees into learning activities. They believe that success lies in effective competition with their competitors; this is achievable only if their organisations learn, and when employees learn, the business is learning.

A smooth process of implementation

Most of the participating organisations did not have proper “paperwork” that would assist during the implementation of an e-learning strategy. This constraint was exacerbated by the fact that most organisations lacked an actual strategy, and in some organisations top management refused to authorise the implementation of full-blown e-learning. The absence of an e-learning strategy and business case gives executives the impression that e-learning co-ordinators are not aware of critical business matters, and so they refuse to authorise implementation. On the other hand, the exclusion of end-users from e-learning strategy formulation and implementation leads to top management doubting the value that implementing e-learning would add to human resource development objectives.

Conclusion

The purpose of the study on which this paper was based was to investigate the integration of e-learning into the corporate training environment of a number of South African organisations. The research question that the study set out to answer was: *What are crucial issues for the integration of e-learning into the corporate training environment in selected South African organisations?* This paper reported briefly on the performance of the selected organisations as measured against the requirements for the successful implementation of an e-learning strategy. Although most organisations that participated in this study were reasonably competent in integrating e-learning for human resource development, this study showed that not all the requirements for the successful integration of e-learning identified in the literature were met. This led to the failure of e-learning implementation in some instances.

Although these findings relate to a limited number of South African organisations, the lessons learnt could be useful in other organisations and contexts in which e-learning is being used for human resource development. It has already been mentioned that being conscious of the pitfalls and managing problems enable organisations to integrate e-learning successfully in the corporate learning environment. The study

conducted will also provide important insights into the current and future integration of e-learning by organisations, human resource development managers and policy formulators.

Organisational competence in integrating e-learning in the corporate training environment for human resource development is an important aspect of the improvement of standards of training in the work environment both locally and abroad. The fact that organisations that participated in this study are reasonably competent in this area holds great promise for the future of our training and learning endeavours.

References

- Camp, P.G. (2000). Quality of life after pulmonary rehabilitation: Assessing change using quantitative and qualitative methods. *Physical Therapy*, 80(10) (pp.986–995).
- Cohen, J.F. (2001). Environmental uncertainty and managerial attitude: Effects on strategic planning, non-strategic decision-making and organisational performance. *South African Journal of Business Management*, 32(3).
- Earl, M.J. (1993). Experiences in strategic information systems planning. *MIS Quarterly*, 17(1) (pp.1–24).
- Edelhart, M. 1987. Various approaches to tying corporate and information systems strategic plans. *PC Week*, 4(26). p. 38.
- Flower, J. (1997). Strategic information planning. *Healthcare Forum Journal*, 40(6) (pp.52–55).
- Gottschalk, P. 2000. Descriptions of responsibility for implementation process. *MIS Quarterly*. pp.47-59.
- Green, A. (1991). Bringing planning down to earth. *Information Systems Management*, 8(3) (pp.67–70).
- Greenhalgh, T. & Taylor, R. (1997). Papers that go beyond numbers (qualitative research). *British Medical Journal*, 315(7110) (pp.740–743).
- Igbaria, M. & Zinatelli, N. (1997). Personal computing acceptance factors in small firms: A structured equation model. *MIS Quarterly*, 21(3) (pp.279–306).
- Hammersley, M. 2000. The relevance of qualitative research. *Oxford Review of Education*, 26(3/4) (pp.393–405).
- King, W.R. (2000). Assessing the efficacy of IS strategic planning. *Information Systems Management*, (pp.81–83).
- Lederer, A.L. & Sethi, V. (1998). Seven guidelines for strategic information planning. Information strategy. *The Executive's Journal*, 15(1) (pp.23–28).
- Merriam, B.S. (1998). *Qualitative research & case study applications in education*. San Francisco: Jossey-Bass.
- Morrison, D. (2003). E-learning strategies – how to get implementation and development right first time. John Wiley & Sons
- Segars, A.H. & Grover, V. (1998). Strategic information systems planning success: An investigation of the construct and its measurement. *MIS Quarterly*, 22(2) (pp.139–163).
- Premkumar, G. & King, W.R. (1994). The evaluation of strategic information systems planning: Information and management. *MIS Quarterly* (pp. 327–340).
- Rackoff, N.; Wiseman, C, & Ullrich, W.A. (1985). Information systems for competitive advantage: Implementation of a planning process. *MIS Quarterly* (pp.285–293).