'He Who Rides the Tiger Cannot Dismount' Implementation of E-learning Within Company Strategies

This paper is under development and will be further extended

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Synopsis

This paper reports research on the collective behaviour of corporate organisations in relation to the adoption and use of e-learning, including the extent to which there are strategies guiding this, integrating it with other corporate processes.

Our overall conclusion is that while rational justifications are usually used for the startup and initial investment in e-learning provision, the sequence of activities that follow from this tend not to fit with the original plan or vision, but despite this they are not abandoned but carry on based on different and emergent logics, or simply because they have become an established ongoing activity of these organisations.

Our evidence supports the view that corporate e-learning shapes and evolves in ways that are different from education based e-learning. Although the scale, investment and aspiration of corporate e-learning is often larger than that in an educational setting the planning and designing is less careful, and the steering of this through formative and summative evaluation is rarely undertaken.

In some corporate settings use of e-learning is highly integrative of initiatives to provide learning assistance, job focused decision support systems and the implementation of corporate knowledge management strategies. In others, it is none of these things.

We suggest that e-learning strategies based on economy, substitution and extended reach should be replaced by strategies that link the e-learning provision to the knowledge management implications of the corporate strategies and business models being pursued by organisations.

Introduction

Although the activities relating to e-learning in corporate settings are basically created by individuals and teams, sometimes using external providers, to bring e-learning opportunities and experiences to other employees of the organisation the result is an overall practice and set of phenomena that characterise the organisation as a totality.

In some cases this is driven by explicit and collectively developed strategies, in other cases such strategies exist but are informal and unwritten, and in other cases individual and local initiatives evolve into collective practice.

Emerging corporate e-learning practice has been made possible by the development of information and computing technologies, but

the existence and nature of these technologies are not enough to explain the diversity, nature and extent of corporate e-learning practices.

The question posed in this paper is, how are firms reacting to it? And how can these reactions be typified?

We see two broad ways of accounting for the nature, extent and form of corporate e-learning activity. The first is that it emerges from some rational business planning and implementation process that plans for a more desirable, efficient and effective future through the use of e-learning. The second is that it is driven by other than rational processes that are based on untested assumptions about its efficiency and effectiveness, a sense that it has to be used because it is there, that it has to be done because others are doing it, that it is necessary to be using the latest technologies simply because they exist.

To the extent to which it emerges that there is quite a lot of the non-rational, in these terms, about the development of corporate elearning, then this raises the question of whether rationality in general is not up to shaping and explaining the emergence of this practice, or whether it is because the wrong form of rationality has been applied, when some other will do better.

Individuals 'know' what they know in different ways and Blackler (1995) suggests that we have five ways of knowing. Rational business planning, then, is only one weapon in the armoury of kinds of knowledge that are used in decision-making. This paper will examine some of the ways in which organisations may be said to understand what they are doing in the implementation of e-learning and the extent to which they are using 'rational' or other more tacit kinds of knowledge.

Ramsay (1993) for example talks about the skill of riding a bike. Riders automatically adjust the curvature of the bicycle's path in proportion to the ratio of their unbalance over the square of their speed. They do not have any knowledge or understanding of the laws of mathematics or mechanics. Indeed, such an understanding would not help them in riding their bikes. The adjustments they make are made as a result of knowledge that is understood in other ways than embrained. According to Ramsay, many skills that involve interaction with people are of this type, and successful practitioners are often unable to identify what they know. In a similar way, those firms that are introducing e-learning may be calling upon various kinds of tacit knowledge. However, this tacit knowledge may not be appropriate to the new e-learning situation and they may be applying knowledge learnt in other contexts to a situation which in fact has novel features. The question therefore arises as to how and whether they articulate this tacit knowledge and 'explain' their rationale.

Methodology

Questionnaires were sent to a sample of 48 companies and a total of 32 responses was received, a response rate of 67%. Companies were selected on the basis of being known to the research team and being likely to be interested in participating in the study. The survey data were backed up by the use of in-depth case studies of a small number of firms.

What are companies doing?

The pattern of use shows great variation between the companies in the sample, some of whom have almost no e-learning while others have a great deal. Most companies, however, are using a variety of e resources and about a third are using e-learning as part of face-to-face training courses. A fifth are only using CD-ROM/CBT in LRCs, a further 9% also use CBT on their intranet and 59% use a wider variety of resources. Overall only 3 companies reported using any internet based learning.

Companies are also using e-learning for a wide range of functions. The research hypothesised that most e-learning would be of a simple and knowledge-based kind. However, this was not found to be the case and e-learning is being used over the whole range of skills, including practical 'doing' skills and project management as well as the 'softer' skills like leadership and 'learning to learn'.

Most companies are expecting substantial increases in the amounts of e-learning they will be utilising but there is a wide range of difference in expectation. Some companies who have no employees using e-learning now expect this to be 100% in 5 years time while others who have less than 10% expect a more modest increase to around 30-40% or less in five years. In addition to delivering *more* e-learning, the great majority of companies are also expecting to be introducing new *types* of e-learning activity.

About a third of companies in the sample had a written e-learning strategy and a further third had an informal one. Written strategies ranged from basic planning for a limited provision to extensive and complex strategic level aims. Most companies had integrated e-learning within their overall T&D strategy and saw it as an additional method within the T&D 'toolkit'. Few saw e-learning as replacing traditional learning.

Does e-learning work?

The data suggest that the companies in the survey are implementing a wide variety of e-learning methodologies, are using them for a

range of learning outcomes, and expect to invest even more in e-learning over the next few years. However, the actual benefits of e-learning are largely unexamined. The prevailing view might be summed up as being that e-learning 'must' be a good thing and is 'bound' to bring gains.

E-learning was considered by respondents to be effective for most kinds of learning except leadership skills. However, the majority of companies felt it was most effective for knowledge-based learning and for project or task management skills. About half the companies consider it effective for practical skills and 'learning to learn', while only a fifth regard it as effective for leadership skills.

E-learning was also considered to be more effective for some learning styles and personalities than others. A total of 20 (63%) of companies indicated that they thought e learning was more effective for some learning styles and/or personality types. A further 6 (19%) thought that it was equally effective for all learning styles and personality types.

Companies reported a variety of anticipated benefits, of which the most important were being able to reach a wider range of employees and the speed with which knowledge could reach employees. Cost savings and effectiveness of learning were also seen as important. Some of the other benefits mentioned were:

- Fits with our strategy of self-managed learning
- Can participate anywhere
- It's bespoke not 'sheep dipping'
- Consistency
- Can be done any time
- Ease of update
- Freeing up of trainer time
- Just-in-time learning
- Fits into busy work schedules
- Enables the integration of field staff, part-time and flexi-time staff

Only two respondents suggested that although a reduction in face-to-face training reduces delivery costs, the cost of the technology and of design and development would largely wipe these out. This finding suggests that the great majority of companies have unrealistic expectations about the cost benefits of e-learning.

Although they anticipated benefits, most companies had not introduced any form of systematic evaluation. Twenty-four companies (75%) reported that they had some evaluation in place but this was generally of a basic or ad hoc kind. Most companies relied largely on feedback sheets and tests within the software. Very few companies were doing more than this. Material from the case studies also suggests that even where evaluation is theoretically in place, in practice it is not being used to either amend or develop the e-learning provision.

Only a third of companies had been able identify any definite business benefits which e-learning had brought. However, those benefits that were identified as having been achieved were very similar to the benefits anticipated:

- Cost savings
- Reduced time away from job
- Wider range of employees reached
- Ease of access
- Ease of delivery once infrastructure in place
- Consistency of training delivery
- Ease of updating material
- More effective learning
- Reduced learning time
- o 'Due diligence' defence on compliance issues
- Better tracking of certified employees
- More training without increasing budget
- Training on demand whenever required
- Fewer trainers
- Speed of information reaching employees
- Able to introduce home-based working for field-based staff
- Cover areas of study not otherwise available
- Learning just-in-time as opposed to just-in-case
- Learners more self-sufficient

Companies therefore are introducing e-learning and expect to introduce more; they do little actual evaluation but they expect that there will be major business benefits; and where benefits are identified they are indeed the ones anticipated. This evidence can be said to support the hypothesis that companies are not using 'rational' methods of calculation in their introduction of e-learning but are rather following their business 'instinct'. They act on their 'beliefs' about the effectiveness of e-learning and appear to be relying on other kinds of knowledge than that described in rational models of business behaviour in making these decisions. It is hard to imagine such large sums of money being spent on for example heavy plant on such a basis.

Data from the case studies

Data were gathered in the form of case studies of three firms:

- AnyTechCorp
- MoneyBiz
- BigBritish

The findings can only be briefly touched upon here. AnyTechCorp may be described as 'true believers', spending huge amounts on investing in e learning but with little evaluation of the results. MoneyBiz might be said to be sceptical agnostics, investing cautiously but steadily in e-learning. BigBritish, however, could be called 'hopeful converts'. They are investing heavily in e-learning, knowledge management systems and e:HR but these are all at the planning stage. Problems, difficulties and possibly failures may all lie ahead.

In all three case studies, the companies are driven by the existence of the technology – by the fact that it's there. They are also afraid that competitors will get ahead and that their own company will be left behind if it does not invest in e-learning There is a range of beliefs about what e-learning can actually do, from the total convert to the total sceptic, but little actual evaluation in place. As the survey results suggested, companies are embarking on e-learning with gathering momentum. They are 'riding the tiger' and hoping for the best. There *must* be business benefits – mustn't there?

Conclusions

Our first conclusion is that organisations don't behave like rational man (woman), calculating odds, or like skilled hunters, using experience to inform decisions. They ride the tiger and hope for the best. They go along with the trend, jump on the bandwagon, follow the fashion. This is true at least of the formal declared strategies for e-learning in relation to the practices that actually follow from them, the form and direction of later developments.

Whether what actually happens is a purely ad hoc or emergent process, or driven by some other logic than the ones expressed in formal and informal strategy statements is hard to tell.

We think that a number of things are significant:

- e-learning tends to develop and grow when the technology is there for other purposes,
- a very high proportion of what e-learning is used for is the development of skills for new forms of IT bases work: e-learning for e work,
- in some cases e-learning, job based decision support systems, knowledge management strategies are integral and have merged into each other
- e-learning can often be attached to other IT systems learning management systems, broader IT systems for personnel, like PeopleSoft, or indeed organisation wide enterprise resource management systems.

This suggests to us that corporate e-learning is not a stand alone isolated phenomenon, but is part of the application of a broad range of IT solutions and support systems in organisations that are becoming increasingly virtualised and increasingly reliant on the development and application of knowledge to add value to goods and services in their core business models.

This suggests that there may be implicit or emergent new kinds of strategy for e-learning that could with benefit be used more explicitly and consciously to guide corporate e-learning practices rather than let it run along on its own momentum.

We suggest that corporate e-learning strategies should be formed and judged in terms of what we want to call their 'line of sight' through the organisations knowledge management strategy to its core corporate strategy and business model.

The argument is that in the overall pattern of organisational change of which e-learning is a part, organisational strategies and their successes and failures are best understood in terms of knowledge generation and use, and e-learning, when useful, supports this process.

We detect four major kinds of organisational strategies in these terms. Their nature, knowledge management and e-learning support are as follows.

Firstly there is the strategy of developing a standard product and service and rolling it out on a very large scale – the McDonalds approach as an example. In this case a form of centralised research and development forms and continuously improves the core product service, which then has to be disseminated in a highly standardised, reliable and quality controlled way to a large number of production/distribution points and the people concerned. E-learning, in the dissemination of standardised work procedures (which our study shows to be a major use) is a major, and often the only way of doing this with the numbers and dispersion involved.

Secondly there is the strategy of being a research led organisation with large stocks of knowledge that can be accessed and used to solve client/customer problems, and/or design tailor made solutions/services. Here the organisations stock of knowledge, and its ability to find it and apply it in projects is critical to organisational performance. In this context e-learning merges with knowledge management and decision support to give highly skilled technical specialists access to a large knowledge pool, and to add knowledge that they produce back into this for broader organisational use.

Thirdly there are those organisations – perhaps exemplified by software authoring organisations, design houses or advertising agencies that rely on the innovation and creativity to come up with novel solutions and products. They rely on creativity and the ability to discover/invent/learn solutions. Here what might be thought of as e-learning is likely to be highly integrated with ways of working, particularly if much of the work is done in dispersed, virtual teams. This is likely to take the form of computer supported group work where learning and inventing new forms of solution to business problems are integral.

Finally there is the business strategy for mature and well-established organisations which involved extracting the previously uncodified knowledge from proven existing products and services and selling/marketing this more directly as a product or service. An example would be a water company that contains all the necessary practices to supply water to domestic and business customers, and deal with water based waste and sewage systems. If they can extract they knowledge in this they can sell it as a consultancy and design service. In this situation the process of extracting knowledge from procedures and practices is very much the process of developing expert systems and authoring tailor made e-learning packages based on analyses of effective practice. Here the resulting e-learning resource supports both employees carrying out the new kind of work that this strategy implies and may itself be part of the product or service delivered to customers and clients. In the water company example, a designed and built water plant would be delivered with the training for the staff who are going to operate it.

These four examples illustrate what we mean by 'line of sight' from an e-learning strategy through a knowledge management rationale to the core corporate strategy and business plan. We suggest that this provides a framework within which to plan, operationalise, monitor and evaluate an e-learning strategy.

Our overall finding and conclusion is that in the first generation of corporate e-learning initial aspirations have been to do with substitution, economies of scale and greater reach of training and development in a context of a greater need for training and development to enable organisational change. The practice of e-learning has however not been held to these objectives and purposes but have tended to develop a life of their own. Our suggestion of the 'line of sight' approach is our suggestion for what serve as a more realistic and contextually sensitive basis for corporate e-learning strategy in the future.

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