MANAGERIAL SKILLS OF AN E-LEARNING MANAGER

Cardoş Vasile-Daniel
Babeş-Bolyai University Faculty of Economics and Business Administration 58th - 60th Mihail Kogălniceanu Street, Cluj-Napoca, Romania vasile.cardos@econ.ubbcluj.ro, +40264-418-652 int. 5806
Tiron-Tudor Adriana
Babeş-Bolyai University Faculty of Economics and Business Administration 58th - 60th Mihail Kogălniceanu Street, Cluj-Napoca, Romania adriana.tiron@econ.ubbcluj.ro, +40264-418-652 int. 5842

This article presents some findings of the E-Learning Manager (ELM) Project regarding the skills an e-learning manager should possess in order to achieve his/her mission. At this point the project is still in the first stage of it. For the design of the skill card there were identified three domains/units in which an e-learning manager should possess skills: pedagogy, technology and management. This article presents some aspects regarding our findings on the management unit.

Keywords: e-learning manager, management, skill set

JEL classification: I20, I21, I29

Introduction

Nowadays, constant innovations and rapid technological changes are commonplace in business. This arises the need for continuous vocational training and the lifelong acquisition of skills and competencies. The use of e-learning to provide vocational training has become an important issue on the European agenda, providing a solution to the question of providing training and assessment on an international scale, regardless of distance, or language.

At the moment, there is no certification in e-learning in Europe being offered. This suggests that there is both: (i) a lack of qualified practitioners, and (ii) individuals who may have experience in e-learning, but lack accreditation. Therefore, a certification in e-learning development would be use not only to those who may work wish to work or already work in the e-learning sector but lack formal accreditation, but also to established individuals already working in the e-learning sector who wish to continue their professional development to keep their skill card up to date.

Research methodology

This paper is based on the **E-L**earning **M**anager Project (ELM), a Leonardo da Vinci project. Based on the first meeting's findings, held in Cork Ireland, in last November, we conducted a qualitative research, based on an extensive literature review on the managerial abilities or skill an e-learning manager should possess in order to fulfill their mission. The findings of the article we're used in the construction of a questionnaire which intends to validate the theoretical hypotheses.

Description of the project

The ELM project aims to develop a European skill card for a computer-enhanced instructional designer. This skill card will be made available through an integrated European skills acquisition system project: an online system for browsing the skills cards available, performing self-assessment online, collecting evidences, and receiving a formal assessment of the evidences online before being accredited as an e-learning manager.

In the project there are six partners involved: Department of Education Development of the Cork Institute of Technology (DEIS CIT) - Ireland, International Software Quality Institute (ISQI) - Germany, International Software Consulting Network (ISCN) - Austria, Corvinno Technology

Transfer Center Ltd. – Hungary, Babeş-Bolyai University – Romania and Plovdiv University – Bulgaria.

The current stage of the project
At this point the project is still in the first stage of it. For the design of the skill card there were identified three domains/units in which an e-learning manager should possess skills: pedagogy, technology and management. This article presents some aspects regarding our findings on the management unit.

The term management covers a wide range of fields and domains but we should address only those aspects that are interrelated with pedagogy and technology units and also with the skill set sub headings identified: e-learning project management, organizational analysis, knowledge management, change management, standards, evaluation and audit, financial management etc.

Project management
"Project management is the discipline of planning, organizing and managing resources to bring about the successful completion of specific project goals and objectives".[41] "A project is a temporary endeavor undertaken to create a unique product, service, or result."[42]

Effectively controlling projects requires a disciplined approach to project initiation, execution, implementation, and post-implementation. This includes having the right people involved, following standard project management processes, and using a set of project management tools for effective execution.

Organizational analysis and stakeholders
An organization's behavior is in a constant and progressive change "new demands from consumers on an individual level, new demands from companies for training courses, a determination to achieve improved productivity etc. as if some form of technological determinism existed), as is the relationship between society and technology, up to a certain point, it being obvious that social innovation does not occur at the same speed as technological innovation. This twofold change imposes upon service providers a certain number of changes, many of them far-reaching and major."[43]

Dealtry R.,[44] stresses that learning management systems "are too e-learning technology driven, emphasizing the virtual component and neglecting the precursory development of a vibrant and committed formal learning organization culture and infrastructure". He proposes a constructivist methodology when designing and implementing strategic new learning and knowledge-based organization development investments. The author identified several functions and activities that are subject to transformation within an organization in order to enable it to obtain a strategically accepted learning environment.

Knowledge management
"KM is the process through which organizations generate value from their intellectual and knowledge-based assets. Most often, generating value from such assets involves codifying what employees, partners and customers know, and sharing that information among employees, departments and even with other companies in an effort to devise best practices".[45]

---

41 www.wikipedia.com
42 www.pmi.org
43 Coulon, A. (2001), Impact of open distance learning on organizations, pg. 3
44 Dealtry, R. (2005), Configuring the structure and administration of learning management, pg. 467
45 Levinson, M. (2008), Knowledge Management Definition and Solutions

Bellinger G.,[46] tried to define 'knowledge' in the context of an organization and the problem of managing the knowledge. Citing Fleming N.,[47] who stated that "a collection of data is not information, a collection of information is not knowledge, a collection of knowledge is not wisdom, a collection of wisdom is not truth", Bellinger states that: "When a pattern relation exists amidst the data and information, the pattern has the *potential* to represent knowledge. It only becomes knowledge, however, when one is able to realize and understand the patterns and their implications." A pattern "embodies both a consistency and completeness of relations which, to an extent, creates its own context."

Karl-Erik Sveiby cited by Barclay M.O. & Murray P. (1997) identified two "tracks" of knowledge management:

- Management of Information. To researchers in this track: "… knowledge = Objects that can be identified and handled in information systems."

- Management of People. For researchers and practitioners in this field, knowledge consists of "… processes, a complex set of dynamic skills, know-how, etc., that is constantly changing."[48]

Standards

An e-learning manager should be aware, or know the different standards that exist in information technology in order to ensure that the content development is compatible with the delivery system chosen to transmit the content and also to ensure a proper evaluation method and feed-back solution. He also has to know the standards or specifications in the field e-learning. But the problem of standardization in e-learning can be a difficult task if we take into consideration the abundance of information technology standards that facilitate the design, deployment and assessment of an e-learning mission.

Singh H. and Reed C. [49] state that "strictly speaking, there are no e-learning standards. Instead, there are a series of groups developing specifications". The author argue that as the process of standards or specifications implementations will spread in the e-learning community there will be an increase in specific and significant capabilities like: content portability, granularity, interoperability, e-learning and knowledge management.

Svenson M.,[50] identifies four major advantages of standard development and use:

1. Durability – no need for modification as versions of system software change.

2. Interoperability – operability across a wide variety of hardware, operating systems, web browsers and Learning Management Systems.

3. Accessibility – indexing and tracking on demand.

4. Reusability – possible modification and use by many different development tools."

ROI of e-learning

"In finance, rate of return (ROR), also known as return on investment (ROI), rate of profit or sometimes just return, is the ratio of money gained or lost (realized or unrealized) on an investment relative to the amount of money invested. The amount of money gained or lost may be referred to as interest, profit/loss, gain/loss, or net income/loss. The money invested may be referred to as the asset, capital, principal, or the cost basis of the investment" [51] The problem of quantifying ROI for an e-learning (in higher education institution or in private companies) mission is that it can't be expressed strictly as "the ratio of money gained or lost" because the

46 Bellinger, G. (1997), Knowledge Management – Emerging Principles
47 Fleming, Neil. (1996), Coping with a Revolution: Will the Internet Change Learning?
48 Barclay, O.M. and Murray, P.C. (1997), What is knowledge management?
49 Singh, H. and Reed, C. (2002) Demystifying e-learning standards, pg. 62
50 Svenson, M. (2001), e-Learning standards and technical specifications, pg. 4
51 www.wikipedia.org

outcome of e-learning, the increase in knowledge and skills can be quantified only in qualitative terms even though these qualitative benefits can offer indirect financial benefits for all the stakeholders.

An e-learning manager in order to ensure e-learning is used by learners and embraced the organization, should also have in mind that e-learning:

-"it's about business and providing a business solution;

-it's about providing a "return on expectation", not just a return on investment;

-it's about enabling learning and driving performance, not training;

-it's about people – learners, managers and executives – not technology;

-it's about motivating learners and energizing organizations; and

-it's about becoming invisible; interwoven into the very fabric of your organization and its culture."[52]

Brown D.,[53] citing Bielawski and Metcalf [54] presents the issues used in training evaluation "identified as being the ROI of training". These issues are: reduced number of training vendors, decreased training travel costs, decreased costs/hr of training, reduced time off task for trainees, increased audience impact, improved response time – meet needs, improved cycle time for training delivery, demonstrated knowledge during training, trainees satisfaction, increased positive management feedback.

The same authors, pertaining to the true value of learning identified the following relevant parameters: increased revenue/sales, decreased cost, improved customer satisfaction, improved quality, improved on-time delivery, increased productivity, improved cycle time, eliminated waste, improved safety record, improved employee satisfaction/morale, reduced employee turnover

Quality management

When it comes to quality and more to quality management most people think instinctively to ISO Standards. These standards are the most used and referred to in various fields. ISO issued o series of standards that settle the frame for a common language and approach regarding e-learning set-up (from a technology perspective ISO/IEC 24751-1/2/3:2008) and also the quality assurance process regarding e-learning (ISO/IEC 19796-1:2005).

ISO/IEC 19796-1:2005 is a framework to describe, compare, analyse, and implement quality management and quality assurance approaches. It will serve to compare different existing approaches and to harmonize these towards a common quality model. The main aspect is the Reference Framework for the Description of Quality Approaches (RFDQ).

Another institution who brought it's contribution to quality assurance and management for e-learning is the QAA which released in 2004 the second edition of the *Code of practice for the assurance of academic quality and standards in higher education* which in *Section 2: Collaborative provision and flexible and distributed learning (including e-learning)* states the following: "Recent developments in learning that uses information and communications technologies ('e-learning'), have given rise in some quarters to the belief that this approach requires an entirely separate and distinct form of quality assurance."[55]

In the academic literature Alistair Inglis[56], covered the problem of quality assurance, quality evaluation and benchmarking in the field of distance education and e-learning. He identifies

52 Dublin, L. (2004), The nine mith of e-learning implementation: ensuring the real return on your e-learning investment, pg. 294

53 Brown, D. (2008) The Value of Learning

54 Bielawski and Metcalf (2002), Blended e-Learning: Integrating Knowledge, Performance Support, and Online Learning.

55 Quality Assurance Agency for Higher Education [QAA] (2004), Code of practice for the assurance of academic quality and standards in higher education

56 Inglis, A. (2008), Approaches to the validation of quality frameworks for e-learning

seven published quality frameworks applicable to the field of e-learning: 1. Quality improvement framework (Inglis, Ling and Joosten), 2. Benchmarking framework (McKinnon, Walker and Davis), 3. Benchmarks for success in internet-based distance education (The Institute of Higher Education Policy), 4. Universitas 21 global quality framework, 5. ACODE e-learning benchmarks (Bridgland and Goodacre), 6. Proactive evaluation framework (Sims, Dobbs and Hand), 7. Quality preference framework (Ehlers). The article concludes by considering a range of factors that have the potential to have an impact on the validation process of the frameworks.

Conclusions and further research

From the sub headings discussed in this article we can draw the conclusion presented below.

An e-learning manager has to consider project management as a continuous activity that doesn't stop after the final assessment because e-learning has to be a systematic activity in order to ensure the sustainability of the process and to offer a competitive advantage to the client organization. An e-learning manager has to know the existing project management tool: PRINCE 2, Microsoft Project Manager, and also the standards in the field like those issued by the PMI (pmi.org), and also project control systems to ensure that the project doesn't exceed the time, budget or human resource limitations.

Having in the term knowledge management we can conclude that an e-learning manger should understand and handle the concept of knowledge and it's importance to the client company considering the impact it can have on the mission, objectives, performance and ability to adopt to changes. Also the e-learning manager should be aware of the two approaches to knowledge management system: information and people.

For successfully managing the whole e-learning process or mission an e-learning manager should take into consideration the standards and specifications in the field among which we can list the following: ISO, AICC, IMS, LRN 2.0, Dublin Core, etc.

When it comes to ROI when dealing with the management of a customer organization which intends to implement an e-learning solution an e-learning manager has to "translate" the qualitative benefits into quantitative terms because he or she has to answer the question: how much will this cost us? Or how will our profit increase? addressed by management.

An e-learning manager has to adhere to some of the quality frameworks or standards in order to test his or her e-learning mission against an accepted referential. This is important from at least two perspectives: the recipient of the knowledge transfer and the client organization and the 'image' of the e-learning manager as compliance with quality standards increase the reliability and confidence on the client company.

As mentioned before the domains and sub headings regarding the management skills an e-learning manager should have will be tested through three questionnaires available for respondents from the academic and industry area involved, more or less, in the design, implementation, exploitation and improvement of e-learning solutions.

References

1. Barclay, O.M. and Murray, P.C. (1997), What is knowledge management?, Knowledge praxis, available on-line at: http://www.media-access.com/whatis.html
2. Bellinger, G. (1997) Knowledge Management – Emerging Principles, available on-line at: http://www.systems-thinking.org/kmgmt/ kmgmt.htm#dac
3. Bielawski and Metcalf (2002), Blended e-Learning: Integrating Knowledge, Performance Support, and Online Learning. Human Resource Development; 2nd edition
4. Brown, D. (2008) The Value of Learning, available on-line at: www.softskill.com – registration is required-)
5. Coulon, A. (2001), Impact of open distance learning on organizations, available on-line at: http://www.centre-inffo.fr/pdf/adapt/adapt2001_chap5_angl.pdf)

6. Dealtry, R. (2005), Configuring the structure and administration of learning management, Journal of Workspace Learning, vol. 17, no. 7

7. Dublin, L. (2004), The nine mith of e-learning implementation: ensuring the real return on your e-learning investment, Industrial and Commercial Training, vol. 36, no. 7;

8. Fleming, Neil. Coping with a Revolution: Will the Internet Change Learning?, Lincoln University, Canterbury, New Zealand

9. Inglis, A. (2008), Approaches to the validation of quality frameworks for e-learning, Quality Assurance in Education, vol. 16, no. 4;

10. ISO/IEC 19796-1:2005 Information technology -- Learning, education and training -- Quality management, assurance and metrics, available on-line at: iso.org;

11. ISO/IEC 24751-1/2/3:2008 Information technology -- Individualized adaptability and accessibility in e-learning, education and training, available on-line at: iso.org;

12. Levinson, M. (2008), Knowledge Management Definition and Solutions, available on-line at: http://www.cio.com/article/40343/Knowledge_Management_Definition_and _Solutions?page=1).

13. Quality Assurance Agency for Higher Education [QAA] (2004), Code of practice for the assurance of academic quality and standards in higher education, Section 2: Collaborative provision and flexible and distributed learning (including e-learning), available on-line at: http://www.qaa.ac.uk/academicinfrastructure/codeOfPractice /section2/default.asp#partA;

14. Singh, H. and Reed, C. (2002) Demystifying e-learning standards, Industrial and Commercial Training, vol. 34, no. 2

15. Svenson, M. (2001), e-Learning standards and technical specifications, pg. 4, available on-line at http://www.centre-inffo.fr/pdf/ adapt/adapt2001_chap4_angl.pdf)

16. www.kmresource.com

17. www.iso.org

18. www.pmi.org

19. www.qaa.org

20. www.wikipedia.org

21. www.cio.com