

Interview with the Hungarian Telecom, Training and Knowledge Management Directorate for case studies in the Megatrends project

Institutional factors

Historical context

1. How would you describe the history of distance education in your institution?

The institution has already started experimenting with e-learning in 1996 by introducing a rented WebCT Learning Management System (later, based on their experiences with this, the company has developed their own LMS) and creating e-contents/e-books and interactive help, but its e-courses have only become fully operational in year 1999. By 2005, the Hungarian Telecom had above 8000 enrolments for c.a. 150 courses. Presently, the time-wise distribution of online and face to face courses taken by the company's learners is about 50-50%.

The first online interdisciplinary training, entitled "Media-engineering", that consisted of c.a. 35 30 hours long modules had been carried out in cooperation with the Budapest University of Technology and Economics between 1999 and 2001. The user group was 30 post graduate students selected from about 60-80 candidates. Their motivation to enrol was the new experience and some chance to earn a postgraduate degree. All 30 learners finished the training successfully. Although not all modules had been accredited at last, but certain courses of the training are still run by the University. This obviously justifies the quality and success of T-Com's pilot initiative.

2. How has competence in e-learning developed in your institution and how has it contributed to your success?

The initiation was internal. T-Com has a so-called E-Team that is an 8 person e-learning group responsible for specific tasks such as methodology advancement, operation support and development. 3 people are responsible for multimedia and pedagogy, 2 for project management and another 3 for operation and its development. The E-Team works on a one to one project basis, often involving external contractors when specific objectives and tasks make it necessary, by this enabling any required competence to be present in their endeavours.

3. Has this development been abrupt or would you describe it more as a gradual step-by-step process)?

Hungarian Telecom's e-learning development has been a well considered and constructed process rooting in a perfectly timed start. Their general pilot experiences and the feedback collected via different ways of assessment had been and are still being fed back into the operation and strategies periodically, by this continuously improving the company's online educational practice – it is a series of methodological milestones in their e-learning development, that T-Com collects anonymous feedback every quarter year both from its staff (including external tutors) and learners. The company keeps up-to-date with pedagogy and technology just as well. It is interesting to note here that after an unsuccessful experimentation with synchronous communication supported e-learning at the beginning, recently T-Com has given another try to this means of collaboration. The extensive availability of broadband

Internet connection opens up new ways of using synchronous communication tools. The company is also trying to integrate such innovative elements into its study design as game-based learning. The gradually growing number of online students is also a quantitative proof of development.

4. How has online education been followed up by evaluation and research and how has this contributed to your success?

Evaluation is an important and strong contributor to T-Com's success in online education. As mentioned above, the company collects feedback every quarter year via different ways of assessment. Direct research typically only plays essential role in the development of the company's IT applications, such as their LMS and synchronous/asynchronous communication tools. It is more peculiar to T-Com to conduct trend analysis and benchmark their practice with other EU member countries' (Deutsche Telecom, Macedonian, Czech and Slovak T-Com).

Technical issues

5. How would you describe competence in information and communication technology in your institution?

The ICT competence of the above described E-Team (an 8 person e-learning group responsible for specific tasks such as methodology advancement, operation support and development: 3 people are responsible for multimedia and pedagogy, 2 for project management and another 3 for operation and its development) is very high – after all the success of T-Com's online education is seriously dependent on their knowledge and performance.

6. To which extent are e-learning courses in your institution based on widely used technologies that can be taken into use by students without requiring them to buy additional hardware or software? (in addition to what they have from before)

T-Com avoids the application of proprietary solutions, they use web standard programmes and technologies exclusively (Adobe Flash, Windows Media Player, etc.), so that the learners would only have to use their web browsers to access the course contents.

7. How would you describe the integration between different IT-systems that are involved in e-learning in your institution? How has this contributed to your success?

Every learning related IT systems are compatible with each other and the corporate HR interface, therefore the management and transmission of data is easy and simple. This plays a quite important role in the smooth running and success of T-Com's e-learning practice.

8. What are the strengths and weaknesses of your e-learning administrative systems (from enrolment through delivery to certification)?

Definite **strengths** of the company's administrative systems are their tailor-made characteristics, how the method of creating online material suits the work of teachers/tutors. The methodology is very fine, containing multi-faceted elements, allowing personalisation and scheduling. The online assessment developed is professional.

Regarding T-Com's online educational **weaknesses**, they still have a lot to improve on their blended learning courses. However this is yet in a premature stage, the gradual improvement is visible.

Courses

9. Which types of subjects are covered by online education in your institution and what is the relative importance of different subjects?

T-Com partially is working on a project basis, contracting for the development of courses on demand. Most typically (at least until recently) the company has mainly developed procurement administrative, technological and basic security type courses and e-learning modules, but also courses on traffic regulations and sales fundamentals.

10. How would you describe the “onlineability” of the subjects your institution has chosen for e-learning?

Any type of subject matter can be transferred into e-learning material with a professional, creative and well paid staff. It is of utmost importance to make the courses interactive and colourful, including lots of multimedia elements, and to ensure that the learner remains motivated throughout the entire learning cycle. It is not always possible to completely exclude face to face sessions from an e-learning course, but it is important to try to minimise their presence.

11. Do the online courses provided by your institution have flexible start-up and progression?

The courses provided by Hungarian Telecom allow completely flexible procedure both by start-up and progression. (NB these courses are only provided internally for T-Com staff and partners.)

12. What is the role or importance of synchronous and asynchronous communication between students and teachers and among students themselves?

In the late nineties T-Com had experimented with the use of synchronous communication in their “teaching in distance” practice but these initiatives had failed. Now, with the exploitation of broadband access, new perspectives have arisen, however it is expected to remain a relatively minor part of e-discussions. The company’s findings show little willingness of their learners to communicate with each other, especially in real time. In fact, it would be possible to trigger student to student communication (by synchronous platforms) with assignments where they must collaborate, but that would have a bad influence on learner centredness and flexibility. The use of asynchronous communication tools is still deterministic.

Management, strategy and attitudes

13. How would you describe involvement from the institution leadership in terms of being supportive, and how has this been important for success?

The institution’s leadership is not only supportive but, in fact, has been the initiator of the educational transformation by the introduction of e-learning. This, inevitably, is an important success factor.

14. How would you describe the attitudes of the different groups of staff towards online teaching? How has this affected your success?

Deputy leaders and teachers were quite resistant towards the use of e-learning at the beginning. In the nineties, the general attitude of deputies was the warm welcoming of e-learning (as a phenomenon) with the additional statement that it is the individual’s (i.e. their employees’) responsibility to find time for the accomplishment of the courses they enrol with. Nowadays it is almost natural that T-Com colleagues consider these courses as an important

part of their work and professional development, and study during office hours. As the teachers/tutors are contracted externally, it is a pre-condition that the contracted party is willing and able to use the LMS.

15. Does your institution have a strategy for online education? If yes, what is (briefly) the content of the strategy and how is it followed up by employees in your organisation?

T-Com's e-learning strategy is a strong part of its training strategy. One of its main focus is cost efficiency. With the introduction of online education, the company's training costs have decreased significantly. Due to their characteristics, e-learning courses cost the fourth of their face-to-face equivalents. Usually the knowledge on demand is transferred in about 3 hours long modules. When such trainings are demanded, the supply must come promptly. Online courses are easier (and cheaper) to maintain and keep up to date. Also, the learners spare not only travel costs but a relatively high number of working hours by not having to travel anywhere to take these c.a. 3 hours trainings. T-Com's strategy therefore includes the aim to keep the cost efficiency of e-training provision, supply them on demand and just in time, and to achieve that 40% of their training courses are provided online.

16. How does your institution deal with quality issues related to online education and has quality contributed to success?

Hungarian Telecom uses ISO 2001. Quality, on one hand, is assured by benchmarking the company's practice with other EU member countries' (Deutsche Telecom, Macedonian, Czech and Slovak T-Com) and, on the other hand, a more bottom-up approach, that is surveying the players and beneficiaries of online education (i.e. company leaders, learners and tutors). Both face-to-face and online learners are invited to fill in an anonymous questionnaire after finishing each of their courses, and every half year. Although statistics show that quite few online learners (5%) fill in these questionnaires (vs. 30-40% of traditional trainees), their contribution to course evaluation seems more valuable than that of face-to-face learners.

17. How would you describe the effectiveness of your administrative routines in online education?

The company's administration system with its well developed and continuously improving routines is working very effectively. The administration system is compatible with the LMS and the staff in concern is competent in the use of these systems.

18. To which extent do teachers involved in online education have predictable and manageable workloads?

T-Com applies a flexible contracting approach, however, for determined educational engagements, with its tutors (NB, the number of teachers teaching online in 2005 is 20-40). These assignments are casual but the volume and nature of their jobs are clearly communicated towards the contracted educators. The tutors are paid by hours. The hourly rates depend on different factors, such as the nature of the online course tutored, the professional background/expertise of the contracted party and their physical location (labour from Budapest is more expensive). NB the latter consideration has a positive consequence regarding the unbalanced employment rates of the capital vs. the countryside. The tutors have certain obligations, such as responding on learner inquiries with 24 hours. Their online activities, like number of sign in-s and time spent in the LMS are monitored and recorded and later evaluated for quality assurance purposes.

19. To which extent does your institution collaborate with other educational institutions and how has this affected success?

Hungarian Telecom has a rich portfolio regarding its institutional cooperations. Its relationships with fellow Telecom companies in other EU countries has already been mentioned and described in earlier questions. T-Com participates in EU funded projects and has bilateral agreements with higher educational and adult training institutions and the government. Essentially, the nature of these collaboration initiatives depend greatly on the other party. With the Eötvös Loránd University (an old and prestigious university) the common initiatives are focusing on social sciences, while with the Budapest University of Technology and Economics (one of the oldest and most prestigious technical universities) the target is rather technological.

20. How would you describe the credibility of your institution (both formal and informal) with the government and public administration and how has this been an important criterion for success?

Telecom is a prestigious international company. Hungarian Telecom has a long history and has always been acknowledged by the government and public administration.

21. How are you able to handle the large number of online courses and students?

The company has a sufficiently large pool of potential tutors, whom can be contracted in case of necessity. The IT support system, the administrative- and learning management systems are highly developed and are very user-friendly. These conditions enable swift and efficient handling of fluctuating number of online courses and students at any time.

Economy

22. How would you describe the cost-effectiveness of online education in your institution? How has cost-effectiveness affected success?

Cost effectiveness, as mentioned above, is a key consideration in Hungarian Telecom's training (and embedded e-learning) strategy. Generally there is about 3-4 face-to-face and 3-4 e-learning study days a T-Com employee enrolls with each year. The deviation from this mean figure is not significant; in case of every employee there is a minimum of 1-2 days spent with internal training and there is not more than a maximum of 10 learning days applicable for some colleagues.

Since most of the company trainings are relatively short, their onlinability is a serious financial factor (for reasons mentioned under Q15). For instance until about 50 persons it could be more cost effective to hold a seminar face to face, while above that number a web seminar would definitely cost less in total both financially and time-wise. Keeping that in mind, the use of synchronous or asynchronous communication forums for different sizes of learning groups can further cut on the training costs. It is also important economically to choose the best facilitators for each one of the company courses, as the tutors' hourly fees vary in a quite broad range (c.a. 8 to 60 €).

23. To which extent is income from operation of online education stable and predictable?

As most of the company's courses have been developed for internal use by employees, there is no tuition fee contributing to T-Com's training budget. There is, however, a fair number of external projects for online course provision. These contractual incomes and the company's in-house accounting scheme facilitate the internal course developments. NB a kind of virtual financial monitoring system enables the measurement of the training operations' cost efficiency that (as mentioned above at Q22) is consistently assured.

24. To which extent does your institution experience pressure to be flexible to be able to adapt to a changing market?

Flexibility, these days, is a key characteristic of a corporate company, that keeps it in competition and enables it to adapt to the market changes. This pressure is handled and responded to successfully.

25. To which extent does your institution apply a strategy of flexible employment and use staff to adapt to changes in markets?

Flexibility, as said above, is a key characteristic of a corporate company, that enables it to adapt to the market changes. As it has been stated at Q21, the company has a sufficiently large pool of potential tutors, whom can be contracted in case of necessity. In addition, there are collaborating agreements with the government and universities that, as a strategic element, also ensure valuable sources in this respect.

Additional factors

26. What other factors have contributed to sustainability, robustness and the achievement of critical mass in your institution?

The growing importance of adult education justifies the widespread use of e-learning, but at the same time, learning abilities and attitudes have a strong impact on its success. The (learning) cultural background in Hungary is not so supportive in this respect, today's adults are too much used to formal education and are not autonomous enough for planning and progressing their personal learning paths. E-learning requires different social and communicational abilities and debating skills that are missing from the middle aged Hungarian society (they are used to and prefer only *receiving* instead of *sharing* knowledge). Yet, these skills and abilities are more and more present in the younger generations. Tomorrow's adult learners do not insist to have face to face elements in their education and are very comfortable with the use of technology and technology enhanced learning.