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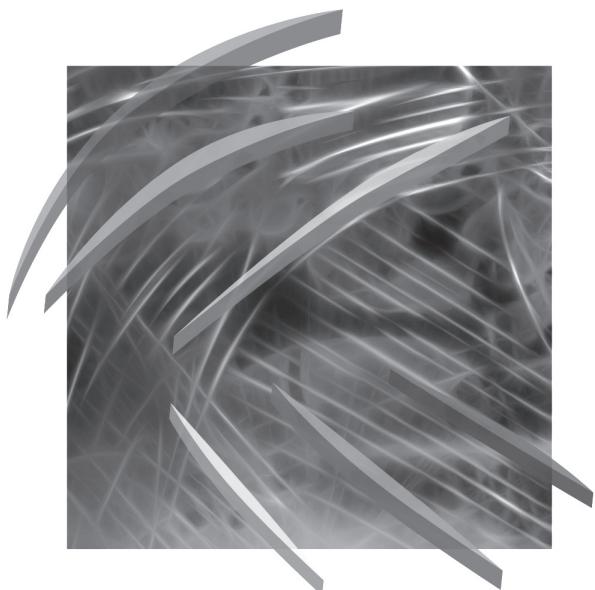
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Contents

Streszczenia

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DEVELOPING AN E-LEARNING STRATEGY AT WROCŁAW UNIVERSITY OF ECONOMICS IN 2008-2009

Abstract: Electronic learning has always been considered a highly sophisticated form of education. Wroclaw University of Economics began to introduce e-learning in early 2008. Nearly two years of enormous collective effort brought about significant results in this important domain. This article discusses the most important guidelines for the implementation strategy. It presents the historical aspects of distant education and the opening situation at WUE in 2008. Then, it identifies the key thematic areas responsible for the successful implementation effort. The first stages of the strategy implementation are followed by the initial results in this domain.

Key words: distance learning history, electronic learning (e-learning), Moodle platform, implementation strategy, E-learning Centre.

1. Introduction

The dynamic growth of cyberspace and information processing techniques offer unique and unheard of potential for a phenomenon which has been known for 300 years, i.e. distance learning. Its electronic version, e-learning, has gained enormous recognition and respect in recent years at universities the world over. Distance learning occurs when there is a certain distance between a teacher and a student. That distance can have a physical, geographical dimension or a temporal one, when both the teacher and student perform their tasks independently, getting in touch only when needed. The reaction of the other party can be immediate – this is the case of a synchronous mode, or delayed in time – in an asynchronous mode.

This paper outlines the historical development of the distance learning concept and the most important elements of an e-learning strategy at Wrocław University of Economics in Wrocław, Poland. The analyzed period of time includes the years 2008--2009, when the decision to initiate this form of education was made, a comprehensive implementation strategy was worked out and the first, most important stages were successfully implemented.

2. Historical aspects of distance learning development

The precursors of distance education were Americans. In 1700 the first press announcement about correspondence teaching appeared in the USA. In 1837 I. Pitman and J. Steward began correspondence teaching in stenography in Bath (England), and by the mid-1800s stenography and language courses were among the most popular courses in distance education [Simonson et al. 2008]. The aforementioned Pitman opened the Phonographic Institute in Cincinnati. In 1837 A.E. Ticknot opened the Society to Support Learning at Home in Boston. She created an innovative teaching methodology, based on effective grading and exchanging course materials among the students. The Society taught 24 subjects in 6 areas (history, science, art, literature, French and German), and each course lasted a month. Each program was supplemented with reading lists and check tests. During the Institute's 24-year activity, ten thousand students participated in those courses. At the higher education institutions, distance learning was introduced in 1883, and three years later the International Correspondence School was opened in Europe (Cleveland-Innes and Garrison 2010).

The technological development made distance education more and more refined and sophisticated. The first radio courses appeared in 1925 in Iowa and the first "educational radio" began broadcasting in Australia in the 1930s [Rosen 2009]. The TV era was initiated in the 1940s, and by 1948 five distance education centres were active in the USA [Simonson et al. 2008].

The next stage in the growth of distance learning was accelerated by satellite connections. The University of Alaska was the first to use it in 1985 [Cleveland-Innes, Garrison (Eds.) 2010]. This method did not enjoy much popularity, though, due to high costs, the need to access high-speed connections and the imminent Internet revolution.

Obviously, the crucial role in the development of distance learning methods was played by the computer. In 1950 IBM, in cooperation with Stanford University, introduced the first software package assigned for primary schools [http://www.stanford.edu/research/]. However, this happened during the mainframe era, and so high costs, complicated service/maintenance conditions and high failure frequency made this teaching method wait till the PC era. Ironically though, low costs of CDs cannot protect multimedia teaching aids form the Internet platform competition these days.

Today, the dominant form of distance education is e-learning (electronic learning), which means teaching and learning with the use of various electronic media, mainly through the agency of the Internet and World Wide Web.

3. Opening situation at Wrocław University of Economics

Wrocław University of Economics (WUE) commenced its activities in 1947 as a private, one-faculty College of Commercial Education. The University has four faculties:

– Economics,
– Management, Computer Science and Finance,
– Engineering and Economics,
– Regional Economy and Tourism.

Altogether it employs 784 academic teachers including 142 professors. There is strong interest in economic studies, in the academic year 2009/2010 the University had about 17,000 students, and so far it has produced over 70,000 graduates. The University is authorized to grant degrees, among them PhD and *doctor habilitatus* of economic science, organization and management. The Wrocław University of Economics is ranked regularly second/third among economic-oriented universities in Poland.

Despite such a unique standing and potential, the University was hardly a leader in e-learning in Poland. For most Polish institutions of higher education the adventure with distance education began in 1998-99, so there has been more than a decade of various experiments and experiences. Indeed, in most cases e-learning means an Internet platform supporting the standard methods with published educational material, usually in pdf format. Nevertheless, there are Universities which have already achieved an average European level and have a pretty rich offer of interactive courses. The dynamics of growth in this sector suggests that within the nearest 5-7 years those universities which will not comply to these demands might be getting wiped out of the market.

Unfortunately, for the Wrocław University of Economics the distance education option was totally uncharted territory. There was not the simplest concept how to start, there was no technological platform to place the courses on. A thorough recognition research showed a strong resistance toward this innovative teaching methodology among the senior academic staff. This could be partly understood: Why bother if for so many years it was so good without these technological gadgets? More importantly, however, professors as a rule are engaged in additional administrative and didactic tasks. Members of this "social strata" are also much more sceptical (towards everything), which is after all not bad for a research occupation.

At the same time, however, a huge potential for the introduction of e-learning was identified at this university. Each year, more than 3300 applicants are being rejected, because of quantitative, i.e. non-merit, limits. Each year, more than 200 students go on a dean's leave. Thanks to the enormous possibilities offered by modern, technology-enhanced distance education, the University could significantly increase the number of its students, thus augmenting its financial revenues. Several decades of experiences acquired by Allama Iqbal Open University (AIOU) in Islamabad, Pakistan, seem to prove that this is the best way of securing a university a financial independence. This Open University was established in 1974, with the main objective of providing educational opportunities to those who cannot leave their homes and jobs. Over the years the meaning of "distance education" has changed, moving

from correspondence study and mail delivery to information and communication technologies (ICT) supported learning. Presently, AIOU has 750,000+ students enrolling a year, and they come not only from Pakistan, but from the Far East as well [Sangi, Karamat 2007].

In response to the identified needs and challenges, on January 1, 2008, the President of the Wrocław University of Economics appointed his proxy (formal representative) for the e-learning issues, who later was nominated Director of the e-Learning Centre at the WUE (the author of this paper).

4. Identification of thematic areas

The first and most important task of a newly appointed president's e-learning proxy was to work out a comprehensive implementation strategy and win its support from the University Senate members. One of the strategy's crucial components was an identification of the thematic and problematic areas directly related to e-learning. As the most important subjects the following were recognized:

    1) Implementation of a technological platform,
    2) Current administration of the platform,
    3) Preparation of interactive, fully "e-learning" courses,
    4) Conducting lectures in the e-learning mode,
    5) Internal promotion system,
    6) External promotion system,
    7) Motivational system,
    8) Training system,
    9) Acquiring financial support,
10) Creation of the E-learning Centre.

Below runs a brief description of the identified thematic areas.

1) and 2) Because of the mostly practical character of the discussed discipline, obviously not excluding its significant methodological share, activating a technological platform was considered an obvious priority. This educational platform was based on Moodle, a Course Management System (CMS), also known as a Learning Management System (LMS) or a Virtual Learning Environment (VLE). It is a free web application that educators can use to create effective online learning sites. Basically, it is a global development project designed to support a social constructionist framework of education, and is provided as Open Source software. It is used in 206 countries, has over 46,000 registered validated sites, over 33 mln users, and over 33 mln e-learning courses [*Moodle Statistics* 2010]. The effective management of this Moodle application required an experienced technical support. A graduate from the Wrocław Technical University was employed, with a rich expertise and precious connections at his mother school, which was a leader in e-learning in the whole region.

3) The process of preparation of educational materials began with a prefatory stage, when teachers uploaded their traditional courses, often in Word of Power Point format, with additional protection. Gradually, some of those courses were transformed to fully interactive teaching units, with all the support offered by Moodle, i.e. discussion forums, chats, tests, etc. the advanced stage required support from more experienced specialists from other universities or even professionals, preparing e-learning courses as a main activity of their businesses.

4) Conducting courses in the e-learning mode is the final step in a relatively long process of preparation and experimentation. One of the most important issues here is the conversion rate from the duration of a traditional lecture to the duration of a "virtual" teaching unit. In Poland, one "didactic hour" equals 45 minutes. It is stipulated that this 45 minutes equals 20–30 minutes in cyberspace. The next obstacle was to get approval for this conversion rate from the University Senate.

5) The internal promotion system meant an intense and effective informational and promotional action amongst the teaching staff and students of the University. The point was to gain the "critical mass" of the number of prepared electronic lectures, preferably grouped in adequate specialization groups or blocks. This would allow the University to rank itself somewhere at the average level on a national scale. After just a few months of hard work this would be a real success, after years of neglect in this area.

6) The external promotion system was supposed to be initiated at a more advanced stage, i.e. after the testing of the first e-learning blocks and when a larger group of teachers would gain sufficient experience. The external promotion would mean a typical marketing activity in Poland and abroad, starting with the neighbouring countries, like Slovakia, Ukraine, Belarus. The plan was to capitalize on the previous international contacts – there are many students from those countries who study at the UEW traditionally. Both the internal and external promotion was commissioned to the Bureau of Promotion.

7) The motivational system was one of the most touchy subjects in the whole procedure, still, it was one of the key determinants of the final success. The whole e-learning activity, especially at the very beginning, was optional to mandatory academic duties. One of the options was based on the reduction of obligatory teaching hours for each instructor actively engaged in e-learning. Another one was based on a favourable conversion rate from hours taught traditionally to hours spent in cyberspace. As far as the process of preparation of the e-learning teaching units was concerned, it was supposed to be based on separate profitable agreements with the teachers involved. The decision regarding the costs was left to the top administration of the University.

8) The training system was an obligatory requirement imposed by a proper regulation imposed by the Polish Ministry of Education. The training should include the service and maintenance of the technological platform, course preparation

methodology, teaching requirements and methodology, etc. Working out this strategy, it was assumed that part of this task could be outsourced to more experienced, professional organizations.

9) The acquisition of financial resources for e-learning activity was recognized as the most unpredictable area of the planned activity. The initial works were financed from the University's resources – a dedicated server was bought and the first agreements with the instructors preparing their courses were covered. A thorough market reconnaissance showed that the price asked by a professional firm for the preparation of 30 hours of fully interactive, e-learning course can reach as much as 15,000-20,000 euro. This ultimately shaped the financial orientation of the whole task, i.e. the courses have to be prepared by the WUE instructors themselves. The additional agreements with them were not ruled out, however, and the first group of teachers got circa 2,500 euro for each 30-hour course. A long-term perspective assumed that a specialized team would be created with a sole task of acquiring money from different sources: organizational and private sponsors, ministerial funds and grants, European Commission programs, etc.

10) The effective implementation of the outlined strategy called for proper organizational forms and structures. The WUE Senate approved the proposition to create, in due time, the E-learning Centre, which would manage and coordinate all the tasks related to distance learning. At the beginning of January 2008 it was assumed that the end of the year would be the deadline for this administrative move.

5. First stages of strategy implementation

The very first step, in the very first days of January 2008, was the purchase of a dedicated computer server and the successive installation of Moodle Learning Management System. A new e-learning portal was activated, and an aggressive promotional action was initiated among the University employees.

In early spring the first teaching courses in electronic format began appearing on the platform. These were not real e-learning units yet, just Word texts or Power Point presentations, as used during the traditional classes. But it was a very important psychological and informational step – the instructors noticed the new possibilities and began losing their initial inhibitions. After six months, 29 courses were placed on this portal, including 4 in English. Additional six packages were devoted as instructional materials for teachers and students. Right before the new academic year, in late September 2008 the UEW Senate unanimously approved the proxy's report of the initial stages of the strategy implementation and decided to establish the E-learning Centre (Figure 1). It was a crucial step in the process of formalization and structuralization of the discussed efforts [Unold 2011].
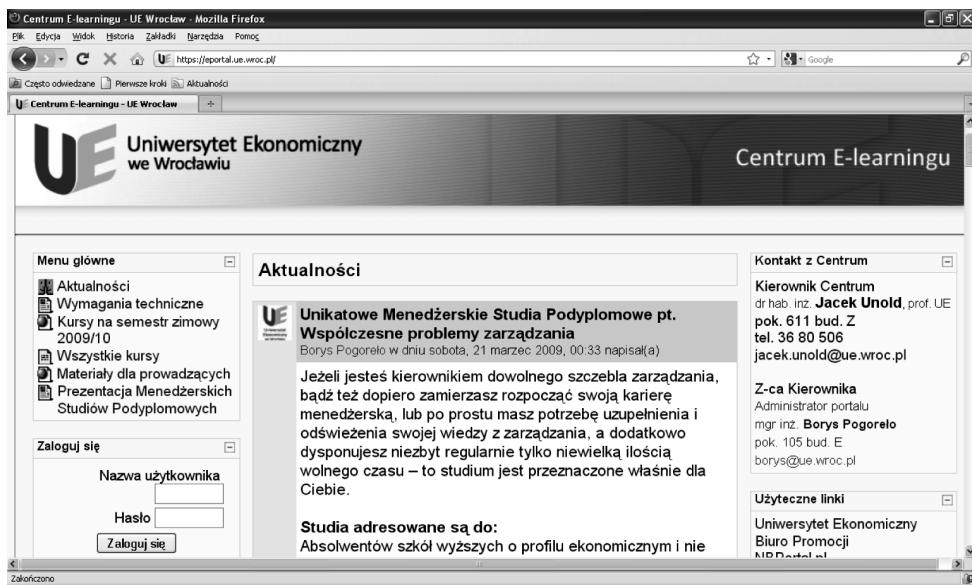
Figure 1. WUE E-learning Centre home page

6. Initial results

Another academic year, 2008/2009, witnessed a real acceleration in the process of e-learning implementation. Eventually, it took a year and a half for the UEW to make up for a decade of backlogs, and to attain an average national level in e-learning. As of late fall 2009, the "state of the art" in the domain of distance education at the Wrocław University of Economics looked as follows:

– Worked out the official "strategy of e-learning implementation at UEW";
– Fully tested and implemented, open Course Management System "Moodle";
– Full service of the educational portal http://eportal.ue.wroc.pl;
– Formalization of the activity within the E-learning Centre;
– Developed training materials for instructors and students;
– Systematic informational and promotional activity;
– Activated the first 12 fully interactive and e-learning courses at the Faculty of Engineering and Economics;
– 309 courses offered at the e-portal (including those 12 fully e-learning);
– 102 instructors from UEW using the e-portal;
– Over 7,500 users of the e-portal (the first 500 of the Moodle applications world over and one of the biggest and most successful Moodle applications in Poland;
– Very high dynamics of growth of the UEW e-portal (in the number of users and offered courses), which suggests that a strong and positive network effect has been reached.

7. Conclusions

Assessing the whole undertaking in retrospect, one of the most difficult problems with the implementation was to enlist people, precisely – instructors, ready to cooperate on this project. It should be remembered that academia does not tolerate revolutions. And so, instead of the marketing "push" strategy, a "pull" approach had to be applied, based on attracting the real enthusiasts of modern distance learning. As a result, it took only six months to gather as much as several dozen electronic courses (so called "quasi e-learning"), and after another year the UEW e-portal became one of the most successful Moodle implementations in Poland.

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ROZWÓJ STRATEGII E-LEARNINGOWEJ NA UNIWERSYTECIE EKONOMICZNYM WE WROCŁAWIU W LATACH 2008-2009

Streszczenie: Nauczanie elektroniczne zawsze jest traktowane jako bardzo rozwinięta forma edukacji. Proces wdrażania e-learningu na wrocławskim Uniwersytecie Ekonomicznym rozpoczął się na początku 2008 r. Prawie dwa lata nadzwyczajnego zbiorowego wysiłku przyniosły znaczące rezultaty w tej ważnej dziedzinie. W artykule przedyskutowane zostały najważniejsze wskazówki dotyczące strategii wdrażania. Obejmują one historyczne aspekty edukacji zdalnej oraz punkt startowy na UEW w 2008 r. Następnie zidentyfikowane zostały kluczowe obszary tematyczne odpowiedzialne za skuteczne wdrożenie. Opisano też poszczególne fazy wdrażania strategii oraz osiągnięte rezultaty.

Słowa kluczowe: historia zdalnego nauczania, elektroniczne nauczanie (e-learning), platforma Moodle, strategia wdrożeniowa, centrum e-learningu.