Abstract- After centuries of little change, the role of the Guru or a teacher as it has been traditionally defined and practiced in Asia is on the verge of becoming an anachronism. Now it is Google, not the Guru who has all answers to the questions of life and learning. New and emerging eLearning and mLearning technologies are harnessing the power of Internet at a very fast pace. eLearning is bringing dramatic changes in the educational landscape and is transforming the breadth, depth and quality of learning in Thai institutions.

The learner-centricity is becoming a key facet in the rapid growth in the number of new learning organizations, learning management systems, eLearning tools, technologies and services in Thailand. This paper reflects on the old educational practices and current trends in eLearning in Thai institutions, particularly the universities and examines the growth of new and emerging technologies that will provide profound and exciting learning opportunities for the students in Thailand and rest of the South East Asia.

I. INTRODUCTION

“There are two fundamental equalizers in life, the Internet and Education. eLearning eliminates the barriers of time and distance, creating universal, learning-on-demand opportunities for people, companies and countries.”

John Chambers, Chief Executive Officer, Cisco

In Thailand eLearning ¹ and mLearning ², as it is throughout the world, is evolutionary. The first signs of change in the Thai political, economic and educational environment emerged in the late 1990s when private enterprise rose in importance and government launched the new Information and Communication Technology (ICT) ³ programs. Since that time the student profile in Thailand has changed dramatically in its social, cultural, and economic context; those who fail to recognize the Thai student’s changing profile, from that of traditional learners to a eLearner, run the risk of failure in the very competitive South East Asia higher education and training market. The growing market orientation of higher education is gradually bringing changes in Thai universities as they have been forced to address non-traditional student and rural segments and markets.

The content on the World Wide Web is predominantly available in English language. Unfortunately, Thai universities have been slow to embrace this fundamental element of the Internet. Thai universities responding in part to student demands have also been slow to develop high quality and efficient courseware. These two factors, the lack of an effective English learning paradigm combined with an inefficient and poorly constructed curriculum drastically lower student’s access to the emerging eLearning market. Most Thai universities are now embracing the eLearning paradigm by simply replicating the existing traditional campus-based programs and courses. Thai universities need to fully commit to the new eLearning and mLearning strategies by developing a much stronger focus: First, they must enhance their English learning models; second, they must improve their campus ICT infrastructure to meet the high bandwidth requirements of eLearning courseware and; third, they must employ more sophisticated eLearning programs. As long as the Thai universities have a strategy encompassing this new focus, it is possible for them to evolve as eLearning technologies evolve.

II. GURU vs. GOOGLE

The First Law of Internet states that all the answers to one’s query are available on the Internet. Therefore the quest is no longer about where to find the answer but how to frame the question? Growing power of Google, Wikipedia, Open Universities and host of free educational services on the Internet is changing the traditional mode of learning. In addition, the growing competition from the neighboring countries in the region, tempered by a decade of disappointments is creating diverse learning opportunities that are likely to shake the foundations of traditional teaching.

A. Traditions, Technologies & Trends

In a traditional Thai classroom, curriculum is often presented with a lack of integration. This lack of integration results in the failure to present a cohesive, integrated and complete presentation of the course’s stated curriculum. Emphasis is typically on basic skills and explicit knowledge; the students are viewed as empty vessels into which knowledge is poured. Thai faculty often behaves in a didactic manner, disseminating facts and correcting answers. In Thailand strict adherence to fixed and traditional curriculum is highly valued and activities rely heavily on textbooks and workbooks [1].

In Thailand eLearning has come a long way from the very early days of Computer Based Training (CBT) in the early 80’s to the use of new medium such as CD-ROM’s in the 90’s before

1 eLearning: The process of learning enabled by the use of software and Internet tools.
2 mLearning: The process of learning enabled by the use of mobile devices such as “Smartphone”, PDA’s and iPods. For example, several US universities have over 60 courses based primarily on the use of iPods.
3 The Thai Ministry of ICT was created in the late 1990’s.
Finally moving into the knowledge-based economy. In Thailand, technologies deployed in the early 1990s relied heavily on Satellites such as Thaicom, which was mainly used for one-way broadcast as well as two-way communication for video conferencing for remote classrooms as it was the only high coverage medium. Later in the year 2000 ISDN and Fiber Optics were introduced as terrestrial transmission technologies. At the same time, many advanced technological challenges appeared in parallel with globalization and revolution in the ICT sector, especially in the telecommunication sector. With the explosive growth in the travel sector in the last decade the usage of the Internet has pushed the improvement in infrastructure for the new digital economy.

A 2002 poll conducted by the Bangkok Poll Centre of Bangkok University indicated that the soaring use of the Internet was due to increasing availability of Internet access in schools and cyber-cafes. Figure-1 shows that the Poll Centre surveyed 1,200 primary, secondary and university students and found that 40% of students go online three or four times a week. More than 16% go online every day, while nearly 28% use the net one or two days a week [2]. In 2007 the trend is that in a big city like Bangkok students are always connected.

The Internet is very slowly transforming the traditional Thai communities into modern knowledge-based communities. Fig-2 from IDC\(^4\) clearly shows the evolution of eLearning media worldwide. In the early days it was not called eLearning, but rather CBT, or computer-based teaching, which reveals the primary focus at the time? In Thailand the shift from CBT to the eLearning is happening, but slowly. Now in the world dominated by Laptops, Notebooks, Mobil phones, Blackberries, iPods and several other kind of communication devices, the quest to find a Guru in a Thai university is being replaced by finding a fast and reliable connection to the Internet.

**B. Thailand e-Readiness**

Economist Intelligence Unit’s 2006 e-Readiness rankings of the 68 countries published last year, Denmark retained its top position, followed by the USA, Switzerland, and Sweden. The next five countries, in order, were UK, Netherlands, Finland, Australia, Canada and Hong Kong. Overall, Europe remained the dominant e-Readiness region worldwide. Singapore was ranked 11th. Thailand was ranked 47th in 2005 and it climbed to 44th place in 2006. In spite of the drastic improvements in their economies, China, India and Thailand are far behind in terms of adopting new and emerging technologies for eLearning. The rankings also show that the divide in terms of broadband development among Europe, USA and Asia is also diminishing. In recent years North Asian countries, such as South Korea and Japan, have become world leaders in terms of broadband usage [3]. However, Thailand remains behind in terms of broadband penetration, which limits the growth of eLearning.

In Thailand the home usage of personal computers, the laptops and the Internet is relatively very low. Thai government and ICT agencies are hopeful that the increased use of PC and Internet penetration at homes will be essential if Thailand has to become a knowledge based economy and increase country’s competitiveness with Malaysia, Singapore and Hong Kong. The digital divide seems to be the major challenge for the Thai government. The government has launched many projects such as SchoolNet, UniNet, TambonNet and Distance Learning Foundation to bridge the digital divide. However, the major big players of the new Knowledge Based economy are concentrated in Bangkok.

The government’s telecom reform efforts over the last five years has been slow in implementing key changes by establishing the country’s new regulatory body, the National Telecommunications Commission (NTC), which was set-up in late 2004, four years after the enabling of Telecommunications Act adopted as law in 2000. Having become operational, the NTC is now concentrating on getting up to the speed. However, in the current political climate it is unlikely to have a major impact on the market. Delays have also occurred in the restructuring and privatizing the state-owned Telco giants, such as the TOT and CAT. While the Internet usage has grown in Thailand, the broadband access has been languishing. Broadband penetration remains low at less than five subscribers per 1,000 people [4]. Although slow but increased adoption of broadband technology will facilitate liberation of higher education, which presents an exciting opportunity for transforming the business of education in Thailand. Particularly exciting is the improved broadband connectivity that may help many Thai universities in creating sophisticated eLearning courseware that is interactive, engaging.

\(^4\) IDC is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets.
and capable of producing rich learning outcomes for a greatly expanded population of learners, locally, nationally and regionally.

III. eLEARNING ASSESSMENT AT ASSUMPTION UNIVERSITY, THAILAND

In order to determine the attitudes of students enrolled in traditional on-campus classes towards the use of mobile devices in their studies, a survey was prepared and posted on the web portal of the Assumption University web site (www.au.edu) in October 2006 "unpublished"[5]. An email was sent to the students explaining the purpose of the survey and asking them to go to the URL of the university web page to complete the questionnaire. Within one month of after the emails were sent, 145 students responded to the survey. The results of the survey are summarized as follows:

- 72 of the respondents were male and 73 of them were females.
- 7.59% of respondents were graduate students and 92.41% of them undergraduates.
- The respondents represented 9 faculty members, the greatest numbers of respondents came from the faculty of Business Administration and faculty of Business Arts, the two largest departments of Assumption University.
- 142 out of 145 or almost 98% of respondents own an MP3 player or a mobile device capable of playing MP3 files. 77 of them or 53% of the respondents had mobile devices capable of playing video files in addition to audio files.
- The most prevalent OS of the mobile devices, 25%, used Symbian, 12% used Windows Mobile, the majority, however, did not know the Operating System of their devices or simply reported that they were using plain MP3 players.
- The majority of participants considered the purchasing cost of these smart mobile devices or the cost of being online (GPRS, Wi-Fi) as the main drawback in using their gadgets. They did not consider the small size of screens or lack of keyboards as problematic factors.
- The participants considered the following as the most important features that could contribute to their studies, if they were to be implemented for mobile devices.
  - Receiving SMS from the university about news and announcements.
  - Watching video lectures on their mobile devices.
  - Listening to MP3 audio of the lectures.
- 79% of students indicated their willingness to purchase a smart mobile phone or PDA if their existing mobile devices could not play the video/audio files of the class lectures.
- There was no significant difference in the attitudes of male and female students towards the use of their mobile devices for listening or watching the lectures; neither was there any significant difference in the attitudes of students in various faculties towards mobile learning.

5 Operating system (OS) is the core software that enables the functioning of the device as well as various applications and services.

Figure-3 given below shows that 65% of the respondents of the survey thought that Mobil devices can play a helpful role in their studies.

IV. eLEARNING IN THAILAND –LOOKING AHEAD

Internet based delivery of higher education and eLearning can no longer be regarded the exclusive realm of the western world. eLearning has become a vital tool in the quest of Thai universities to face their new learner demographic. Few Thai universities such as the Rhamkhamhaeng University, Sukhothai Thammatirat University, and the College of Internet Distance Learning (CIDE) at Assumption University are providing new eLearning programs and degrees. In 2004 Assumption University of Thailand spent more than two million dollars to set up College of Internet Distance Learning (CIDE) at its new location in Bangna, Bangkok. However, the market for these universities is largely local and confined within the metropolis of Bangkok and surrounding areas. The market for broadband in Thailand is still very costly and the universities are still skeptical about the benefits of having costly bandwidth. However, the growing VoIP services and digital video will hasten the process of broadband deployment. Content developers will also see the need and the opportunity to capitalize the increasing eLearning market. Demographic trends in Thailand are also at the heart of this phenomenon. Although this is pale by comparison to what is happening in India or China, the number of 18-24 year olds in Thailand are seeking higher education is set to double by 2010 and eLearning providers expect to capture at least half of this growth. The new generation, especially the college bound population seems to be more aggressive in terms of using the current technologies available in the Thai market. eLearning is an essential component of this emerging market.

So what is the future of eLearning in Thailand? Experience suggests that the development of eLearning requires significant modifications to the traditional paradigms of the supply of education [6]. This implies not only changes in the programs and coursework, but also changes in attitudes, in order to accommodate the new challenges posed by eLearning in general and higher education in particular [7]. Google along with other repositories of knowledge will gradually diminish the role of the Guru on the stage. The sage on the stage is being gradually replaced by more interesting and interactive eLearning options. The tools and technologies such as Mobil and Smart Phones, iPods, Pod casting, Digital Videos, Blogs, MP3/ 4 and ePortfolios are changing the
way people live, learn and work in the knowledge based

societies.

eLearning is a challenge that is very much interconnected to the other social and cultural challenges in Thai universities. It needs to be a part of the overall institutional strategy and the technology needed should be an integral part of the ICT infrastructure and usage policy. Also there are many issues of plagiarism, privacy and security that need to be considered [8]. Thailand is improving its bandwidth requirements, the technologies, and the pedagogical skills. It is now a question of combining these effectively with an aggressive education policy. The growth of internet technologies in Thailand indicate that by the end of this decade the eTeacher and eLearner will be able to maintain their interactions effectively via mobile devices well stocked with online VoIP and wide variety of multimedia software. They will do this as easily and cost-effectively when they are on the road or in their homes or offices located in remote areas of Thailand.

Despite the political and economic turmoil and questions about the current government’s progress on a range of national projects, Thailand’s higher education sector has been exhibiting a lot of energy. This energy will enable growth and innovation in eLearning providing Thai students with an opportunity to be part of the global community. This is more important now than at any time in the history of Thailand.

V. SUMMARY

Internet based delivery of higher education is growing at an unprecedented speed in Asia. Forces of globalization of higher education and competition from the neighboring countries such as Singapore, Malaysia and India are increasing pressure on Thai universities to evaluate their current teaching-learning paradigms. The role of the Guru is being replaced by Google. Thai universities must rapidly move from their traditional ways of delivering education or face crushing competition from those that have already embraced the new technology based e/mLearning paradigm. These ICT enhanced new tools and technologies can enable Thai universities to respond to the challenges of creating quality eLearning programs and courseware for the changing higher education market of 8 million internet users and 20 million users of Mobil devices in Thailand.

VI. REFERENCES


