

## The Future of Mobile Learning – A Survey of Expert Expectations about learning on mobile phones

Maciej Kuszpa

### 1 Introduction

The increasing activities in German-speaking countries – particularly in the private enterprises – regarding mobile learning offerings are the reason for the survey that has been carried out. The technological development and the constant increase in mobile device penetration among the population are check less. This progress causes sustainable changes in the e-learning industry as well. The companies involved face a big challenge and a unique chance: education in every place in the world and at any time as the core characteristics of Mobile Learning.

The goal of the survey was to extract perceptions from private enterprise companies regarding the technological and economical potential of mobile technologies in educational fields. The aspects focused on were basic development trends, but also specific applications and still unsolved challenges and problems in this new research field. The lessons learnt from the survey are on the one hand snapshots of the current interests in Mobile Learning and on the other hand serve the draft of recommended courses of action for the e-learning companies.

The survey presented was conducted in the beginning of 2005 at companies from Germany, Switzerland und Austria. 1,012 experts were addressed who are involved in the conception, production and/or launch of computer-based learning offers. The aim was to query people who have relevant experience and/or expert knowledge about learning offers in the new media. The questionnaire enfolded an overall of 23 questions from the areas of trends, applications and challenges of Mobile Learning. The results from the questions about the expected extent as well as the advantages and disadvantages of Mobile Learning are exemplified in the present abstract. With 170 filled out questionnaires, the return rate was almost 17 %. Exactly 168 questionnaires were included into the data evaluation, because two questionnaires had only been rudimentarily filled out. The evaluated questionnaires stem from 137 different companies.

### 2 Expected spreading of Mobile Learning

The question is whether the issue of Mobile Learning is simply a temporary trend pushed by technology and discussed only by experts or whether learning on mobile phones does have the potential to address a mass-market – either shaped as fun-driven edutainment opportunities or as a fundamental component of lifelong learning.

68.5 % of the participants personally estimate Mobile Learning as a (very) important issue in the next years – only 17.9 % consider this subject not relevant. Therefore, at least a basic interest for a broader discussion about learning on mobile phones and a good basis for further exploration and developments of Mobile Learning can be noted.

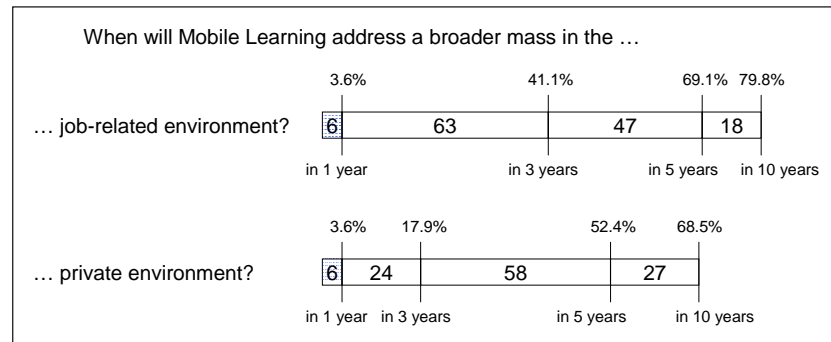


Figure 1: Expected mass circulation of Mobile Learning

The establishment of Mobile Learning is more to be expected in the job-related environment than in the private environment (cp. fig. 1). A respectable share of 41.1 % of the interviewees estimates that within the next three years, mobile devices will support the learners while learning for their job. Although roughly over 80 % assume Mobile Learning as an accompanying element in learning for professional life in the long run. More than half of the interviewees share the opinion that it will take another five years before a significant rate of the population will be using mobile learning offers. In contrast to that, only 3.6 % believe in a mass establishment of Mobile Learning in the short term of one year and 17.9 % expect that within the next three years.

Notably, 31.5 % share the opinion that Mobile Learning will never establish itself in a private environment – compared to about 20 % that can not imagine valuable mobile learning offers in job-related environment. This leads to the assumption that participants see Mobile Learning rather as a basic necessity than as a gadget.

### 3 Advantages and disadvantages of Mobile Learning

Following the statement of 90.5 % of the interviewees, a time- and place-independent learning alternative is the greatest advantage of Mobile Learning (cp. fig. 2). Furthermore, a learner can individually control his or her speed of learning during the use of mobile devices – a chance that is considered advantageous by 79.2 %.

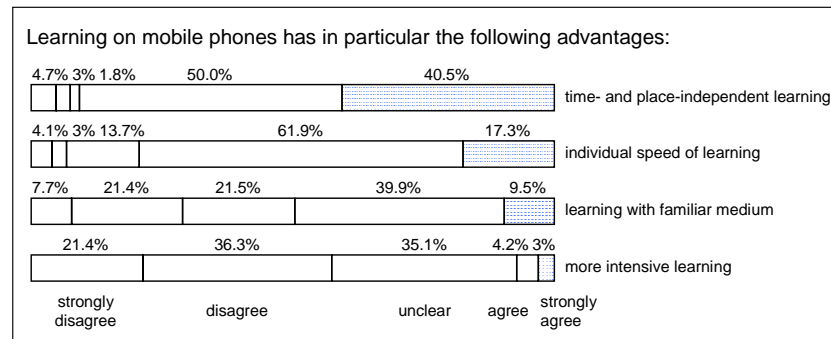


Figure 2: Advantages of Mobile Learning

The fact that a (mostly) personal and familiar medium is being used for learning is seen as an advantage by 49.4 %. However, the opinion that learning on the way is comparably a more intensive learning, is supported by only 7.2 %.

The flexibility associated with the mobile device was emphasised by the experts. This „medium is usually available at all times“, so that it is possible to “access updated information and learning content anytime and anywhere”. For the reason that mobile devices are “handy and always with you”, they are particularly suited for „repetitive learning” – for example when learning foreign languages. The learners can make use of “short repetition phases” to „better cram the whole learning materials”. The greatest benefit for learners is the „environmentally sensitive learning“ as a „addendum to go“ in combination with other forms of learning.

The greatest disadvantage of Mobile Learning is seen in the need for a higher self-discipline when learning on mobile devices by 70.8 % of the interviewees (cp. fig. 3). Nevertheless, 55.4 % of the participants assume the need for learners to still become more familiar with the usage of such a medium in order to be able to use mobile learning offers at all. Furthermore, 53.6 % of the experts feel Mobile Learning as an impersonal way of learning. Only about a fourth of them is in doubt about the verification of the learning success through Mobile Learning. Although more than half of the participants see that familiarisation with the medium is necessary, the usage doesn't seem to be a technological challenge – only 23.8 % of them think the learners need a high level of technological know-how.

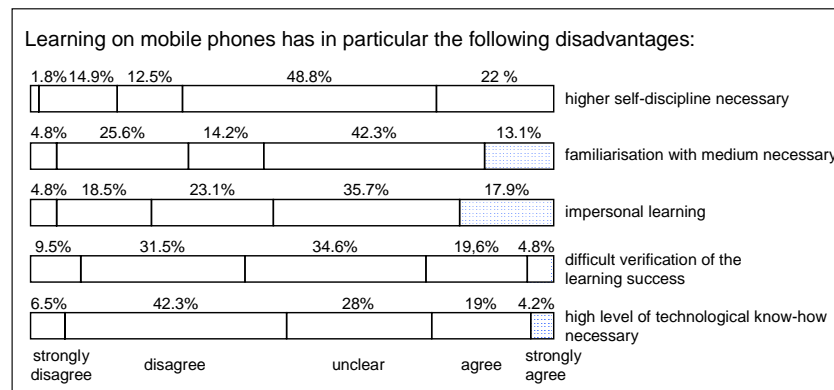


Figure 3: Disadvantages of Mobile Learning

Besides the “necessity of a high self-discipline while learning”, the experts often criticized the “way too small displays on mobile devices”, that give “to little space for a good presentation of the learning content”. The small displays provided only “low comfort” because too “small content and a bad overview” are very eyestrain, especially when reading extensive texts. But also the “small buttons and keyboard on the mobile devices” are not very comfortable and offer only “limited input possibilities”.

#### 4 Conclusion and Perspectives

Due to the immense penetration and the continuously increasing capabilities of mobile devices, there is no doubt about the basic potential of mobile network technologies for business opportunities not only for the network operators. Across all industry sectors, new distribution channels and even new markets arise because of new mobile technologies – the education providers can also benefit from this development.

The results of the survey show that mobile network technologies are suitable for learning under specific premises and in certain situations. Learning everywhere and anytime can be a valuable complement but definitely no substitute for traditional learning methods like events with mandatory physical presence or learning with personal computers. With prices dropping and new business models being presented by mobile network operators, it will become more attractive for learners as well as for education providers to concentrate on Mobile Learning.

However, every new idea should always be discussed and approved in close collaboration with the target group at an early stage in order to avoid aberrations and to reduce inhibition thresholds. Therefore it is important not only to take into consideration the wishes and experiences of learners, but also to consider the ideas and perceptions of the teachers for further developments.

#### 5 Further Information

For further information about the survey and about mobile learning please visit the site of the Mobile Education Center of Excellence at <http://www.mobile-education.de/>

#### Literary Source

Kuszpa, Maciej: The Future of Mobile Learning – A Survey of Expert Expectations about learning on mobile phones, in: Online Educa 2005, Book of Abstracts, Berlin 2005