

RELOAD

A Knowledge Platform and a Blended Learning Concept for Employees in the Do-It-Yourself (DIY) Industry

Abstract

The European funded project RELOAD aims at developing and implementing new eLearning concepts for low qualified employees in the Do-It-Yourself (DIY) industry so as to introduce them to self-directed and multimedia-based learning. In a blended-learning approach, self-learning processes are to be supported by experienced colleagues and through learning in groups. Moreover, so-called microtrainings will be included. The result will be a knowledge platform for the employees of this sector. The project has a term of two years and is coordinated at an European University. The project partners include the European DIY-Retail Association (EDRA), producers and DIY-stores as well as scientific partners from the education and IT sector in Europe.

1. Introduction

The main focus of RELOAD is on employees of the Do-It-Yourself (DIY) industry. Employees and consultants in this sector play a particularly important role as they communicate directly with the end customers in sales and consulting talks. But as a fact many employees and consultants in the DIY stores are un-trained or low qualified workers, or workers from outside the sector.

RELOAD also considers customers with regard to means of informing them on products. For the DIY sector to be commercially successful it is vital that the end customers know how to use and apply products purchasable in DIY-stores. Only then they will actually buy these products. So for this sector the maxim is true that “the knowing customer buys more”.

RELOAD tries to address both at the same time: the employees and the costumers by offering a knowledge platform as a multimedia and semantic based solution. This platform contains eLearning modules which are tailor-made for the individual learning needs of the employees and should enable them to actualise their knowledge much more efficient and faster.

Through the planned knowledge platform in the DIY stores, eLearning applications as short learning modules will support the self-directed learning of the employees which is integrated into daily work processes. This kind of learning can be integrated into dynamic work processes more easily than classical types of learning and at the same time it is also more cost-efficient.

As a consequence the customer of the DIY stores will gain more profit through a more efficient consultancy.

2. Approach

The work situation of the DIY employees is largely affected by the modern knowledge-based society. Companies need methods for coping with a steadily growing quantity of knowledge and for enabling employees to deal with an increasing amount of new information about products. Usually, companies choose to offer opportunities of further vocational education to the employees.

In this context, employees have to be provided with the relevant product knowledge for being able to all-around consult the customers. Many customers do not only wish to buy one single item in a DIY-store but rather several ones as they follow a “project” like installing a new bathroom or building a summer house. However, most customers do not engage in consulting about their whole project but only ask for specific information, e.g. about where to find a distinct item. Employees have to be able to find out whether customers need to buy more than one item and have to offer them all-around consulting.

An innovative approach of informing customers is “EduCommerce”. EduCommerce is a blend of eLearning and eCommerce and refers to online training of customers (Leege 2007). It supports and helps the customers in decision processes and provides orientation. The focus is not on advertising but on informing the customers on different aspects of the products, e.g. sustainability and use for the purpose at hand. By this approach, the customers can both inform themselves or be informed by employees in consulting talks. Information can be transmitted e.g. via short learning sequences or via 3D or 2D pictures of products.

In RELOAD through a blended learning concept with a focus on eLearning, employees in the DIY stores will be provided with the skills they need for consulting customers professionally. In this project the eduCommerce

concept will be used to train the employees on the one hand and on the other hand it should offer a better service to the customers of this sector.

3. Project Objectives

The European-funded project RELOAD has a strong emphasis on the sales-consultants in DIY-stores. The main objective of the project is to create a tool to refresh the knowledge of employees informing about skills that are needed to use a product which is sold in the DIY-stores. By means of eLearning, employees will be enabled to efficiently inform customers. Additionally, RELOAD incorporates the producers' and providers' perspectives.

The sub-objectives of the project are:

- To introduce untrained or older employees or employees who are not used to learning anymore, to self-directed and media-based learning in the DIY sector by following a blended learning approach.
- To accompany multimedia-based self-contained learning processes, e. g. by experienced colleagues and through collaborative group learning.
- To prepare so-called "microtrainings" for supporting self-directed learning and for more effectively integrating multimedia learning systems in the daily working processes.
- To support companies in becoming "learning companies".
- To secure the companies' ability of economic survival and the employability of the workers sustainably.

The outcome of the project will be a knowledge platform including didactics especially adapted to the target group.

3. Concepts

On the basis of the necessity for lifelong learning the knowledge platform will be implemented in the DIY stores. Producers and DIY-stores will create microtraining units for the platform in order to give the employees the opportunity to use the platform for "learning on the job".

The concept of microtrainings has been transferred from the predecessor project "Microteaching" of the EU-Leonardo da Vinci programme. Microtrainings are short single modules which can be combined according to target groups, thus forming a complete curriculum. They support self-directed learning at the work place and encourage employees to keep their knowledge up to date (Brall & Hees 2007).

A model for developing microtrainings will be generated in the project RELOAD which will enable producers in the DIY industry to prepare their product information or additional consulting information didactically, organise them by key words and populate the knowledge platform with the information units. In this way, the knowledge value chain from providers and DIY-stores to the end customers is to be optimised by efficient knowledge transfer.

Moreover, further "social software" applications are planned to be integrated into the knowledge platform. The term "social software" refers to web-enabled software programmes which enable users to interact or share data with other users. It is planned to install online forums for employees to communicate throughout the DIY industry so they can comment on and evaluate the contents of the knowledge platform.

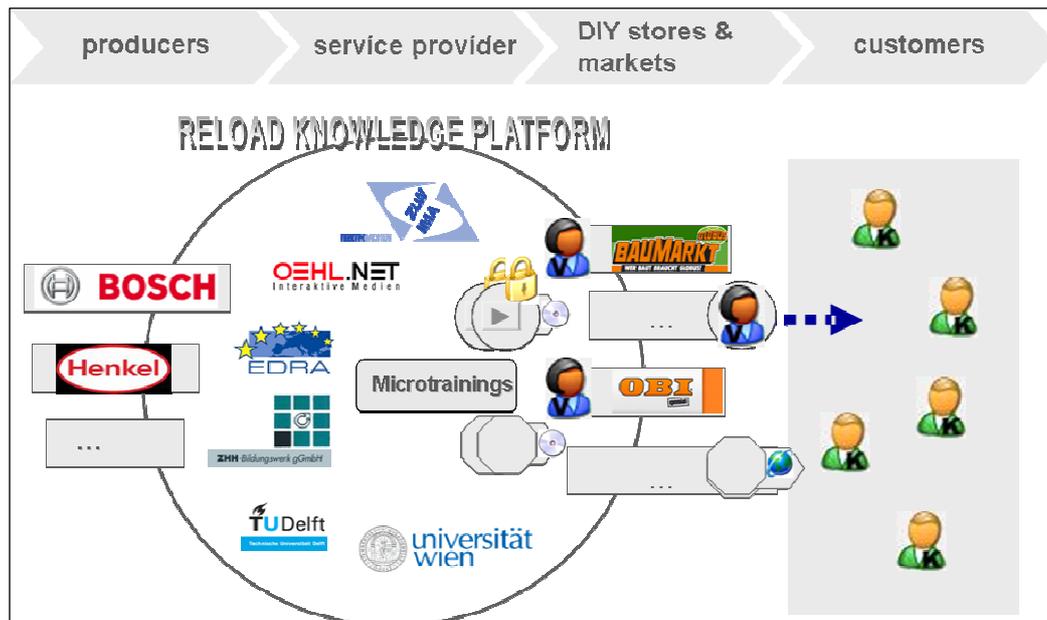


Figure 1 RELOAD Project Progress

4. Scientific Methods

The scientific methods for the implementation of microtrainings will be supported by a knowledge platform based on didactics adapted to the needs of employees in the DIY-industry.

The knowledge platform is based on a semantic net to offer a very flexible and non linear way of learning to the learners. The semantic net structure offers logical connections and combinations between the contents of the knowledge platform. Semantic nets can be visualised using directed graphs. They allow data storage which is non-linear and similar to the structure of a mind map. Knowledge retrieval via the search function can follow various ways and is not bound to the more restrictive tree architecture (Sattari et al 2007). As the the target group in RELOAD is not used to learning anymore, the non linear connected microtrainings as short learning units on the platform will suit to their learning needs best.

With help of the semantic net thematic learning blocks were devided and prepared into small learning units in order to allow the learner to make a goal oriented choice (Brall et al 2007).

The application of the different learning blocks with microtrainings are very efficient and motivating for the learner. The learning contents will be prepared as short multimedia files with a duration of five to ten minutes. So the learner's attention and concentration will remain for the duration of the learning unit as it is proven in the former scientific project "microteachings" (Brall et al 2007).

Multimedia based self-learning processes will be accompanied by experienced colleagues. Moreover, collaborative learning in a group will take place. The microtrainings will add to the support by colleagues and supervisors. In this way, the learners remain motivated for continuing the "microtrainings" and will integrate the multimedia learning into daily work processes. At the same time, knowledge and experiences of workers will be collected and distributed in the company.

The didactic concept has to be adapted to the target group of untrained and low qualified employees. The cognitive apprenticeship approach makes sure that the study topics are embedded in a realistic background. In this way, an integration of the learning results in the daily work routines is ensured. The cognitive apprenticeship as a pedagogical approach is a type of coaching for learners, e. g. by more experienced persons. Cognitive apprenticeship is a theory of a process whereby a master of a skill teaches that skill to an apprentice. According to this theory, masters of a skill often fail to take into account the implicit processes involved in carrying out complex skills when they are teaching their students. To avoid these tendencies, cognitive apprenticeships "are designed, among other things, to bring these tacit processes into the open, where students can observe, enact, and practice them with help from the teacher" (Collins et al., 1987). This approach teaches acceptable performance and the integration of practical and theoretical knowledge for understanding specific situations and suits the main target group of RELOAD best.

5. Benefits

By integration of all partners into the knowledge value chain, the knowledge flux from producers to end customers can be improved to a large extent. This leads to a win-win situation for all participants. Customers will be better informed on features and uses of the products they purchase. Being better informed they will buy more which will naturally lead to an increase of sales.

Furthermore, the DIY-stores can enhance the quality of vocational training by a more efficient blended learning concept and through the microtrainings. Thus, they will have a chance to avoid the high employee fluctuation in this sector.

6. Consortium

The project consortium consists of experienced key personnel and specialists in the targeted sector. This expert group combines the necessary competences in the different fields, which are needed for a successful realisation of the project's aims. Specialists from the DIY-sector join experts for eLearning and didactical teaching-and-learning-competence development as well as experts for the creation and design of eLearning tools.

Beside the European Association of DIY Stores producers (EDRA), other contractors and DIY-stores are involved so as to closely supervise the development of contents. This is essential for meeting the requirements of the target group, i.e. the staff members of DIY-stores and for ensuring a learning process tailored to their needs.

7. Project data

The project RELOAD starts off in November 2007. It has a duration of two years and is lead-managed by an European University. The project is placed within the EU-Leonardo da Vinci programme in the sector of vocational and advanced training.

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