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Newsletter
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Almost 99 per cent of businesses operating in the European Union are small and medium-sized enterprises (SMEs). At present, they account for around 60 per cent of the Community's GDP and provide almost 70 per cent of jobs. SMEs are the main driving force of the economy. Their condition, therefore, is crucial for the development of EU Member States.

For years now microbusinesses have been suffering from an undersupply of suitable training: a training offer that is inexpensive, tailor-made, allowing workers to learn fast while strengthening their businesses and competitiveness. Work organisation is one area where such training is badly needed. This need is now being answered by the "E-SME" community project, which is just coming to an end in 2011.

THE PARTNERSHIP

Stowarzyszenie REFA Wielkopolska, Poznań – Project Leader
Stowarzyszenie Rozwoju Edukacji Ustawicznej „Transfer", Warsaw
REFA Bundesverband e.V., Germany
Fraunhofer IPA, Slovakia
Racionalizační Agentura s.r.o., the Czech Republic
Hellenic Regional Development Centre – HRDC, Greece

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E-support for Entrepreneurs

The European market is about to see a new training product. Based on well-known multimedia know-how, the product is addressed to managers and workers of industrial SMEs. The product's authors ensure that it is a user-friendly state-of-the-art tool, with an additional benefit of a competitive price.

The project "Multimedia training tools used in teaching work organisation methods in relation to industrial enterprises at SMEs sector" is executed under the Lifelong Learning Programme in five partner states: Poland, the Czech Republic, Germany, Greece and Slovakia. The project was preceded by a careful analysis of current SME needs in this area. "We asked SME owners, managers, as well as workers what their training gaps are as regards work organisation," says Leszek Nowaczyk of the Association REFA Wielkopolska, the project manager. "On this basis we identified the training modules that we had to focus on."

Blended Learning

The project identified five areas in which industrial SME training needs are the most dramatic. Then each area was assigned to one of the project partners: Association REFA Wielkopolska from Poland, REFA Bundesverband e.V. from Germany, Fraunhofer IPA from Slovakia, Racionalizační Agentura from the Czech Republic and Hellenic Regional Development Centre from Greece. Each partner was to develop one of the training modules. "The top problem of industrial small and medium-sized enterprises – and the smaller the business, the greater the problem – is that you can't let people leave their working place for too long, for example to send them for a longer training," claims Leszek Nowaczyk. "Therefore, we decided to develop

multimedia training tools that could be used in the blended learning format. In blended learning, the time the trainees meet in a session with a trainer is reduced to a bare minimum, while the rest of the material is covered in the e-learning format. Thus the time a worker needs to leave his or her working station for is minimised, which eliminates a major barrier in the eyes of employers. For example, a traditional training module would put in about 100 of in-class training, while in blended learning this time is reduced to 24 hours."

Five Training Modules

The project partners developed training modules covering five key areas. The first area is Work Organisation, whereby the multimedia training focuses on issues such as ergonomics, occupational health and safety as well as elimination of redundant activities (i.e. all the activities that the customer will not be willing to pay for).

The next module is Working Time Standardisation, and is devoted to working time measurement methods. "We teach how to use these methods to set standard task execution times," says the project manager.

The third module is addressed to workers involved in production planning and management. The module covers such topics as the intricacies of manufacturing processes, how to optimise the order execution time, how to best utilise the machine park available and plan its load effectively.

Module four is addressed to engineers and technical workers dealing with cost accounting. "One aim of the training is to raise the cost awareness of technical staff, and to help engineers interact better with company accountants and financial officers. The training shows how technical solutions translate into cost and expenses on the business's balance sheet. Indeed, a decision to buy a new piece of expensive machinery needs to take account of when its cost is going to break even. The need to meet and negotiate with clients more frequently is a cost generating factor, which, however, is not disclosed in a typical cost accounting sheet. But we do point it out in our courses," says Leszek Nowaczyk.

The final fifth module is devoted to quality management, whereby quality is seen as the extent of meeting customer expectations relative to the price that must be paid for this compliance. "Of course, every business should strive to manufacture top quality products, but, at the same time, quality does have a price tag attached to it and the two must be properly balanced," claims the project manager.

National Versions and the English Version

Each module was first developed in the responsible partner's national language and tested in its respective country. Testing was done by future potential users of the product, i.e. SME workers, who were selected so as to represent a varied level of experience in a given area. Their feedback was used to introduce a number of important modifications. For example the in-class sessions with a trainer have been split into two parts, one before and one after the e-learning stage.

Now, once the modifications have been made, all the modules are being translated into English. "When this work is done, each module will be translated into the national languages of the remaining four partners. In this way, in every country each module will be available in its national language and in English," explains Leszek Nowaczyk of the REFA Wielkopolska.

The project will come to completion in 2011. The partnership are now contemplating a commercial launch of the product.

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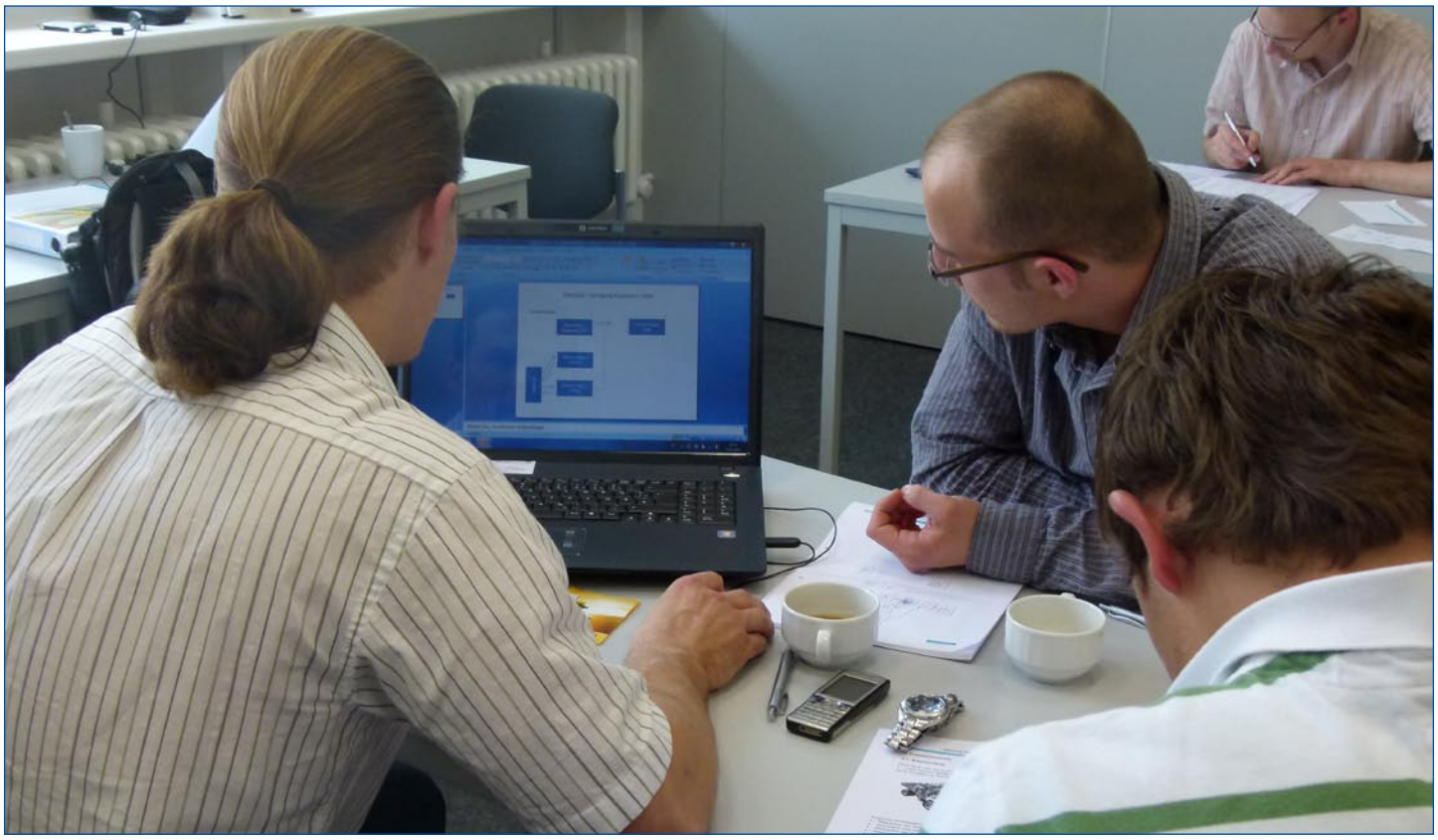

A Multimedia Pill

Interview with Anna Weber of Association REFA Wielkopolska, project co-ordinator for e-learning, and Leszek Nowaczyk, manager of the "E-SME" project.

The project is addressed to industrial small and medium-size enterprises. Why have you chosen this target group?

Leszek Nowaczyk: The entire training programme being developed by the project is based on the source materials prepared by the REFA Bundesverband, the world's largest non-profit organisation dealing with work organisation research. The German REFA's primary strength is its offering addressed to industrial companies. So we, too, have decided to offer what best REFA has in stock for this target group.

Who specifically are the project beneficiaries?

LN: Once the project enters a commercial stage, the spectrum of potential beneficiaries will be very broad. Noteworthy, the training is highly specialised, i.e. it does not cover general management issues, but rather develops skills in five areas: work organisation, resources planning, working time standardisation, quality management and cost accounting. Therefore specialists in those fields are our primary addressees. Nevertheless, one should also take account of the unique situation of microbusinesses, where one worker may cover many functions and positions. For example, the deputy CEO may also be involved in working time standardisation. In this sense, the training course is also addressed to managers.

What is the plan of the training developed by the project?

LN: Initially we were planning to start the entire training process from an e-learning stage. The idea was that after that stage, the trainees – having acquired the knowledge contained in the modules – would meet in-class with a trainer. However, this method was not validated in testing. As a result, we decided to split the classroom time into two parts. At present, the training starts with a session with the trainer, who teaches the basics, responds to the trainee' questions and highlights the significant elements on which they should focus in their study. Consequently, in the e-learning stage that follows,

the trainees are able to use the materials more effectively, because of the initial lead-in. After the e-learning stage there is another short in-class session with the trainer, to enable the trainer to assess how well the trainees have mastered the material and offer assistance in case of any problems.

How long should the e-learning stage take?

LN: This form of learning is dependent on many factors. First, there are personality-related factors: some people are more inquisitive than others, so to cover the material in e-learning the former will take more time. Secondly, the time needed depends on the trainee's prior knowledge. The training is attractive to people who want to learn about a new topic, one they have not studied before, working time standardisation, for example. Those trainees will have to devote more time to the training than the students who have already dealt with this topic, but are now interested in specific techniques in this area. All in all, however, one and a half months should suffice to cover all the material contained in the e-learning course.

What is the structure of an e-learning-based training?

Anna Weber: The modules have been designed so as to allow them to be used by workers of various businesses. This means that the structure is fairly fragmented. One module includes a number of courses, which are further subdivided into smaller learning units. Thus the trainee may acquire knowledge of individual short topics and then check his or her knowledge by the means of revision questions. We are not involved in the assessment of this revision. Rather, the point is for the trainee to be able to check their knowledge and decide when they are ready to move on to the next unit. At the same time, each module and each of its constituent units ends up with a test, which is assessed. The test results give us information not about how much of an expert a person has become, but only about how well he or she has integrated the knowledge contained in the module. By the end of the course the trainer has one more opportunity to verify the knowledge of the individual trainees during in-class sessions.

LN: Our goal is to include assessment of the trainees. Originally, in the e-learning part we wanted to include a test to decide if a trainee is qualified to receive a course completion certificate. However, having discussed it with our partners and participants of the testing stage, we concluded that it would not be right to leave this decision to the computer alone. Consequently, it is the trainer who ultimately decides how far a trainee has mastered the course and whether he or she can receive a completion certificate.

Are basic computer skills sufficient to follow the e-learning component of the training?

AW: At the outset of the course, every participant receives two files by e-mail: information about our internet platform and how to navigate it, and an instruction manual for the training module. People who have had earlier experience of e-learning platforms showed not to need those instructions at all; however, many participants of the testing stage found them very useful.

There are quite many training courses addressed to SMEs. What is the distinguishing feature of your product?

AW: Our course contains carefully selected materials for which a great demand has been shown. It's like a pill that everyone wishing to be familiar with a given topic should take. This pill is administered in a manner that is as friendly as only possible, i.e. we require no earlier knowledge or skills to use the product. Furthermore, we did our best to make the presentation as attractive as possible, by applying multimedia and films in which an instructor shows and explains clearly the material contained in the handbooks.

What is the future of this product after the project is completed?

LN: The training course will be incorporated into the training offering of the Association REFA Wielkopolska and the other project partners, and addressed to entrepreneurs. We hope there will be adequate demand. We are still in the pricing exercise, but I can already say that the product will be about half the price of regular training courses available in the market. The course completion certificates will be awarded by REFA, a brand well-recognised throughout Europe. We will also apply to accredit the training course, but this is subject to the individual procedures applicable in the partner Member States.

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TRAINING PROGRAMME

Module: Work Organisation This module is designed to give the manufacturing process organiser the necessary knowledge of work process optimisation, elimination of redundant activities and – as a result – reducing the time needed for work operations. The module contains the original REFA analytical procedure applicable to worker activity, means of production and materials. It covers ergonomics of work stations, work load and onerousness, and development of services. The module helps to identify the possibilities of raising work productivity.	Topics covered: • Reengineering of work processes. • Continual process improvement. • Elimination of stoppages. • Elimination of redundant activities. • Reduction of operation time. • Optimum ergonomics of work stations.
Module: Working Time Standardisation This module complements the Work Organisation training course. Elaborate methods and templates allow the study methods to be adapted to every type of manufacturing processes.	Topics covered: • Coherence and clarity of work processes. • Working time registration and analysis. • Preparation of data for working time catalogues. • Elimination of redundant activities.
Module: Cost Accounting The module is addressed to workers operating in a cost-effectiveness regime. The training is designed to improve the communication between the staff responsible for manufacturing processes and the financial function of the undertaking.	Topics covered: • Correct cost determination. • Selection of cost calculation methods relative to the business profile. • Effective cost control. • Optimisation of capital expenditure decision processes. • Minimisation of manufacturing/project costs. • Optimisation of indirect costs.
Module: Quality Management High quality applies not only to goods and services. Organisations and manufacturing or service processes, too, need to conform to prescribed quality criteria. Desirable and sustainable level of good quality cannot be achieved without a quality management system. This system is designed to manage and improve the quality of processes and technologies.	Topics and skills covered: • Quality management tasks and tools, and their effective application. • Practical examples of aims and requirements imposed by process-oriented standards. • Quality management methods used to gather and assess statistical indices and data. • Practical examples of how to use the methods introduced in the module to measurements, goods deliveries and processes. • New skills in the area of product and process optimisation. • Application of the newly-acquired knowledge in relations with customers and suppliers. • New skills in quality improvement of products and work processes.
Module: Resource Planning Execution of orders according to the customer's expectations requires keeping to prescribed deadlines and reduction of workflow times. Those tasks are aided by professional planning strategies. Similarly, optimum utilisation of personnel, materials and means of production (work) improves competitiveness of manufacturing and service processes.	Topics and skills covered: • Highly useful planning strategies and tools to ensure effective order execution. • How to prepare a work plan. • A system-based method of process planning and optimisation. • Optimisation of deadlines and workflow times. • New skills in order execution; preparedness to assume more responsible tasks. • Identification and balancing of production needs with available production capacities. • Methods and effective tools of material planning and management. • Principles of applying flexitime and working time as defined in company's procedures.