

Roche Diagnostics

Author Unknown

Name of institution: Roche Diagnostics
URL of institution: www.roche.at
Country: Austria
Number of Employees: 250
Revenue in 2005:
Experiences with e-learning since: 2002
Business sector: Medical Technology
Target group/participants in e-learning: Technical employees in production
Content : Qualification in the production engineering (specific technologies)
Form: Blended learning solution
Interviewed people: Roland Milla, project manager bit media

2. How the institution used e-learning

2.1. Description of the starting situation

Why e-learning? - Starting situation Administration expense within the range of the qualification proofs (square meter system) should be reduced saliently. Beyond that urgently a Controlling system was needed for internal measures for further education taken place.

Employees need (provable) in-house certified knowledge, in order to be able to fulfill in the production of high-sensitive diagnostics devices high claims of quality. Technologies change sequentially, in this industry are give it in particular a rapid technological progress. That means employees in production must be trained locally and just in time in new technologies and procedures. These training courses as well as training course success must have documented clearly demonstrably.

Automatic documentation of learning processes, training conditions, simplification of the administration of these processes and data, making learning and methodology flexible. (Cost saving only within the range of the administration, not in the training - because cost-intensive individual learning contents must be produced)

That participant inside is an activity or a situation out in these phases to think and to realize independently or in the team, thus if possible all jurisdictions (self authority, specialized authority, social authority) to be promoted be able. At the end of learning units as concrete results and/or a products as possible are to stand, which can be presented and kept of participant inside (on-line or in operational readiness level phases)

2.2. The courses

With the learning platform SITOS® administrators have the possibility of placing participant inside and Tutors and courses to an on-line training course together. The level of the courses (e.g. the action fields of a certain occupational group) as the second

level in SITOS® one administers. Within this range with several content resources a course is generated, i.e. learning contents/programs are arranged for a partial training course. The third level of on-line training courses is the level of the learning modules (e.g. the action situations), whereby several learning modules are usually merged into a course. All sections and/or subsections of a learning module are selectable from the user to each time. It besides context-referred between the sections "is linked", whereby the automatic adjustment of the navigation functions a mad in the knowledge net prevents.

This e-learning course (content) was provided predominantly in-house and assigned to the appropriate employees. The e-learning system is until today in use and for most different topics is consulted. However courses form the emphasis to the production engineering of diagnostics devices.

Each e-learning consists of a certain number so-called „Learning Objects “, which have an average machining time of 30 minutes. The total period of an individual course depends on the number of Learning Objects as well as on the necessity of additional operational readiness level trainings. On average for each topic however a learning time is spent by approx. 12 hours.

The e-learning course is developed majority multimedia and sets a rich medium-mixes (large portion of video, Audios, animated patterns, interactive elements for success in learning controls, Self tests)

Learning statistics

A learning object under SITOS (e.g. a lesson, a document of etc.) „Tracking so mentioned can be deposited “. Tracking means that certain data - like the number of calls, the date first and the latter the call, which reached points within a lesson - to be stored. With each call of a course and/or lessons these data are up-to-date indicated. Thus you are as users able to judge separately which portion „course “you already settled one and/or which contents of it very often and which it not to have regarded still at all. The learning statistics (if available) is indicated directly under the name of the respective learning object.

1 Datenbank Grundbegriffe
Aufrufe: 3 Beginn: 27.02.2002 Soll: 60% Ist: 14% Lernzeit: 0:04:00

Panels

The panels are comparable with black boards and are divided into groups of courses. They serve in order to exchange with others participant inside information for general topics.

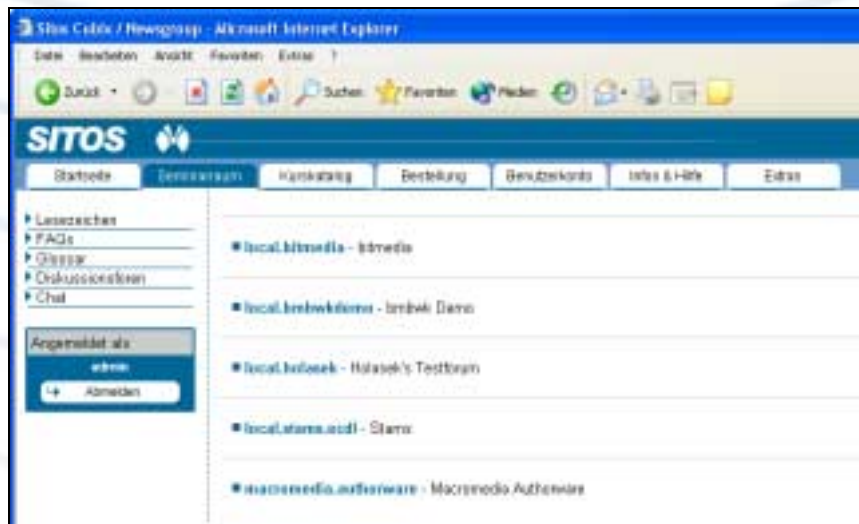


Abbildung: Diskussionsforen – Übersicht



Abbildung: Diskussionsforum – Inhalt

E-Mail at Tutor

A Tutor is a person, who supports and accompanies someone in a e-Learning training course. With the Teletutoring this happens now not in personal contact, but with use of the new telecommunications technologies and here mainly by E-Mail and forum. As soon as concerning a problem learning contents or administrative affairs emerge, which you cannot solve, write a message your Teletutor and ask a question to the concrete problem. Indicate the more exactly you in your message, where the difficulties lie - in which course, with which lesson, in which section, with which exercise - these arose, the more exactly can the answer of your Tutors fail.

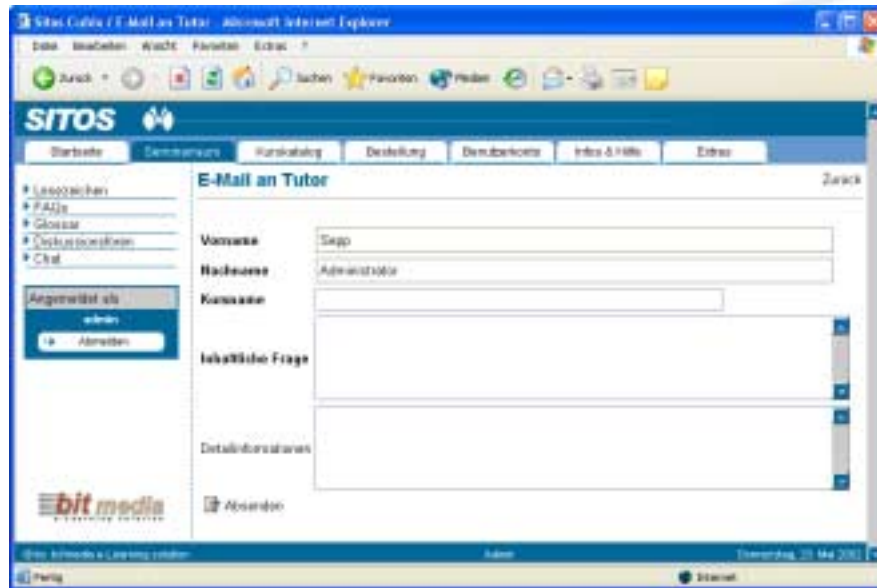


Abbildung: Nachricht an den Tutor

Chat

The learning platform SITOS offers also the possibility, with others participant inside and/or with the Tutor to chat.

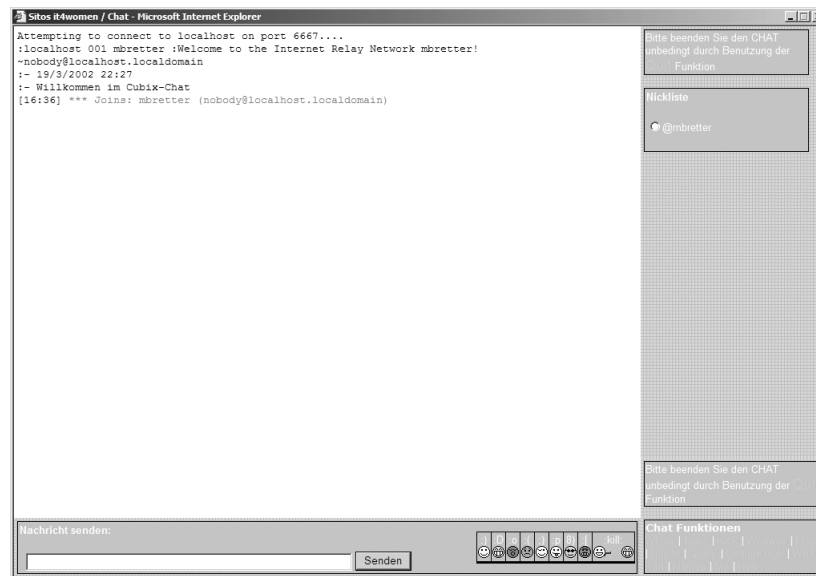


Abbildung: Das Chatfenster

Technical requirements

Windows Client, Intranet (>256 KBit/S), Internet Explorer with Shockwave + Flash, audio.

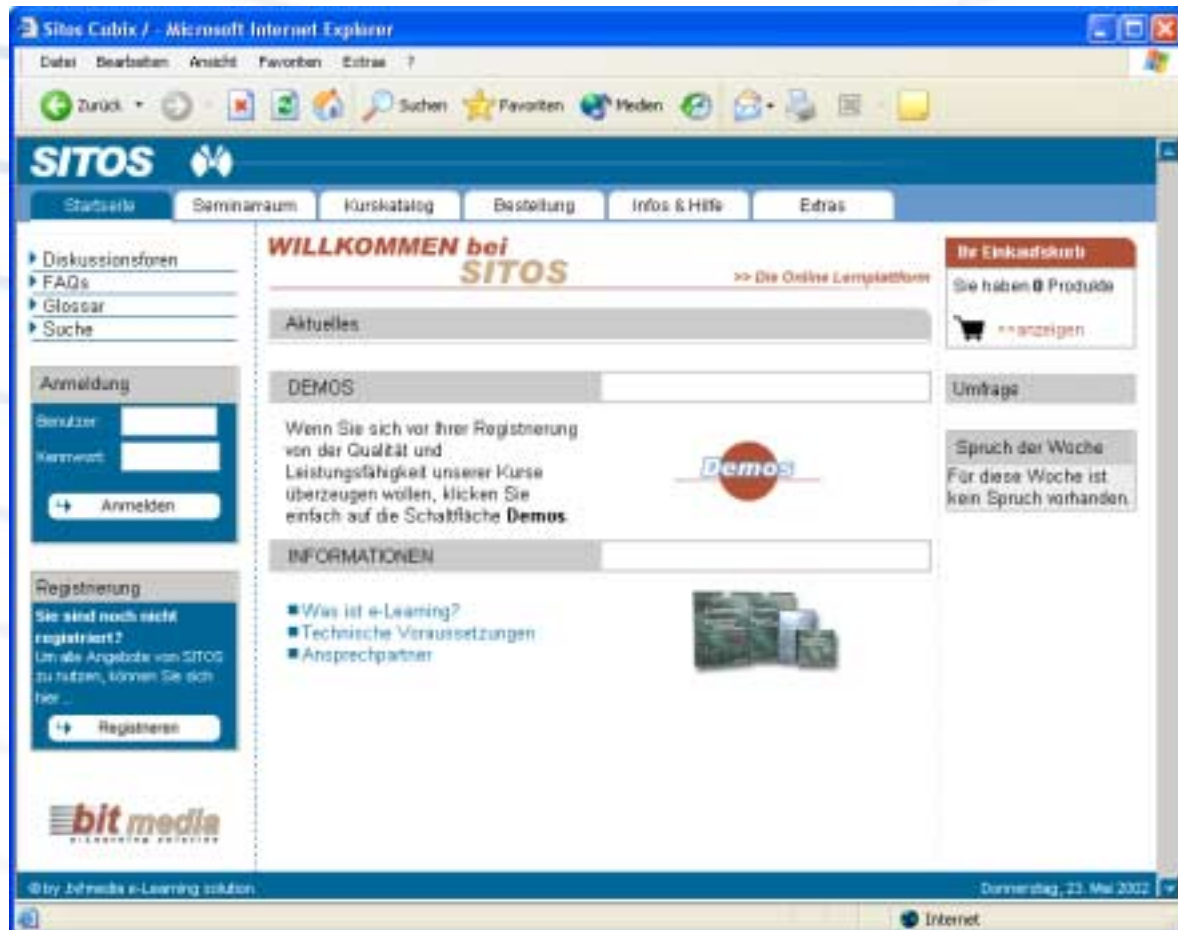
2.3. Number of employees involved

200

2.4. E-learning platform and technology issues

Used learning platform: SITOS 3.5

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Provider: bit media e-Learning solution.

Technical requirements of the LMS:

- Server operating system Linux or Windows (here: Windows of 2003 servers)
- Data base: Oracle, MySQL or ms SQL server (here: MS-SQL)

2.5. Course development

1. Common analysis of the starting situation with the customer

- Actual situation
- Determination of the critical success factors
- Determination of the improvement potential

2. Development of an approach

- Rough conception training system
- Fine concept
- Work statement
- Technical product requirement specifications

3. Development prototype - exemplary conversion of the learning environment with functionality already adapted

4. Evaluation prototype

- Internal evaluation prototypes in the project team
- External evaluation prototypes with representative target group

5. Technical realization of the overall system

- Development with milestones
- Regular reviews

6. Implementation of the system

- Installation
- Training of all involved ones

7. Project conclusion

- Deliveries & acceptance
- Agreement over further maintenance & support

2.6. The administration process

- registration, entrance, report nature, accounting.

Which employees come into the benefit of the e-Learning of offer? Course dispatching by training responsible person (=Administrators in different ranges and smoothing).

Employee gets report of reservation (inclusive entrance data to the training system) via E-Mail sent. Report of reservation contains additionally date data. Employee logs in training system and finds booked courses in the learning area. Open, editors of the e-Learning courses by the system are along-logged - likewise success in learning and/or results integrated tests. Employee can call even his learning status up and/or also jew. The training responsible person Most diverse inquiries/report are at any time callable. The system has besides a calendar function for the administration of operational readiness level training courses.

Reservation of additional course offers by employees. No administrative supervision. Employees booked course and gets this de-energised.

3. Description of direct and indirect effects and outcomes of the e-learning activities

3.1. Completion rates

150 employees

3.2. Satisfaction

Through in the training system integrated feedback elbows and questionnaires one raises and/or by recurring Meetings with the contractor. The feedback is predominantly positive.

3.3. Success of the participants

is guaranteed (demonstrability of the knowledge given)

4. Challenges and barriers

Technical problems

At the beginning of bad performance with certain more complex evaluations.

Organizational problems

None

Other problems

Introduction of the system would have better Information before

5. Success factors

- Confine co-operation between clients and contractor (regular tuning)
Employment of a solution already tested
- E-learning system must be obligating for employees in the training (if only voluntarily, then to small use and acceptance)
- Well planned introduction of the system (sensitization of the employees, training of the administrators, sufficiently time for test phase before genuine enterprise in the enterprise)

6. E-learning investments, developmental costs and operational costs

License costs of learning platform approx. 20.000 EUR

Hardware: approx. 2.000, - EUR

Development costs (adjustment): approx. 30.000 EUR

Enterprise: 1 half tag strength internally