E-learning v oblasti informačních technologií

E-learning in area information technologies

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Abstract
Modern activities are not possible without active use of information technology. Globalization processes and technological developments have the influence to benefit in creating work to become knowledge-based. Information and knowledge make value with energy as the primary benefit in creating resources. The useful ability is to define one's own database. Data processing applies an easy and user-friendly interface for better control of saved data. Competitive advantage needs flexibility, agility, scalability, and visibility. These aspects are effectively solved by various levels of adaptability. Inspirational adaptability is applied in the Oracle Enterprise Manager interface for management database systems. The users must know how to work with these products of information technologies. Simulation training constitutes an effective method for resolution of the always repeating queries of students and users of supported software packages. A number of commercial and free download products as Free Screen Recorder, AVI Screen Capture or Adobe Captivate are available. The important moment is to start from the base level (as a beginner), and then go on to the next level using information and database systems.

Keywords
E-learning, education, information technology, database systems

Introduction
Active Internet usage leads to the development of creative activity. For example, online help is conducted with multimedia simulation and database systems dispose a user-friendly interface. The work is interactive and usually the result is promptly known. The rhythm work is adapted to user dispositions. Today's dynamic world needs quick and flexible resolutions. Classic or modern methods with visualization support are used for information systems development. *Information systems must be highly adaptable if they are to satisfy users' complex and rapidly evolving requirements.*[3] Their users must know how to work with these products of information technologies. Abilities exist, which is needed to innovate with a view to new trends and requirements. These abilities are often marked as "soft" and they are useful for everyone. Soft abilities pertain to competence in effective communication, support to teamwork, elasticity to resolve problems, managing information stress, and orientation in information with support independent access. Active Internet usage enables that texts are completed in multimedia simulations and they can be taken in by vision and hearing for better remembering. Classical methods are used as the direct method for realization. The direct method consists of repetition and using intuition. The next method is suggestopedia with a consequential connection to all senses. The indispensable aspect is periodicity and style preparation.

Optimal selection of preference from area information technology is not easy way to quality and credibility. Overview about implemented type of operating and database systems is presented in a number statistics and summaries. The market is varied in area database

systems. *Journal Connect! mentions follow percent market allocation with database systems*[6]: 48,6% Oracle, 20,7% IBM, 18,1% Microsoft, 3,9% Teradata, 3,1% Sybase, 1,7% Progres Software, 0,8% InterSystems, 3,1% Others. Influence on level of license allocation in database market for Oracle database system has product accessibility and number independent distributors. Database Oracle Standard Edition One is quality database with focused on small and midsized firms. Corporation Oracle offers this database system, and next products on internet to free download.

Situation in area operating systems is mentioned in article *Trends: Server's operating systems in Czechia*.[14] The organizations use on part servers different operating systems. Windows and Linux/UNIX are usual combinations. Files and application servers use host environments of operating systems Windows. Operating system UNIX uses approximately one third organizations. The same analyze writes about necessity to trace preference of type operating systems with regard to number employees and level financial sources for information systems development. Operating system UNIX uses 12% the smallest subjects, but between the biggest organizations is this presentation 62%.

Individual access to method for selection of optimal resolution is necessary not only in sphere small and midsized firms and organizations. It is important to respect given setting and limits for mapping actual situation. When using information technology in firms and organizations, one must select hardware and software on a correct basis. An expert view on information technology is based on fragmenting information technology implementation into areas and levels. Areas are usually operating systems, database systems, and other applications such as Customer Relationship Management (CRM) or Business Intelligence (BI). Levels are for example file systems, processes, user environments, and security. For today's modern society, this is not sufficient. For successful information technology implementation, it is necessary to think about a third dimension. This dimension is linked to the dynamic, global, and multicultural needs of firms, organizations, and individuals. Among this dimension belong:
- o Competitive advantage with the aspects of quality and productivity,
- o Market occasions with aspects of support partnership and communications,
- o Technical viability,
- o Monitoring indicators such as speed, visualization, and virtualization,
- o Innovation processes and products, innovation in area organization and marketing.

The commercial sphere is a dynamic sector with continual competition, which urges firms to increase quality and productivity on their own services and products and cutting down prices. These powers have an important influence on decreasing expenses; therefore, it is necessary to quickly adapt support needed for information technologies. For example, *new trends as virtualization, Service Oriented Architecture (SOA) or Grid Computing have the right place for correct and optimal using of information technology*.[5] The Oracle products use Enterprise Manager Grid Control for most comprehensive management. Development of the commercial sphere needs support of user friendly communications and partnership within the global scope. Information technology and e-learning, of course, can help with this theme.

E-learning and multimedia simulation for creative activities
The important benefit of information technology implementation is support and creating sufficient space to think about new products and services. Correct implementation of information technologies helps with seeking new possibilities – removing market barriers,

support decision with tools like BI and CRM, and of course, better communication between clients and firms and organizations.

The formation of a larger space for creative activities and searching for new products and services needs proper knowledge and education in area information technologies. It is only one of many of aspects. Knowledge and realization of modern information technologies are connected to combining and timing used information technologies for benefit. Benefit does not have to come from the area of finance, but it can intervene in the sphere of consumer satisfaction, development of new and innovated products and services, or for self-satisfaction and self-fulfilment. New skills, knowledge, and methods bring better occasions for use on the dynamic market, to address more clients, obtain more orders, or to give more confidence. All these facts make better conditions for life; therefore, searching for effective methods for implementing quality and difficult information technologies bring more benefit.

The ability of firms and organizations to realize given goals depends on the level of organization, interpretation, evaluation, comprehension of information, and on information support executed processes. The interest theme is area searching competitive advantage for small and midsize firms. This situation is solved on base benefits of data processing with support-powered database systems. Entrepreneurs (owners) in small and midsize firms must get a clear description of the contributions to the wider use of traditional database systems. A clear description helps to build specialized methods for education and training with multimedia elements.

Users must better understand how information technologies work. The effective solution is simulation training with support multimedia animation. Simulation training constitutes an effective method for resolution of the always repeating queries of students and users of supported and upgraded software packages. It is needed to entertain a level of support intuitive control and integration with e-learning application for select acceptable software. A number of commercial and free download products as Free Screen Recorder, AVI Screen Capture or Adobe Captivate are available. Tutorial training is a good build in the classic PowerPoint interface. Layered objects and self animations as added effects of enforcing or movement path are useful abilities. An effective method for setting a presentation is automatic running, which requires correct coordination with the displaying of objects on snapshots and for transitions between individual timed snapshots. The benefit of animation in the Adobe Captivate environment is clearly compared with PowerPoint for the need to teach students on how to work with a computer program. Product outputs in Adobe Captivate easily integrate comments, text description, education tests, or video recordings. The final application uses a high-quality output format and is able to be played back by standard web browsers. Method resolution for build multimedia simulation is given in unexacting sequence activities: record-given action in selected software interface, edit recording, output file generation and running a multimedia simulation with a web browser.

The correct education of all software products needs access to new versions of products, documentation, and to global communication with experts. Communication is important from the share experiences point of view and special theme knowledge. The same principles are useful and irreplaceable for every user of information technologies. The Oracle database system requires the same. The Oracle corporation supports interested people in a wide range of activities, such as working seminars, specialized webpages for Oracle the database system

community and other products, Oracle Wiki, blogs, personal distribution of the Oracle magazine, panel conferences, and meetings. The conferences and meetings take place in various destinations.

Conclusion

An important reality is that information technologies are a competitive differentiator for users in the EU. Searching actual abilities of information technology creates a wide course for simulation use with selected applications in a given environment. A good way to search is to have detailed knowledge about the actual situation in the area of information technology. A precise synopsis about this subject brings optimal ability for finding a needed combination of information technologies for creative support of human activities.

An important aspect to seeking an optimal method for implementing quality technology like the UNIX operating system, Oracle database systems, tools from BI and CRM applications in the public dimension is to start on a basic level with a user-friendly interface. This level is a given fact that an information technology expert is not continuously needed and answers on questions are quickly determined. Today's information technology intervenes in all domains and activities in our global information society. The key for using better information technology is detail and tolerant monitoring which offers possibilities, reflecting knowledge from active use and modelling with simulations.

Abstrakt

Moderní aktivity nejsou možné bez efektivního používání informační technologie. Procesy globalizace a vývoj technologie mají vliv na kreativitu práce s využitím znalostí. Informace a znalosti představují tvůrčí sílu v procesu vzniku zdrojů. Užitečnou schopností je definovat vlastní databázi. Zpracování dat aplikuje snadné a uživatelsky příjemné rozhraní s cílem poskytnout kvalitní kontrolu uložených dat. Konkurenceschopnost vyžaduje pružnost, rychlost, rozšiřitelnost a viditelnost. Tyto aspekty jsou efektivně řešeny různými úrovněmi přizpůsobení. Inspirativní přizpůsobení je viditelné v rozhraní Oracle Enterprise Manager pro řízení a správu databázových systémů. Uživatelé musí znát jak pracovat s těmito produkty informačních technologií. Simulační instruktáže představují efektivní způsob řešení často se opakujících dotazů studentů a uživatelů podporovaného softwaru. Existuje řada komerčních a volně dostupných produktů jako Free Screen Recorder, AVI Screen Capture nebo Adobe Captivate. Důležitým momentem je začít na základní úrovni a pak pokračovat na další úroveň používání informačních a databázových systémů.

Kľúčové slová
E-learning, vzdělávání, informační technologie, databázové systémy

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