Infrastructure for E-Business on the Internet: Mini-Track Chairman's Introduction*

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Existence of the appropriate infrastructure is the major bottleneck on the way to a more efficient ebusiness on the Internet. Also, the basic infrastructure and the application domain have to be correlated for the best performance. These issues and more are the subject of this mini-track. The first part (with three presentations from MIT, Boston, USA, University of Patras, Greece, and UNAM, Mexico) covers the core issues in the infrastructure domains. The second part, with ten different panel contributions, discusses the issues in the domain of the infrastructure/applications correlation (prepared by the students of the University of Belgrade).

The first paper to be presented comes from MIT, and is related to the Oxygen project. The goal of Oxygen project is to bring an abundance of computation and communication to users through natural spoken and visual interfaces, making it easy for them to collaborate, access knowledge, and automate repetitive tasks. Speech and vision, rather than keyboards and mice, provide the main modes of interaction in Oxygen. Oxygen rests on an infrastructure of mobile and stationary devices connected by a self-configuring network. This infrastructure supplies an abundance of computation and communication, which is harnessed through several levels of software technology tomeet user needs.

The second paper to be presented comes from Patras, Greece, and is representing the HPLAB. This paper gives a comprehensive understanding of the role and importance of e-catalogs in today's e-commerce strategies. The main contribution of it is a systematic approach towards the classification and evaluation of platforms, tools and implementations used for building e catalogs for e-commerce solutions. E-catalog solutions are classified into three general models. These approaches represent the most common classification of ecatalogs in everyday use. After a short evaluation of each model, the current state of the market is reviewed by reviewing a representative tool for each category.

The third paper to be presented comes from UNAM- the largest university in Mexico. It describes several new clustering algorithms for nodes in a mobile ad hoc network. It is proposed to combine two known approaches into a single clustering algorithm which considers connectivity as a primary and lower ID as secondary criterion for selecting clusterheads. The goal is to minimize number of clusters, which leads toward dominating sets of smaller sizes (this is important for applications in broadcasting and Bluetooth formation). Paper also describes algorithms for modifying cluster structure in the presence of topological changes together with propositions for an unified framework for most existing and new clustering algorithm and a framework for generating random unit graphs with obstacles.

Special value of this mini-track is the panel part to follow, which will feature short presentations in the form of tutorials. For more information on these tutorials, see the WWW site that contains full blown PowerPoint presentations (http://galeb.etf.bg.ac.yu/~vm/). These tutorials cover different aspects of ebusiness in widest sense. they include not only the problems of informatics, but also the problems of general engineering, economy, art, and medicine.

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