

THE DEVELOPMENT OF E-GROUPWARE IN THE COLLABORATIVE WORK OF ARCHITECTURAL DESIGN

A case study in International Centre Project, Rangsit University

Joins the Team and managing information flow.

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The emergence of the computer networking, especially the internet has been a very useful tool for the construction industry. The AEC (AEC: Architectural, Engineering and Construction) has adopted the computer technology to the collaboration design work (CSCW: Computer Support Collaborative Work). It used to be that people work together in the real physical space like an office or design studio but now in the virtual design place. This is to accommodate the work that is being done among the designers or construction teams that are far apart. Through Web Application these people can work together from different location.

There has been a continuous development in the area of Web Application. AEC is using one called Groupware which can be categorized into two big categories. one is the free open source and the other is that you need to pay for it. The advantage of paying for the groupware is that the module you buy is specifically designed to fit your needs. For examples the AutoDesk Buzzsaw which is online collaboration software for design and construction work (more information can be seen at <http://www.autodesk.com/buzzsaw>). The services provided including Server preparation, Network system and Security system for the organizations. On the other hand the Open Source Groupware, this application is available free of charge to the public. Though it is not as specifically customized to fit your purposes as the other option but people can use this as a starting point and develop it into what they needs. Most of the times, these open source applications are not designed specifically to fit any particular type of industries. So to be able to use this software in the area of architectural design, some development works need to be done.

In this research, we used one type of the Groupware called E-GroupWare for implementing an experiment of the collaboration work of the Project International Centre, Rangsit University. The purposes are to research and

study the productivity of the E-GroupWare through the use of the current communication systems including PC computer, Pocket PC, and Mobile phone using Symbian OS. Since the information is being placed on three different Platforms, the outputs will be different from one and the others. Therefore, the data generation must take this into consideration for the flexibility of information. Also the arrangements of the information is to be considered (information hierarchy) for file management within the Project.

The result of this research has shown that the work done within the organization has significantly improved. It is shown that working through the use of the E-Groupware applications helps solve the communication problems within the organization which resulting in less work for the employees, there were fewer mistakes had been made. Hence there was a decrease in cost and time of operations because now they can check up on the works at anyplace and anytime.