

## Abstract

Exhibition space planning design is a cooperative effort organized by the design, management, project, marketing and sales division to get the practical layout and efficient area utilization exact to each purpose of various works. It is flexible and being adjusted according to various requirements. At the present the application of computer technology that combined with space planning design has several limits in collaboration and the exchange of non-data based information as well as the individual usage of instant software thus resulting in an inefficient cooperative performance.

The software obtained from this research has been created to be responsive toward the 3 main users: the architects who design the plan, the project organizers and the sales division who manage the booth reservation. It was initiated from development of semi-automatic booth layout creator and arranging equipments in which the architects generally design the plan by specifying the activity area along with the exhibition pathway. The software is operated to create plan and arrange the booth in the area as designed, and automatically show the result in the number of booths, cost estimation, area utilization and equipment rental details. Furthermore, the booth reservation process was developed to be made via the internet including information inquiries and all the correction data regarding to the reservation also available online. Users can also edit other details in the database system, resulting in more efficient and effective cooperation among users. This software was applied with the case studies of 3 exhibition halls in Bangkok: Plenary Hall of Queen Sirikit National Convention Center, Event Hall of Bangkok International Trade & Exhibition Centre and Impact Challenger Hall of Muang Thong Thani. It was found that this useful software helps the architects to efficiently design an exhibition space with standard booths. Moreover, this software can integrate data from the design into the database system for concerted efforts from all departments. It can be operated through personal computers or internet network.