B. Y. RYOO, J. KANG. ***Information strategy planning for long term informatization in construction.*** *Gerontechnology 2012;11(2):332;* doi:10.4017/gt.2012.11.02.514.00 **Purpose** This paper presents how much information strategy planning (ISP) can affect the outcomes of system integration (SI) in the construction industry. It includes a study of computer-aided software engineering (CASE) tools which can work with the commercial software development methodologies. This research is essential because computerization at the corporate and project level should be integrated. This would facilitate the transfer of data from the site-specific, project-specific resource management to the home office corporate wide resource management. Home offices focus on corporate resource management while project offices emphasis is on project resource management of a specific project. **Method** Through a case study in Korea, the impacts from seven ISP- and SI-projects will be presented and discussed. The study was initiated by studying commercial software development methodologies and generic software development methodologies[1-2]. Two surveys and a series of interviews were conducted with the firm to find the following: (i) if they were aware of software development methodologies prior to the project; (ii) what was the goal of the ISP/SI projects and what SI-methodology was considered; and (iii) what was the approach to accomplish systems development and integration with existing systems if any. Additional study was conducted to learn essential tasks from the ISP- and SI-projects in the construction industry. **Results & Discussion** Even though there were differences in the scope of the projects, all participants had an information strategy plan. Depending on the primary purpose of the SI-projects, the scope of ISP ranged from mere business environment analysis, information system development to full scale system integration. The results from the information strategy plans were used as a guideline to: (i) outline the images of future information systems; (ii) determine proper hardware and software configurations; (iii) define the key functions of information systems; and (iv) eventually complete restructuring of their organization. According to our observations, commercial system integration methodologies can give system integrators and construction firms a clear view of system development processes and deliverables throughout the project life cycle. The methodologies promise efficient and effective management of systems development projects as well. In addition, some of the firms have utilized written project/construction management procedures as project procedure manuals.

References

1. Hitachi Consulting Corporation. Key Trends in Information Technology in the Engineering & Construction Industry, A Knowledge-Driven Consulting®. White Paper. Dallas: Hitachi Consulting Corporation; 2005
2. Ellis HJC, Demurjian SA, Naveda JF, Fernando NJ. Software Engineering: Effective Teaching and Learning Approaches and Practices. Hershey: IGI Global; 2009

Keywords: information technology, system integration, information strategy planning, software
Affiliation: Texas A&M University, College Station, Texas, USA; *E:* bryoo@tamu.edu
Full paper: No