

10. Conclusion

Most information systems departments believe that their main business is new BISs development. Swanson and Beath (1989), however, argue that the major responsibility of an information systems department is maintaining existing BISs upon which the business is increasingly dependent. BIS maintenance is characterized by its high risk, huge cost and slow speed of implementation. The maintenance of existing BISs can account for over 60 percent of all effort expended by an information systems department, and the percentage continues to rise as more BISs are produced (Hanna, 1993; Lientz & Swanson, 1980; Martin et al., 2004; Seacord et al., 2003). Hence, it is very important to make the maintenance of existing BISs easier.

For the WinBISs, client programs must be manually deployed to each end-user machine, bringing about a heavy BIS maintenance load. If all client programs were to be stored in a central warehouse, and thereafter the client programs downloaded, installed and run on end-user machines dynamically and automatically, then the BIS maintenance load would be effectively eased.

In this paper, I have proposed and demonstrated an ActiveX

component-based technology (including both the downloadable architecture and the transformation process) to realize this idea. This unique and innovative applied technology can easily and effectively improve the deployability of existing WinBISs bringing about a remarkable ease in the BIS maintenance load, and is a contribution to the field of information systems.

Incidentally, an earlier version of this paper is published in Lecture Notes in Computer Science, Vol. 4317 (Chyou & Cheng, 2006).