

Chapter 99

Building for the Future: Systems Implementation in a Construction Organization

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EXECUTIVE SUMMARY

This chapter provides the IT readiness assessment for before and after scenarios of IT systems implementation in a construction consultancy company providing multi-disciplinary services for the construction industry throughout the United Kingdom. The services offered include building surveying, quantity surveying, project management, civil and structural engineering design, and mechanical and electrical engineering design, among others. On application of the maturity model it was found that the overall processes for managing information are improving since the introduction of the new IT system. Prior to the project, the development of IT/IS was driven to perform daily work tasks that required the company to run a business. The new systems has streamlined the organization-wide communication, which the previous system did not have the capability to do, and to reduce cost for document reproduction. The level of IT skills prior to the project was relatively low; the introduction of the new system has helped the company to increase their staff's IT skills.

BACKGROUND AND HISTORY

Organization B is a construction consultancy company providing multi-disciplinary services for the construction industry throughout the United Kingdom. The services offered include building surveying, quantity surveying, project

management, civil and structural engineering design and mechanical and electrical engineering design, among others. Organization BBBB was established in 1941 and operates from their offices in four different cities. The organization turned into a Limited Liability Partnership (LLP) in April 2006, with an annual estimated turnover of £12 million. Organization BBBB employs 220 staff across 4 offices, of which 120 staff are

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located at the Head Quarters of the company. No specific department exists in their organizational structure. Instead, the organization operates in groups, but not strictly by discipline. For example, one group consists of multiple disciplines, and anyone can be a group leader. The disciplines are as follows: Building Surveyor, Quantity Surveyor, Project Manager, Employers Agent, Architect, CAD, Mechanical and Electrical Engineers, Civil and Structural Engineers, Planning Supervisors. There are three layers of management within Organization BBBBB's organization structure; The Executive Group, The Senior Management Group and The Practice Group. Organization BBBBB's organization structure is shown in Figure 1.

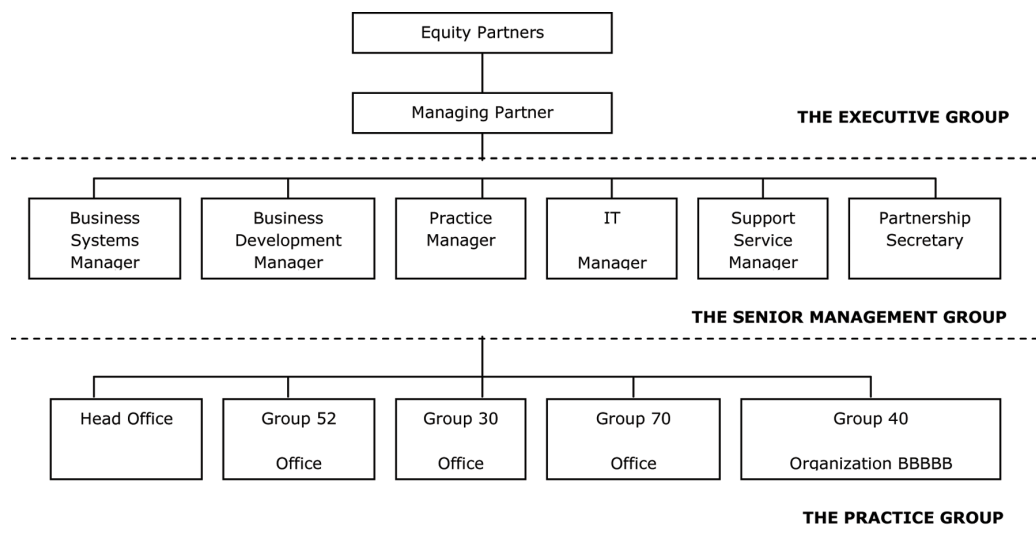
Sequence of Events

In November 2004, the management of the company discussed the need to replace their existing Database Management System (DMS), which had reached the limit of its development potential. In doing this, they had to recognize the need for a coherent approach to their IT, and the need to bring all systems under one control.

In 2004, the management wanted to have access to all parts of the knowledge system through

one front end. Further discussions established that they wanted to include a Knowledge Management System (KMS), and added Human Resource (HR) functionality to the proposed system. The organizational business system managers suggested what the practice really needed was a single piece of software that had the capability to manage all the functions within the organization. The management agreed, and asked for a time frame. The project team was then established and comprised of a business system manager as head, and IT manager, a database programmer and a business development manager; and started to evaluate the products available in the market. During the product evaluation, the project team identified products which could do more than just DMS functions, and in fact provide them with a Client Relation Manager (CRM) which is essentially an advanced address database with functions that make the information both accurate and usable, and also an extranet function which makes all documents retrievable from remote locations and an intranet for internal information distribution. The whole function combined to provide a sophisticated Knowledge Management System (KMS). This is what they thought many people had been requesting for some time. The project

Figure 1. Organization BBBBB's organizational structure



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