

Chapter 4

Building for the Future: Systems Implementation in a Construction Organization

Hafez Salleh

University of Malaya, Malaysia

Eric Lou

University of Salford, UK

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.

DOI: 10.4018/978-1-61350-311-9.ch004

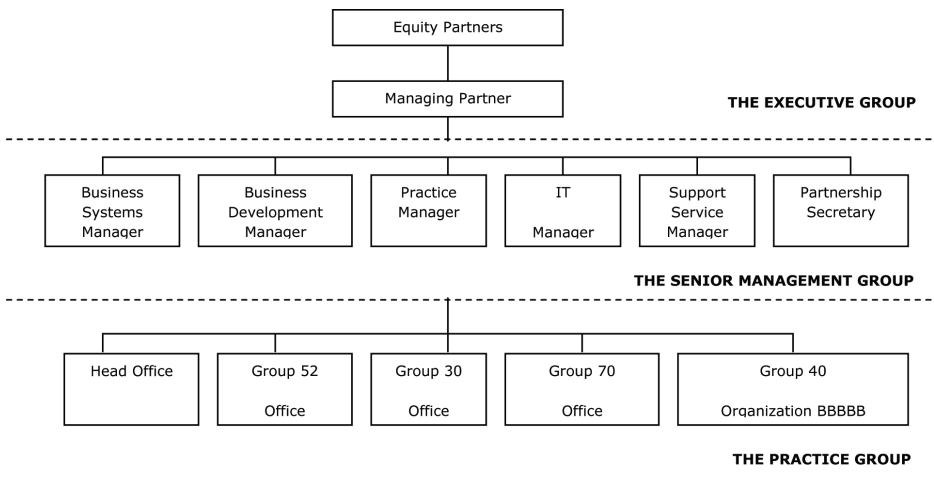
BACKGROUND AND HISTORY

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 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 BBBB's organization structure; The Executive Group, The Senior Management Group and The Practice Group. Organization BBBB'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

Figure 1. Organization BBBB's organizational structure



28 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/building-future-systems-implementation-construction/61097

Related Content

Integration of Data Sources through Data Mining

Andreas Koeller (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition* (pp. 1053-1057).

www.irma-international.org/chapter/integration-data-sources-through-data/10951

Constraint-Based Pattern Discovery

Francesco Bonchi (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition* (pp. 313-319).

www.irma-international.org/chapter/constraint-based-pattern-discovery/10838

Feature Extraction/Selection in High-Dimensional Spectral Data

Seoung Bum Kim (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition* (pp. 863-869).

www.irma-international.org/chapter/feature-extraction-selection-high-dimensional/10921

Mining 3D Shape Data for Morphometric Pattern Discovery

Li Shenand Fillia Makedon (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition* (pp. 1236-1242).

www.irma-international.org/chapter/mining-shape-data-morphometric-pattern/10980

Evolutionary Approach to Dimensionality Reduction

Amit Saxena, Megha Kothariand Navneet Pandey (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition* (pp. 810-816).

www.irma-international.org/chapter/evolutionary-approach-dimensionality-reduction/10913