



Chapter XIX

Knowledge Management for Healthcare: Using Information and Communication Technologies for Decision Making

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EXECUTIVE SUMMARY

This case study is based on data collected from a prominent UK-based healthcare software house (Company X Ltd). The organization specializes in information and communication technologies (ICT) solution development, implementations, support services (including system and application support and telephone hotline support), and training and consultancy services. The organization prides itself on the fact that, by providing unique customized ICT solutions based on the Internet and database technologies, it is able to ensure that its healthcare-based clients (hospitals and allied organizations) have strategic advantages. The case study describes the outcome of a three-year research project, the chief outcomes of which were the development of a knowledge management (KM) conceptual model for use in the healthcare solutions sector as well as detailed advice and recommendations for the organization.

BACKGROUND OF THE CASE STUDY

This case study presents an extensive discussion on the cultural, organizational, and technical implications of introducing the knowledge management (KM) paradigm in the healthcare sector. Company X Ltd (“Company X”) is a UK-based healthcare information and communication technologies (ICT) solutions provider. The organization was concerned about the possibility of a sharp decline in its share of the UK healthcare-ICT solution provider market. Company X was interested in identifying the emerging trends in the highly competitive UK-healthcare ICT solution provider market. The market is composed of such organizations as the National Health Service (NHS) Trusts (government-funded hospitals and healthcare centers) which were becoming more skeptical and demanding, both in terms of service and price for new and innovative ICT products.

To accomplish the goal of identifying the emerging trends in this highly competitive market, Company X initiated a research collaboration with the Biomedical Computing Research group (BIOCORE) based at Coventry University, UK. One of the primary objectives of the research was to investigate the efficacy of the KM paradigm for Company X in order to redesign itself to meet the changing healthcare ICT needs.

ORGANIZATIONAL BACKGROUND

Company X is a software house based approximately 40 miles west of central London. Employing 45 persons as well as a number of external associates, the company specializes in ICT solution development, ICT implementations, support services (including system and application support, telephone hotline support), training, and ICT consultancy services, all primarily for the healthcare sector.

Most of the business solutions provided by Company X are based on the Microsoft Windows platform and on Web browser technologies. The company has extensive experience in integrating Web browser technologies with information databases. The company prides itself on the fact that by providing unique customized Web-based ICT solutions and database technologies, it is able to ensure that its clients have strategic and operational advantages.

Provision of such high-quality customized ICT solutions necessitates Company X to work in close collaboration with its clients. As a result, the company has considerable contacts with a wide cross section of the community (such as social services, NHS Trusts, GP practices, councils, care agencies, and charities).

Company X was started approximately 12 years ago by a managerial team that had close ties with the SQLBase development team at ORACLE. The Company X managerial team was responsible for introducing SQLBase into the UK. The company is almost entirely owned by its employees, and all research and development at Company X is remunerated from income generated from its consultancy services.

The original Company X business plan was to focus on the development of client-server solutions using Microsoft Windows, SQL, and information databases. Company X is also a synergy partner of Centura Software (formerly Gupta), an ORACLE reseller, an Informix business partner, and offers the services of Microsoft-certified trainers. Company X is also a Microsoft healthcare solutions partner. Company X also has an

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