Chapter X

To Ease the Dilemma of Help Desk: The Application of Knowledge Management Techniques in Manipulating Help Desk Knowledge

Nelson Leung, University of Wollongong, Australia

Sim Kim Lau, University of Wollongong, Australia

Abstract

Information technology has changed the way organizations function. This resulted in the reliance of help desks to deal with information technology related areas such as hardware, software, and telecommunication. Besides, the adoption of business process reengineering and downsizing has led to the shrinkage of the sizes of help desks. Consequently, the help desks have to cover more information technology products and resolve more technical enquiries with less staff. Thus, the outcome is clear that users have to wait comparably longer before the help desk staff are available to offer assistance. This chapter describes the development of help desk,
ranging from help desk structures to support tools. This chapter also discusses the application of knowledge management techniques in the development of a proposed conceptual knowledge management framework and a proposed redistributed knowledge management framework. While the conceptual knowledge management framework proposes a standard methodology to manage help desk knowledge, the proposed redistributed knowledge management framework allows simple and routine enquiries to be rerouted to a user self-help knowledge management system. The proposed system also enables help desk to provide technical knowledge to users 24 hours a day, 7 days a week. Regardless of time and geographical restrictions, users can solve their simple problems without help desk intervention simply by accessing the proposed system through portable electronic devices.

Introduction

In the past two decades, the emergence of information technology (IT) has converted a large part of organizational activities from manual- and paper-based to automatic- and electronic-based. Such a conversion not only increases the complexity of IT infrastructure, but also increases the coverage of help desk on software, hardware, network, and other IT related areas. It is quite common for a single help desk to cover hundreds of thousands of software, hardware, application programs, and network connections, and sometimes it is difficult even to memorize all those names. What exacerbates the situation is the wide adoption of management methodology such as business process reengineering and downsizing. This leads to the shrinkage of the size of help desk because the overall budget has been reduced. This also leads to the loss of priceless knowledge considered crucial for the daily operation within the help desk boundary, because a significant number of experienced help desk staff has been reduced. The consequence for more service with less staff is quite obvious: a user has to wait comparably longer before a first level operator is available. In addition, the help desk staff are no longer available for high-level and proactive support activity or training. According to a research conducted by the Help Desk Institute (Broome & Streitwieser, 2002), most respondents in the help desk industry have reported that their call volume has been increasing every year for the past 10 years. Heckman and Guskey (1998) confirm that “help unavailable when needed” is the major reason for service delivery failure in the help desk, which in turn leads to user dissatisfaction.

Help desk experts and academic researchers continue to look for ways to relieve the above burden, and the effort includes development of systems, support structures, and models, but the hard work seems in vain. What goes wrong? Humans always use reflective design concepts as a method to develop a system; in other words, we tend to solve a problem based on past experience and conscious reflection without
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