Departure of the Expert Systems Project Champion

Janice C. Sipior
Villanova University, USA

INTRODUCTION

This article discusses the expert system (ES) project champion by examining the experiences of Ciba-Geigy Corporation with an ES project, impeded by the departure of the project champion. The OpBright Expert System, developed to support the identification of appropriate optical brightener products by sales representatives, was intended to provide a competitive advantage through superior customer service. With the promotion and transfer of the vital force committed to the project's success, the ES encountered a stalemate. The difficulties in maintaining momentum for the ES without a project champion are discussed. Finally, suggestions are presented to guide organizations away from the same fate.

BACKGROUND

The role of project champion has been recognized as vital to successful project development since the time of Schon's (1963) seminal work. A project champion for information systems is defined as "a key *individual*, whose *personal* efforts in support of the system are critical to its successful adoption" (Curley & Gremillion, 1983, p. 206). The project champion, for ES projects in particular, is recognized as critical to the successful application of this technology (Hayes-Roth & Jacobstein, 1994; Sipior, 2000: Wong, 1996). Champions of ES projects differ from those of other projects due to the necessity to identify, document, and distribute knowledge and expertise, facilitating knowledge-sharing. The characteristics of project champions are discussed in the next section.

Formal Position

A project champion is frequently an executive from the area of application (Willcocks & Sykes, 2000), but may come from external organizations, such as a consultants or vendors (Thomas, 1999). Champions may be managers (Beath, 1991); or hold other formal positions (Mayhew, 1999; Pinto & Slevin, 1989; Thomas, 1999). Surprisingly, champions rarely come from formal IT functions (Martinsons, 1993; Willcocks & Sykes, 2000) and may even view IT managers as too conservative, adversaries to technological innovations, and even inept (Beath & Ives, 1988). Rather than being assigned to the role, interest and personal conviction to a project compel the champion to emerge (Pinto & Slevin, 1989; Schon, 1963). Formally appointing an individual could actually lead to his demise (Howell & Higgins, 1990). Once convinced, the champion exhibits an entrepreneurial spirit (Bolton & Thompson, 2000; Pinto & Slevin, 1989; Schon, 1963).

Leadership Qualities

The champion tends to go well beyond job responsibilities, and may even go against management directives (Beath, 1991; Curley & Gremillion, 1983). Champions are characterized as more than ordinary leaders. They exhibit transformational leadership behaviors (Howell & Higgins, 1990). Such leadership is particularly valuable for implementing systems intended to bring about organizational change (Beath, 1991; Landers, 1999), such as redefining responsibilities, realigning lines of authority, shifting power centers, and adjusting reward schemes. As knowledge repositories, ES certainly has the potential to invoke change of this nature.

Base of Power

Some level of power is held by champions (Mayhew, 1999; Pinto & Slevin, 1989), attributable to formal position or personal relationships. Diminished power can result in project failure (Scott & Vessey, 2002). Champions are perceived as influential or prestigious by organizational members (Curley & Gremillion, 1983). This perception by others may be the result of a planned influence strategy to attract followers (Schon, 1963). Such influence strategies include impression building, rational justification, assertion, or persuasive communication (Howell & Higgins, 1990). Although activities of champions may be intentionally fostered, their influence tactics are not always regarded in a positive light (Beath, 1991).

Visionary Perspective for Change

The champion is willing to put himself on the line, risking his reputation, to complete the project. The champion serves

as a visionary and directs his energies to bring about change to achieve that vision (Landers, 1999; Willcocks & Sykes, 2000). Primary among the influence strategies is persuasive communication (Sumner, 2000). The vision must be clearly communicated in order that others understand and support the vision (Kotter, 1995). An unrealistic or misunderstood vision can result in failure well after the project is underway (Royer, 2003).

A CASE STUDY OF THE PROJECT CHAMPION AT CIBA-GEIGY

Ciba-Geigy Corporation, an international chemical manufacturing firm headquartered in Basel, Switzerland, continually strives to gain market position by fostering their progressive image. Ciba-Geigy emphasizes customer service, especially important to the Dyestuffs and Chemicals Division. This division produces over 2,000 products including fabric dyes, optical brighteners, and industrial chemicals, representing approximately 20% of corporate sales. The OpBright Expert System, developed to support the identification of appropriate optical brightener products, was championed by the vice president (VP) of the division as providing benefits realizable from managing internal knowledge. The VP was convinced, as was found in previous research, that effective knowledge management can impact business performance (Alavi & Leidner, 1999; Hansen, Nohria, & Tierney, 1999; Zack, 1999). Included among the anticipated benefits of OpBright are gaining competitive advantage, faster response to customers, consistent quality customer service, training new salespeople, and managing product expertise, as discussed in the following sections.

Gain Competitive Advantage

As a leading dyestuffs and chemicals producer, Ciba-Geigy recognizes the value of IT as an important means for gaining competitive advantage. Continually striving to gain market position by fostering their progressive image, Ciba-Geigy has emphasized the need to utilize IT in direct marketing. The use of laptops by the sales force, championed by the VP, provides a highly visible means for projecting this image as well as enhancing sales force performance.

Respond More Quickly to Customers

Improved communication between the sales force and the division office, in terms of such factors as speed, receipt and response, and content completeness, was realized through the use of laptops by the sales force. For example, access to the online order processing inventory and sales service system enables sales representatives to complete a sales transaction

more quickly, increasing employee productivity and providing more responsive and effective customer service. This taste of success led the VP to seek further improvement. In informal meetings with the corporation's computer vendor, IBM, the VP became convinced that customer support could be enhanced through the implementation of an ES, a recognized benefit of expert system applications (Mattei, 2001).

Provide Consistent Quality Customer Service

The VP had the insight to identify the importance of offering fast, expert advice regarding the appropriate use of optical brighteners for individual customer's applications at the time of on-site sales calls. Optical brighteners are used for a wide variety of end-products. For textiles, paper products, and detergents, optical brighteners are applied to enhance coloring, that is, to make "whites whiter and brights brighter." Non-textile applications include testing for leaks, such as those in automotive parts. Salespeople are thus challenged to make appropriate and specific recommendations concerning a wide range of applications, wherein the factors to consider can vary widely. The inability of a salesperson to answer customers' questions can result in delayed or lost sales. Recognizing this impact, the VP championed the expert system as a means of increasing sales profitability. Individual customer questions could be addressed on the spot while maintaining consistency and quality in responses.

Train the Sales Force

By managing and distributing knowledge about optical brightener product features, areas of application, and troubleshooting solutions, the sales force is able to develop a greater understanding of the optical brightener product line and technical characteristics. New salespeople benefit by having unconstrained access to a "technical expert". Sales force training is thereby enhanced during formal training sessions and while on the job.

Manage Critical Product Expertise

The VP envisioned an entire family of ES, for all optical brightener applications, would be developed in the future. The domain for the first ES was appropriately narrowed to include the application of optical brighteners to fabrics only. An expert in this area of application was identified. This individual has extensive experience with the optical brightener product category, having served as a customer support technician and troubleshooter for over 15 years. His knowledge about customer requirements, properties of fabrics, and application processes enabled him to recommend appropriate optical brightener products based on features of

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