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VETSNET: A CASE STUDY OF ESCALATION AND DE-ESCALATION

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Abstract

Information systems development projects are more likely to fail than to succeed. One reason for this failure is a manager's tendency to maintain commitment to projects despite receiving negative feedback. This phenomenon is known as escalation of commitment to a failing course of action, or simply escalation. This paper examines the case of escalation and de-escalation of commitment in the development of the Veteran's Service Network (VETSNET) system for the United States Veteran's Administration (VA). An exploratory content analysis of secondary data sources is performed to identify factors promoting escalation. Consistent with prior literature, support was found for project, organizational, and contextual determinants of escalation. The three relevant project factors were a perceived lock-in effect due to few alternatives, the long-term nature of the project, and ambiguity in the project's requirements and schedule. Three organizational factors that contributed to escalation were poor software capability of VA, lack of dedicated leadership, and pervasiveness of an institutionalized "One VA" vision. Contextual factors in the form of congressional laws and oversight also impacted the VETSNET case. De-escalation was triggered by publicly committing to a deadline and changing top leadership.

Keywords: escalation, IS development failure, case study, content analysis

Introduction

Information systems development projects are more likely to fail than to succeed. In fact, only 23% of Information Technology (IT) projects meet their targets in terms of budget, schedule, and functionality (Standish 2001). The United States government is a frequent offender when it comes to IT project failure. For example, during the 1980s, there were three failed attempts at revamping the IRS computer information systems at a cost of over $3 billion. Despite these massive losses, the IRS began yet another IT modernization project in 1997 with a 15 year schedule and a $5-7 billion budget (Nelson and Ravichandran, 2004). Given the objective facts, management's decision to continue with such projects seems irrational. The objective of this research is to use content analysis to examine another case of IT project failure within the US government – the development of the Veteran's Service Network (VETSNET) system. The research question addressed is: What factors contribute to escalation and de-escalation occurring in government information systems development?

Background

Escalation occurs when there is "repeated decision making in the fact of negative feedback about prior resource allocations, uncertainty surrounding the likelihood of goal attainment, and choice about whether to continue" (Brockner 1992, p. 40). In these projects, management receives negative feedback but still remains committed to continuing the project due to other irrational pressures. Ross and Staw (1993) have identified five factors that contribute to escalation: project, psychological, social, organizational and contextual factors (see Table 1 for a description).

VETSNET as a Case of Escalation

In 1992, the United States Veteran's Administration (VA) initiated development of a customized system for processing compensation and payment to veterans. This modernization project was known as the Veteran's Service

Network (VETSNET) system and was intended to drastically reduce claim processing time from an average of 151 days (AIMD-94-26, p. 3). A look at the history of VETSNET development shows that it meets the three criteria for escalation: continued allocating of resources, negative feedback, and uncertainty over project. Although VETSNET was originally scheduled for completion in May 1998 with a budget of $8 million, management continued allocating resources to the program for an additional six years. After spending over $40 million on the project, the first full field test of the system was installed at a single regional office in April 2004. The Veteran's Administration (VA) continued requesting money for this project to facilitate nationwide deployment by December 2005.

During this period, there was negative feedback to the VA from a variety of sources. A 1997 report by the National Academy of Public Administration advised that the VETSNET program be terminated (NAPA 1997). A 1998 VA in-progress review team also questioned the logic of continuing (VA, December 1998). Finally, the GAO issued no fewer than 12 reports critical of the VA's IT management. These negative reports as well as a history of prior software development failure contributed to a sense of uncertainty regarding the project's potential for success.

Table 1. Determinants of Escalation

Determinant	*Description*
Project	Objective features of the project that impact the expected profitability or utility (Staw 1997)
Psychological	Errors in judgment that cause managers to believe continuation will lead to success (Brockner 1992). Reinforcement traps (Ross and Staw 1993)
Social	Impact of interpersonal relationships on decision making; Decisions as social events (Staw 1997)
Organizational	Level of Political support, Institutionalization of project, and side-bets made on behalf of the project (Ross and Staw 1993)
Contextual	External Parties pressing commitment to a course of action (Staw 1997)

Methodology

Despite several years of laboratory study, there have been only a few information systems studies that have analyzed a specific field case in terms of escalation theories (Keil 1995; Newman and Sabherwal 1996; Montealegre and Keil 2000; Nelson and Ravichandran 2004). The primary method used to study escalation and the impact of these factors has traditionally been through laboratory experiments using student subjects. While increasing internal validity, the external validity of the findings cannot necessarily be assured. Several leading researchers have called for empirical studies that validate the factors posited in the conceptual model, look for the relative salience of these factors at various stages, and connect with the real-world of the field. Staw stated "I believe the completion of additional field studies, both quantitative and qualitative in nature, should be given our highest priority" (Staw 1997, p. 211-212).

Content analysis of secondary documentation was used to understand the details of the VETSNET case. Traditional content analysis involves four steps for analyzing textual data: creating a coding scheme, applying the coding scheme to the data, counting the frequency of these codes, and testing hypotheses (Lacity and Janson, 1994). A preliminary list of twenty-four codes was generated based upon the review of respect to the escalation factors cited in the literature. The documents analyzed included a mixture of GAO reports, congressional testimony, and VA internal reports. After compiling this initial list of documents, the coding scheme was applied on a sample of seventeen of the twenty-five identified documents using the qualitative software tool, ATLAS/ti. As content analysis proceeded, the number of codes rose to 83. Some of these codes were escalation factors while others just categorized the background information about the case. There were a total of 354 text segments tagged. Where possible, the new codes were then mapped back to the five original escalation determinants.

Factors for Escalation and De-escalation

Although social and psychological factors were likely an influence promoting escalation, the types of documents available publicly did not allow us to examine this. This section describes the Project, Organizational and Contextual factors that promoted escalation in the VETSNET project as well as the triggers for de-escalation.

Project Factors

Three project factors described previously in the literature contributed to escalation in the VETSNET case: the perceived lack of alternatives, the view of VETSNET as a long-term investment, and the ambiguity associated with the project. The VETSNET project was being developed to replace the aging Benefits Delivery Network – software developed in the 1980s and patched together to become Y2K compliant. Both maintenance and new enhancements on the old system were becoming more difficult. The March 1998 VA In-process review team noted:

> "The existing claims tools and systems are antiquated and do little to support effective
> operations… In many ways, it is precisely the urgency of the need that dictates that
> VETSNET proceed" (VA, March 1998, p. 11).

Without a viable alternative to VETSNET, decision makers were locked-in to continuing the project.

The long-term nature of the project -- in this case, a two year timeframe -- promoted escalation as well. Staw and Ross (1993) explain that long-term projects, particularly research and development projects, can lead to escalation because there is a longer payback period expected.

Ambiguity in the project's requirements and schedule also leads to escalation. The project suffered from scope creep, a gradual increase in expected system functionality without adjusting the project plan. Some groups thought the system was supposed to just replace the old BDN, while others saw this as an opportunity to incorporate new functionality specified by the on-going business process re-engineering effort (VA, March 1998, p. 3). Another source of constant change was the scheduled completion time which moved at least 5 times during the life of the project. The moving dates obscured the fact of just how late the project really was.

Organizational Factors

Three organizational factors that contributed to escalation were poor software capability of VA, lack of dedicated CIO, and pervasiveness of the "One VA" vision. In 1996, the GAO reported that the VA was operating at Level 1 (chaotic) on the Software Engineering Institute's Capability Maturity Model (CMM). The VA was particularly weak in project management, tracking, and reviews. Because the organization did not have repeatable processes in place to ensure software success, the GAO recommended stopping all software development activities until the VA had at least reached Level 2 (repeatable) on the CMM.

> "Major system development initiatives … such as ... VETSNET … should be
> reassessed for risk of potential schedule slippage, cost overrun, and shortfall in
> anticipated system functions and features. Shortcomings such as these are more
> likely from organizations with a software development maturity rating below 2..."
> (GAO-96-90, p. 10)

The VA disagreed with this recommendation, however, and decided to continue.

Another factor that weakened the VA was that during the initial stage of the VETSNET project there was no dedicated Chief Information Officer. Throughout the 1990s, a single individual served as both CIO and Chief Financial Officer. A source interviewed by GAO indicated that "VA's CIO is unable to get involved in the normal, day-to-day business of a CIO unless a problem arises that absolutely demands his attention." (GAO-98-154, p. 17) In this same report, the acting VA CIO admitted to a lack of information technology experience. Instead, he relied on his Deputy CIO who expressed frustration over a lack of authority to make decisions in the organization. Although the VA approved a separate CIO position in 1998, it took another three years before this position was filled by Dr. John Gauss in July 2001.

Finally, evidence that the VETSNET project became institutionalized promoted project escalation. From its beginning, VETSNET was linked to the VA's strategic vision of "One VA", an effort to increase customer service

to veterans by integrating the three divisions of the VA – Veterans Benefits Administration (VBA), Veterans Health Administration (VHA), and National Cemetery Administration (NCA). This vision became a driving force in IT decision making and was frequently mentioned in GAO and VA documents:

> "IT is essential to VA's ability to effectively serve the veteran population and is the cornerstone of the department's "One VA" vision of providing seamless services to veterans and their families"
> (GAO-01-550T, p. 1).

Contextual Factors

In addition to project and organizational factors, contextual factors in the form of congressional laws and oversight also impacted the VETSNET case. The Clinger-Cohen Act became law in 1996 and required governmental agencies to appoint a Chief Information Officer (CIO), engage in business process re-engineering efforts prior to expending additional IT funds, and design and implement an enterprise architecture. Many of the GAO reports complained about the VA's non-compliance with this law. Therefore, the VA was required to divert resources to addressing these concerns.

De-escalation Factors

In 2001, a series of events occurred that triggered de-escalation, or the breaking of the escalation cycle. Two of the de-escalation triggers identified by Montealegre and Keil (2000) occurred in the VETSNET case as well: publicly state limits to project and change in top management. The first trigger involves publicly stated limits beyond which the project will be terminated. In his April 2001 congressional testimony, VA Secretary Prinicipi publicly called for an evaluation of the VETSNET program that would determine whether it would continue:

> "We will not throw good money after bad. If this current version of VETSNET doesn't meet our needs for the next several years, we will terminate its development. Conversely, if it does meet our needs, we will not hold past failures against it, and we will go into production with the system" (Principi, 2001, p. 4).

The next trigger was a change in top management or project championship. When Dr. Gauss was confirmed as the new VA CIO in July 2001, he centralized IT decision-making, created a temporary freeze on IT spending until the enterprise architecture was completed, and increased VETSNET management controls. These moves were instrumental in getting the VETSNET program back on track. A new target of a full systems test by April 2004 was established and successfully reached.

Conclusions

This paper has examined the case of escalation and de-escalation in the VETSNET project from 1986 to 2004 using secondary data sources. Consistent with prior literature, support was found for project, organizational, and contextual determinants that promoted escalation. However, the data sources used in this case study prevented finding support for the social and psychological determinants of escalation.

As with any research technique, ensuring validity and reliability are important. Validity in content analysis is concerned with ensuring the appropriate linkage between the coding scheme and theory under consideration (Jauch, Osborn, and Martin,1980) and assessing the quality of data collected by others (Jarvenpaa, 1991). There are close ties between the coding scheme and escalation theory. Reliability in content analysis is usually demonstrated by using multiple coders and comparing their coding choices. At least two-thirds agreement among coders would indicate a satisfactory level of inter-rater reliability (Jauch et. al., 1980). A limitation in this research is that a single coder read and analyzed the reports.

These limitations suggest starting points for future research. One extension of this project would be to directly interview personnel at the Veterans Administration regarding the project. A second enhancement would be to complete coding of all source documents found and to use multiple coders. Finally, it would be interesting to compare and contrast the results found here with other government information system projects. Common patterns of both escalation and de-escalation could be identified and prove beneficial to both researchers and practitioners.

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