DECISION SCIENCES INSTITUTE
Enterprise Software Solutions: How Do Steering Committees Steer?

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ABSTRACT

Despite years of practice and significant cost, companies seldom realize the full benefit of an enterprise systems deployment. Despite their critical importance to a business, over 50% of enterprise system deployments are failures. This research identifies the factors that contribute to the performance of an enterprise systems steering committee as a governance and information processing body. Although steering committees play a significant role in guiding complex and costly enterprise software implementations, the performance factors leading to their success are not fully understood. This research finds that a steering committee is more impactful in deploying successful enterprise-wide solutions when it displays a multileveled, interrelated grouping of foundational, structural and action-based factors that take effect in sequence during the project. The foundational elements initiate the deployment, the structural factors provide an organizing logic, and the action factors are necessary for taking the project through to successful deployment. Sub elements for each of the three (foundational, structural and action) factors are also identified.

KEYWORDS: Enterprise Resource Planning (ERP); implementation methods; critical success factors (CSF’s); IT governance; critical failure factors (CFF’s); steering committee; enterprise systems; project performance; decision processes; configuration; business-unit committee; executive committee, information processing view.

INTRODUCTION

Efficiency and effectiveness are the primary goals of any corporation because they reduce waste and increase productivity; yet both remain tantalizingly elusive in many ways. The fields of information technology (IT) and enterprise solutions (ES) are major areas where this disparity is keenly felt; companies often spend large amounts of money without getting desired results (Chan & Reich, 2007; Rettig, 2007). This inefficiency may stem from any number of problems—both company-specific, as well as secular—so there certainly is not a one-size-fits-all solution for firms looking to address the issue. While research suggests that corporate governance in the form of enterprise steering committees is an important component of enterprise systems deployments, these groups are challenged by how to successfully
implement complex enterprise systems in a way that realizes the promise of efficiency and effectiveness. A steering committee is a high-level group of representatives from multiple divisions, functions and external agents (e.g. consultants or advisors) who link IT and business strategy by selecting projects, setting strategic direction, and making strategic decisions during critical systems implementations (Karimi, Bhattacherjee, Gupta, & Somers, 2000; McKeen & Guimaraes, 1985; Nolan, 1982; Shakir, 2001). An enterprise system is a tightly integrated software solution that links several functional applications within a single solution eliminating the need to manually enter redundant information (M Lynne Markus & Tanis, 2000). These systems promise seamless integration across transactional level data from various functions to summarized reporting levels where management can analyze results (M Lynne Markus & Tanis, 2000). Enterprise systems support activities across the entire organization and can include both internal and external customers. The enterprise systems market was estimated to be a "$47.6 billion industry by 2011" with high failure rates that warrant academic research into enterprise systems leadership (Morris & Venkatesh, 2010, p. 144: 144). This research explores the factors that contribute to the performance of enterprise systems steering committees, as experienced by steering committee participants. Since steering large, complex projects that span the entire organization requires executive leadership, this research will complement studies that exist which explain steering committee decision-making processes and IT governance.

While enterprise solutions promise transformations in how companies operate, it is estimated that, in reality, more than 50% of enterprise resource planning (ERP) implementations fail (Hong & Kim, 2002; Rettig, 2007). Chan points out that due to poor alignment, organizations continue to experience sub-optimal enterprise system performance despite heavy information systems (IS) investments (Chan, 2002). This is especially disappointing as expectations for success are extremely high, given the amount of technology spending that is required to meet the promise. Thus, companies are often left unsatisfied without understanding why or how they can avoid the problem in the future (Chan, 2002; Rettig, 2007). In fact, the root causes of these failed expectations are not fully understood, and a research gap exists. Steering committees have the potential to improve "user-designer communication" by using a sociotechnical approach which combines the technical aspects of an implementation drawn from computer science, management science and operations with the behavioral aspects drawn from economics, sociology, and psychology thereby increasing the possibility for enterprise solution success (Andonie, Russo, & Dean, 2005; Laudon & Laudon, 2004).

This research explores the factors that enable steering committees to positively influence the outcome of an enterprise systems implementation. The literature is conflicted in regards to the factors that influence steering committee performance and consequently the outcome of a project. Although much literature on enterprise failures exists, few studies exist which explain why some steering committees are more effective than others. The focus of this research is to better understand the performance of enterprise steering committees with regards to information technology projects. We began this study by reviewing the academic and practitioner literature around enterprise implementations and steering committees as a governance board. We discuss our methodology and the challenges involved in this area of study due to the lack of literature and access to key executives. We describe our six findings and discuss how they were developed. Finally, we identify the limitations of this study and conclude with our thoughts on the implications for practitioners and for future research.

LITERATURE REVIEW

This section identifies key academic literature, theories, and practitioner articles that seeded our research and shaped the research question. Some research exists that explores steering committees and the decision making process, but it is limited in that just a few case
studies exist to back up the findings. A tremendous research gap within the literature exists because many of the studies only validate that steering committees are either, one of many critical success factors (CSF) of an implementation, exist to establish IT strategy, or—in just one study—influence to outcome of a project. Also notable is that much of the existing research focuses on project management rather than steering committees. Project Management is more tactical in nature and has a completely different role than steering committees. With the understanding that the role of project management and the steering committee is different, certain aspects of Kerzner’s 16 points of project management maturity apply better to the steering committee members than to project managers who may not have the executive power needed to effect change (Kerzner, 2013).

Much of the existing research establishes the CSF’s of executive leadership and the role of the CEO on enterprise projects, but we posit that steering committees drive projects to success or failure. We found that steering committees exhibit significant influence during the initialization, planning, staffing, implementation, deployment, and acceptance phases of projects as is indicated by the existing research (Doll & Torkzadeh, 1987; Muscatello, Small, & Chen, 2003; Plant & Willcocks, 2007; Robey & Markus, 1984; Somers & Nelson, 2001; Venkatesh & Davis, 2000). Somers and Nelson (2004) found that steering committees are a critical component throughout the first five stages of an enterprise system deployment, and are most important during initiation and acceptance (≥80% of respondents considered this factor important). Not surprisingly, a research gap exists linking steering committee performance to the rather recent agile implementation method for enterprise systems. This study considers a steering committee’s performance throughout the six classic stages of a project and within the agile development projects that are becoming commonplace. Agile development is defined by Dybå and Dingsøyr as using an evolutionary delivery model where “high-quality adaptive software is developed by small teams using the principles of continuous design improvement and testing based on rapid feedback and change” (Dybå & Dingsøyr, 2008, p. 4: 4). Within the literature, notable examples exist which highlight the problem of practice, discuss failed ERP implementations and reinforce our findings.

Example #1 – In a study of DistCo (a medium sized distribution company with 300 employees) Viehland and Shakir (2005) found that the company envisioned a “vanilla implementation” of enterprise software, not understanding the complexities of their business model and how the software aligned with their requirements. The implementation cost $3 million and ran from 1998 to July of 2002 with continual process changes, delays caused by organizational changes, unexpected costs and software customizations (Viehland & Shakir, 2005).

Example #2 – At McKesson (a global healthcare provider with current sales of $122 billion), management found itself facing three fundamental challenges with its well-documented enterprise implementation that required them to completely change direction. A company executive, VP Nettles, observed that “we didn’t have the buy-in from the people in charge of the business processes that feed the R/3 financials, so you couldn’t get them to install those modules. Our costs went up, but nothing got implemented” (B. Davis & Wilder, 1998, p. 4: 4). The company needed to adjust scope and reduce the number of modules being implemented, and create an effective steering committee. They scaled down the 40-member steering team to four business executives (CIO Jim Watkins, CFO Rich Hawkins, the controller, and the VP of shared financial services), changed implementers, and then reorganized the project management team (B. Davis & Wilder, 1998). In this case, the failure and adjustments illustrate how steering committees can be ineffective on many fronts. Similar to example one, we see that a “false start” was made, but McKesson was able to recover and make a “strong finish” through strong executive leadership (B. Davis & Wilder, 1998, p. 4: 4). McKesson is the only company that attested to retooling the enterprise steering committee.
This section describes the key theories that underpin this research, which include Stewardship Theory (ST) and the Punctuated Socio-Technical Change Model using an interpretive approach. At an enterprise level, success studies “build primarily ‘horizontal’ descriptive or prescriptive process explanations of IS change” (Lyytinen & Newman, 2008, p. 592). Enterprise systems-based theories help us understand steering committee successes because they define the objectives from which these groups can be measured. Broader studies that examine IT system success from a quantitative perspective are leveraged to understand the components of IT systems success. Building on these theories of success it is equally important to understand what failure means, so in our research we also leveraged empirical studies of IS failure by Lyytinen & Hirschheim (1987) to understand the historical experience of enterprise failures in business.

Stewardship theory applies to company agents who have similar behavioral incentives, work toward the goals of the organization and the principal, and are not self-interested. As a rational actor, the principal will choose to work with a steward as opposed to a non-aligned agent (J. H. Davis, Schoorman, & Donaldson, 1997). Stewardship theory has a strong role in explaining the performance of a steering committee and greatly influences the actions of these groups. In the McKesson example, we see that Stewardship Theory played a key role in choosing the steering committee members once the original implementation failed. At the steering committee level Stewardship Theory helps us understand how these groups make decisions.

Enterprise system change or success is a complex process that impacts numerous interdependent systems in a manner that is often unforeseen (Lyytinen & Newman, 2008). Because non-enterprise based theories “mostly focus on one level of change they tend to forego interactions with multiple systems and the organizational environment”, which is fundamental in enterprise systems research (Lyytinen & Newman, 2008, p. 592). An enterprise system is a “work system” that “evolves over time through planned change and unplanned adaptations” and are best studied using grounded research (Alter, 2002, p. 2). The Punctuated Social-technical IS change (PSIC) Model builds upon this work system approach and allows for an interpretive study of how enterprise systems steering committees can achieve success (Lyytinen & Newman, 2008). By definition enterprise system success involves the reconfiguration of a “work system” by integrating an overarching enterprise technology which governs and orchestrates many sub-systems (Lyytinen & Newman, 2008, p. 592).

Broader studies of IT success by Seder and Gable help us understand the longer-term success factors of enterprise implementations (Sedera & Gable, 2004). Success from an IT perspective is not clear and numerous complimenting studies have tried to explain IT success (Delone, 2003; Gable, Sedera, & Chan, 2008; Lyytinen & Hirschheim, 1987; Sedera & Gable, 2004). Sedera and Gable’s longitudinal study yielded four key components of IT success which are system quality (1), information quality (2), individual impact (3) and organization impact (4) each with a unique set of contributing factors (Sedera & Gable, 2004). Sedera and Gable’s empirical study builds upon numerous IS success studies but most notably Delone and McLean’s “10 year update” which is a “success model that indicates that causality flows in the same direction as the information process” (Delone, 2003, p. 15; Sedera & Gable, 2004).

However, we posit that enterprise systems success is a dynamic, interrelated process that evolves through guidance of a steering committee and grapples with the success criteria that Sedera and Gable articulated.

While understanding success can be complex, understanding the notion of IT failure is equally difficult. Several notable studies on IT failure exist that explain multiple aspects of failure (Lucas, 1975; Lyytinen & Hirschheim, 1987; M.L. Markus & Robey, 1983; Sauer, 1993). Perhaps, a better definition of IT success may be the absence of IT failure (Lyytinen & Hirschheim, 1987). Lyytinen and Hirschheim found that IT failure is a “multi-faceted
phenomenon of immense complexity which defies any simple solution” (Lyytinen & Hirschheim, 1987, p. 294). Lack of IT failure may also depend on what Marcs and Robey define as either stakeholders who “intentionally misstate their own needs to ensure system failure” to achieve a political end or a “failure in coordination” (M.L. Markus & Robey, 1983, p. 27). A successful steering committee will require the absence of failure to achieve success.

In 2009 Lechler and Cohen discussed how steering committees are an important in “building and sustaining of an organization’s project management capability” and described steering committees as a “linking mechanism” (Lechler & Cohen, 2009, p. 42: 42). Lechler and Cohen further discussed how steering committees could have both positive and negative effects on a project which reinforces the problem of practice. Lechler and Cohen felt a research gap existed and that a study should be conducted to better understand “the effects of steering committees in more detail” (Lechler & Cohen, 2009, p. 42). This particular research contributed to our study in that it reinforced our premise that limited research exists; it defined some steering committee members and validated that these groups do influence projects. The challenge with this study is that it was limited to four companies and the authors themselves noted that the study was only a “first step” to understanding the impact of steering committees on project success (Lechler & Cohen, 2009, p. 51). Our study extended much of the enterprise literature and confirmed aspects of the steering committee literature.

RESEARCH QUESTION

How do steering committees understand and process information to control enterprise system implementations and achieve success? Steering committees have been identified as being one of several contributing elements to success of enterprise systems implementations, but not much research addresses their role in IT success (Lechler & Cohen, 2009; Somers & Nelson, 2001; Somers & Nelson, 2004). The limited research that exists on steering committees as a unit of analysis and the factors that result in poor or exceptional performance, only touches the surface of the topic (Lechler & Cohen, 2009). This research explores the factors that affect steering committees as an effective and efficient IT governance body.

METHODS

In order to gain an understanding of what makes steering committees effective, we conducted research across a myriad of industries for varying sized organizations. The evaluation of steering committee performance was conducted at an individual level using a qualitative, grounded theory approach formulated by Glaser and Strauss in 1967 to elicit actual experiences that steering committees witnessed throughout numerous implementations. Qualitative research methods are better structured for understanding incidents and the actions of a steering committee over the course of a project or series of projects because it allows the researcher to build theories as the study evolves through interaction with each type of person who sits on a steering committee. “Grounded Theory explicitly involves generating theory and doing social research as two parts of the same process” which was ideal for research on steering committees since not many studies exist in this area and we can learn from actual experiences of the selected steering committee members (Glaser, 1978, p. 2: 2).

Grounded Theory allows us to understand three of the key components Charmaz defines as grounded theory: social, historical, and interactional context (Charmaz, 2006). Using the grounded approach, we learned from the lived experiences of our research participants who witnessed the social interaction on the numerous committees for which they were involved.
Charmaz also discussed the local nature of grounded theory which we interpreted and interpolated as being representative of complex organizations which may be global. Grounded Theory, as Charmaz outlined, allows us to compare data as the research is conducted through a process of initial, focused, axial and theoretical coding (Charmaz, 2006). We developed and compared codes as the research progressed and our theories started to formulate.

Almost immediately, we found that steering committees varied by size and type of organization, so we grouped them by revenue for public organizations and by type if they were a non-profit organization (FIGURE 1: Company Groupings). We created these groupings to illustrate the findings in a manner that would help us understand the factors that influence steering committee performance by these groupings as opposed to assuming all findings would be valid across all types of organizations. The groupings were determined by evaluating all organizations through publically released financial and profile data. From the publically released financial data we chose revenue as a key indicator of size. From the profile data we categorized organizations by their primary function; for-profit, education and governmental. The revenue groupings generally align to common published practitioner literature which ranks companies such as the Fortune 500.

**FIGURE 1**

**Company Groupings**

<table>
<thead>
<tr>
<th>Company Classification</th>
<th>Criteria</th>
<th>Measurement</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group One</td>
<td>Revenue</td>
<td>Greater than $25 Billion</td>
<td>12</td>
</tr>
<tr>
<td>Group Two</td>
<td>Revenue</td>
<td>Between $5 Billion and $24.9 Billion</td>
<td>6</td>
</tr>
<tr>
<td>Group Three</td>
<td>Revenue</td>
<td>Between $1 Billion and $4.9 Billion</td>
<td>4</td>
</tr>
<tr>
<td>Group Four</td>
<td>Revenue</td>
<td>Under $1 Billion</td>
<td>7</td>
</tr>
<tr>
<td>Group Five</td>
<td>Education</td>
<td>Primary mission is education</td>
<td>2</td>
</tr>
<tr>
<td>Group Six</td>
<td>Government</td>
<td>State and Federal</td>
<td>1</td>
</tr>
<tr>
<td>Group Seven</td>
<td>Private</td>
<td>Private for-profit companies</td>
<td>3</td>
</tr>
</tbody>
</table>

* Based on publically reported financial and profile data for 2012

Although there are no official guidelines for who sits on steering committees, the literature review provided an initial perspective that was used as the baseline and enhanced through the iterative nature of the grounded approach. As a result of combining the steering committee roles which were developed from the literature review and qualitative study, we were able to identify key steering committee membership which is outlined in FIGURE 2: Steering Committee Roles. The roles not identified through the literature review in Figure 2 were developed through a coding exercise and after a point of saturation was reached and it became clear that no other significant roles existed within our population. Using the steering committee roles list in Figure 2, we conducted interviews that captured the lived experiences of each position. Many of the research participants were able to provide unique insight through their experiences on multiple projects, in multiple roles and while working at multiple companies.

However, it is also important to note that the literature discussed the involvement of the CEO in large enterprise implementations but this role needed to be removed from our list because we found that in groups one, two, three, five and six this was not the case. In group four the CEO may play multiple roles on a steering committee because these organizations are much smaller. This omission is notable since it was identified in existing research, but not common in practice for projects ranging between 1 million and 400 million dollars.
A bias does exist in that the role list was defined primarily from interviews with large organizations, government and private organizations and has limited input from the smaller companies in group four. Input from external executives was limited due to the strong nature of stewardship that evolved as the interview and coding process progressed.

Interviewees were chosen based on their professional backgrounds and level of experience. The research objective was to interview candidates who had greater than 10 years’ experience and who had implemented an enterprise-wide system and in many cases more than one notable implementation. Several of the interviewees had implemented projects in more than one organization and were able to discuss lived experiences in multiple organizations and from the perspective of multiple steering committee roles.

Because the research intent was not to single out any particular industry, steering committees are represented across a wide range of industries and sizes, as is shown in Figure 3.

Using axial coding “categories were related to subcategories [which] specified the properties and dimension of a category” (Charmaz, 2006, p. 60: 60). Theoretical coding followed
both the coding from the focused and axial coding to introduce theoretical as conceptualizing\(^1\) (Charmaz, 2006). The theoretical coding “specifies the relationships between categories” that we developed during the focused and axial coding.

**Sample**

Existing research on steering committees is surprisingly limited and not much is known about the factors that influence the performance of a steering committee. Of the research that does exist explaining steering committee performance, it is only preliminary and is based on just a few case studies. The intent of this research is to advance the understanding of steering committee performance by focusing on a broader group of companies and enterprise projects. We chose to focus on a select few organizations which were grouped by revenue and preference was given to those with international operations. The sample also includes organizations whose primary mission is education and governmental operations. A total of 30 interviews were conducted across six groups representing 24 companies and numerous projects. The companies are geographically diverse with significant operations in the United States, Germany and the United Kingdom with divisions spanning every major continent. The data set represents a bias towards larger organizations where a perceived need for a steering committee might exist due to the size of the systems being implemented. However, some smaller organizations were also interviewed to validate how transferable the findings are across groups. Within group five and six two of these organizations were significant in size measured by capital budget and number of employees which were equivalent or larger than group three. Group one through three represents publically traded organizations.

**Data Analysis**

Coding evolved through a systematic process using a grounded approach to data collection with validation from literature. Using initial coding, transcripts were coded line-by-line and incident-by-incident capturing memos and notes which were used to compare the experiences not only to others but also the literature (Charmaz, 2006). Through the initial coding phase, over 300 codes were identified that were substantial in nature. During focused coding, the initial codes were grouped by recurring themes and concepts that started to take form. The iterative initial and focused coding processes required constant validation and even follow-up interviews to validate the concepts that emerged. Using this process, transcripts were coded three times at which point there were only 183 initial codes.

Once the focused coding was completed, we began axial coding where the logical themes were formed and are illustrated graphically in the coding figures outlining the components of the foundational, structural and action factors (see Figures 4, 5 & 6). In Figure 5, the structural factors are decomposed into the sub-codes that contribute to the member selection, complexity, accountability and unit of collaboration factors, as referenced in Table 3. All the elements of the structural factors are interdependent. Steering committee members are more effective when accountability exists and the level of collaboration is high. Complexity, known or unknown, impacts the other factors within the structural framework. (See Figure 5). At last, we observed theoretical relationships between axial codes whereby we created foundational, structural and action based factors which interrelate in a complex and iterative manner.

From the point where we started initial coding, the researchers remained open to developing ideas and frameworks that emerged. Given the disparity between the literature and the themes throughout the coding process, we revisited the literature quite often to validate all findings. The challenge was building a theory from a very limited set of literature and determining what enterprise systems research could be applied to steering committees.
Through this process our theories emerged and we adjusted the interview protocol and target interviewees within the limits of the study to obtain theoretical saturation (Charmaz, 2006).

RESULTS

Our findings identified several interdependent complexities and progressive behaviors. The findings are listed below.

1. Our data identified that three types of steering committees are commonly deployed to process information in order to be successful. We also found common usage of sub or “working” committees to process information.
2. We discovered that steering committee performance is impacted through a multileveled grouping of factors.
3. We found that there is no evidence that steering committees need to meet more often than when critical decisions are required or the project reaches a critical transition point. Meeting when there is no information to process adds no value to the project.
4. Smaller firms may not require steering committees because use of these committees may place too great a burden on the organization.
5. Steering committees function better when there is a defined decision maker.
6. Complex interdependencies and uncertainties between factors have a causal affect and often leave steering committees grappling with their ability to process information.

Finding 1: Our data identified that three types of steering committees are commonly deployed to process information in order to be successful. We also found common usage of sub or “working” committees to process information.

(1) The fully engaged steering committee seemed to be the most effective for large complex projects. (2) The procurement only steering committee was most prevalent in organizations below $1 billion in sales and within State government (note, opportunity for further research exists at the governmental level). The procurement and (3) high level steering committees exhibit varying degrees of success and are dependent on the quality of the project management organization. In large global, complex projects the engaged steering committees were the most common and successful with the procurement and tracking style committees often failing or terminating projects. Please note that the sample code moments of steering committee types are directly transcribed from the interviews.

<table>
<thead>
<tr>
<th>Sample code moments of steering committees types</th>
<th>Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>The steering committee was really just there to say that it was not an open checkbook.</td>
<td>High level SC</td>
</tr>
<tr>
<td>International experience, it is the executive team that basically manages that company, build its culture of high level of commitment, extremely engaged. Their projects are directly associated with their objectives. It is not on a vacuum. It actually says specifically, your objective is to complete this and it is part of your... you will be evaluated based on the completion of that project. It creates a whole different dynamic for the company</td>
<td>Fully engaged SC</td>
</tr>
<tr>
<td>It was, “Can you do this?” “Yes.” Once the decision was made to go forward, then the reporting goes back to the senior</td>
<td>Procurement only SC</td>
</tr>
</tbody>
</table>
management team. The senior team, the steering committee was never a technical advisor anyway. It was more just a decision making body. Once the decision was made, their usefulness was done.

Please note that the sample code moments of steering committee above are transcribed directly from the interviews.

Finding 2: We discovered that steering committee performance is impacted through a multileveled grouping of factors.

The level one factors are made up of foundational, structural and action groupings. These groupings are defined by contributing sub-factors at level two. As a project progresses the steering committee’s level of engagement changes from foundational to structural to action. The factors start by acting independently then form relationships to other factors before becoming dependent upon one another. As the project progresses through the various stages, the factors interact differently as the steering committee builds experience, but the ability to improvise must exist if a foundational or structural change occurs. Changes to the foundation of a project may change its structural factors and consequently the actions that must be taken. For instance, a sizeable acquisition during any phase of the project may require the structure of the committee to change and force this governance group to improvise and take appropriate action to include the new business unit into the project.

Foundational factors: Consists of several contributing factors and determines the foundation for how or why a steering committee is formed. We found this group of factors to the foundation of the committee and project. Without these factors there would not be a need for the committee nor possibly an enterprise project. The foundation is supported by three groupings of sub-factors that we refer to as the core, strength and operational pillars of a productive foundation.

Figure 4 portrays the three pillars formed by the foundational factors as being the core, strength, and operational aspects of the committee. Each pillar is decomposed into their sub-elements, and within each sub-element we show the high level codes that led to the identification of the sub-elements and our clustering of them into the pillars. The twelve sub-elements composing the three foundation pillars apply sequentially over time, beginning with the initialization phase of a project. They can have a tremendous impact to the structural and action components of a steering committee and the eventual success of the project if they occur in the later phases of a project. The first three of these factors set the stage for the project; environmental factors may include events that require a project to be considered like an acquisition, scoping determine what the organization would like to accomplish and project determination is where the steering committee decides a project is worth doing.

Politics, common vision, engagement and expectation management are the next set of factors and make up the strength of the foundation. Politics is a well-known driver of any endeavor and we found that it exists from the onset of any project and either grows or dissipates as the project progresses. Interestingly we found that while a common vision must exist, what participants perceived as being common across boarders was not always the same even if the objectives were clearly stated.
FIGURE 4
The Three Pillars of a Steering Committee Foundation with Supporting Codes

<table>
<thead>
<tr>
<th>Foundation</th>
<th>Core</th>
<th>Strength</th>
<th>Operational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>The CFO quit</td>
<td>Acquisitions</td>
<td>Process &amp; Institutional Knowledge</td>
</tr>
<tr>
<td>Environmental</td>
<td>Divestitures</td>
<td>Public offerings</td>
<td>Years of organizational experience in ES development</td>
</tr>
<tr>
<td>Environmental</td>
<td>A key resource left temporarily due to health</td>
<td>Government changes requirement</td>
<td>Subject matter expertise</td>
</tr>
<tr>
<td>Project Scoping</td>
<td>Relevancy of scope</td>
<td>Timeline</td>
<td>Technical</td>
</tr>
<tr>
<td>Project Scoping</td>
<td>Timeline</td>
<td>Agreement on scope</td>
<td>Functional</td>
</tr>
<tr>
<td>Project Scoping</td>
<td>Scope creep</td>
<td>Blind on scope</td>
<td>Other</td>
</tr>
<tr>
<td>Project Scoping</td>
<td>Blind on scope</td>
<td>Re-scoping</td>
<td>Process knowledge</td>
</tr>
<tr>
<td>Project Scoping</td>
<td>Re-scoping</td>
<td>Basic project scoping</td>
<td>Company knowledge</td>
</tr>
<tr>
<td>Project Scoping</td>
<td>Basic project scoping</td>
<td></td>
<td>Project knowledge</td>
</tr>
<tr>
<td>Firm and Project Size</td>
<td>Project size</td>
<td></td>
<td>Program level knowledge</td>
</tr>
<tr>
<td>Firm and Project Size</td>
<td>Millions of Dollars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm and Project Size</td>
<td>Number of project resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm and Project Size</td>
<td>Small not requiring SC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm and Project Size</td>
<td>Project significance or top system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>Large firm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>Small firm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>Number of participants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>Global in nature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Politics</td>
<td>Political alignment throughout project</td>
<td>Advance or diminish their own position</td>
<td>Process knowledge</td>
</tr>
<tr>
<td>Politics</td>
<td>Alignment with political power circles before having SC meeting</td>
<td>Key players need to have a voice</td>
<td>Company knowledge</td>
</tr>
<tr>
<td>Politics</td>
<td>Relationships to key members of organization</td>
<td>Individual agenda</td>
<td>Project knowledge</td>
</tr>
<tr>
<td>Politics</td>
<td>Marriage to a certain enterprise system within a department</td>
<td>Political role playing due to level</td>
<td>Program level knowledge</td>
</tr>
<tr>
<td>Politics</td>
<td>Common Vision</td>
<td>Understand context</td>
<td></td>
</tr>
<tr>
<td>Politics</td>
<td>Common vision differs by level</td>
<td>Agreement on what’s right</td>
<td></td>
</tr>
<tr>
<td>Politics</td>
<td>Common vision improves as project progresses</td>
<td>True and certain common vision</td>
<td></td>
</tr>
<tr>
<td>Politics</td>
<td>Common objective and MBO</td>
<td>Common vision</td>
<td></td>
</tr>
<tr>
<td>Politics</td>
<td>Alignment speeds effort</td>
<td>Blind or flawed vision</td>
<td></td>
</tr>
<tr>
<td>Engagement</td>
<td>No engagement</td>
<td>Low engagement</td>
<td></td>
</tr>
<tr>
<td>Engagement</td>
<td>High engagement</td>
<td>Too much engagement</td>
<td></td>
</tr>
<tr>
<td>Engagement</td>
<td>Exit point</td>
<td>Engaged for monetary reasons</td>
<td></td>
</tr>
<tr>
<td>Engagement</td>
<td>Meaningful engagement</td>
<td>People don’t listen</td>
<td></td>
</tr>
<tr>
<td>Engagement</td>
<td>Seasoned engagement</td>
<td>Peer pressure</td>
<td></td>
</tr>
<tr>
<td>Engagement</td>
<td>Inquisitive type engagement</td>
<td>Meaningful engagement</td>
<td></td>
</tr>
<tr>
<td>Expectation Management</td>
<td>Failed to meet expectations</td>
<td>Met expectations</td>
<td></td>
</tr>
<tr>
<td>Expectation Management</td>
<td>Met expectations</td>
<td>Partially met expectations</td>
<td></td>
</tr>
<tr>
<td>Expectation Management</td>
<td>Reset expectations</td>
<td>Unattainable expectations</td>
<td></td>
</tr>
<tr>
<td>Expectation Management</td>
<td>Understanding the project’s true requirements</td>
<td>Keeping promises</td>
<td></td>
</tr>
<tr>
<td>Expectation Management</td>
<td>Keeping promises</td>
<td>False assumptions</td>
<td></td>
</tr>
<tr>
<td>Expectation Management</td>
<td>Trust</td>
<td>Trust in internal capability</td>
<td></td>
</tr>
<tr>
<td>Expectation Management</td>
<td>Trust in alignment of goals and objectives</td>
<td>Not believing what is presented</td>
<td></td>
</tr>
<tr>
<td>Expectation Management</td>
<td>Relationship trust</td>
<td>Trust through understanding</td>
<td></td>
</tr>
<tr>
<td>Expectation Management</td>
<td>Transparence increases trust</td>
<td>Trust is lost</td>
<td></td>
</tr>
<tr>
<td>Expectation Management</td>
<td>Trust is gained</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The final four factors of process and institutional knowledge, emotional attractors, transparency and trust are the operational factors for the foundation of the steering committee as is shown in Table 2. We found that a steering committee, like any other organization, needs expertise, rules, guidelines, voice of reason, clarity and a high level of confidence in the process and resources. We found that having process and institutional knowledge on engaged steering committees was paramount since this governance body must make informed decisions. Having a negative or positive voice at the executive team level was found to be a contributing factor to both negative and positive performance, as well as eventual acceptance of the solution. We found that in order to make good decisions, a steering committee must have transparency to all aspects of the foundational factors and project status, and that the transparency be absolutely clear of misinformation. Trust was such a strong factor that it transcends all three of the foundational, structural and action-based factors.

### TABLE 2
**Foundational Factors**

<table>
<thead>
<tr>
<th>Sample code moments of foundational factors</th>
<th>[Sub-Codes] / [Factors]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within the State you have to bid to see which vendor has the lowest price and then you have to write up a requisition and then the requisition has to be approved by like four or five different people, and then it finally goes through. Something that should normally take a day or two could take about two months.</td>
<td>[Procurement process completed and vendor notified] / [Project Determination]</td>
</tr>
<tr>
<td>It was really just starting from the ground up, you know, since we have been around for twenty-five years. They just had never done that before so that is kind of how the steering committee – well, was how the steering committee – was formed here. And they ended up making certain choices based on that committee.</td>
<td>[Years of organizational experience in ES development , Decision made] / [Process &amp; Institutional Knowledge , Project Determination]</td>
</tr>
<tr>
<td>Well we’ve probably had half-dozen acquisitions during the course of our project but probably the environmental thing that changed that happened in our projects was our CFO changed. In some ways yes, it had an impact towards the end of our project but I could see that what definitely changed the dynamic in some ways was the new CFO coming in. Other things in the environment that did change were other key people moved out and left during the middle of the project and somebody was out on maternity leave which definitely that had an impact in the project.</td>
<td>[The CFO quit, A key resource left temporarily due to health, Acquisitions] / [Environmental]</td>
</tr>
<tr>
<td>But if you worked with somebody in that role that is unwilling or thinks that in a political environment they can advance their own</td>
<td>[Advance or diminish their own position] / [Politics]</td>
</tr>
</tbody>
</table>
position while using a work product that the firm comes up with, it all falls apart.

Please note that the sample code moments of steering committee types are transcribed directly from the interviews.

**Structural factors:** Four sub-factors control the structural component of a steering committee and influence how that group will perform. Once the foundation is set we found that these structural factors impact the performance of a steering committee in both positive and negative ways. We also found that if an element of the foundation changed, then the structural component also needed to be revisited.

Complexity was found to drive unforeseen issues within the structure of a steering committee. Complexity exists in many forms but the research participants often cited the “no one having done” a certain type of deployment before and therefore the interdependencies were not known or even worse, changed throughout a project. Williams found that “as the complexity and scale of attempted projects increases, the ability to bring these projects to a successful completion dramatically decreases” (Williams, 1999, p. 272: 272).

Overall member selection was found to be the most influential factor when considering the structure of a steering committee. Member selection has strong a qualitative correlation to accountability, which is the second-most influential factor of steering committee performance. Having members who are accountable for certain aspects of a project is a significant contribution to the success of a project. One of the side benefits of this study was expanding on the existing literature to define the key roles that should exist on a steering committee. These key roles and groupings are depicted previously in Figure 2.

Lastly, we found that while complexity, member selection, and accountability played key roles, the level of collaboration that needs to exist between members was the most significant indicator of performance. Lawrence and Lorsch (1967) identified collaboration between departments as being an important factor of success and it was validated within this governance structure.
In Figure 5, the structural factors are decomposed into the sub-codes that contribute to the member selection, complexity, accountability and unit of collaboration factors, as referenced in Table 3. All the elements of the structural factors are interdependent. Steering committee members are more effective when accountability exists and the level of collaboration is high. Complexity, known or unknown, impacts the other factors within the structural framework.

### TABLE 3
Structural Factors

<table>
<thead>
<tr>
<th>Sample code moments of structural factors</th>
<th>[Sub-Codes] / [Factors]</th>
</tr>
</thead>
<tbody>
<tr>
<td>When we had disagreements as a core team, we just worked through everything. There were some tense times where we totally did not agree with what that graph said, or with the way that it should be presented. So we worked through everything and just got to better parts at the end. And all of us felt really good about that. No one felt like anyone took over or that one opinion dominated more than another. I don’t know if you are interested, but</td>
<td>[Climate of respect, Ability to voice concerns, Encouraged open communication] / [Level of Collaboration]</td>
</tr>
</tbody>
</table>
they were no men on my team. So I don't know if that makes a difference, but it probably was a different dynamic. And we were all pretty much equal.

So there was a lot of concern amongst that group that somehow this was going to be a disadvantage to them. It was going to make them look less profitable than they looked out of their back office operation. Their expectations were, "This better be something that we understand very clearly and that doesn’t disadvantage us in that way." I was the head of the implementation because I had all of the staff that was going to be the staff for the new merged company.

Well, if you’re actually going to set up a steering committee I’d tell you the same thing, which is: you need to make sure that you’re responsive to the needs of people that are going to be using the system. And, you need to have representation from both the top and the bottom – we’ll call it top and bottom – or the manager and the user. Because, while the manager has one view of it, the user might have a different view, and you’re going to get a better idea of what exactly you require or what the needs are if you go on both.

| Action factors | These factors are the things that a steering committee does with respect to steering a project. Steering committee’s timely use of action factors leads to efficiency and effectiveness. In agreement with the existing literature, we believe that steering committees have a key role in making decisions that drive a project. Existing literature has largely focused on these governance groups as using well-defined models for their decision-making process. This study confirmed that steering committees do use a decision-making process, but the exact process varies by each committee and organization. The exact process is developed through a process of trial and error. Communication is one of many change management factors that this study exposed as being significant to the performance of a steering committee. In agreement with Kerzner’s 16 points to project management maturity, organizations must “cultivate effective communication, cooperation and trust to achieve rapid project management maturity” (Kerzner, 2013, p. i: i). We found that it is imperative that, if a significant foundational or structural factor changes, the steering committee must evaluate the impact and choose a prudent course of action. Some research participants noted changes due to key member moves, acquisitions, and exposure of unknowns as requiring improvisation. |

Please note that the sample code moments of structural factors above are transcribed directly from the interviews.
In Figure 6 the decision, communication, and improvisation factors are decomposed into the sub-codes that make up each factor, which are broken down in Table 4.

### TABLE 4
**Actionable Factors**

<table>
<thead>
<tr>
<th>Sample code moments of actionable factors</th>
<th>[Sub-Codes] / [Factors]</th>
</tr>
</thead>
</table>
| Again it goes back to what my example would be, it goes back to change management. You know we continue to have problems with some of our regions. They were struggling with what they had to get done. You know, because it is with priorities and conflicts within the region. We had a region in Europe that was in the middle of implementing a new ERP platform and at the same time we had to steal resources and enough bandwidth to also play their role with what we needed to get done with our HFM project. And there were a few times where we were so stuck in not being able to move forward that we had to use the steering committee meeting as, you know, our bully pulpit, as you will, to form that alignment with the band. One situation, where it was critical for us to be able to go live on time, we were stuck and we... | [Resource prioritization, Power to make a decision] / [Decision]
| [Changing the dynamics of the meeting to achieve an objective] / [Improvisation] |
weren’t getting the answers we needed. Then, in the middle of the meeting, the CFO got his admin to get the VP on the line in the middle of our steering committee meeting. Fortunately, it was in the morning our time. If we would’ve picked them and called them on the cell pretty late in the evening in Europe… So, basically, we worked through the issue live on the spot. And definitely, improvising was not on the agenda of the meeting for the day.

What happens is, while the discussion is an ongoing discussion and the steering committee is not being effective on making a decision, on locking this down, the clock is ticking, resources are waiting, there are resources waiting for a decision, and there is a value-time component associated here that translates into additional cost, by definition.

Please note that the sample code moments of actionable factors above are transcribed directly from the interviews.

**Finding 3: We found that there is no evidence that steering committees need to meet more often than when critical decisions are required or the project reaches a critical transition point. Meeting when there is no information to process adds no value to the project.**

Having too many meetings leads to complacency and lack of efficiency and effectiveness and is a common mistake that project managers make. There is simply no reason to have unnecessary meetings as Kerzner validates by stating that “nonproductive meetings should be eliminated” (Kerzner, 2013). Steering committees should meet when a project changes phases or a substantial change occurs within one of the three level factors which are defined previously in Figure 4 and Figure 5, and here in Figure 6.

Project managers tend to use steering committee meetings as a mechanism for communication rather than as a steering mechanism. The result of doing such results in situations where members sit at a conference room table and discuss anything but the project, as evidenced by many of the interviews. Efficient and effective steering committees guide a project through action based factors because the key is to have “stakeholders that are able to make decisions and get things done.”

The three Level One factors of steering committees transcend all phases of a project and were found equally impactful in both traditional and agility-based projects. Committees that met to address notable changes in any sub-factor or when a project transcended a project phase were found to be very effective. We found a commonality across many of the committees, of scheduling meetings every two to four weeks “just because they have always done it that way.”

**TABLE 5**

<table>
<thead>
<tr>
<th>When Should Steering Committees Meet?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sample code moments of when should steering committees meet.</strong></td>
</tr>
<tr>
<td>Yeah, well I actually implemented the steering committee on that one because when I first started, it was the very first week I was here, they were trying to do this implementation – had been trying to do it for six to nine months. You know, we sat around the conference table and everyone just kind of chatted. I was like, what was that? They said oh, that was our steering committee. I’m like well that’s not a steering committee. So we went and we actually brought in all of…there were three companies we...</td>
</tr>
</tbody>
</table>
were trying to spring on-board sequentially. While we were working on one, we included the stakeholders from the other two companies that we were going to go next. That was really impactful. But the key is to having...making sure that you have the stakeholders that are able to make decisions and get things done and that are held accountable. Those are the keys to a good steering committee.

And there were a few times where we were so stuck in not being able to move forward that we had to use the steering committee meeting as, you know, our bully pulpit as you will, to form that alignment with the band. One situation where it was critical for us to be able to go live on time we were stuck and we weren’t getting the answers we needed then in the middle of the meeting the CFO got his admin to get the VP on the line in the middle of our steering committee meeting.

I wonder if you can invent an Agile approach for steering committees. My question is out there. Is there such a concept that will allow the decision to be pushed into smaller, shorter windows and better decision-making closer to the real issue or not…and is there an evolution of the steering committee that would evolve to have different members in it that need to be in for that decision, and it is not a committee so to speak but an ever evolving thing?

What I found with bigger steering committees is that half the people are using the steering committee as an update and not as a place to make decisions and solve problems. So therefore, we spend half our time getting them up to speed and too many people are going to try managing the expectations of their abilities to gather information and process it in enough time to make effective decisions.

Finding 4: Smaller firms may not require steering committees because use of these committees may place too great a burden on the organization.

Unlike larger organizations, smaller companies do not tend to have the resources available to take on larger, complex enterprise projects that require a steering committee. For those that do, the members can be the actual developers or even the CEO who fills multiple roles and needs to ensure that corporate resources are being used appropriately. We found that smaller organizations tended to have steering committees that were focused on procurement only and then “trusted” their project team to implement the solution, as interviewees responded to our questions, as shown in Table 6.

| TABLE 6 |
| Are Steering Committees Required for Smaller Firms? |

<table>
<thead>
<tr>
<th>Sample code moments of when steering committees are required for smaller firms.</th>
</tr>
</thead>
<tbody>
<tr>
<td>So the owners are not part of the senior staff but they are in here all the time and so they would even come in sometimes to some of these meetings because they want to know where their money is going. But because we are still at fifteen million as a smaller company, we would have some people on the steering committee who are some of the hands-on implementation people, also.</td>
</tr>
<tr>
<td>It ended up making communication a lot easier but it also made it so that I was able to provide a lot of input with the steering committee as in ‘we want this, we do not want that, spending money here is worth it…the TM1 is worth more to your budget than, say, Hyperion.’ Those types of inputs into it. And so especially with those two, I had a lot of influence on it because it was ‘if I am going to use this, it is going to be mine, this is what I want.’</td>
</tr>
</tbody>
</table>

Please note that the text above is transcribed directly from the interviews.
Finding 5: Steering committees function better when there is a defined decision maker.
One of the more interesting findings is that having a defined, invested leader on the steering
committee makes the group more effective. The leader of this committee should be someone
who has power over the group in some manner and if necessary, can take a problem to the
CEO. While it seems like having the CEO on the committee would be a logical answer, it just
does not make sense from the perspective of being an invested participant, despite what the
literature suggests. We did find a fair amount of steering committees that included the CIO and
CFO plus other high level executives, but in the end the steering committees that had a sponsor
as a lead were most effective as was discovered through interviews represented in Table 7.

<table>
<thead>
<tr>
<th>TABLE 7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Defined Decision Maker</strong></td>
</tr>
</tbody>
</table>

Sample code moments of defined decision maker

Yes. The team leader of the steering committee is a very critical role. A very critical role
because they the dream to reality, they enable the discussion. They bring up issues and
they enable people to have discussions about decisions that need to be made. They
expose the steering committee to the critical decision and the time component to the
decision, to the project or to whatever you are trying to do… he is a facilitator.

What I would add about steering committees is that steering committees do not
necessarily have to be about one particular practice. It has to be more about… decisions
as one of the components of portfolio management.

How much information do we want to report externally? How much detail is enough
detail? If the steering committee process, or the steering committee group team members
do not agree on how much detail is enough, and they just stall by just basically going into
perpetual discussion on how much is good enough detail or too much detail, you could
basically halt the whole project because nobody makes a decision about how to move
forward.

Please note that the text above is transcribed directly from the interviews.

Finding 6: Complex interdependencies and uncertainties between factors have a causal
affect and often leave steering committees grappling with their ability to process
information.

Another key finding of this research is that the interdependencies between the
foundational, structural and action-based factors exist, and a steering committee’s performance
is greatly influenced by how it reacts to changes that may occur to these interdependencies.
The magnitude of the change within foundational and structural factors requires the steering
committee to process greater amounts of information to be successful. The challenge is that
with so much to analyze, these committees must find meaning if they are to successfully
navigate the changing process.

Uncertainty within the foundational factors of a project or goal caused the most common
changes within the environmental effectiveness of steering committees. The causal effect of an
environmental change of a project causes all the foundational factors to change - with a poor
foundation the structure becomes questionable. Consequently, many decisions may need to be
revisited and the need for complex decisions and improvisation exists. Those committees that
are better at processing information are able to improvise more effectively. When a steering
committee was unable to process higher levels of information, it resulted in decisions or
improvisations that were not well-enough thought out.

DISCUSSION AND CONCLUSIONS
These findings validate some of the existing research and expand the body of knowledge around steering committees. While much existing research is case study based, this study provided in-depth analysis of the factors that define the performance of these groups through an in-depth interview process. Following a grounded method, this research validated Galbraith’s information processing view of an organization and Gleick’s notion that a functional unit must be able to process that information in order to be successful. Failure to do so often resulted in varying degrees of failure rather than just a single overarching failure.

Steering committees consume large quantities of information as they transcend all phases of an enterprise project with the ultimate goal being a project that lacks failure. Much of the information a steering committee processes does not have meaning, so the group must rely upon support mechanisms such as sub-committees to organize the data into useful segments. As complexity from change emerges the “basic proposition is that the greater the uncertainty of the task, the greater the amount of information that has to be processed between decision makers during the execution of the task” (Galbraith, 1974, p. 28: 28). When our referenced six steering committees found they had to increase their information processing capability, they realized “the organization must adopt integrating mechanisms which increase its information processing capabilities” such as level of collaboration and having working sub-committees to disseminate large amounts of information (Galbraith, 1974, pp. 29-29: 29). We found that as information processing requirements increased, committees were challenged to logically disseminate the data as they sifted through what Gleick describes as, “lines of meaning amid leagues of cacophony and incoherence” (Gleick, 2011, p. 426: 426). In organizations that exhibited a higher degree of project governance sophistication, the ability to process meaningful information increased with the use of engaged committees, sub-committees and having the right people involved.

As discussed earlier this research showed no relationship between a CEO’s involvement and the success of an enterprise systems’ deployment, as was depicted by much of the existing research. One of the unforeseen benefits of this study was a better understanding of the structural factors within a steering committee. Members who can process information and are willing to be held accountable for the success of a project are the ones who should be on the steering committees.

Traditionally, steering committees meet on a set timetable and process information regardless of whether or not meaning exists, which can make these groups dysfunctional. A strong argument could be made for having agile-type steering committees that are called upon to weigh information when changes in the foundational and structural factors occur and action is needed. The key is having the understanding that the steering committee is not a project management body, but rather a strategic governance board that ensures the organization realizes the benefits of the enterprise endeavor.

Limitations

This research was focused primarily on larger organizations, thus the ability to predict performance for smaller organizations is somewhat limited. In some cases, enterprise steering committees may not be the panacea for smaller organizations that they are for larger organizations. Smaller organizations simply may not have the personnel to staff a steering committee nor the funds to dedicate to a project large enough to require a steering committee. However, as organizations below $1 billion grow in complexity and demand projects that require executive steering, this research would be quite useful.

Implications for Practice and Future Research
Practitioners should be aware of the increased information processing needs that enterprise and design projects demand, and develop steering committees in a manner that supports success. The implications of this research for practice and for academia are furthering the understanding of how information processing requirements cause steering committees to fail. Furthermore, additional research linking critical success factors to steering committees should be undertaken. Another area for further research is to develop a better understanding of the impact agile implementation methodologies have on steering committees. How does the iterative approach affect changes and subsequently affect the level of information that must be processed by a steering committee?

APPENDIX

Research Interview Protocol
The research questions below are designed to understand the performance of a steering committee during the implementation of an enterprise system.

I will begin the interview by explaining my involvement in the DM program. I will explain that the research I am conducting is designed to gain a better understanding of enterprise systems steering committee performance.

1. Tell me about yourself and how you came to be in your current role.
2. What have been your roles on steering committees?
3. Tell me about a successful project from the perspective of the steering committee's role in that project.
   a. What was the nature of the project? Describe its complexity.
   b. Please give me an overview of the process that the steering committee followed.
   c. What were the critical decisions made during this project and how did you figure out the path forward? Tell me about how those decisions were made and who the steering committee interacted with? What happened?
4. Tell me about a less successful project from the perspective of the steering committee’s role in that project.
   a. What was the nature of the project? Describe its complexity.
   b. Please give me an overview of the process that the steering committee followed.
   c. What were the critical decisions made during this project and how did you figure out the path forward? Tell me about how those decisions were made and who the steering committee interacted with? What happened?
5. Would you like to add anything?

REFERENCES


Davis, B., & Wilder, C. (1998). False starts, strong finishes—companies are saving troubled IT projects by admitting their mistakes, stepping back, scaling back, and moving on. Information Week, 30(11), 41–43.


