Government IS Implementation: A Framework for Stakeholder Orientation

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Abstract:

Information systems (IS) researchers and management practitioners have increasingly begun to use the concept of stakeholder engagement to explain diverse outcomes associated with implementing new technology, yet the IS literature largely omits this focus in the context of enterprise systems implementation. While the literature has established stakeholder engagement's significance, it has not done the same for organizational stakeholder orientation. As such, I develop a theoretically sound framework to analyze organizational stakeholder orientations during a multi-partner IS implementation process. Researchers have traditionally viewed stakeholder engagement as corporate responsibility in action, but, in reality, stakeholder engagement may or may not involve a moral dimension. In this grounded theory research, I introduce a stakeholder engagement framework that contains two new constructs (i.e., stakeholder engagement and stakeholder sensitivity) and eight different dimensions guided by four major motivating factors. Additionally, I conducted a case study on a IS implementation project to analyze the stakeholder engagement for the project's implementation phases to capture the dynamic nature of the stakeholder engagement process and stakeholder sensitivity.

Keywords: Stakeholder Engagement, Stakeholder Orientation, IS Implementation.

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1   Introduction

Information systems (IS) researchers and management practitioners have increasingly begun to use the concept of stakeholder engagement to explain diverse outcomes associated with implementing new technology. From analyzing 400 strategic decisions including technology acquisitions and strategic reorganizations, Nutt (2002) reports an overwhelming 50 percent failure ratio. He primarily classifies "failure" as an organization's aborting an IS project, only partially implementing it, or failing to produce expected results. Interestingly, Nutt attributes most of the failures to decision makers' inability to integrate and engage relevant stakeholders (Nutt, 2002). This finding also agrees with the earlier literature that stresses the significance of stakeholder interests (Bryson, Bromiley, & Jung, 1990; Bryson & Bromiley, 1993; Burby, 2003; Margerum, 2002). For instance, Bryson (2004) indicates that being unable to synthesize information that various stakeholders possess and failing to address their concerns while making decisions are major flaws in thinking or action that can lead to failure. On the other hand, the literature contains abundant evidence of organizations' creating positive outcomes through cautiously engaging stakeholders. Aside from supporting issue legitimization and facilitating closer alignment between organizations and society, the literature has established that stakeholders' opinions can have various effects on an organization's decision making and project-implementation processes (Deelstra, Nooteboom, Kohlmann, Van den berg, & Innanen, 2003). Several other studies have also identified stakeholder engagement as an effective organizational strategy and a means to improve external stakeholder relations (Kivits, 2011).

Despite numerous studies that indicate the strategic significance of stakeholder engagement, IS appears to largely lack this focus in the context of enterprise systems (ES) implementation. From comprehensively reviewing the enterprise systems research, Lorenzo (2004) identifies a high risk of ES implementation failure at the project phase (Buckhout, Frey, & Nemec, 1999; Davenport 1998), diffusion phase (Shepherd, 2001; James & Wolf 2000, or the benefit-realization phase (Shepherd, 2001; Markus & Tanis, 2000; Davenport, 1998). In addition, Lorenzo's (2004) categorization of existing ES implementation research indicates four salient trends: 1) critical success factors, 2) measuring success, 3) descriptive case studies, and 4) long-term challenges (Lorenzo, 2004). Finney and Corbet (2007) have also raised similar concerns in examining enterprise resource planning ERP literature: they state that much of this literature has focused on critical success factors with limited or no regard to the stakeholder perspective. An intimate understanding of various stakeholder groups would make it possible to effectively address the challenges related to the project phase, diffusion phase, and the benefit-realization phase, which would enhance the probability of successful ES/IS implementations (Finney & Corbet, 2007).

<div align="center">**Contribution:**</div>

This study extends the knowledge of stakeholder theory related IS research in two major ways. First, the end goal of public-sector IS implementation is different compared to private-sector IS implementation. Due to divergent mission objectives and stakeholder groups, value maximization often takes precedence over profit maximization for most government organizations, and the interpretation of "value" differs widely (Flak & Rose, 2005). Scholl (2001) has studied major e-government initiatives undertaken by public-sector organizations using stakeholder theory; however, the scope of Scholl's (2001) research does not allow one to analyze stakeholder theory in detail in relation to the characteristics of public-sector organizations. Through a case-based grounded theory approach, current research has identified the major stakeholder orientations in public-sector IS implementation, including the manifestation of three major aspects of stakeholder theory that Donaldson and Preston (1995) identify: normative, descriptive, and instrumental. Second, Ballejos and Montagna's (2011) findings clearly indicate the significance of the stakeholder perspective while considering a multi-party joint IS implementation effort, which is even more salient for government organizations due to larger stakeholder groups, ethical considerations and value-maximization objectives (Flak & Rose, 2005). Ballejos and Montagna (2011) have also found that engagement alone is not adequate in ensuring sufficient stakeholder consideration in an IS design process; rather, a level of consistency in stakeholder representation is necessary to avoid underachievement of IS project goals due to poorly conceived procedures. Yet, a majority of stakeholder-related research in the IS domain focuses on the concept of "organizational responsibility towards the stakeholder", which directly aligns with the normative core of stakeholder theory. The current study complements this conventional approach towards stakeholder research in a significant way by considering the reality that stakeholders can also impact the organization or project and focusing on the concept of "stakeholder orientation", which is manifested through a combination of stakeholder engagement and stakeholder sensitivity.

Motivated by this existing knowledge gap in IS literature and the necessity to understand the nature of stakeholder orientation, I develop a theoretically sound framework to analyze organizational stakeholder orientations during a multi-partner IS implementation process.

While the literature has established stakeholder engagement's significance, it has not done the same for organizational stakeholder orientation. Stakeholder theory's normative core dominates it; as Jones and Wicks (1999) write: "the interests of all stakeholders have intrinsic value, and no set of interests is assumed to dominate the others". This normative approach is closely aligned with Freeman's (1984) original call for managerial attention to all stakeholder interests as a vital success factor. However, just as organizational or managerial decisions have implications for an organization's stakeholders, stakeholders can likewise affect the organization. The existing stakeholder literature has largely neglected this reciprocal relationship, which often forms the core notion of strategic stakeholder management (Fassin, 2012).

Stakeholder taxonomy often differs significantly in public-sector IS implementations than in private-sector or profit-oriented IS implementations. Besides the primary stakeholder groups such as employees, customers, partners, vendors, and governments, these implementations can include indirect stakeholders such as civic society and pressure groups who defend the interest of specific stakeholder groups, which gives raise of the notions of reciprocity, loyalty, and fairness (Fassin, 2012).

Reciprocity concerns clearly highlight the need for public-sector organizations to systematically understand organization stakeholder orientation during IS implementation initiatives. Earlier research on stakeholder orientations defines the concept in terms of allocated resources (Berman, Wicks, Kotha, & Jones, 1999), such as time dedicated for certain activities. During IS implementations, the project time allocated for certain tasks certainly has implications for all stakeholders because different groups may perceive time allocation differently.

Lyytinen and Hirschheim (1987) and Lyytinen (1988) have also demonstrated the critical role that stakeholder concepts play in IS implementations. These authors argue that whether IS implementations succeed depends on how satisfied different stakeholder groups are with them. Although these findings indicate of the suitability of the stakeholder lens while considering IS implementations, little research on organizational orientation has examined stakeholder engagement and stakeholder sensitivity in the context of public-sector IS implementations. The body of literature on stakeholder theory is quite extensive, and researchers have used the theory to investigate organizational ambiance, strategic management, ethical concerns, business planning processes, e-government, project management, environment management, and the successful implementation of information and communication technologies and development of large information systems (Mishra & Mishra, 2013). Even though stakeholder theory applies to many different contexts, in reviewing the literature, I found researchers have focused on stakeholder categorization and stakeholder management in general. I believe that, during a large-scale information system (IS) or commercial off-the-shelf (COTS) software implementation, organizations need to maintain an appropriate level of stakeholder engagement and stakeholder sensitivity to achieve success. However, research has largely not explored the point of engagement and the engagement's nature. Thus, I create a theoretically sound framework for analyzing and comprehending organizational stakeholder orientation during IS implementations.

This paper proceeds as follows: in Section 2, I describe the concept of the stakeholder in a COTS/IS implementation context. In Section 3, I present a framework for identifying stakeholders and a framework for assessing stakeholder engagement and sensitivity levels. In Section 4, I describe the research methodology I employed for our grounded research study. In Section 5, I discuss the case data. In Section 6, I analyze the theoretically saturated codes and their justification. Finally, in Section 7, I discuss the findings' implications for research and practice, make suggestions for future research directions, discuss the study's limitations, and conclude the paper.

2   Concept of Stakeholder in IS Implementation

Originally rooted in strategic management literature, stakeholder theory has received increasing attention from both managers and academics since the publication of Freeman's (1984) landmark book *Strategic Management: A Stakeholder Approach* (Mitchell, Angel, & Wood, 1997). Although Freeman suggests that stakeholder relationship is a useful unit of analysis when it comes to strategy or strategic management, he also clarifies that the concept of stakeholder emerged much earlier from research conducted in 1963 at Stanford University that defined it as "those groups without whose support the organization would cease

to exist" (Freeman, 2004). Building on this definition, he defines a stakeholder more broadly as "any group or individual who can affect or is affected by the achievement of the organization's objectives" (Freeman, 1984, p. 40).

Beside the variation in scope that naturally appears from different definitions, Friedman and Miles (2006) have identified indiscriminate uses of the term "stakeholder" over last two decades. Private industries, public-sector organizations, businesses, and media frequently use the term but often without clearly defining or seeming to understand the term itself (Mainardes, Alves, & Raposo, 2011). While one may find confusion about the term in non-academic circles unsurprising due to a lack of knowledge concerning stakeholder theory, academic researchers have also found it difficult to agree on the term's definition. One can see the diversity about the term in looking at Bryson's (2004), Buchholz and Rosenthal's (2005), Pesqueux and Damak-Ayadi's (2005), Friedman and Miles's (2006), and Beach's (2008) work, which combined contain a total of 66 different concepts for the term "stakeholder" (Mainardes et al., 2011).

Due to the variation in what constitutes a stakeholder, researchers have created diverse methods and approaches to identify relevant stakeholders. The most frequently appearing stakeholder classification schemes focus on primary or secondary stakeholders; owners and non-owners of the firm; owners of capital or owners of less tangible assets; actors or those acted upon; those existing in a voluntary or an involuntary relationship with the firm; rights holders, contractors, or moral claimants; resource providers to or dependents of a firm; risk-takers or influencers; and legal principals to whom agent-managers bear a fiduciary duty (Mitchell et al., 1997).

A joint-effort COTS implementation that involves multiple government organizations and multiple vendors has a much broader scope in terms of affected parties and people compared to an internal IS implementation by a single organization. Since this type of implementation crosses organizational borders, it can also mean that stakeholders have only a loose association, which makes properly identifying and engaging with stakeholders during various implementation phases absolutely critical for success. Given I analyze such an implementation in this study, the potential number of different possible stakeholders, and my scope here, I focus only on the primary stakeholders who were directly engaged with or affected by the implementation process for the project's duration. This approach also concurs with how Boddy and Buschanan (1986, p. 92) define organizational information system stakeholders: "All those who have a practical concern for the effective application of new technologies, and who are in a position to take or to influence decisions about why and how they are used".

3   A Framework towards Stakeholder Engagement

As I indicate in Section 3, one cannot easily identify legitimate stakeholders in many cases because of the extensive variations among different stakeholder classification schemes that exist in the literature. Because of temporal restrictions on our study's scope and our focus on the COTS implementation process, I found a question-based stakeholder identification scheme most suitable for my purposes. A question-based framework, which Pouloudi and Whitley (1997) and Cavaye (1995) present, usually asks relevant questions concerning the IS and its nature. Table 1 shows the results of the stakeholder analysis for the current case.

Although Donaldson and Preston (1995) propose that stakeholder theory's core lies in its normative dimension, from an IS implementation success perspective, instrumental and descriptive versions of stakeholder theory appear to be more dominant in the literature due to the nature of the context related to an IS implementation. For the current study, I adopt the descriptive approach (Donaldson & Preston, 1995) to identify the salient and key stakeholders and the engagement processes that pertain to a COTS/IS implementation.

Table 1. Stakeholder Identification

Relevant question	Identified stakeholders	Category
Who initiated the system?	Host organization and the application co-owners	Owner/clients (internal)
Who sponsored the system?	Host organization and the application co-owners executives	Owner/clients
Who had to adopt the system and make it work?	Host organization and the application co-owners, chartered banks, insurance and pension administration companies, credit unions	Owner/clients (internal), external clients
Who were the system's intended users?	Host organization and the application co-owners, chartered banks, insurance and pension administration companies, credit unions	Owner/clients (internal), external clients
Who received the output of the COTS/IS?	Host organization and the application co-owners, chartered banks, insurance and pension administration companies, credit unions, other government departments	Owner/clients (internal), external clients
Who were the system's intended developers and operators?	Vendor, solution integrator, host organization and the application co-owner's IT support	Owner/clients (internal), vendor (external)
Who did the system affect?	Host organization and the application co-owners, chartered banks, insurance and pension administration companies, credit unions, host-agency application support, host-agency extended IT teams	Owner/clients (internal), external clients
Who won or lost by using the COTS/IS?	Host organization and the application co-owners, chartered banks, insurance and pension administration companies, credit unions	Owner/clients (internal), external clients

Stakeholder management is one dominant theme in stakeholder research, yet this research often ignores or takes for granted stakeholder engagement as an aspect of stakeholder management. Achterkamp and Vos (2008) and Brown and Jones (1998) found that one cannot always attribute project failure to ineffective project management practices; rather, inappropriate social interactions among project stakeholders can often cause projects to fail as well. One senior project managers from my case study expressed this concern:

> *What we are not good at doing is collecting the requirements…. We spend a lot of time identifying what the requirements are and sanitizing them, but we still have the issue of missing requirements during implementation phases…. Business users and stakeholders are involved but not necessarily fully engaged.* (Senior project manager, host organization)

Some authors have oscillated between involvement and engagement by using the attribute of reciprocity or mutual benefit. MacLeod and Clarke (2009) and others have pointed to care and commitment as the determinant of engagement levels (Pushor 2007). In an attempt to clarify the term "engagement", Pushor (2007) explains: "In comparison to involvement, engagement comes from en, meaning 'make', and gage, meaning 'pledge'—to make a pledge (Harper, 2002), to make a moral commitment".

One can depict stakeholder engagement as the organizational effort to involve relevant stakeholders in a positive manner through exchange and cooperative relationships. The stakeholder literature from business ethics, social accounting, and human resource management indicates that stakeholder engagement typically relates to themes such as responsibility, managerialism, and social control, and construction (Greenwood, 2007). All three are closely related to the power and authority that different groups possess. Moreover, Pushor and Ruitenberg (2005) argue that flattening the command structure of the organization by sharing power and authority among involved parties can lead to a higher engagement driven by mutual benefits.

Elsewhere, Missonier and Loufrani-Fedida (2014) propose a conceptual approach towards stakeholder engagement anchored in actor-network theory that acknowledges the dynamic and emergent nature of the relationships among various stakeholders in a project. Missonier and Loufrani-Fedida (2014) show that 1) problematization (i.e., framing the issues of interest and identifying how they affect the actors), 2)

interessement and enrolment (i.e., assigning roles to stakeholders and the acceptance of the assigned role by the stakeholders themselves), and 3) mobilization (i.e., reaching agreement among stakeholders in terms of actions) can together effectively contribute towards a better understanding stakeholder engagement. These findings agree with Pushor's (2007) argument that care and commitment have a correlation with engagement because all three processes combined elucidate the mutual benefits for all stakeholders, which, in turn, drives engagement level.

Stakeholder sensitivity (i.e., an organization's attitude toward the stakeholder scope in terms of size, which of course is not a static construct) can complement the stakeholder engagement. Mitchell et al.'s (1997) conceptualization of stakeholder salience (based on power, urgency, and legitimacy) is one of the most significant works that helps explain sensitivity.

3.1   Stakeholder Sensitivity and Stakeholder Engagement

For this study, I adapt and augment the stakeholder engagement framework that Greenwood (2007) originally proposed. Greenwood (2007) conceptualized this framework primarily from considering the ethical aspects of stakeholder engagement for corporations, which directly correspond to the concept of "corporate social responsibility". Maintaining the dominance of stakeholder theory's normative orientation (Donaldson & Preston, 1995), Greenwood (2007) suggests an optimal level at the center of each quadrant on his four quadrant model. To enhance the precision of the engagement approach, I adopted Greenwood's (2007) four-quadrant model. I further divided each quadrant into two subquadrants based on the dominance of the engagement or sensitivity level, which I identified through a grounded-theory process (see Figure 1). By examining stakeholder engagement at a micro-level, I discovered stakeholder orientation's instrumental application (Donaldson & Preston, 1995) in addition to its more prevalent normative applications. For example, stakeholder engagement in IS implementation projects is often used an instrument for advancing project goals rather than aligning stakeholder interests.

I present the identified stakeholder sensitivity-engagement framework below (see Figure 1).
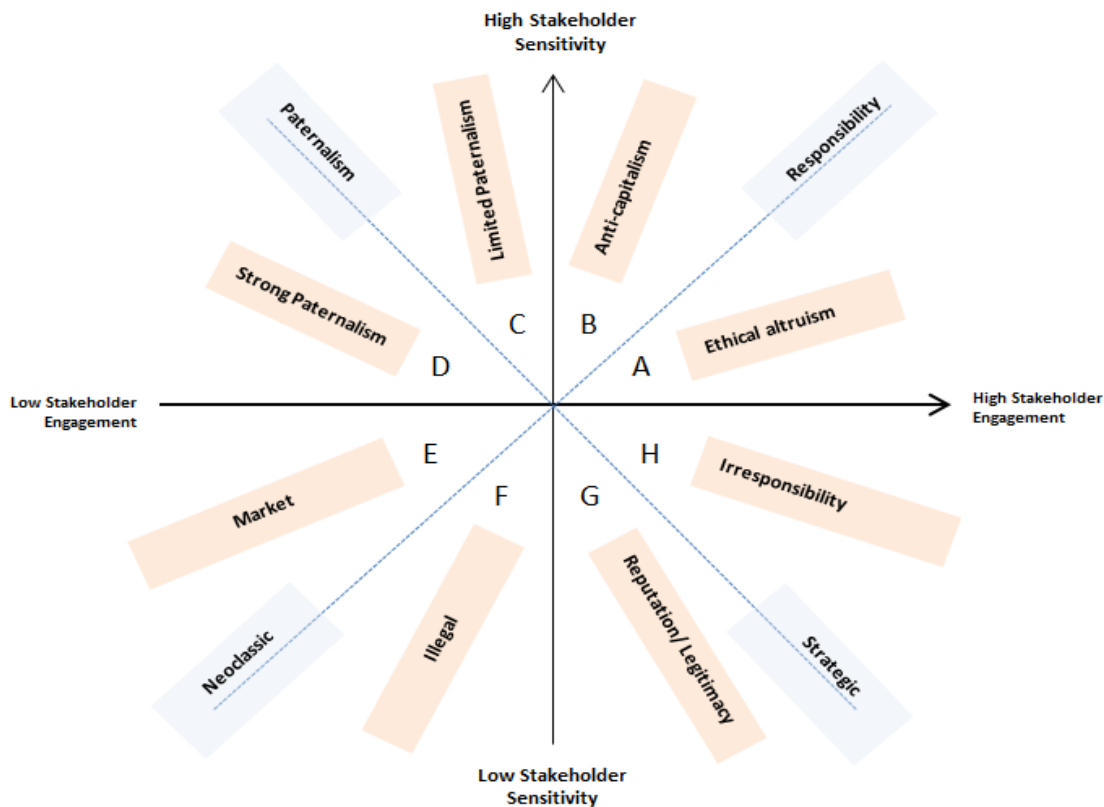

Figure 1. Stakeholder Sensitivity and Stakeholder Engagement

However, while I present it here, I emphasize that the themes present in this model emerged from a grounded research approach in which I analyzed primary and secondary case data to identify distinct

themes and contexts. I developed this new model specifically to help plot the interactions between the key variables of "stakeholder engagement" and "stakeholder sensitivity".

The x-axis of the model represents stakeholder engagement. As I indicate above, engaging stakeholder groups in an initiative or task may require a different approach than simply considering the possible groups of stakeholders. In an IS implementation project, this engagement often requires task performance, consultation communication processes, dialogue, and information exchanges. One can measure the intensity of the engagement using the frequency of activities related to these categories.

The y-axis of the model represents stakeholder sensitivity. One can see stakeholder sensitivity as a proxy for an organization's responsibly treating stakeholders (or stakeholder agencies in Greenwood's (2007) original model). This construct largely indicates the breadth of the various stakeholder groups that one considers at any given stage of a IS implementation process and their perceived influence on the outcome of that stage. Similar to the level of engagement, stakeholder sensitivity can also vary considerably from one stage to another of an IS implementation project. Maintaining an optimal level of sensitivity versus engagement is extremely critical for IS projects to prevent a certain category of stakeholder from moving to a different category (e.g., to prevent a "dormant" stakeholder from becoming a "dangerous" stakeholder and jeopardizing the success of an IS project).

This dimension reflects the organizational attitude towards ethical and moral values. A "low" sensitive view may include only contractually related stakeholders, such as clients, vendors, owners, and so on, and a "high" sensitive view might consider all the stakeholders that the system impacts. These latter stakeholders can even include the general population, whom the IS system may eventually impact in some distant future.

Inspired by the concept of "optimal trust" (Wicks et al., 1999), Greenwood (2007) suggests an optimal level for both dimensions in his model. However, what one considers optimal can depend intensely on the context of engagement. Particularly for IS implementations, a certain level of stakeholder sensitivity deemed optimal for one stage could act as a source of confusion and chaos for another stage. Therefore, in the proposed engagement-sensitivity model, dotted lines dividing each for the four quadrants indicate a balanced combination. Table 2 describes each of these segments.

4   Research Methodology

Initially, I conducted a single case study to identify the organizational stakeholder orientation by employing a grounded theory approach, which led to my creating a framework. Other research has proven a grounded theory approach based on a case study to be a valid methodology (Urquhart, Lehmann, & Myers 2010). Indeed, the case organization I examined represented a valuable source of information for stakeholder orientation given its public-sector context and the involvement of multiple owners and a vendor and solution integrator.

4.1   Research Process

I followed two key steps to conduct my research. First, I reviewed the academic literature review on stakeholder engagement and corporate social responsibility. In doing so, I obtained an initial starting point in terms of identifying key stakeholder engagement levels and stakeholder categorizations during an IS implementation.

Second, I analyzed and coded all primary and secondary data collected through in-person interviews over a four-month period. From these interviews, I identified the four major orientation dimensions of my proposed framework.

Although I respected the overall principle that grounded theory must explain the behavior being analyzed and fit the data collected from the case (Glaser & Strauss, 1967), in terms of theoretical coding and identifying the saturated categories, I primarily adopted the method that Gregory, Beck, and Keil (2013) used, which Glaser's (1978) approach to the grounded theory research guided. Immediately after the problem-formulation and case-study design phases, I performed open coding to identify various indicators of stakeholder engagement and stakeholder sensitivity. In the next stage, I delimited the coding process to a set of eight categories that emerged from the open-coding process. The final three stages of the research process—theoretical coding, scaling up, and theoretical integration—focused primarily on establishing a theoretical connection between the identified categories or orientations and the existing

theoretical framework of the domain. Table 3 outlines the details of the process I followed while analyzing data and mapping them into the core categories of stakeholder orientation.

Table 2. Stakeholder Engagement and Stakeholder Sensitivity (Adapted from Greenwood, 2007)

Segments/ quadrant	Title	Stakeholder engagement	Stakeholder sensitivity	Relationship between stakeholder engagement and stakeholder sensitivity
A (responsibility)	Ethical altruism	Strong engagement of stakeholders.	Acts in the interest of primary stakeholders; sensitivity is moderate to high in the sense that a few legitimate stakeholders might be left out.	Increasing stakeholder sensitivity with strong engagement measure driven by corporate social responsibility; organization should not totally sacrifice own interests to help others' interests.
B (responsibility)	Anti-capitalism	Moderate to high engagement of stakeholders as determined by the organization.	Considers the interest of all stakeholder Including illegitimate.	Participation of too many (including illegitimate) stakeholders may compromise the firm's purpose.
C (paternalism)	Limited paternalism	Low to moderate stakeholder engagement as determined by the organization.	Acts in the interest of a broad group of stakeholders as determined by the organization.	Acting in the perceived interest of the stakeholders with limited consultation.
D (paternalism)	Strong paternalism	No or little stakeholder Engagement.	Acts in the interest of legitimate stakeholder as determined by the organization.	Acting in the perceived interest of the stakeholders without consulting them to the point of interfering with and reducing their liberty.
E (neoclassic)	Market	Low to moderate stakeholder engagement due to economic reasons.	Does not act in the interest of legitimate stakeholders.	Controlled and highly focused engagement to further the owners' interests. Organization and stakeholders as economic entities.
F (neoclassic)	Illegal (outside the boundary of the law or accepted custom)	No stakeholder engagement as determined by agents in control of the company.	Does not act in the interest of legitimate stakeholders; treats stakeholders as purely instrumental.	Organizations act in their or principals interests either illegally or outside moral minimum norms. Could include fraud, theft, and abuse of human rights.
G (strategic)	Reputation/ legitimacy	Engaging small groups of legitimate stakeholders to further shareholder interests.	Stakeholders are selected primarily based on the strategic objectives of the organization with a low to moderate sensitivity.	Narrow focus in terms of stakeholder sensitivity and moderate on engagement; engaging stakeholders enhances strategic alignment, reputation, and legitimacy with stakeholders.
H (strategic)	Irresponsibility (bad faith)	Excessive engagement without accountability or responsibility towards stakeholders.	Appears to act in the interest of only influential stakeholders.	Engaging with stakeholders under deceptive conditions while acting "as if" they seek to meet stakeholders' interests.

Table 3. Grounded Theory Research Process: Steps, Tasks, and Outcomes

Research steps	Tasks	Outcome
Problem formulation	• Establish the phenomenon in terms of its practical relevance as a prerequisite to produce grounded theory that has "grab" (Glaser & Strauss, 1967). • State what the problem is from a practice and theory perspective and why it is important (Van de Ven, 2007). • Screen prior research to identify gaps in the literature (Urquhart, 2007).	• Identified that stakeholder orientation is important issue that needs careful attention during IS implementation. • Identified researcher's and practitioner's need for sound framework to systematically analyze engagement. • Identified gaps in the literature on stakeholder orientation in IS implementations.
Single case study design	• Establish engaged relationship with practitioners and negotiate access to data (Pan & Tan, 2011; Van de Ven, 2007). • Select a case study site and explain the reasons for conducting a single case study (e.g., the main criterion for a revelatory case is "when an investigator has an opportunity to observe and analyze a phenomenon previously inaccessible to scientific investigation") (Yin, 2003, p. 42).	• Obtained approval from host organization's ITS leadership team and legal and ethics committee for conducting a case study on a regulatory reporting system project and to obtain data from the host organization and its partners and vendors. • Selected a "revelatory case": analyzed a case that involved multiple partners and vendor and solution integrator.
Open coding data collection	• Gather rich primary and secondary data, including intensive interviewing (Charmaz, 2006). • Code the data and understand what it is about by going through interview transcripts line by line, assigning conceptual labels to data segments, and identifying core categories (Glaser, 1978). • Adhere to the principle of emergence of grounded theory: categories should emerge from the data in the sense that they must "fit" (they must be readily, not forcibly, applicable to and indicated by the data under study) and "work" (they must be meaningfully relevant to and be able to explain the behavior under study) (Glaser & Strauss, 1967). • Triangulate and compare different slices of data to find similarities and differences (Charmaz, 2006).	• Conducted two rounds of interview (both open ended and structured). • Gathered weekly meeting minutes from the electronic repository and project control documentations. • Identified various indicators of stakeholder engagement and stakeholder sensitivity. • Compared multiple perspectives, including clients' and vendors', and compared multiple sources of data.
Selective coding & data collection	• Delimit further coding to only those concepts and variables that relate to the emerged categories (Glaser 1978). • Make constant comparisons between instances of data labeled as a particular category and other instances of data in the same category to substantiate categories (Urquhart et al., 2010). • Collect further data based on principle of theoretical sampling (i.e., deciding on analytic grounds where to sample from next) (Glaser & Strauss, 1967, p. 45).	• Delimited further coding to a set of eight categories that represented the subsegments of the model. • Followed the constant comparisons technique of grounded theory research in which I focused on the development of any new categories and concepts by constantly comparing data to data that the eight subcategories I already identified did not cover.
Theoretical coding & data collection	• Analyze and specify the theoretical relationships between core concepts and categories (Bryant & Charmaz, 2007, p. 25). This theoretical coding (Glaser, 1978), also referred to as iterative conceptualization (Urquhart et al., 2010), helps one to increase the level of abstraction, relate categories to each other, and clarify which categories may be properties of others.	• Analyzed relationships between the eight subcategories and the four orientation dimensions.

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Table 3. Grounded Theory Research Process: Steps, Tasks, and Outcomes

Scaling up	• Engage with other theories for theory building: to raise the level of conceptualization and scale up the emerging theory, one should use existing theories or concepts for comparisons (Urquhart, 2007). Thereby, meta theories and theoretical categories with limited empirical content and general scope are particularly suitable as heuristic or sensitizing devices (Kelle, 2007). • Group higher-level categories into broader themes to increase the generalizability of the theory and relate it to the broader literature (Urquhart et al., 2010).	• Engaged with literature on stakeholder engagement and corporate social responsibility. • Conceptualized stakeholder orientation as a combination of stakeholder engagement and stakeholder sensitivity. • Conceptualized four different dimensions of stakeholder orientation during IS implementation.
Theoretical integration	• Relate the theory to other theories in the same or similar field by comparing the substantive theory generated with other, previously developed theories (Glaser, 1978; Urquhart et al., 2010).	• Compared our four core dimensions of organizational stakeholder orientation to the three core aspects of stakeholder theory (descriptive, instrumental, and normative) that Donaldson and Preston (1995) propose.

4.2 Primary and Secondary Data

Primary data for this research comprised 15 face-to-face interviews conducted between April 2014 and July 2014 with project team members from tri-agency (the host organization along with two external co-owners of the application), key project personnel from the COTS vendor in Dublin, Ireland, and the solution integrator (see Tables 4 and 5). I conducted all interviews in Ottawa, Ontario, Canada. Both tri-agency members and the solution integration team were located in Ottawa, and I interviewed members from the vendor side, including their technical director who was involved with a regulatory reporting System (RRS) project, when they were present in Ottawa during that period. I tape-recorded and transcribed all interviews. On average, the interviews lasted about an hour and a half; however, the initial interviews lasted for nearly two hours, and the member-checking and fact-checking interviews lasted an hour or less. I conducted the interviews in a semi-structured manner. I complemented the primary data with informal face-to-face discussions because the project team was still present at the host organization and I could not always conduct follow-up interviews due to individuals' availability.

To triangulate my research findings, I also collected secondary data from the enterprise repository of the host organization, which included various project documentations, meeting minutes, and technical documentation.

Table 4. Primary Data Resulting from Face-to-face Interviews

Type of primary data	Description of the primary data		
	Role of interviewee	# of Interview with tri-agency employees	# of interviews with vendor and solution integrator	# of total interviews
15 interviews	Project manager	1	1	2
	Business lead	2	0	2
	Business analyst	2	1	3
	Enterprise architect	1	0	1
	Data architect	1	0	1
	Solution architect	1	1	2
	Project team member	2	2	4
	Total # of interviews (some people were interviewed twice)	**10**	**5**	**15**

Table 5. Secondary Data Used for Triangulation

Types of documents	Purpose of analysis
Meeting minutes, design decision documents, project planning documents, and test cases and plans.	Analyzed to determine the activities took place on certain phases, boundaries of the phases, links to other phases, stakeholders considered, and stakeholder engaged.

5   Case Discussions

My case involved a two-year project in which a Canadian Government department—in collaboration with two other government departments (together referred to as tri-agency)—acted as the client. One of the two vendors was a well-known, top-tier solution integrator from North America that partnered with a COTS vendor from Dublin that specialized in financial regulations. Tri-agency launched the project in early 2012 in a bid to replace the existing legacy RRS with a COTS-based product. Tri-agency used the legacy system primarily to collect, validate, and maintain financial data and financial returns filed by federally regulated deposit-taking institutions (DTIs). It was developed in 1998 and had undergone several enhancements since its deployment, yet it appeared to be incapable of adapting to the increasing quantity and complexity of data-collection and management needs. The tri-agency project team proposed a COTS replacement for the existing system to increase corporate effectiveness by improving tri-agency's ability to collect and analyze data and to maximize the use and availability of the collected data by greatly reducing the processing time and extending distribution capabilities.

In analyzing the RRS implementation by tri-agency, I primarily focused on the stakeholder engagements and sensitivity controls through processes, tools, roles, and procedures that constituted the organizational stakeholder orientation. In Sections 5.1 to 5.6, I analyze the six major phases of the RRS implementation to identify stakeholder sensitivity and stakeholder engagment, significant processes that the project team employed to ensure the stakeholders' engagement, artifacts, and the links responsible for successful project execution.

5.1   Pre-project Activities

An organization's management personnel usually initiate IT projects when they have an opportunity to enhance business processes and increasing operational efficiency (Ward & Daniel, 2002). Additionally, in government organizations, compliance, public safety, and reputation are among the driving forces behind strategic IT initiatives. These organizations analyze these factors when exploring business opportunities, and, for large projects (especially non-IT ones), this phase comes before an IT project actually begins.

Activities performed during "pre-project" phase, such as business-case development and requests for proposals (RFP), play an important role in IS implementations. Although debates on the merit of RFP continue, (Popp & Dallis 2012), since government organizations are subject to principles of fairness and transparency, they cannot avoid them.

The Gartner Research Group has presented research findings that indicate that an organization increases the chance it will select the right vendor and product by 40 percent if it executes the RFP process well (Karamouzis & Longwood, 2007). The RRS project affirmed the significance of the RFP given that the tri-agency's first RFP failed, which cost it over CA\$1 million.

One does not often capture these key pre-project activities with a standard implementation model or when one ignores the significance of the link between this phase and the implementation phases. The pre-project phase also has a high sensitivity in terms of stakeholder consideration and engagement, which a comment that the RRS project manager made evidences:

> When we are submitting a business case to the Investment Governance Office for a project of this magnitude, we have to consider all sides, …not just the internal workload from an additional system in our inventory. As a matter of fact it's an external facing system used by all the FI's [financial institutions] of the country; we really had to show that due diligence was done and interests of all sides were looked after to get the blessing from the executive sponsors. (Senior project manager, tri-agency)

Table 6. Pre-project Engagement and Activities

Phase	Typical activities	Groups engaged	Groups considered	Engagement considerations and controls
Pre-project	IT investment proposal, business justification, executive sponsor and departmental sponsors, stakeholder identification, RFP execution.	Tri-Agency partners, sponsors, senior leadership team, project team, procurement team, vendors, existing clients of the vendor.	Tri-agency partners, sponsors, senior leadership team, project team, procurement team, vendors, existing clients of the vendor, solution integrators, internal IT support teams, external chartered banks, other financial institutions such as credit unions and insurances companies, users of financial institutions.	The project team considered a broad set of stakeholders and engaged a large portion of them to ensure proper representation; organizational reputation and reputation of the government was a driving force.

5.2   Requirements and Planning

This phase primarily includes the activities required to gather and formalize the business-use cases and business process models for the relevant units and additional activities such as generating an initial project plan and arranging project team logistics. This phase fundamentally contributes to the success of any IS project (Letavec, 2014). In addition to reviewing the functional requirements at a much detail level, the project team also refined and identified the non-functional requirements specific to the organizational environment. Both the vendor and the solution integrator were directly involved with the tri-agency project team in this phase. Further, in this phase, the project team focused on maintaining scope in the face of a large stakeholder group and resolving conflicting expectations, which the following quote illustrates:

> *Our goal at this point in time was to transform stakeholder needs and expectations into software architecture and at the same time ensure that it is feasible what they are asking…. It was definitely more focused on the tri-agency's operational objectives and most of the requirements were fed in from RFP phase…. Even so the deep-dive gave us [vendor and the solution integrator] the opportunity to do a due diligence on the RFP requirements by validating them with the tri-agency*. (Senior project manager, solution integrator)

Table 7. Requirement and Planning Engagement and Activities

Phase	Typical activities	Groups engaged	Groups considered	Engagement considerations and controls
Requirement and planning	Requirement analysis, scope solidification, contract negotiation, SLA/warranty negotiation, sprint/ implementation planning.	Project team, tri-agency business, IT enterprise architecture group, extended IT support teams (infrastructure, database, release management, application support etc.), vendor, solution integrator.	Project team, tri-agency business, IT security, IT enterprise architecture group, extended IT support teams (infrastructure, database, release management, application support etc.), vendor, solution integrator, external chartered banks, other financial institutions like credit unions and insurances companies, users of financial.	Significant stakeholder engagement through processes such as DeepDive and RTM/RQM to facilitate exchange of idea and contributions; although the organization considered a large group of stakeholders, it maintained its focus on business objectives.

5.3   Design and Architecture

This phase is another crucial phase for COTS implementation and for traditional software development projects in which one transforms requirements for the desired system into a detailed design. Design documents produced during this phase also establish the architecture of the system (i.e., its components, interfaces, and behaviors). At tri-agency, activities during this phase included decisions about the operating environment (i.e., servers, networks, databases, access mechanisms), interfaces, integration of the new COTS with existing applications, and non-COTS components.

The extended development and support team on the client side, including the COTS support team and ITS operations, were engaged with the design process during the analysis and conceptual design phase.

The design authority process that the tri-agency project team introduced played a critical role in achieving the desired outcome from a controlled engagement, which one project manager indicated:

Most times this work falls on the development team almost with a little bit of involvement from the BAs [Business Analysts]…. I would say establishing a design authority that includes the vendor, the architects and business is really critical…. There were a number of times that we had issues, questions or things that were not going as they should, and we fell back on the document that was produced as a design authority to make sure that we were delivering the design. (Senior project manager, solution integrator)

Table 8. Design and Architecture Engagement and Activities

Phase	Typical activities	Groups engaged	Groups considered	Engagement considerations and controls
Design and architecture	Functional and non-functional design, product enhancement, glue-ware and integration work, "to be" (future state) business procedures, update the support and operations guide, produce the preliminary transition plan, develop test cases.	Project team, tri-agency business, IT enterprise architecture group, vendor, solution integrator, extended IT support teams.	Project team, tri-agency business, IT security, IT enterprise architecture group, extended IT support teams (infrastructure, database, release management, application support etc.), vendor, solution integrator.	Moderate stakeholder sensitivity with a strictly controlled engagement process guided by the project team to maintain focus; design authority process helped to materialize this engagement process.

5.4   Development

Using the guidance from requirements documents and system architecture, the development team actually began configuring the COTS product, integrating the RRS into existing infrastructure, and coding additional functions for related non-COTS components during this phase. Although the design and architecture team took inputs from high-level requirements and user stories and converted them into a detailed design document that outlined every detail of the RRS system's behavior, the project team found developing integration features one of the most critical and challenging phases.

An organization's decision to either build or buy in a project's pre-initiation phase usually determines the nature of its development phase. Tri-agency decided to opt for a COTS solution because it thought it the most cost-effective option. This decision also led the project team to focus on a narrow number of stakeholders, such as the offshore development team that the vendor provided and the integration team that the solution integrator provided. Furthermore, both the offshore and agile aspects of the development reduced the project's visibility from an engagement perspective. Indeed, the technical lead of the RRS project commented on the organization's narrow stakeholder focus and low stakeholder engagement:

During the development, we had small group meetings with off shore development teams. As the process was highly technical and sometimes messy, we never invited the client or business users. Vendor provided developers also saved us the hassle of finding people with unique skill set. (Technical lead, tri-agency)

Table 9. Develop Engagement and Activities

Phase	Typical activities	Groups engaged	Groups considered	Engagement considerations and controls
Development	Develop solution components, metadata conversion, product enhancement, glue-ware development, migration preparation, prepare user guide, prepare for QA.	Vendor development team, solution integrator development team.	Vendor development team, solution integrator development team, ITS application support, tri-agency business.	Maintains a low engagement by a small group of stakeholders often due to economic reasons.

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5.5   Delivery and Transition

In this phase, the project team handed over the production-ready COTS system to operations support. In this phase, the project team focused on validating whether the system met client expectations and obtaining stakeholders' agreement on delivered functionalities. Due to an agile model, the RRS implementation contained a delivery phase at the end of each sprint in which the project team delivered certain groups of business functions to the business sponsors as planned during the requirement and planning phase. The project team migrated the remaining data to the target system as a part of its "go-live" activities. Besides delivering business functions, the joint development team primarily tested and validated the RRS's usability in this phase, which included testing both units of modules and the overall integration.

Tri-agency adopted an integrated testing approach in which both the tri-agency business users and tri-agency project team jointly tested the solution. This approach suits agile developments well and appeared to work well the present case as the tri-agency quality assurance/test team lead explained:

> *One good thing about this project was the testing. …We said the business needs to give us the test resources for functional, regression and system integration testing, …so we combined functional testing with UAT essentially. That is, …they tested the system as it was going to be for them, as opposed to testing it and saying it's all good and them not accepting it…. This is a new concept because typically you have testers, and then you have business users after.* (Quality assurance team-lead, tri-agency)

During this phase, the project team implemented the support model prior to deploying the solution. The project team engaged with the tri-agency's internal IT teams during this settle-in period to assist the user community and support operation areas as required.

Table 10. Delivery and Transition Engagement and Activities

| Phase	Typical activities	Groups engaged	Groups considered	Engagement considerations and controls
Delivery and transition	Prepare for solution transition into production, user training and knowledge transfer, data and metadata migration, deploy solution to production, go-live activities.	Tri-Agency Partners, project team, vendors, solution integrators, internal IT support teams (application support), external users.	Tri-agency partners, IT owner, business owner, project team, procurement team, vendors, solution integrators, extended IT support teams (application, database, infrastructure, incident management and release management), external users (financial institutions).	Typically moderate sensitivity towards stakeholders and high engagement of internal stakeholders for strategic reason; a balance between the sensitivity and engagement is maintained but an opportunity to act in bad faith does exist .

5.6   Close-out

In the final phase, the project team focused on bringing the project to a close. Besides the stakeholders' acknowledging the newly delivered system as a "system of record", this phase also provided the opportunity for the project team to reflect on and analyze the project performance through lessons-learnt and satisfaction surveys. Other key activities that occurred in phase included finalizing support and technical documentations, reviewing support agreements, and re-allocating resources. From a stakeholder sensitivity and engagement perspective, tri-agency's project manager reflected on this final phase as follows:

> *[The] goal is not the same as UAT phase where we tried to identify the missed requirements or product issue by actively seeking feedbacks [low sensitivity], goal of the "lessons learnt" survey is to identify the strategic mistakes…. We wanted to tell the project sponsor that we have delivered on our promises and produced something valuable for the organization [strategic]"* (Project controller, tri-agency)

Table 11. Close-out Engagement and Activities

Phase	Typical activities	Groups engaged	Groups considered	Engagement considerations and controls
Close-out	Monitor system stability, oversee project stand-down, produce project completion report, lessons learnt.	Project team, tri-agency business, IT extended support teams, vendor and solution architect.	Future project both business and IT, project team, tri-agency business, IT extended support teams, vendor and solution architect, external users, project sponsors, Investment governance office.	Getting insight from current implementation for future strategic decisions by getting a comprehensive feedback from a small group of legitimate stakeholders.

After analyzing the primary and seconday data, I found that the RRS implementation had different levels of stakeholder sensitivity and engagement at different stages. These variations arose due to the the influence of the four primary dimensions in my framework on the tools and techniques used, which I also confirmed in my coding process. Figure 2 presents a final stakeholder orientation framework that shows the various implementation phases.
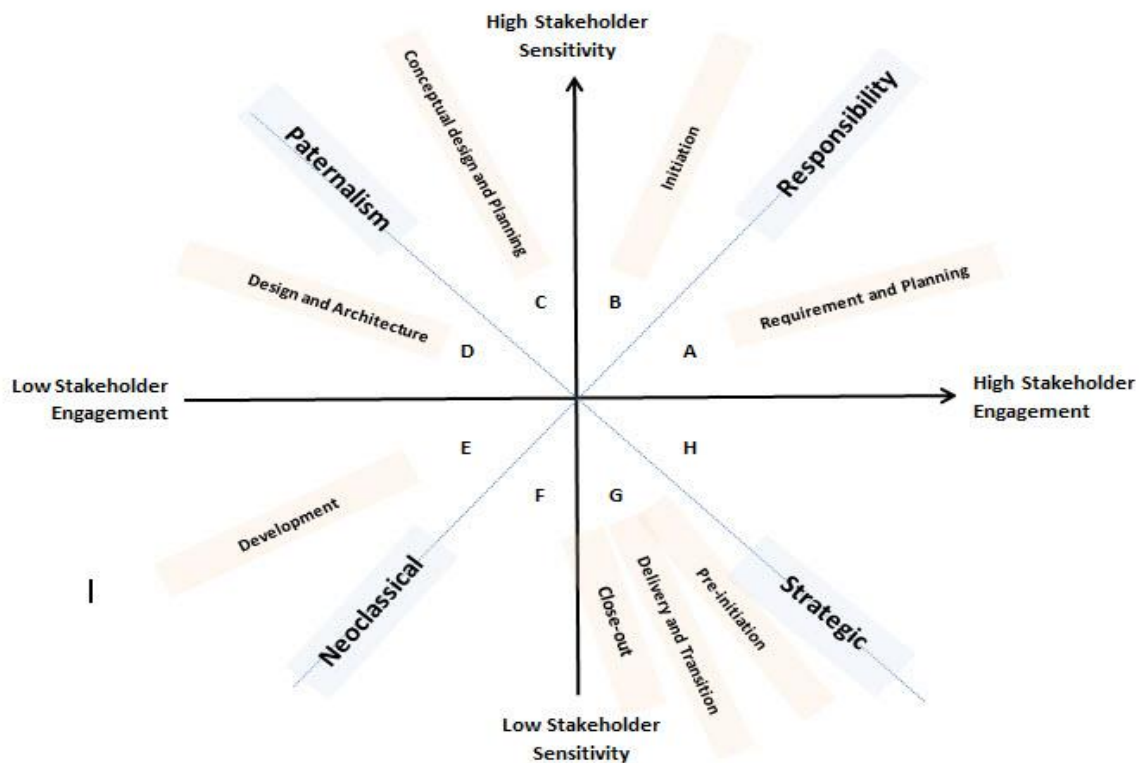
Figure 2. Stakeholder Engagement and Sensitivity for RRS Implementation

6   Case Analysis

Table 12 presents the process of selective coding and theoretical coding processes leading to a scaling-up activity (as Table 3 of the research methodology section presents).

Table 12. Phase-specific Orientation Analysis and Code Derivation

Implementation phases	Processes, procedures tools, policies, and roles	Selected codes/indicators	Saturated code/core categories
Pre-Initiation	Business gating, medium-term plans	Alignment with medium-term plan, protecting reputation, building trust, reduce operational risk, increase organizational effectiveness, compliance with base III requirements.	Strategic
Initiation	MOU, RFI/RFP, procurement, RTM, external communication, demonstration, vendor management, contract negotiations, reference checking, escalation channels	Protect Canada's economy, protect financial institutions, ensure financial wellbeing of the people of the country, government's ability to ensure financial stability.	Responsibility
Requirement and Planning	DeepDive-I, Prototyping, RTM	Clarify requirements in terms of vendor proposed solutions, consider all parties the system will directly impact; capture all concerns and requirements.	Responsibility
Analysis and Conceptual Design	Non-functional requirements, DeepDive-II,	Map the requirements to the functionalities of the new system, determine the technical capabilities and what they should be, propose refinements to original requirements captured.	Paternalism
Design and Architecture	Design authority process, capacity planning, balanced representation	Control the actual design process through a design authority group and a design approval process, select representation from business and IT, propose capacity extensions not captured by RTM.	Paternalism
Development	change control, escalation management, scope control, product enhancement	Monitor scope creep and scope seep leading to a change, fixed-cost offshore development, identify product enhancements to help deliver RTM in full.	Neoclassical
Delivery & Transition	Integrated testing, implementation coordinator	Joint test team to enhance client/partner's buy-in to enhance probability of successfully delivering project, maintain internal integrity and control structures.	Strategic
Close-out	Organizational policy integration, knowledge management, recognition, enhancing PMO capabilities	Sense of achievement and appreciation leading to employee dedication and partner relationships, external communication for meeting deadline of preannounced dates with commercial partners.	Strategic

6.1   Responsibility Dimension (Normative Orientation)

The subquadrants A and B in the first quadrant comprise the "responsibility" dimension of the organization's stakeholder orientation, which a project demonstrates with a strong sensitivity to and engagement with stakeholders. High sensitivity and engagement also allow an organization to place stakeholder interests ahead of its own, which reflects the foundational core of the stakeholder theory. An organization's recognizing that all stakeholder interests have intrinsic worth primarily drives this orientation. Such an organization may at times appear to value strong sensitivity over its own organizational interests; as such, it needs to balance how much it does so by engaging with stakeholders to determine the optimal level.

In the RRS project, the initiation, and requirement, and planning phases demonstrated a strong "responsibility" orientation in that the tri-agency used processes and tools such as the memorandum of understanding (MOU), request for information/request for proposal (RFI/RFP), procurement, requirement traceability matrix (RTM), external communications, vendor management, contract negotiations (fixed

versus variable rate), the buy versus build discussion, reference checking, escalation channels, DeepDive-I, prototyping, and RTM.

The RRS project used the two vital processes RFP and RFI during the initiation phase. They linked to the subsequent requirement and planning phase because much of the functional requirements became a part of the RTM. After an initial RFP failure that cost the project nearly CA$1 million, the RRS project adjusted both engagement and sensitivity postures through the RFP to make it more flexible (the first RFP allowed only North American vendors, but the second RFP had no geographical restrictions), add provisions for joint bids, and clarify the broader scope and purpose of both the system and the organizational goals.

The RTM was one significant tool that the tri-agency project team used during the initiation and requirement and planning phases. Although the RTM tracked approved and committed requirements, it heavily influenced attempts to balance engagement and sensitivity levels. The RTM successfully captured the concerns and suggestions of all legitimate stakeholders early in the implementation phase and persuaded the vendor to agree to a fix-cost contract for such a large project. Maintaining an encompassing approach while establishing RTM clearly reflected a responsible attitude for the tri-agency.

Further, the RRS project also used DeepDive, a process that the IDEO group (a learning design company) initially developed for rapid product development, during the project's requirement and planning and analysis and conceptual design phases. The tri-agency project team conducted DeepDive sessions to establish the project's scope and solidify the component design plans, which led to a high engagement level of the stakeholder with the project activities.

6.2   Paternalism Dimension (Normative Orientation)

The subquadrants C and D in the second quadrant comprise the "paternalism" dimension of an organization's stakeholder orientation, which a project demonstrates through a strong sensitivity to and moderate to low level of engagement with stakeholders. One can interpret this paternalism as if the organization is working in the best interests of the stakeholders (moderate to high sensitivity) without highly engaging them with the project activities. Although these organizations may have a questionable ability to maintain stakeholder sensitivity without engaging them, this orientation still appears to be aligned with the normative aspect of stakeholder theory, which means they resemble the traditional version of corporate social responsibility.

For the RRS project, the conceptual design and planning and the design and architecture phases demonstrated a strong "paternalism" orientation because processes and tools such as DeepDive, the design authority process, capacity planning, balanced representation, and RTM dominated the implementation flow.

The project demonstrated aspects of paternalism through various processes; one such process with high visibility was "design authority". Comprising two key elements (i.e., design authority group and design approval cycle), the project team introduced the design authority process early in the project's lifecycle. In addition, to minimize discrepancies between client and vendor expectations, the client's instrumentally using this process determined what the vendors implemented and how they did so.

6.3   Neoclassical Dimension (Instrumental Orientation)

The subquadrants E and F in the third quadrant comprise the "neoclassical" dimension of the organization's stakeholder orientation, which a project demonstrates through low sensitivity to and low-level engagement with the stakeholders. Maintaining a high stakeholder engagement and sensitivity does not come without out a cost in an IS implementation project because such effort requires valuable project time and resources to address concerns that could significantly reduce the project's effectiveness and negatively impact the deliverables. To avoid disastrous consequences, projects may adopt a neoclassical orientation, according to which an economically based view of the firm takes precedence in which one treats the stakeholders as instrumental, which minimizes interest in building stakeholder relationships.

The RRS project demonstrated a neoclassical orientation during its development phase. The RRS project management's decision to implement a COTS solution through an agile development approach and engage an offshore vendor along with an experienced solution integrator reflected the organization's goals: economic efficiency and risk aversion. It needed to instrumentally engage stakeholders.

The change control process itself played a critical role for the RRS implementation because the project was based on a fixed price contract, and any broken links between user stories, work statements, and RTM requirements would cause additional changes and likely increase the overall project delivery cost for tri-agency. Similarly, the escalation-management process also had an economic orientation with low stakeholder engagement. This process appeared vital for the RRS implementation due to the nature of the host organization, which had a strict IT environment and access-separation policies. Deploying any new or modified code and migrating data from one environment to another depended on the availability of internal COTS support staff. Escalations were necessary a few times to reduce the standby costs of the project team.

The neoclassical orientation of an organization may cross the normative boundary of stakeholder theory, but Jones and Wicks's (1999) "convergent stakeholder theory" argues that one can avoid an endangered management's relationship with the firm through implementing an "enacted environment", which allows corporate managers to behave morally in a stakeholder context.

6.4   Strategic Dimension (Instrumental Orientation)

The subquadrants G and H in the fourth quadrant comprise the "strategic" dimension of the organization's stakeholder orientation, which a project demonstrates through a moderate sensitivity to and fairly high engagement level with stakeholders. These projects place the organization's strategic goals above the interests of stakeholders. Further, because they use stakeholders to further the organization's goals, an instrumental stakeholder approach is a more dominant than normative one.

For the RRS project, the pre-initiation, close-out, and delivery phases demonstrated a strong strategic orientation. In this phase, the project team used processes, tools, and roles such as business gating, integrated testing, implementation coordinating, and collaborative knowledge management.

With a business-gating process, a project team reviews the appropriateness of the IS implementation initiative and ensures that it adequately understand what they need to do and why. Further, it ensures that the investment has a good direction and aligns with the organization's strategic objectives. The RRS project emphasized: 1) reducing operational and reputational risk, 2) increasing corporate efficiency, and 3) increasing corporate effectiveness as key benefits that will be realized on completing the project. The business-gating process for the RRS project ensured a moderate sensitivity by considering the executive sponsors and strategic partners with a high level of engagement.

The integrated testing approach that the project team used during the project's delivery phase enhanced tri-agency's buy-in for the delivered solution by affirming external clients' expectations and increasing their confidence. The role of "implementation coordinator", specifically during the project delivery and close-out phases, enabled the project to synchronize with existing organization practices of fixed window-based change management, configuration and asset management, SLA-based incident management supporting IT resiliency, and BC/DR management to ensure business continuity. The combined effects of these selective engagements can be tied to service level and IT resiliency enrichment, which are closely aligned with organization's strategic objectives.

Since projects in this quadrant have a moderate to low sensitivity level and high engagement, an organization may pursue its strategic objectives through a purely instrumental behavior at the expense of normative aspect of the stakeholder theory.

7   Conclusion and Future Research

Enterprise-level software implementations, especially when they involve multiple vendors and multiple partner organizations, can be complex. However, because of various limitations, I focus on the post-RFP IS project implementation and on the host organization's practices for the entire duration of the project. For this research, I consider descriptive, normative, and instrumental aspects of stakeholder theory (Donaldson & Preston, 1995) from a micro-perspective to examine stakeholder engagement and sensitivity in a large IS implementation by a government organization. Based on this, I develop a framework to capture the dynamic nature of stakeholder orientation.

The framework I propose can benefit organizations in evaluating their IS implementation practices from an organizational stakeholder perspective. An old management adage that is still accurate today—"You can't manage what you don't measure"—clearly indicates the value of assessing stakeholder engagements in IS implementation using the framework I propose in this paper and validates the alignment of IT initiatives

with organizational stakeholder orientation. Through a grounded theory research approach, I identify four major dimensions of organizational stakeholder orientation: 1) responsibility, 2) paternalism, 3) neoclassical, and 4) strategic. I further subdivide these dimensions into two subsections each, which results in a total of eight different organizational orientations based on the level of stakeholder engagement and sensitivity. The proposed framework shows the possibility of sacrificing the normative aspect entirely for an instrumental approach; however, due to the public-sector context of the RRS project, it demonstrated the characteristics of a convergent stakeholder approach whereby implementation phases have a well-defined normative core and support instrumental processes to make them practically viable (Jones & Wick 1999). Therefore, the current research, in addition to answering "how" aspect of stakeholder theory's value proposition from a micro-perspective, also serves to elaborate on the "convergent stakeholder theory" that Jones and Wicks (1999) propose.

7.1   Implications for Practice

Achterkamp and Vos (2008) and Brown and Jones (1998) have found that one cannot always attribute project failure to ineffective project-management practices; rather, inappropriate social interactions among project stakeholders often cause projects to fail, too. One of the senior project managers from the RRS case study expressed this concern by saying:

> What we are not good at doing is collecting the requirements.... We spend a lot of time identifying what the requirements are and sanitizing them, but we still have the issue of missing requirements during implementation phases.... Business users and stakeholders are involved but not necessarily fully engaged. (Senior project manager, tri-agency)

My findings also suggest that most large-scale COTS and IS implementation projects can use processes such as DeepDive, design authority, and integrated testing and tools such as RACI charts and RTM to maintain a desired level of stakeholder engagement and sensitivity.

7.2   Limitations

Analogous to most other case-study-based research efforts, this study has several limitations. This project combined agile and offshore development. A thorough examination of the factors that made the approach effective is necessary, especially when the offshore development team does not have access to the client's production environment or production data. Furthermore, vendor engagement and effectiveness in a complex implementation like this should also be an area of future investigation, especially when the host organization has a highly segmented IT environment with rigid release-management and change-control processes in place.

Another major limitation of the current research concerns generalizability. Due to a single-case design focusing on the public sector, stakeholder orientation might differ greatly in other typical cases. In addition, the framework should be validated using other public-sector IS implementation data – on both successful and failed projects – to enhance the overall generalizability and validity of these findings.

I did not attempt to establish a relation between IS implementation success and organizational stakeholder orientation; rather, I theoretically analyzed the orientation of an organization to identify a sound framework that others can use to benefit from different stakeholder orientations. Although approaches that the tri-agency partners took with the RRS project did reduce future threats from stakeholders and demonstrated tri-agency's organizational responsibility towards a broad range of stakeholders, we need further empirical studies based on different contexts to improve the generalizability of the framework I present here.

Acknowledgments

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