EVIDENCE ON EFFORTS TO ALIGN ORGANIZATIONAL STRUCTURES AND BUSINESS STRATEGIES

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ABSTRACT

This paper is based upon a research study to determine the significance of managerial leadership practices in a corporation's transformation during the period from 2004 to 2008. The study attempted to discover how managerial leadership practices effectively advance horizontal integration of an inclusive and collaborative organization. The study was grounded on propositions involving organizational development roles, IT governance, and collaborative organizations. Triangulated inquiry from peer-reviewed documents and a survey of 24 participants who included 2 women and 22 men comprising a chief information officer, 7 functional managers, 8 project managers, and 8 engineers of a corporation in the Northeastern United States confirmed the propositions. The findings indicated that horizontal integration has begun in transition from being separate toward becoming collaborative. This paper will reveal how disparate images that are subculture bound could be enhanced by the Full Spectrum Leadership model involving collaborative and integrative leadership practices.

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KEYWORDS: IT Management, business strategy

INTRODUCTION

Organizations today utilize different strategies to promote growth and stability within its internal and external operations. Within these strategies are two types of integration that occur in businesses: horizontal and vertical. Vertical integration refers to the organization's control of business activities; this can be an increase or decrease of product or service distribution (Vidal, 2008). Horizontal integration, on the other hand, can mean internal or external expansion within the organization. This can be the result of a merger or expansion of other organizations to help improve the existing organization's product offering (QuickMBA.com, 2007). For the purpose of this article, the horizontal integration of an organizational structure and business strategies will be discussed.

Palepu, Healy, and Bernard (2000) suggested that business strategies that lend themselves to the ultimate decision to merge with, or acquire any organization include: (1) taking advantage of economies of size (2) improving target management (3) combining complementary resources (4) capturing tax benefits (5) providing low cost financing to a financially constrained target (6) increasing product market. Horizontal integration should enable a firm to expand its products and existence geographically throughout the United States and international to enhance the economies of scale. In addition, the firm's resources can be shared and reused internally and externally to improve economies of scope. Furthermore, the firm's market power can be increased through partnerships. The firm can relocate factories in foreign countries to lower labor and operating cost; thus increasing its profitability and reach to the consumers.

However, horizontal integration can pose challenges due to cultural differences within companies acquired (QuickMBA.com, 2007; Schein, 2004). Companies may have different financial and technical applications and business practices which are impractical to maintain due to cost effectiveness, yet difficult to consolidate due to cultural and organizational differences. Thus, horizontal integration does

not always provide effective economies of scope because of redundant structures and differences of applications and practices.

The organization that will be used as an example in this article is named SYNERGY. This is a real organization located in New Jersey. To maintain confidentiality and privacy of this organization, a pseudonym was used as an example. SYNERGY is a pseudonym for an engineering company located in the Northeastern United States. SYNERGY is the "mother" organization that controls the activities of five companies. Each company has independent information technologies, lines of business, and working cultures. Each product has its own applications and processes. The companies have different cultures (Schein, 2004), organizational structure, and geographical locations throughout the United States. To satisfy customers and stakeholder relationships and to enhance its competitive advantage, SYNERGY has integrated its organizational units into a single enterprise to achieve common systems, applications, and processes. SYNERGY has named this organizational transition horizontal integration. The horizontal integration is the consolidation of product lines, financial systems, and engineering applications and processes. The goal is to reduce discrepancies, eliminate redundancies, and improve organizational performance.

An example of a known company that practices horizontal integration is GAP. Similar to SYNERGY, GAP controls three clothing companies: Banana Republic, the Old Navy, and the GAP company. Each company has its own target population and market focus; yet, as a whole, it takes control of the big retail clothing industry (Spies, n.d.)

LITERATURE REVIEW

The literature review explicates the study's theoretical framework and presents propositions involving organizational development, IT governance, and collaborative organization. The goal is to understand how organizations promote horizontal integration.

Organizational Development Roles

Chen and Latendresse (2003) indicated that knowledge growth, information exchange, and competition in business happen at a rapid pace and that IT projects must not fail to accommodate these requirements. When an IT project fails, an entire business may fail. Top management should be a proponent of an IT project and understand the importance of the project in order to allocate adequate resources to see the project to conclusion. N. Evans and Hoole (2005) noted an IT executive can establish organizational development roles to promote business-IT fusion.

IT Governance

The objective of IT governance research is to achieve strategic alignment between business and IT to ensure that IT investment delivers value to business. Haes and Grembergen (2005, 2006) provided a summary of previous research on IT governance. For example, Gardner mentioned IT governance improvement for the first time in 2003. Grembergen (2002) emphasized that IT governance can promote the fusion of business and IT if the board, executive management, and management formulate and implement IT strategies. Nagel and Rietveld (2004) introduced 11 reasons firms need to implement IT governance. The reasons include reduced IT costs, business continuity, centralization of IT services, synergy, security success rate for IT projects, the possibility for outsourcing, added value of IT, market dynamics, legislation and compliance, and external pressure. Table 1 presents the rationale and percentage ranking for IT governance.

Table 1: Rationale and Percentage Ranking for IT Governance

Rationale	*Ranking*
Reduction in information technology costs	74
Business continuity	68
Centralization of information technology services	62
Synergy	52
Security	50
Success rate of information technology projects	48
Outsourcing	45
Added value of information technology	41
Market dynamics	39
Legislation and compliance	26
External pressure	15

Adapted from Nagel and Rietveld (2004).

Information technology governance should include a mixture of processes, structures, and relational mechanisms (Haes & Grembergen, 2005). If these elements are not designed and coordinated well, fusion will not be promoted. If firms have IT governance in place but do not have the necessary processes, structures, and relational mechanisms in place, IT governance will not be optimized or implemented properly.

Collaborative Organization

Firms implement relationship management to build and improve customer relationships for the sake of competitive advantage (Eriksson & Mattsson, 2002). Relationship management is expanded to partners and subcontractors domestically and internationally (Griffith, 2002). Hunt and Morgan (1994) explained that firms must meet changing requirements to compete and grow. This requires firms to cooperate with their partners and work effectively with their network of organizations. The synergy of networking and partnering can only be created and maintained through relational exchanges, trust, and commitment in relationship marketing (Hunt & Morgan). In addition, service quality has become an important attribute for competitive advantage (Hitt, Katsuhito, & Kochhar, 2000). Service quality reflects customer satisfaction, especially when service quality aims to strengthen relationship management for competitive advantage.

Dibb and Meadows (2001) posited that relationship management can provide good financial products to customers. Coughlan, Lycett, and Marcredie (2004) believed that relationship management could promote fusion between business and IT. Coughlan et al. asserted that collaboration is the key element for aligning business and IT activities and improving business performance. However, collaboration is hard to achieve in a large organization. Therefore, relationship management becomes a useful mechanism to manage and maintain business and IT collaboration and activities.

DATA AND METHODOLOGY

The research techniques included surveying 24 professionals who include 2 women and 22 men, a CIO, 7 functional managers, 8 project managers, and 8 team members involving 8 stakeholders. Two SYNERGY nonparticipants were asked to review and comment on the survey questions prior to their administration to ensure the questions are relevant to the study's purpose and objectives. In addition to surveying, a sample of the company's relevant artifacts such as charters, statements, annual reports, business plans, IT projects, and management structures and processes was examined, analyzed, and interpreted in accordance with themes developed in the propositions. The artifacts illustrate organizational activities and reflect the context of reorganizing, integrating, consolidating, and transforming the business-IT structures and processes relative to business-IT fusion. The charters, statements, annual reports, and messages were obtained from SYNERGY's archive.

The managerial leadership effectiveness demonstrated during the horizontal integration was measured in terms of how well organizational development roles, IT governance, and relationship management were established. To measure these constructs, the survey questions were designed in the form of a Likert-type scale (Likert, 1932) to measure frequencies of organizational development roles, IT governance, and relationship management attributes provided by the stakeholders. Likert-type scales were used to quantify results and obtain shades of perceptions. Choices or categories of responses ranged from strongly disagree to strongly agree. As the categories moved from one to the next, for example from strongly disagree to agree, the value increased by one unit.

The levels of leadership effectiveness were measured in terms of how well organizational structures and business processes were successfully consolidated and integrated. To measure these constructs, a sample of the company's relevant artifacts such as charters, statements, annual reports, business plans, IT projects, and management structures and processes were examined, analyzed, and interpreted in accordance with themes developed in the propositions. The goal was to gather the elements of a good story and generate useful findings about processes and outcomes for those who must make decisions about horizontal integration (Patton, 2003).

Instrumentation

This qualitative evaluation using a case study design was a "triangulated inquiry" (Patton, 2002, p. 66). A triangulated inquiry refers to a combination of several data sources converging on a single construct of managerial leadership practices about horizontal integration (Hilton, 2002). The data sources included survey data and strategic and operational plans, charters, annual reports, statements, IT projects, and management structures. The multiple data sources provided different perspectives about how managerial leadership practices contribute to a decrease in the business-IT gap. A triangulated data source can minimize "deficiencies intrinsic to a single-investigator, single-site, single-theory, single method, or single-unit of analysis" (Hilton, p. 2).

The triangulated inquiry focuses on understanding the perspectives of participants and audiences (Patton, 2002). The Likert-type scales and open-ended questions are presented in Appendix A. The sequence of questions formulated in the survey addressed the research problems and objectives. The survey questions provide traceability and "pattern matching" (Campbell, as cited in Yin, 2003, p. 26) that establish the logic that links the survey data to specific propositions. Pattern matching follows a systematic approach and method that indicates connections between theories and case study propositions.

Pattern matching allows for comparisons between the findings of the study and the findings of previous studies to identify new insights and knowledge. A systematic approach for process tracing was used to eliminate irrelevant patterns. Relevant patterns are expected to reflect qualitative findings from the survey and other artifacts. Process tracing involves statistical analysis including frequency distributions, percentages, means, standard deviations, and statistical manipulations in order to arrive at more conclusive findings and conclusions.

The survey questions were designed in the form of a Likert-type scale to measure frequency distribution, percentages, means, and standard deviations of the organizational development roles, IT governance, and relationship management attributes. The results are presented in tabular formats so that correlations and relevant models are established. The survey comments and open-ended questions provided a platform for the stakeholders to speak their voice (Patton, 2003). A sample of charters, statements, annual reports, business plans, IT projects, and management structures and processes illustrated organizational activities that reflect organizational cultures and management practices during the horizontal integration. The purpose was to establish logical links from the organizational models to the propositions. Table 2 shows the relationship between the data sources, purposes, and instruments.

Table 2: The Relationship of Data Sources, Purposes, and Instruments

Data source	Purpose	Instrument
SYNERGY stakeholders	Focus on specific propositions to answer the first research question "how managerial leadership practices effectively advance business-IT fusion of an inclusive and collaborative organization" and determine the business-IT interrelations	Likert-type scales and comments
SYNERGY stakeholders	Focus on stakeholders' voice to answer the second research question "how business-IT fusion affect risks and profitability" and provide recommendations to improve business-IT fusion	Open-ended questions
Annual reports, PowerPoint slides for program and technical operations, key messages, process and tools newsletters, and IT architecture framework	Focus on additional insights about managerial leadership practices to answer both research questions	Documents

Data Collection

Data collection included the following: (a) key stakeholders as participants, (b) a survey with participants to evaluate managerial leadership practices and to recommend strategies for business-IT fusion, and (c) reviews of company documents for evidence of managerial leadership practices and new insights. Stakeholders were identified based on key programs and business-IT units.

E-mail, telephone, or face-to-face meetings were used for the survey. The participants received an explanation about the survey, purpose, schedule, benefit, risk, confidentiality, and who and what were involved. After the participants agreed to participate in the survey, they received the survey questions as an e-mail attachment or as a hard copy with an agreement of a specific schedule for the survey to be completed and returned. The survey questions were used to collect data and included a Likert-type scale and open-ended questions. All hard-copy responses from the participants were kept in a safe box and all electronic responses were stored on a secure computer. Appendix A shows the survey instrument. A sample of SYNERGY's charters, statements, messages, annual reports, business plans, IT projects, and management structures and processes were obtained from SYNERGY's archive. All data were stored in a database.

Data Analysis

The survey included Likert-type scales and open-ended questions that were documented and analyzed as an aid to understanding the participants' perspectives. A sample of SYNERGY's charters, annual plans, reports, statements, organizational structures, and program processes were obtained and analyzed to examine how management implemented the horizontal integration. Data reduction techniques such as transcription procedures using an Excel spreadsheet and Statistical Package for Social Science (SPSS) software tools were used for statistical manipulation. Data from the Likert-type scale survey and the open-ended questions and a sample of SYNERGY's artifacts were analyzed and coded for interpretation (Creswell, 2002).

Likert-Type Scale Data

The Likert-type scale survey was designed to answer the first research question, namely, how managerial leadership practices effectively advance business-IT fusion of an inclusive and collaborative organization. The Likert-type scale data were entered into Excel spreadsheets for loading into SPSS. The data were

tabulated by the number of responses per scale and transferred to SPSS to generate tabulated reports of distributions and trends.

The Likert-type scale survey measured frequency distribution, percentages, means, and standard deviations of the organizational development roles, IT governance, and relationship management attributes. The mean indicates the average answer direction and standard deviation indicates the average distance from the mean. A low standard deviation indicates that observations cluster around the mean. A high standard deviation indicates that variations in the answers exist. A zero standard deviation suggests that responses to a question are the same.

The Likert-type scale survey was coded to the nominal accept and reject levels by combining all agree and disagree answers. The Likert-type scale ranged from 1 to 5 and the scale is presented as follows: 1, *strongly disagree*; 2, *disagree*; 3, *neutral*; 4, *agree*; and 5, *strongly agree*. The score for each response was computed by multiplying each frequency count to the scale (1 to 5) and adding them together. The highest percentage score and the lowest score are computed and presented as the following:

The highest percentage score $X = 24 \times 5 = 120$ (where 24 = number of participants and 5 = strongly agree)

The lowest percentage score $X = 24 \times 1 = 24$ (where 24 = number of participants and 1 = strongly disagree)

Thus, the X score of each response could be computed by applying the following formulas:
$X = Y\,(120/100)$ or $X = 1.2Y$,

where X is a score and Y is a percentage score between the lowest score and the highest score. When all participants strongly agree with a question, it has the highest score. Conversely, when all participants strongly disagree with a question, it has the lowest score.

Comments, Open-Ended Questions, and Document Data

The comments and open-ended questions provided a platform for the stakeholders to speak their voice (Patton, 2003) and provide new insights. The goal was for the stakeholders to answer the second research question, namely, how business-IT fusion affect risks and profitability. Moreover, the open-ended questions were designed to solicit participants' recommendations about how to solve the business-IT gap and how to improve organizational performance.

A sample of charters, statements, annual reports, business plans, IT projects, and management structures and processes illustrated SYNERGY's activities during the horizontal integration and reflected organizational cultures and managerial leadership practices. The purpose was to evaluate what management did and how management consolidated five companies. Moreover, the purpose was to establish logical links from the organizational models to the propositions. According to Creswell (2002), qualitative data should be organized and developed into themes for interpretation. Creswell presented the following coding process for qualitative data:

1. Preparing, organizing, and exploring the data
2. Explaining and establishing themes from the data
3. Depicting and communicating the findings
4. Interpreting the findings
5. Corroborating the relevancy of the findings

The comments from the open-ended questions and data from the documents were organized and developed into themes reflecting the propositions. Component parts, their relations, and meanings in making up the propositions were established. Key words, synonyms, and frequency counts were developed using NVivo software to identify patterns to answer the research questions and reveal new knowledge. Figure 1 presents the process that guided the analysis of the survey and the development of a code for interpretation. In addition, Table 3 presents the questions that guided the development of themes from the data.

RESULTS

Key business, programs, process, and IT stakeholder interpretations of the activities involving horizontal integration were collected using survey that reflected the findings of previous studies from A. Evans (2003), N. Evans (2004a, 2004b), N. Evans and Hoole (2005), Haes and Grembergen (2005, 2006), and Coughlan et al. (2004). The data pertaining to organization development roles, IT governance, and collaborative organization were analyzed for purposes of determining managerial leadership practices enabling the horizontal integration. The survey data, comments, and open-ended questions list participatory characterizations, and the documentary data list activities pertaining to horizontal integration. As the documents presented the horizontal integration structures, process, and activities, they reflected managerial leadership practices during the horizontal transformation. The documents indicated the horizontal integration activities for propositional corroboration or disputation and inference (Yin, 2003).

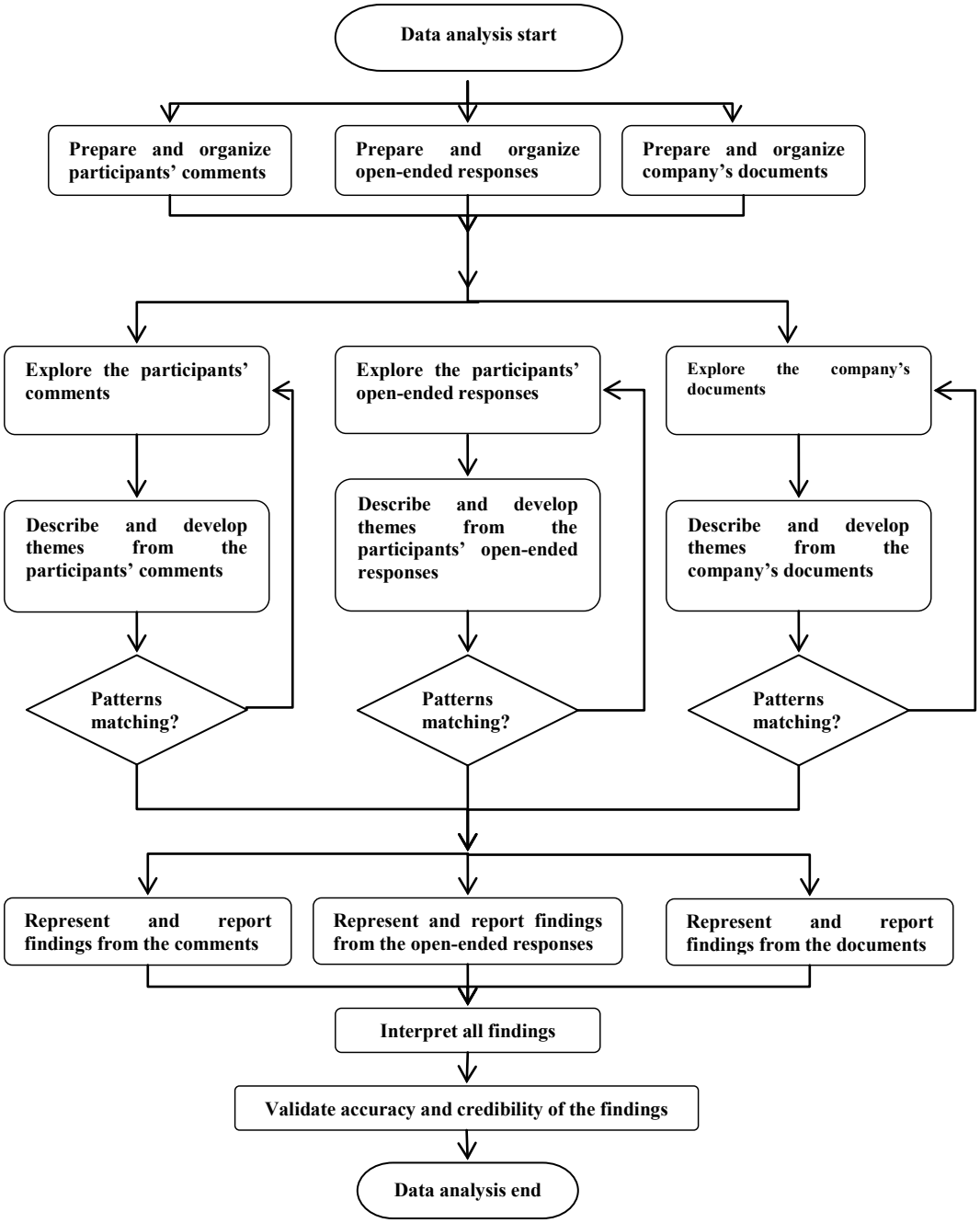
The horizontal integration involved more than designing better applications and processes and intended to improve organizational performance and involved better management. However, organizational development roles were not properly addressed during the horizontal integration of system development processes. Knowledge between organizational units and programs was not effectively transferred. Trust, collaboration, and relationship management were not emphasized. Information technology was unable to create environments that allow the business units to make rational decisions for the horizontal integration. Meaningful governance mechanisms were not defined and the success of projects was due largely to the efforts of the individual contributors. Effective leadership principles were needed at all levels of responsibility, enabling IT participation in a program's proposal phase.

Table 3: Guide: Analysis of Qualitative Data

Questions	Purposes
What is the whole? What are component parts of the whole? What are their relations? What are the substances?	Organizing and exploring the data for analysis
What are the key words?	Identifying the themes from the data
What are the synonyms?	Developing the themes from the data
What are the frequency counts?	Linking and developing the sub-themes
What are the patterns?	Matching the findings to previous studies
Do the patterns match the propositions?	Confirming the findings
Do the patterns answer the research questions?	Validating the credibility of the findings
What are the new patterns?	Identifying the new patterns and knowledge
What is the new model for future research?	Constructing a new model

Adapted from Creswell (2002) and Yin (2003).

Figure 1: Analysis of the survey and development of a code for interpretation (adapted from Creswell, 2002 and Yin, 2003).



With some apparent orientation toward establishing horizontal integration teams and chartering and bolstering some integration activity across different sites, some common tools and processes have become standards. Stakeholders apparently held positive views of the horizontal integration activity. The documentary coding data indicated integration activity crossed aspects of synergy. The documents indicate some horizontal integration teams were formulated to lead integration activities across different sites to take advantage of resources and skill sets to provide the best solutions to complex challenges. Trade studies were conducted to define common tools and standard processes.

The findings of this qualitative evaluation using a case study method have revealed the significance of managerial leadership practices of SYNERGY's horizontal transformation between 2004 and 2008 and shown how horizontal integration could enhance organizational performance. Using a qualitative evaluation case study approach, the research comprised an examination of SYNERGY's horizontal integration grounding on studies by Evans and Hoole (2005), Haes and Grembergen (2005, 2006), and Coughlan et al. (2004) to determine the effectiveness of the horizontal integration. In terms of the horizontal integration, effective implementation of horizontal integration requires managerial leadership that pays attention to ethical considerations (Donaldson, 2000; Evans & Jewels, 2005) promoting an inclusive organization.

The horizontal integration of disparate systems, applications, and processes that corroborated the studies of N. Evans and Hoole (2005), Haes and Grembergen (2005, 2006), and Coughlan et al. (2004) should show the following: (a) IT executives can design organizational development roles to improve organizational effectiveness, (b) the board and executives can design IT governance to guide and support processes and structures to meet organizational development roles, (c) organizational leaders can promote collaborative organization to support relationship management, (d) good working relationships between business and IT reduce business-IT gaps, and (e) shared ownership and responsibilities between business and IT contribute to risk mitigation, ROI, and organizational performance.

Within the study, answers to the question regarding how well N. Evans and Hoole (2005), Haes and Grembergen (2005, 2006), and Coughlan et al. (2004) described qualities of business-IT fusion in the horizontal integration setting were found. Although the horizontal integration was apparently not wholly transformed from a disparate organization, there is evidence that inclusivity and diversity in regards to leadership and managerial practices contributed to horizontal integration effectiveness.

Multiple horizontal integration teams were established to define common processes and common framework to consolidate different applications and processes. However, subculture conflicts and disparate applications and processes posed challenges. Because the horizontal integration was to involve better management and to improve organizational performance, consolidating or designing better applications and processes was one of several facets to enhance such performance. Other organizational issues such as cultural and human aspects should be properly addressed during the horizontal integration of system development processes to allow knowledge to be transferred between organizational units and programs. Although the horizontal integration was apparently not wholly transformed from a disparate organization, there seems to have been positive and improving risk mitigation and ROI.

From 2004 to 2008, SYNERGY has continued to transform from five individual operating companies into one integrated organization. SYNERGY has implemented cross-site relationships by developing Horizontal Integration Teams and common processes that support the strategic plan. SYNERGY has leveraged its people, technology, and processes to support the growth strategy. SYNERGY established up a cross-enterprise engineering organization to transition from a site and line of business-based functional organization to an engineering discipline-based organization with cross site centers. This change was focused on improving engineering consistency and discipline, assigning clear accountability and authority, and fostering cross-enterprise product leverage and development, as well as providing individual career growth opportunities. SYNERGY aligned the majority of its engineering work force along common functional disciplines, regardless of geographic location.

SYNERGY introduced a "Full Spectrum Leadership" model with the objective of making it "the language of leadership." The model consists of five key imperatives which all employees were asked to focus on and strengthen, both in themselves and in their management-level employees. These qualities include the ability to shape the future, build effective relationships, energize the team, deliver results, and model personal excellence in terms of integrity and accountability. The Full Spectrum Leadership was viewed as

a development for the management team and employees. It became the language of leadership at SYNERGY in helping to build on the company strengths to meet the demands of the future growth.

The focus of the 2008 year was to help the management team understand Full Spectrum Leadership and develop in areas where the team had opportunities for improvement. In addition, Full Spectrum Leadership was incorporated into business processes for talent selection, management, development, and performance accountability. Thus, the Full Spectrum Leadership Imperatives provide a comprehensive framework for leadership excellence and become the integrator of SYNERGY efforts to achieve full Horizontal Integration for growth and performance and deliver greater value to its customers. As the horizontal integration has begun its transition from being separate toward becoming collaborative, the transformation of an inclusive and collaborative organization by A. Evans (2003), N. Evans (2004a, 2004b), N. Evans and Hoole (2005), Haes and Grembergen (2005, 2006), and Coughlan et al. (2004) was confirmed.

CONCLUDING COMMENTS

The study was limited to SYNERGY's horizontal integration from 2004 to 2008 that reflects the business-IT fusion and managerial leadership practices implemented during the horizontal integration. Thus, study findings may not be repeatable from other organizational contexts. The situations or responses detailed in the study are unique to SYNERGY, which limits the generalizability of the study. However, the "effectiveness" and "impact" (Simon, 2006, p. 27) of business-IT fusion, lessons learned, and best practices may be generalized and constructed into some strategies. The findings disclosed that implementing Full Spectrum Leadership model and integrating organizational development roles, IT governance, and relationship management were the preferred modality when promoted horizontal integration to enhance collaborative and integrative aspects of the organization. The findings substantiated the need for further research specific to the following research questions: how organizations demonstrate horizontal integration's contribution to the success of the enterprise and how horizontal integration facilitates organizational transformations. Finally, the research indicates a collaborative and integrative model is needed to gain further insights into and subsequently improve managerial leadership practices. Strategies to implement the collaborative and integrative model to large organizations can present significant challenges because of subcultures-bound; however, these challenges could yield greater organizational performance by enhancing the capabilities of leaders and employees within the organization.

APPENDIX A: COPY OF SURVEY INSTRUMENT

Section 1: Strategies for Promoting Business-IT Fusion

The survey asks questions about managerial leadership practices for organizational development roles, IT governance, relationship management, horizontal integration, and business-IT synergy. The survey allows you to express your opinions and provide information about your experiences anonymously; your name is not attached in any way to the responses you give. By answering the questions, you will help your organization learn about its strengths and weaknesses and improve its strategies for promoting business-IT fusion. The survey has columns for your responses (Table A1). Please mark x in the column that corresponds to the significance of each of the following factors for contributing to managerial leadership practices.

Table A1: Surveyed Columns for Responses

SA	A	N	DA	SDA
Strongly agree	Agree	Neutral (neither agree nor disagree)	Disagree	Strongly disagree

Please avoid the neutral column as much as possible. Additional comments can be added at the end of each category. In addition, Tables A2, A3, A4, A5, and A6 contain Likert-type scale survey questions and Table A7 contains the open-ended questions as follows.

Table A2: Likert-type Scale Survey for Organizational Development Roles

Statement for evaluation	SA	A	N	DA	SDA
1. IT is an integral part of most forms of business initiatives at SYNERGY.					
2. IT is properly used at SYNERGY.					
3. IT projects are capable of delivering what clients expect at SYNERGY.					
4. SYNERGY's IT executives are aware of the organizational factors that contribute to project failure.					
5. Organizational issues are properly addressed during system development processes at SYNERGY.					
6. The SYNERGY's organizational development roles improve organizational performance.					
7. The SYNERGY's organizational development roles support the structures and processes of the entire system.					
Comments:					

Table A3: Likert-type Scale Survey for IT Governance

Statement for evaluation	SA	A	N	DA	SDA
1. IT governance is exercised by IT management in order to create business-IT synergy.					
2. The management ensures that money spent on IT delivers value for the business.					
3. The SYNERGY's Business-IT units make business-IT decisions together.					
4. IT department creates an environment that allows programs to make rational decisions.					
5. The IT department understands goals and requirements of the programs to establish clear engagements.					
Comments:					

Table A4: Likert-type Scale Survey for Relationship Management

Statement for evaluation	SA	A	N	DA	SDA
1. IT has resources to find the right people for the job.					
2. The right people take lead roles according to their degree of specialization.					
3. IT people do not wait to be told what to do.					
4. Colocation with programs being supported is important for IT technical personnel.					
5. IT people seem to have a one-team attitude because they are part of the program.					
6. Program units see IT as some sort of adjunct.					
7. Program units know who to talk to in IT.					
8. IT knows who to talk to in the program units.					
9. The IT department and the program units have the necessary knowledge of each other's requirements.					
10. IT people understand that they are responsible to work towards delivering a product to a customer.					
11. IT people and the programs communicate with one another.					
Comments:					

Table A5: Likert-type Scale Survey for Horizontal Integration from 2004 to 2008

Statement for evaluation	SA	A	N	DA	SDA
1. Horizontal integration development improves organizational performance.					
2. Horizontal integration development focuses on processes between different sites.					
3. Organizational issues were properly addressed during the Horizontal integration of system development processes.					
4. Horizontal integration involves more than designing better tools; it involves better management.					
5. The IT departments create environments that allow the business units to make rational decisions for horizontal integration.					
6. The IT departments establish clear agreements to support business units in achieving of horizontal integration.					
7. Trust, collaboration, and relationship management were emphasized.					
8. Effective leadership principles are applied at all levels of responsibility.					
9. Effective knowledge transfer between IT and programs is promoted during horizontal integration.					
Comments:					

Table A6: Likert-type Scale Survey for Business-IT Synergy

Statements for evaluation	SA	A	N	DA	SDA
1. IT continually tunes itself to business with contingency plans in place.					
2. Tools architecture supports horizontal integration.					
3. Tools are integrated with input from end users for continuous improvement.					
4. Results of business must be known for all IT investments (solution benefit).					
5. Programs own products; IT delivers financial value.					
6. IT is fully embedded in business strategy (technology strategy).					
7. Programs and IT equally share ownership.					
Comments:					

Section 2: Open-Ended Questions

Table A7: Open-ended Questions

1. Should IT focus on standardization and harmonization of differences?
2. Is IT a commodity or a competitive advantage?
3. Should IT people situate themselves as change agents?
4. How managerial leadership practices existed from 2004 to 2006 that demonstrated fusion in work relationships for horizontal integration?
5. How does management contribute to the decrease of the business-IT gap?
6. How does this company promote business-IT fusion in work relationships for the horizontal integration?
7. How does business-IT fusion affect project risks and return on investment?
8. What strategies do you suggest in order to promote business-IT fusion?

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