

Part 1: Improving Performance Effectiveness through Leadership and Management Education

By Dr. William S. Boddie

This article contains extracts from Dr. Boddie's research dissertation for his Doctor of Management in Organizational Leadership Program research dissertation. This article is in two parts -- in part one, the research problem and method used to collect the research data are discussed. In part two, which will appear in December's issue of Succeed to Lead, the themes and recommendations that emerged from the study will be discussed.

Abstract

It is estimated that only 30% of global IT project investments initiated in 2004 realized the expected outcomes. The purpose of this qualitative phenomenological case study was to explore the experiences and perceptions of a purposive sample of Business Information Technology Management (BITM) Certificate Program graduates regarding how the program prepared the graduates with leadership and IT management competencies. The BITM Certificate Program prepares participants with leadership and IT management competencies. The data from the interviews suggested the program enabled the graduates to help improve their organization's performance effectiveness and revealed that 70% of the study participants obtained new IT leadership and management positions.

Introduction

Global leaders often depend on information technology (IT) to realize organizational performance effectiveness and efficiency. IT is defined as "computer systems hardware, software, support services, and telecommunications services" (Yamada et al., 2004, p. 3). C. K. L. Lee (2003) found that "IT is making a significant impact on almost every aspect of today's organizations" (p. 1). Many global leaders invested heavily in IT to achieve the desired performance effectiveness and efficiency outcomes for their organizations. "Global organizational leaders collectively invested \$2.1 trillion in IT in 2002, \$2.3 trillion in 2003, and \$2.5 trillion in 2004" (Yamada et al., 2004, p. 5). Yamada et al. (2004) projected that global organizations would invest \$2.6 trillion in IT 2005 and would invest over \$3 trillion annually by 2008. Despite making significant IT investments, many leaders failed to realize the organizational performance effectiveness and efficiency outcomes expected from their IT investments. Stang (2004) found that only 30% of global IT project investments initiated in 2004 realized the expected outcomes.

Stang also found that of the global IT project teams that had a budget of "less than \$500K . . . fewer than a third were successful [in meeting the organization's expected outcome]" (p. 2). Caruso and Gentry (2005c) concluded that competent IT leaders and managers can help produce the outcomes expected from their organizations' IT

investments. The most salient IT leadership competencies are creating a shared vision, communicating the vision, and empowering others to take action to realize the vision (Caruso & Gentry, 2005c). Remenyi and Brown (2002) declared that the most salient IT management competencies were planning, organizing, coordinating, directing, and controlling. Mingay, Mahoney, McDonald, and Bell (2004) found that "Managers sustain established organizations and processes" (p. 3), and that managers use "execution, organization, planning, control, performance and ensuring continual improvement" (p. 2) to achieve organizational performance goals. Caruso and Gentry (2005c) emphasized that IT practitioners should receive IT leadership and management education prior to being assigned to leadership positions. Although competent IT leaders and managers can help achieve the outcomes expected from their organizations' IT investments, little research was found that explored the effectiveness of IT leadership and management certificate continuing education programs (CEPs).

The purpose of this phenomenological case study, using a modified van Kaam method by Moustakas (1994), with audio taped and transcribed unstructured interviews, was to explore the lived perceptions of a purposive sample of 20 Business Information Technology Management (BITM) Certificate Program graduates living in the metropolitan Washington, DC, area. The BITM Certificate Program is designed to prepare participants with IT leadership and management competencies. The researcher sought to explore how the participants used the IT leadership and management competencies gained, if any, from their BITM Certificate Program experiences, to help produce the outcomes expected from their organizations' IT investments. The study involved only BITM Certificate Program graduates who served in an IT leadership or management position and who have served in an IT leadership or management position for at least one year. The BITM Certificate Program is a continuing education curriculum that seeks to prepare IT professionals with leadership and management competencies (Northern Virginia Community College (NVCC, 2005).

Program course foci include IT leadership, systems analysis management, IT lifecycle management, enterprise architecture leadership, business process re-engineering leadership, project leadership, and IT security. Each of the seven program courses is a separate, stand-alone module within the BITM Certificate Program. The BITM Certificate Program is designed specifically for intermediate-level business professionals involved with leading and managing IT environments. The BITM Certificate Program was established in 2000 and was delivered at selected community colleges in the metropolitan Washington, DC, area from 2000 to 2005. The program name and focus was changed to the Business Information Technology Leadership (BITL) Certificate Program in 2005. The revised program curriculum focuses extensively on IT leadership competencies, in addition to IT management competencies, to help organizations realize the outcomes expected from their IT investments. No studies were located that explored the IT leadership and management competencies participants gained from the BITM or the BITL Certificate Programs. The BITL Certificate Program is currently delivered at selected community colleges in the metropolitan Washington, DC, area.

Background of the Problem

Global organizations started using IT in the early 1960s (Field & Stoddard, 2004). Organizational leaders in the 21st century depend heavily on IT to support critical business functions in industries such as public infrastructure and utilities, financial management, and medical and health services. Dependence on IT leaders and managers to help organizations gain a competitive edge increased dramatically in the past 25 years (Koong, Liu, & Liu, 2002). Although introducing IT capabilities enabled many global organizations to gain a competitive edge in the past 25 years, effective IT leadership and management continues to challenge many global organizations. Field and Stoddard (2004) concluded that since the advent of modern IT in the early 1960s, few organizations effectively managed their IT resources.

Although IT is critical to many organizations, many global organizations struggle to realize the outcomes expected from their IT investments. According to the most recent Chaos report from industry analyst Standish Group, only one-third of all IT projects can be deemed successes. The report also shows time overruns in projects have increased significantly—from a low of 63 percent in 2000 to 82 percent in 2003. According to industry research firm Gartner, poor [IT] project manager competency accounts for the bulk—60 percent—of project failures. (p. 381) It appeared that IT leaders and managers might benefit from IT leadership and management education. These leaders and managers could then use competencies gained in IT leadership and management education programs to help realize the outcome expected from their organizations' IT investments. Remenyi and Brown (2002) concluded that IT challenges are usually due to human factors rather than due to technological factors. Several recent challenged IT initiatives demonstrated the need for IT leaders and managers to gain and use IT leadership and management competencies.

One example of a challenged IT initiative was the United States Thrift Savings Plan (TSP) IT system conversion. The conversion of TSP was delayed by three years. The conversion delays and subsequent project cost overruns cost TSP participants and beneficiaries over \$36 million (U.S. Senate, 2004, p.1). Additionally, the delayed conversion constrained the capability for U.S. federal government TSP participants to make financial transactions. The U.S. Senate Committee on Governmental Affairs investigated the TSP conversion delay and determined that the lack of competent IT leaders and managers contributed significantly to the conversion delay.

Another example of a recent challenged IT initiative was the U.S. Internal Revenue Service (IRS) Business Systems Modernization project. The IRS project, which was launched in 1998, was designed to enable the IRS to modernize the manner in which it conducts business.

It "is more than a quarter-billion dollars over budget. Its key component, renovation of the master database of taxpayer records, is more than three years behind schedule. Five other modernization-related components are late and busting their budgets"

(Harris, 2004, p. 44). The TSP and IRS IT initiatives are examples of how IT investments failed to realize the organizations' expected outcomes.

The failure of IT initiatives such as the TSP and IRS examples is likely to continue to occur unless IT leaders and managers gain and use leadership and management competencies to complement their technical competence. IT leadership and management certificate programs such as the BITM Certificate Program might help prepare IT leaders and managers with IT leadership and management competencies. As a result, IT leaders and managers could more effectively help produce the outcomes expected from their organizations' IT investments. Various researchers noted concerns about the ability of education programs to prepare IT professionals with needed competencies.

Selingo (as cited in Liu, Liu, Koong, and Lu, 2003) suggested that universities and colleges failed to adequately educate graduates to meet the needs of the IT industry in the previous decade. Selingo also noted "a disconnect between what the market needs and what the colleges are providing" (as cited in Liu et al., p. 191). Livingood (2003) cited the failure of higher-level educational programs to adequately prepare IT staff as a primary contributor to the lack of skilled IT professionals. Their dependence on IT requires organizations to attract, employ, and retain IT leaders and managers with the competencies to lead and manage the organization's IT environment. However, global business leaders noted significant concerns about the lack of skilled IT professionals to support constantly changing business environments (Cortez, Dutta, & Kazlauskas, 2004).

Concerns regarding the competence of IT leaders and managers suggested a study of IT leadership and management certificate programs might add new knowledge. IT leadership and management certificate CEPs such as the BITM Certificate Program might help prepare IT leaders and managers with IT leadership and management competencies. Competent IT leaders and managers could more effectively help produce the outcomes expected from their organizations' IT investments.

Statement of the Problem

The problem is that many IT leaders and managers lack leadership and management competencies. Caruso and Gentry (2005b) noted, "Leadership is critical to the success of all enterprises. Nowhere is this need more apparent than in the IT world" (p. 1). Caruso and Gentry posited, "The best technologists are often promoted and then left without guidance to learn the leadership roles [competencies] on the job, resulting in demoralized teams, overbudget projects, and a lack of project direction" (p. 1). Little research was located that explored the effectiveness of IT leadership and management certificate programs.

Purpose of the Study

The purpose of this qualitative, phenomenological case study, using a modified van Kaam method by Moustakas (1994), with audio taped and transcribed unstructured interviews, was to explore the lived experiences and perceptions of a purposive sample of 20 BITM Certificate Program graduates living in the metropolitan Washington, DC, area. The researcher sought to explore how the participants used the IT leadership and management competencies gained, if any, from their BITM Certificate Program experiences, to help produce the outcomes expected from their organizations' IT investments. Many individuals serving in global IT leadership and management positions lacked IT leadership and management competencies (Caruso & Gentry, 2005b). The study involved only BITM Certificate Program graduates who served in an IT leadership or management position and who have served in an IT leadership or management position for at least one year. The phenomenological research design was appropriate because the researcher sought, as Moustakas concluded, "to determine what an experience means for the persons who have had the experience and are able to provide a comprehensive description of it" (p. 13).

For the purposes of the study, the central theme and its complementary foci was to attempt to (a) describe the participants' lived professional IT leadership and management experiences after completing the BITM Certificate Program, (b) explain how the program might have prepared the participants with IT leadership and management competencies, and (c) examine what might be needed in the current program curriculum to help increase the leadership and management competencies of IT leaders and managers.

Data from the participant interviews were distilled and emergent themes were identified. The data from this study can provide organizational leaders with information regarding recruitment strategies, hiring and placement decisions, and formulation of leadership and management mentoring programs for information technologists. Additionally, the data can provide continuing education program managers with information for future IT leadership and management certificate program curriculum designs.

Significance of the Problem

Gomolski (2005) reported, "Across all industries, the average organization plans to devote 3.5 percent of its gross revenue to IT expenses in 2005" (p. 4) in the United States. The U.S. gross domestic product (GDP) for 2003 was \$11 trillion (Simons, 2004/2005). The *OECD Observer* reported the "Gross Domestic Product (GDP) is defined as the sum of all goods and services produced in a country over time, without double counting products used in other output" ("Is GDP," 2004/2005, p. 30). Simons reported that the global GDP in 2003 was equivalent to \$34.6 trillion dollars. This study was significant because competent IT leaders and managers could potentially help the United States and other countries realize the outcomes expected from their substantial IT investments.

This study was also significant because it sought to provide data regarding IT leadership and management competencies that could affect thousands of IT leaders and managers. The U.S. Department of Labor, Bureau of Labor Statistics (as cited in U.S. Department of Labor [DOL], 2004) reported that approximately 284,000 computer and information systems managers were employed in the United States in 2002. As reported by the U.S. Bureau of Labor Statistics, computer and information systems leaders and managers influence significant aspects of organizational activities, productivity, effectiveness, and efficiency. The U.S. Bureau of Labor Statistics projected the growth for computer and information systems managers from 2002 to 2012 to be “much faster than average growth” (DOL, 2005, ¶ 1). The “much faster than average growth” category is the Bureau’s highest category of growth expectation level. The computer and information systems career field is projected to increase 36% or more by the year 2012 (DOL, ¶ 1). Little data currently exists about how IT leadership and management certificate continuing education programs (CEPs) prepare IT leaders and managers with IT leadership and management competencies. This qualitative phenomenological case study of the BITM Certificate Program graduates’ post-program experiences and perceptions sought to add meaningful data to the body of leadership knowledge.

Nature of the Study

A qualitative, phenomenological case study approach was used for this research. Priest (2002) noted that phenomenology involves describing everyday experiences to understand the essential structure of those experiences. This qualitative phenomenological study will attempt to “understand people’s perceptions, perspectives, and understandings of a particular situation” (Leedy & Ormrod, 2001, p. 153). A qualitative phenomenology research method was an effective approach for this study because it enabled the researcher to (a) “gain insight about the nature of the particular phenomenon, (b) develop new concepts or theoretical perspectives about the phenomenon, and/or (c) discover the problems that exist within the phenomenon” (Leedy & Ormrod, p. 148).

Kleiman (2004) suggested that phenomenology studies focus on the lived experiences of participants in a specific phenomenon. He noted lived experiences reveal one’s immediate and pre-reflective consciousness about an event one experienced. Kleiman further suggested that such lived experiences become the basis for reflecting on an event and transforming the event into an object of consciousness. Bernard (2000) provided additional insight about phenomenology. The phenomenological research method is appropriate for this study in that, as Bernard noted, phenomenology “emphasizes direct observation of phenomena” (p. 20). He noted phenomenologists seek to describe their experiences rather than attempt to explain what they experienced.

The qualitative, phenomenological case study was appropriate for this research because the BITM Certificate Program graduates' perspectives regarding their program experiences were described in the study. The participants selected for this research study were graduates of the BITM Certificate Program. Bernard (2000) noted, "If you want to know about the lived experience of individuals, you need a nonrandom sample of respondents. You choose those respondents because they offer insight into something that they are best able to talk about—their own lives" (p. 192).

The research procedure included unstructured interviews with open-ended questions. Bernard (2000) argued that unstructured interviews involved having a clear plan and exercising minimum control over the respondent. Bernard also noted that unstructured interviews enable respondents to freely express themselves at the respondents' pace. He stated, "A lot of what is called ethnographic interviewing is unstructured" (p. 191). Bernard emphasized the value and benefit of unstructured interviewing and maintained the following:

When you want to know about the lived experience of fellow human beings—what it's like to survive hand-to-hand combat, how you get through each day when you have a child dying of leukemia, how it feels to make it across the border into Texas from Mexico only to be deported 24 hours later—you just can't beat unstructured interviewing. (p. 193)

Unstructured interviews were conducted to provide the participants the greatest latitude and flexibility in responding to the interview questions and to facilitate asking follow-up questions based on the participants' responses. Each interview lasted approximately 30 to 60 minutes and was audio taped to assure each participant that the information was accurately documented. After collecting all the interview data, the data were analyzed to identify emergent themes relating to post-BITM Certificate Program IT leadership and management competencies the participants might have gained and used to help produce the outcomes expected from their organizations' IT investments.

Research Question

This study was guided by the following research question: How has including leadership and management competencies in an information technology education program prepared graduates to help produce the outcomes expected from their organizations' IT investments?

Editor's Note: Part Two of this report will be published in December's issue of *Succeed to Lead*.