The Ambidextrous Pursuit of Strategic Information Technology Alignment and Organizational Agility in the Community Benefit Sector

Full Paper

Roderick L. Lee
Pennsylvania State University - Harrisburg
rlee@psu.edu

Abstract

The information systems literature suggests a positive relationship between strategic information technology alignment and organizational agility, and the implications on performance for organizations operating in turbulent environments. This emerging stream of integrated research has begun to provide key insight on the positive benefits of the ambidextrous pursuit of alignment and agility in for-profit organizations. However, these relationships have been largely unexplored in nonprofit settings. Nonprofit organizations exist to address social, political, economic, and cultural challenges rather than maximizing shareholder wealth. In order to address this void in research, this paper draws on the alignment and agility research in order to examine how one exemplary nonprofit is strategically exploiting its information system resources in order to improve performance and social value creation. This paper concludes with implications for research and practice.

Keywords

Strategic IT alignment, agility, ambidexterity, nonprofit organizations, social value creation

Introduction

Over the last two decades, considerable research and practice has focused on the creative and innovative use of information system resources in order to attain and sustain a strategic advantage (Pearlson et al. 2016; Piccoli and Ives 2005; Wade and Hulland 2004). Organizations attain a strategic advantage through improvements in efficiency, effectiveness, differentiation, and innovation. Moreover, organizations are able to sustain a strategic advantage through continuously adapting business processes and business models in response to environmental threats and opportunities.

Strategic information technology (IT) alignment and organizational agility have emerged as critical and concurrent organizational goals in order to attain and sustain a competitive advantage (Tallon and Pinsonneault 2011). Strategic IT alignment refers to a situation in which an organization's business strategy is enabled and supported by IT (Hoque et al. 2005), while organizational agility refers to the ability to adapt and respond to environmental challenges with flexibility and speed (Sambamurthy et al. 2003; Tallon and Pinsonneault 2011).

Over the last two decades, researchers have consistently found a positive relationship between strategic IT alignment and organizational performance (Chan et al. 1997; Kearns and Lederer 2003; Kearns and Sabherwal 2007; Oh and Pinsonneault 2007; Preston and Karahanna 2009). This stream of research has demonstrated that organizations that successfully align their information systems and business strategy are in a better position to achieve a competitive advantage.

At the same time, empirical research has demonstrated a relationship between organizational agility and performance (Sambamurthy et al. 2003; Tallon and Pinsonneault 2011). This stream of research has

found that organizations that are more flexible and agile are in a better position to sustain a competitive advantage.

In recent studies, IS scholars have called for more research that uses ambidexterity as a lens to explore the link between alignment and agility (Tallon and Pinsonneault 2011). In this context, ambidexterity refers to an organization's concurrent pursuit of strategic IT alignment and agility. Despite the critical importance of the ambidextrous pursuit of alignment and agility for the survival of modern organizations, very little research has integrated alignment and agility perspectives (For an exception, see Tallon and Pinsonneault 2011). Moreover, this emerging stream of research has been largely conceptual in nature and exclusively explored in for-profit settings. As a result, we know very little about how these concepts explain phenomena in nonprofit contexts.

Nonprofit organizations exist to create social value by providing essential programs and services that benefit individuals and communities. However, NPOs are operating in an increasingly turbulent environment. Indeed, the disruptive force of digitation, decreased public confidence and trust, unstable public investment, increased demand for programs and services, and increased demand for transparency and accountability have completely disrupted the game in the nonprofit sector. In turbulent environments, organizations that are agile and able to adapt and respond will thrive and prosper, whereas those that fail to adapt will decline and perish.

In order to address the complex challenges that the community benefit sector faces, NPOs around the globe can benefit from understanding the relationship between strategic IT alignment and agility, and the implications for performance and social value creation. Therefore, this research aims to address this need by examining the interplay between alignment, agility, and the implication for performance and social value creation in nonprofits.

These relationships are explored in an exemplary nonprofit in the Northeast United States, referred to in this study as Fusion International. Fusion International is a charity that operates as a mission-based business. The organization creates social value by providing opportunities to explore and appreciate other cultures and building better lives for children around the globe. Given the current sociopolitical climate in terms of race relations and immigration around the globe, organizations such as Fusion International are witnessing an increase in demand for programs and services.

This paper contributes to the literature by extending the alignment and agility perspectives to the community benefit sector. In addition, this paper contributes to the literature by examining how one NPO's strategic planning process positively affected strategic alignment of IT, organizational agility, and performance. Finally, this paper concludes with implications for research and practice.

Theoretical Background

Figure 1 illustrates the conceptual model that was used to guide this research. Based on prior research (Tallon and Pinsonneault 2011), the model demonstrates a direct link between strategic IT alignment and performance, strategic IT alignment and organizational agility, and organizational agility and performance.

Figure 1: Conceptual Model
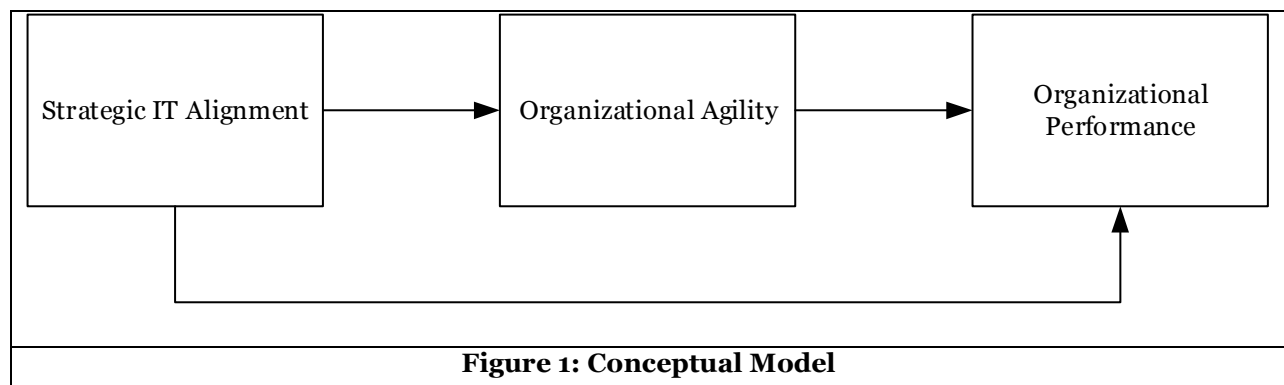
Strategic IT Alignment and Performance

Strategic IT alignment refers to the link between an organization's IT and business strategy. An early model on strategic IT alignment provided key links between an organization's IT strategy, business strategy, and organization design strategy (Henderson and Venkatraman 1993). Empirical research has shown that alignment results in improved performance, innovation, market growth, and reputation (Chan et al. 1997; Kearns and Sabherwal 2007; Oh and Pinsonneault 2007).

Research on the antecedents of alignment indicates that knowledge sharing behaviors between the IT and business executives, and a shared understanding of the role of IT and capabilities of IT are critical factors (Preston and Karahanna 2009). Equally important, researchers have demonstrated that formal planning is a key condition for successful alignment (Kearns and Lederer 2003).

Organizations that successfully align their IT and business strategy are in a better position to achieve a competitive advantage. However, organizations that fail to properly align their IT and business strategy are prone to adopting information technologies that fail to support their strategic objectives and goals. Therefore, prior research and management practice supports the following proposition:

> *P1: Strategic alignment of the IT and business strategy is positively associated with performance.*

Strategic IT Alignment and Organizational Agility

There is an emerging body of research on the ambidextrous pursuit of alignment and agility (Tallon and Pinsonneault 2011). Based on the literature, the same capabilities that facilitate alignment also foster agility. These capabilities include a shared understanding of IT between IT and business managers, and embedding IT in key business processes (Tallon 2008). Essentially, the collaborative strategic planning process facilitates adaption and enables agility (He and Wong 2004).

Recently, researchers have explored the link between alignment-induced exploration and exploitation of IS resources and organizational agility. Alignment-induced exploitation of resources facilitates continuous improvement by fostering the development of dynamic IT capabilities (Gupta et al. 2004; He and Wong 2004; Tallon and Pinsonneault 2011). Alignment-induced exploration enables organizations to explore innovative and disruptive ways of using IS resources for innovation and competitive action. The premise is that organizations are creating alignment between their IT and business strategy in a manner that facilitates agility (He and Wong 2004). As such, the following proposition is proposed:

> *P2: Strategic IT alignment is positively associated with organizational agility.*

Organizational Agility and Performance

Once an organization achieves greater performance outcomes and attains a competitive advantage, it is critically important to sustain the competitive advantage. Organizational agility provides a perspective for understanding how organizations sustain a competitive advantage by continuously adapting and responding to environment threats and opportunities through innovation and swift competitive action.

Organizational agility is characterized as a dynamic capability. Dynamic capability is defined as "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments" (Teece et al. 1997). Sambamurthy et al. (2003) are credited with incorporating agility into the IS literature. The researchers define agility as the ability to continuously sense opportunities for competitive action and marshal the necessary resources to seize upon those opportunities.

In addition, Sambamurthy et al. (2003) contributed to the literature by identifying three types of agility: customer agility, partnering agility, and operational agility. Customer agility is defined as the involvement of customers in the process of identifying opportunities for innovation and competitive action (i.e., gaining insight). Partnering agility is defined as the ability to leverage the assets, knowledge, and competencies of partners that result in opportunities for innovation and competitive action. Operational agility is defined as the ability to leverage the organization's business processes to develop the speed, accuracy, and cost economy that is necessary to support innovation and competitive actions. In addition,

operational agility enables organizations decrease information asymmetries and allay concerns with public confidence and trust. Therefore, the following proposition is proposed:

P2: Organizational agility is positively associated with performance.

Nonprofit Operating Environment

There are three types of sectors in society, private, public, and social. The primary source of revenue in the for-profit sector results from the sale of products and services, whereas appropriated tax dollars represents the defining source of revenue in the public sector (Lee and Bhattacherjee 2011). Unlike private sector organizations, nonprofits are not in business to earn profits and they do not possess the ability of the public sector to levy taxes. Charitable contributions in the form of money, volunteer time, and contributed materials are the primary sources of revenue in the nonprofit sector.

The second key defining difference between organizations that operate across the sectors is the public value. The principle public value delivered by private sector organizations is financial returns to its shareholders and the use value of its products and services delivered to customers. The principle value delivered by public sector organizations is the achievement of the politically mandated mission. Unlike private and public sector organizations, their social mission and the creation of social value drive nonprofit organizations.

For the past two decades, nonprofit organizations have been operating in an increasingly complex and turbulent environment. According to Richardson et al. (2014), turbulent environments are characterized by unstable public investment such as fluctuating donations, competition for grants, and a volunteer workforce characterized by high turnover. However, the NPO environment is further characterized by the disruptive force of digitation, decreased public confidence and trust, unstable public investment, increased demand for programs and services, and increased demand for transparency and accountability. The rapid proliferation of emerging technologies creates an environment filled with opportunities for NPOs to adapt and respond to these environmental threats in creative and innovative ways.

Research Design

In order to examine the propositions stated above, this research employs a qualitative, contextually anchored case study with an exemplary organization (Yin 2014). A case study is defined as a study of events in their real-life context (Yin 2014). Contextually anchored research is conducted in sectors that are unexplored in mainstream IS research in order to facilitate the interweaving of the extant IS research in novel contexts (Chiasson and Davidson 2004). In addition, case study research that explores exemplary organizations take advantage of phenomena that has not received contextually sensitive research attention (Yin 2014).

Research Site

Fusion International is a charity that operates as a human services organization and cultural institution in the Northeast United States. The organization is considered an exemplary nonprofit based on its Standards for Excellence Accreditation. Fusion International exists to provide opportunities to explore and appreciate other cultures and build better lives for children around the globe. Given the current sociopolitical context in terms of race relations and immigration, Fusion is witnessing an increased demand in cultural awareness/appreciation programs both locally and internationally coupled with decreased revenues from the decline in international adoptions. The rapid advancement of information technology provides opportunities for Fusion to adapt and respond to their current operating environment.

Data Collection

The data collection occurred over a five-month period between October 2016 – and February 2017. The primary sources of data included an onsite semi-structured interview, organizational documents, and web content. In order to begin the data collection process, a one-hour semi-structured interview was conducted with two highly informed participants, the Chief Executive Officer (CEO) and Chief Financial

Officer (CFO). The participants were qualified based on their knowledge of the business strategy, and information systems acquisition and use. At the end of the meeting, the CEO provided organizational documents such as the strategic plan, intercultural business programming plan, annual report, etc. The organization's IRS 990 and other data were gathered from the organization's public website.

Data Analysis

This study relied on an *a priori* conceptual framework and propositions in order to guide the data collection and analysis. Data analysis involved an iterative analysis of the interview transcript, organizational documents, and web content. An interpretive analysis provided a rich description and a deeper understanding of the complex social phenomena that unfolded as the case evolved.

Pattern-matching was chosen as the qualitative data analysis technique. Pattern-matching is relevant to case studies as long as the predicted pattern is stipulated prior to the data collection (Yin 2014). Similar to a controlled observation in natural science, pattern-matching is a technique in which data is matched with theoretical propositions (Campbell 1966; Campbell 1975). Outcome pattern matching, a technique consistent with analytic generation was used as the pattern-matching technique. The process of outcome pattern matching consists of a theoretical pattern of expected outcomes, an observed pattern, and an attempt to match the two (Trochim 1989). As result, the conceptual framework in Figure 1, and the observed pattern derived from the data are explored in the next section.

Results

Strategic Planning Approach

The strategic planning process facilitates alignment and is important in identifying ways to sense and respond to environmental threats and opportunities (Kearns and Lederer 2003). The three types of strategic planning approaches are issues-based, organic, and goals-based strategic planning (Stair and Reynolds 2018).

In order to develop their five ½-year strategic plan, Fusion International retained the services of a Nonprofit Center at a local university. Based on the interview and document analysis. Fusion's strategic approach is more in line with the goals-based strategic planning process. Phases in the goals-based strategic planning approach include the following: (1) analyze the situation; (2) set direction; (3) define strategies; and (4) deploy the plan. However, unlike strategic planning in the for-profit sector, Fusion does not have a separate IT plan. They do however; embed technology in the business plan as well as include a separate line item in the budget for IT.

Strategic IT Alignment and Performance

Following prior research, alignment was focused on the creation and content of the planning documents (Kearns and Lederer 2003) and matching the extent of IT use in support of the organization's strategic goals and objectives (Palmer and Markus 2000). Consistent with prior research, knowledge sharing behaviors between the IT and business executives, and a shared understanding of the role of IT and capabilities of IT are antecedents to strategic alignment (Preston and Karahanna 2009).

Those involved in the collaborative strategic planning process at Fusion International included the CEO, steering committee, board members, and consultants. According to the CEO, the organization uses an annual work plan and a monthly benchmark report in order to determine if the organization is continuously meeting its goals. For example, the CEO stated, "The strategic plan really drives everything that we do here we are very strategic plan driven."

When asked to describe the core technologies that support mission-critical activities, the CIO indicated, "Obviously with Blackbaud we have their Raiser's Edge, Financial Edge, and the NetCommunity web stuff and we are hosted through them so we are not even managing this software, which is awesome, and from a disaster recovery perspective, that is their problem." The CIO went on to indicate the data is secure and safe. Furthermore, the organization uses one server and provides remote access to applications through a VPN to enable employees to perform work remotely.

The organization currently relies on cloud-based applications provided by Blackbaud such as Raiser's Edge and Financial Edge. Systems and productivity software are acquired through TechSoup at a significant discount. In order to facilitate transparency and accountability, the organization discloses financial, performance, and governance information on its own public website. Finally, Donor Search software is used to help determine the level of asks in donor recruitment letters, and Paper Save software is used to digitize all paper documents. These documents are then stored in Raiser's Edge. The general saying around the office is that "if it is not in Raiser's Edge, it did not happen."

The CEO and CFO work in close collaboration on the strategic plan and information technology decision making. As indicated above, they are well versed on using the current technologies that the organization has adopted to support mission critical activities and achieve stated performance outcomes. While Fusion International clearly illustrates strategic foresight as evidenced in the strategic planning documents and use of technology, a separate IT planning process would facilitate a closer link between the IT function, and the strategic objectives and goals of the organization.

IT-Enabled Agility and Performance

In order to measure agility, Sambamurthy et al. (2003) operationalized agility along three dimensions: customer; operations; and partner agility. Table below matches agility, IT use, and strategic goals. A summary is provided in Table 1 below.

Key Application	Type of Agility	Strategic Benefits
Social Media	Customer	Along with interviews and focus group with key stakeholders (board members, staff, major donors, volunteers, sponsor families, and adoptive parents), Fusion gains key insights from social media in order maximize educational and revenue generating opportunities.
Skype/Email	Partnership	Fusion uses email and Skype to facilitate collaboration and information sharing with international partners in order to build efficient and sustainable overseas programs.
Raiser's Edge	Operational	Fusion uses integrated cloud-based applications that enables knowledge management, data management, and improved decision making.
Financial Edge	Operational	Fusion uses a full fully integrated, cloud-based application that provides powerful tools to empower transparency, stewardship, and compliance.
Website	Operational	Fusion effectively uses it website to allay donor confidence and trust. The organization discloses pertinent financial and performance information on its own public website in order to facilitate transparency and accountability.
Paper Save software	Operational	Fusion uses paper save to digitize all documents in order to facilitate knowledge management.
Donor Search	Operational	Fusion uses Donor Search evaluate prospect's important wealth and philanthropic information.
Table 1: IT Enabled Agility at Fusion International		

Fusion International had become very effective at strategically using IT to facilitate operational agility. According to the CEO, the organization engaged in an initiative to go paperless about 4 or 5 years ago. For example, the CEO stated "I used have like files, files all over my desk and everything, but now everything is scanned and put in the database." The CEO also described the integration of the website, database, and accounting software. When describing gains in operational efficiency, the CEO stated "when a deposits comes in, it automatically goes to the financials and when a donation comes in online, it automatically

goes to the financials." The CIO further indicated that they can operate with less staff and "the stuff we used to do manually is now automatic."

Finally, Fusion is in the process of implementing a self-directed program to develop intercultural competence that will include an interactive website and a virtual tour of the historic museum. These innovations will be used to facilitate intercultural training that is currently underway with police departments, corporations, and educational institutions.

Conclusion

Organizations that successfully align their information systems and business strategy are in a better position to achieve a competitive advantage, whereas organizations that are more flexible and agile are in a better position to sustain a competitive advantage. This study explored the relationships between strategic IT alignment and performance, strategic IT alignment and agility, and agility and performance in the community benefit sector. The results revealed that nonprofits operating in turbulent environments could enhance performance and social value creation through the ambidextrous pursuit of strategic IT alignment and organizational agility. However, this study is limited to a single case study.

Despite the limitations, this study does provide implications for research and practice. This research provides important insights on the relationship between alignment and agility in the nonprofit sector. However, future research is need to explore the impact of strategic IT alignment and agility on performance and social value creation over time. Moreover, a multi case study approach and survey research is needed in order to generalize the findings to a larger segment of nonprofits.

This research also contributes to practice by suggesting that nonprofit managers should understand the importance of the simultaneous pursuit of strategic IT alignment and organizational agility in order to sense and respond to environmental threat and opportunities with speed and ease. Furthermore, nonprofit managers should follow the best practice in the-profit sector and unpack the consolidated business strategy into separate IT and business strategy documents.

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