

Organizational Ambidexterity and Not-for-profit Financial Performance

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DEDICATION

This dissertation is the result of many people's efforts and support, and is therefore dedicated to my mother, for believing that I could be the first one in the family to graduate from college, graduate school, and a PhD, and never once asking if I knew what I was doing; to my father and stepmother, for encouraging me throughout the entire process; to my brothers, for keeping me connected to the rest of the world for four years; and to my wife Laura, for joining me on this path every step of the way.

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ABSTRACT

The purpose of this dissertation is to extend the concept of organizational ambidexterity (OA) into the domain of not-for-profit (NFP) organizations. These organizations are subject to many of the same demands as their for-profit counterparts, yet research has not been conducted on how NFPs manage the competing pressures of refining existing routines for efficiency with the need to grow and innovate. This dissertation includes two portions: a quantitative analysis of a large NFP-rating agency dataset and qualitative interviews with executive directors and managers from within the food banking industry to identify the processes in use at a sample of ambidextrous organizations.

The quantitative study uses a financial outcome—fiscal performance—in order to assess the degree to which financial outcomes are affected by exploration and exploitation, two actions central to the ambidexterity paradigm. Results of this study indicate that although exploration and exploitation are related to fiscal performance within NFPs, the results vary greatly depending on the industry in question.

The qualitative portion of the study indicates that three activities aid NFPs in engaging in exploration and exploitation: managing knowledge, retaining professional talent, and enabling leadership. This study concludes with implications for researchers and managers, as well as suggestions for future research extensions.

TABLE OF CONTENTS

Chapter 1 – Introduction and Study Rationale.....	1
Study Purpose	2
Assumptions.....	3
Overview of Methodology	4
Contributions.....	5
Organization of the Dissertation	7
Chapter 2 – Literature Review and Hypothesis Development.....	8
Specializing in Efficiency or Exploration.....	9
Reconciling Efficiency with Exploration – Organizational Ambidexterity	12
Antecedents of Ambidexterity	14
Moderators of Ambidexterity	17
Outcomes of Ambidexterity.....	18
Synthesizing and Extending Organizational Ambidexterity.....	20
Literature Review Conclusion	22
Chapter 3 – Methods and Context	23
Challenges in Assessing NFP Effectiveness.....	28
The Rise of Not-for-profit Watchdog Organizations.....	31
Description of Charity Navigator.....	32
Study 1 Methods and Context.....	33
Research Design and Quantitative Analytic Techniques.....	34
Study 1 Variables and Description of Measures.....	34
Organizational Efficiency (Exploitation).....	34
Organizational Capacity (Exploration)	36
Controlling for Industry Differences	37
Creating a Measure of Organizational Ambidexterity.....	38
Fiscal Performance.....	39
Control Variables	39

Validity	40
Study 2 Methods and Context.....	41
Study 2 Data Collection	43
Research Methods Summary	45
Chapter 4 – Results	47
Study 1: Organizational Ambidexterity and Financial Performance	47
Results of Hypothesis Tests	48
Robustness Checks.....	51
Industry-specific Results.....	52
Study 2: Processes for Managing Ambidexterity	53
Managing Knowledge	56
Retaining Talent.....	60
Enabling Leadership	70
Chapter 5 – Discussion	79
Discussion of Quantitative Results	79
Discussion of Qualitative Results	81
Managing Knowledge: Headquarters and Subsidiary Relationships.....	81
Retaining Talent: Organizational Identity and Image.....	84
Enabling Leadership: A Complexity Perspective	88
Managerial Implications	91
Study Limitations and Future Research Directions	93
Chapter 6 - Conclusion	97
References.....	99
Appendix.....	117
Vita.....	140

LIST OF TABLES

Table 1: Quantitative Impacts of Organizational Ambidexterity on Performance	125
Table 2: Partial Correlation Matrix with Descriptive Statistics.....	127
Table 3: Full Correlation Matrix with Industries	128
Table 4: Description of Charity Navigator Sectors and Industries	130
Table 5: Pairwise ANOVA Comparison for Average Fiscal Performance Differences between Charity Navigator Quadrants	131
Table 6: Clustered Regression Analysis of Complete Charity Navigator Dataset with Fiscal Performance as the Dependent Variable.....	132
Table 7: Regression Results for Industries with Significant Exploration, Exploitation, or Ambidexterity Effects.....	133
Table 8: Representative Examples for Each Process and Relationships to Exploration or Exploitation.....	134
Table 9: Managing Knowledge Quotes	137
Table 10: Retaining Talent Quotes	138
Table 11: Enabling Leadership Quotes.....	139

LIST OF FIGURES

Figure 1: Organizational Ambidexterity Classification by Exploration and Exploitation	118
Figure 2: Charity Navigator Data Source Example	119
Figure 3: Visual Web Ripper Data Extraction Example.....	120
Figure 4: Scatter Plot of Food Bank Interview Sites	121
Figure 5: Institutional Review Board Approval.....	122
Figure 6: Human Subjects Informed Consent Statement.....	123
Figure 7: Interview Protocol	124

Chapter 1 – Introduction and Study Rationale

One of the central premises of strategic management is that through the effective execution of strategy, leaders have the ability to alter their organization's competitive position within the larger environment (Eisenhardt, Furr, & Bingham, 2010; Eisenhardt & Martin, 2000). Dynamic capabilities research (Eisenhardt & Martin, 2000; Teece, Pisano & Shuen, 1997) suggests that organizations must continually acquire and realign resources in new ways in order to survive and thrive in increasingly complex environments (De Geus, 2002; Piao, 2010). These tenets apply to profit-seeking businesses, such as manufacturers of semiconductors (O'Reilly & Tushman, 2008), software (Lavie & Rosenkopf, 2006), and consumer products (Tushman & O'Reilly, 1996), as well as other types of organizations, such as hospitals (Rushing, 1974), churches (Plowman et al., 2007), and health maintenance organizations (Ginsberg & Buchholtz, 1990). The development of repeatable, routinized processes (Adler et al., 2009) promotes the efficient use of resources, but organizations must also resist the continual threat of becoming too entrenched in a particular product, service, or process. This delicate balancing act has proven difficult for many organizations to maintain (Adler et al., 2009; Benner & Tushman, 2003). Within the domain of strategic management, the concept of organizational ambidexterity (OA) (Eisenhardt et al., 2010; Simsek, Heavey, Veiga, & Souder, 2009) addresses the inherent tension of developing repeatable, efficient routines and practices while also adapting to changing conditions.

OA has been defined in more than twenty ways since its original conceptualization (Duncan, 1976) and each definition attempts to capture the essence of an organization that can pursue two different goals: exploration and exploitation. For the purposes of this dissertation,

Lubatkin, Simsek, Ling, and Veiga's (2006: 647) parsimonious definition is used to describe OA: "Ambidextrous firms are capable of exploiting existing competencies as well as exploring new opportunities with equal dexterity." Although OA has been studied in a number of different industries and countries, one context remains unexplored that may inform our understanding of how organizations engage in these two types of actions: the not-for-profit sector.

Not-for-profits (NFPs) are beginning to shoulder a greater burden of the development and distribution of social programs that were previously considered to be under the purview of governmental agencies (Smith & Lipsky, 1995; Van Slyke, 2007); consequently, NFPs must balance the efficient delivery of existing services with changes in the greater environment that may influence future demand (Ryan, 1999). These changes can include new or discontinued funding opportunities (Sherlock & Gravelle, 2009) and shifts in growth potential (Kaplan & Grossman, 2010) that complicate the efforts of NFPs to focus solely on existing programs and services. Thus, NFPs provide an excellent context in which to explore OA because they are constrained by the scope of their mission yet must develop new opportunities to counter overall declines in rates of charitable giving.

Study Purpose

Despite recent attention to ambidextrous operations in the strategic management literature, including a 2009 special issue in *Organization Science*, no studies to date have attempted to assess the correspondence between ambidextrous operations within the NFP sector (See Simsek et al., 2009 for a thorough review) even though this sector comprises more than 1.1 million organizations, contributes nearly 5% of the United States gross domestic product, and employs more than 12.9 million workers (Sherlock & Gravelle, 2009). This study expands the

boundaries of the ambidexterity hypothesis to test its premises on a sample of NFP organizations in order to determine the relationship between OA and organizational performance within this unique organizational context. This study also examines a sample of NFP food banks to understand the processes that their managers use to engage in high levels of exploration and exploitation.

Given the effects of ambidextrous operations on overall organizational effectiveness, two key research questions arise. Specifically:

RQ1. What impact does ambidexterity have on financial performance?

RQ2. How do ambidextrous organizations engage in exploration and exploitation activities?

Assumptions

One of the key assumptions of NFP research is that best practice methods and measures from for-profit business can be applied to not-for-profit organizations (Kaplan, 2001). The direct social impact of strategic NFP actions can be nearly impossible to measure reliably (Rojas, 2000), but organizations that focus on business-related routines such as performance measurement, reporting, and stakeholder management are still expected to outperform organizations within a similar “industry” (Salamon, Geller, & Mengel, 2010; Siciliano, 1996). As NFPs embrace the professionalism of services and management (Hwang & Powell, 2009), many may improve their performance through the implementation of strategies initially developed to benefit the for-profit sector. However, if NFPs are implementing professional practices from the for-profit sector in a haphazard manner (Rojas, 2000), then ambidexterity may provide a common vocabulary to describe the competing pressures that NFPs face: the balance of long-term growth prospects with the efficient delivery of current programs. The field of strategic

management and society as a whole are likely to benefit from a more holistic approach to growing societal wealth by including NFPs as a worthwhile source of data and a beneficiary of empirical research findings from the strategy literature.

NFPs make a particularly compelling context for understanding OA due to a number of constraints not typically seen in the OA literature. First, NFPs organize around a central mission that defines the scope of their programs, products, and services and makes growth through unrelated diversification unlikely. Second, many NFPs are local or regional in nature (e.g., Virginia Beach SPCA, Knox Area Rescue Ministries), which eliminates geographic expansion as a viable growth opportunity. Finally, third-party agencies rate NFPs to identify how each organization spends its money. Expenses related to utilities, property, and professional staff are considered inefficient as they represent expenditures that do not go directly to program expenses. Consequently, NFPs have an incentive to maximize efficiency within a constrained set of growth opportunities, resulting in an unlikely setting for ambidextrous behavior. These conditions make NFPs an excellent context in which to view OA and to study if and how NFP managers attempt to engage in exploration and exploitation.

Overview of Methodology

This dissertation uses a mixed methods approach to understand the effects of ambidextrous operations on organizational effectiveness and the underlying processes at work in a subset of ambidextrous NFPs.

First, the quantitative data for this study are IRS-990 financial filings organized by the third-party NFP monitoring organization, Charity Navigator (CN). Data span the fiscal years ending between January 2008 and December 2009. Based on CN's ratings of two theoretically-

relevant dimensions, exploration and exploitation, organizations were clustered into groups. Following this categorization, means tests were conducted to determine the fiscal performance levels associated with exploration and exploitation. Additionally, robust clustered regression was used to determine the relationship between ratings of exploration and exploitation and NFP fiscal performance. The sample covers a wide variety of different industries, allowing for further analysis of organizations that vary in their levels of capital intensity (orchestras vs. food banks), size (national vs. local), and age (old vs. young organizations).

Second, the qualitative portion of this dissertation examines a sample of NPFs from the food banking industry in order to understand the processes by which organizations simultaneously engage in high levels of exploration and exploitation. Through four site visits and a series of semi-structured interviews, data were gathered and analyzed for major themes related to managing this paradox. These findings are discussed in conjunction with their ability to relate to the for-profit strategy literature.

Contributions

This study makes a number of contributions to the ambidexterity literature base. First, the use of a large-scale dataset provides the statistical power to isolate industry-specific differences in OA. Many of the larger samples in extant ambidexterity research have been limited to single-industry research contexts such as software (Venkatraman et al., 2007), biotechnology (Rothaermel & Deeds, 2004), or robotics (Katila & Ahuja, 2002). Meanwhile, empirical tests of ambidexterity that use alternate methodologies such as case studies (Adler, Goldoftas, & Levine, 1999; Han, 2005; Tarafdar & Gordon, 2007) are necessarily limited to single organizations or industries, making comparisons difficult if not impossible. The use of a large-scale, multi-

industry dataset contributes to the ambidexterity literature by isolating the effects of ambidextrous operations on organizational performance while also allowing for comparisons across different industries.

Second, this study contributes to the ongoing debate of whether or not ambidexterity is a continuous or orthogonal construct (Gupta, Smith, & Shalley, 2006). Although exploration and exploitation were originally considered trade-offs that needed to be balanced lest an organization find itself mediocre at both (March, 1991), more recent research has suggested that these two concepts are orthogonal rather than continuous (Atuahene-Gima, 2005; Katila & Ahuja, 2002; Uotila, Maula, Keil, & Zahra, 2009). Consistent with prior studies, the presence of a significant interaction term between exploration and exploitation would provide evidence that exploration and exploitation are orthogonal and can be pursued simultaneously; however, this interaction has not always been significant in prior research (Bierly & Daly, 2007).

Third, the use of a mixed-methods research design provides a better understanding of the underlying processes at work within ambidextrous organizations. Although a few previous studies of ambidexterity have employed a mixed-methods research design (Beckman, 2006; Gibson & Birkinshaw, 2004a), this remains the exception rather than the norm. The use of qualitative interviews to more thoroughly describe the underlying processes at work within NFPs contributes to two different literature streams: ambidexterity and NFPs. By introducing a widely studied theoretical perspective from strategic management to the unique context of NFPs, this study begins to make connections between two literature streams that could benefit from greater coordination. This study examines ambidexterity within this context to assess the robustness of this theory beyond its traditional context of for-profit firms.

Organization of the Dissertation

This mixed-methods dissertation follows a sequential explanatory strategy (Ivankova, Creswell, & Stick, 2006). Sequential explanatory research begins with a preliminary quantitative study followed by a qualitative study that mirrors the pattern established by other organizational researchers (e.g. Edmondson, 1996; Novak & Sellnow, 2009; Sutton & Rafaeli, 1988). This process first assesses the general pattern of relationships between the variables of interest and then follows with in-depth analysis of a subset from the full sample to understand more clearly the underlying mechanisms driving the quantitative results.

This dissertation is comprised of six chapters. This first chapter has introduced the general research question and setting for the present study. Chapter 2 provides a review of the literature and the hypotheses developed for this study. Chapter 3 describes the research sample, methodology, and analytic techniques employed to answer the research questions and evaluate the hypotheses described above. Chapter 4 presents a discussion of the quantitative and qualitative findings of this study, as well as the caveats associated with this particular project and the challenges related to interpreting the hypothesis tests. Chapter 5 offers a discussion of the theoretical and managerial implications of this research and provides suggestions for future research that may build from the present study. Finally, chapter 6 presents the conclusion of this dissertation.

Chapter 2 – Literature Review and Hypothesis Development

Organizational ambidexterity (OA) is a concept that describes the capability of firms that leverage efficient existing routines while simultaneously adapting to changing situations in order to pursue new growth opportunities (Lubatkin et al., 2006; Raisch & Birkinshaw, 2008). First conceptualized as the balance between the opposing forces of exploration and exploitation (Duncan, 1976), this concept has evolved from an organizational learning phenomenon (Levinthal & March, 1993; March, 1991) to become known as OA (Tushman & O'Reilly, 1996), which has most recently received attention as a capability of key strategic importance for organizational performance (Eisenhardt et al., 2010). Some scholars even suggest that the ambidexterity hypothesis has gathered enough empirical support to be called an emerging research paradigm in organizational studies (Raisch & Birkinshaw, 2008).

Currently, researchers use different meanings and measures of OA across research settings, which makes comparisons of their findings difficult. The terms “exploration” and “exploitation” are used commonly in the ambidexterity literature (Gupta et al., 2006; Levinthal & March, 1993; O'Reilly & Tushman, 2008), but scholars also refer to these pressures as the need to balance “search” with “stability” (Rivkin & Siggelkow, 2003), “flexibility” with “efficiency” (Adler et al., 1999) and “alignment” with “adaptability” (Tiwana, 2008). Even with an agreed-upon lexicon for discussing these organizational pressures, many unsolved facets of the ambidexterity paradox remain, such as the role that time plays in ambidexterity and how different organizational structures influence these competing tensions (Simsek et al., 2009).

Various streams of literature in the field of organization sciences have attempted to reconcile the two opposing forces of exploration and exploitation (Raisch & Birkinshaw, 2008).

These themes of exploiting carefully refined routines for efficient operations while exploring new capabilities and offerings are now found in strategic management (Auh & Menguc, 2005; Burgelman, 1991; Ebben & Johnson, 2005), organizational learning (Gupta et al., 2005; He & Wong, 2004; Levinthal & March, 1993), technological innovation (Jansen, Van Den Bosch, & Volberda, 2006) and organizational adaptation (Burgelman, 1991; Probst & Raisch, 2005). As literature continues to build in this area, we better understand the importance of carefully balancing these two processes; what remains less clear is how organizations actually engage in both processes (Adler et al., 2009). Much of the difficulty in achieving this balance is due to the inherent tension that organizations experience while trying to streamline operations and develop efficient processes throughout the organization to the detriment of the processes related to creative exploration (Cole & Matsumiya, 2007). Each of these two processes, exploration and exploitation, have been linked to organizational performance, but research suggests that the interactive effect of both is the key to long-term sustained performance (He & Wong, 2004) and longevity (De Geus, 2002; Piao, 2010). The juxtaposition of these two factors results in the matrix presented in Figure 1 and forms the basis for the quantitative portion of this study.

Specializing in Efficiency or Exploration

Organizational operations may improve through standard operating procedures and repeatable routines (Benner & Tushman, 2003). The application of rigorous scientific measurement applied to organizational tasks in the nascent field of management science sought the single best method (Taylor, 1911) to perform a task, such that workers would perform routine tasks in a consistent, optimal manner. This attention to replicability initially targeted tasks involving manual labor such as the handling of pig iron or the laying of bricks (Gilbreth &

Gilbreth, 1919), jobs that could be de-skilled into their component actions and subsequently timed, measured, and refined. These time and motion studies demonstrated that organizations that chose to pursue efficient operations with highly structured, repetitious tasks should produce greater levels of productivity; however, later studies determined that the routinization of tasks has the opposite effect on organizational productivity through its dehumanizing work conditions that may lead to worker burnout (Adler, 1993). Much of the early management research that focused on improving productivity and organizational performance attempted to replace idiosyncratic worker behaviors with repeatable, standardized, efficient operations; however, this minimized the variance in each individual's contribution. Thus, as efficiency grows at the expense of new ideas or processes (Benner & Tushman, 2003), an organization's overall ability to improve its standing in the environment could be compromised (De Geus, 2002; Levinthal & Myatt, 1994).

Although the term "scientific management" has fallen by the wayside, its legacy lives on with efforts to streamline operations with standard operating procedures and continuous improvements to process management (Benner & Tushman, 2003). As actions develop into repeatable routines, organizations build competency and efficiency through repetition as learning effects accrue (Cohen, 1992). Even today, a number of popular programs (e.g., Six Sigma, ISO 9000, de-layering, reengineering) focus exclusively on minimizing process variance and promoting standardization for organizational success (Benner & Tushman, 2003).

Devoting time and energy to exploring new options comes at the cost of refining existing skills and routines (Levinthal & March, 1981), which, when coupled with a focus on efficient execution, can often result in returns that are sooner, surer, and easier (March, 1991). Hence,

organizations tend to favor these types of familiar routines rather than investing in riskier new processes that may yield unpredictable gains (Levinthal & March, 1993). These conceptualizations of ambidexterity imply a trade-off such that the pursuit of one strategy results in foregoing the other, which Abernathy (1978) termed the “productivity dilemma,” in which each strategy could only be pursued to the detriment of the other. In other words, by engaging in both strategies simultaneously, firms risk mediocre performance of each (March, 1991), rather than the reaping synergies found between them. Based on this conceptualization of exploration and exploitation as trade-offs under which higher performance benefits are reaped when firms refine their existing routines, the following hypothesis is proposed:

H1a: Exploitation-focused organizations within Figure 1 (quadrant 2) will experience greater financial performance than organizations that attempt an ambidextrous strategy (quadrant 4).

Early work on organizational learning assumed that exploration and exploitation were mutually exclusive trade-offs. To the extent that an organization excels at a particular skill, the attractiveness of improving a new capability—which may potentially cannibalize an existing capability—makes experimentation and innovation less attractive (Levitt & March, 1988). Conversely, work on this delicate balance suggests that ongoing development of efficient routines, coupled with the ability to adapt to major changes, is the key to long-term organizational survival (De Geus, 2002).

The concept of the competency trap (Levitt & March, 1988; Liu, 2006) speaks to the unwavering refinement of existing competencies with little regard for the development of new

competencies. In these cases, core competencies actually become core rigidities (Leonard-Barton, 1992) as organizations encounter difficulty adapting to changing environmental trends, customer demands, or technological changes. Many of the oldest companies still in existence have undergone major transformations over their lifetimes, and many had to destroy their core competencies altogether by changing industries or strategies order to survive (De Geus, 2002; O'Reilly & Tushman, 2008). Based on this conceptualization of exploration and exploitation as trade-offs, under which greater performance benefits accrue to firms that explore new markets and products (Piao, 2010), the following hypothesis is proposed:

H1b: Exploration-focused organizations within Figure 1 (quadrant 3) will experience greater financial performance than organizations that attempt an ambidextrous strategy (quadrant 4).

Reconciling Efficiency with Exploration – Organizational Ambidexterity

What began as the study of competing trade-offs in the organizational learning literature (Floyd & Lane, 2000; March, 1991) is now coalescing into its own research paradigm (Raisch & Birkinshaw, 2008). Recent research has taken the viewpoint that exploration and exploitation are orthogonal activities that do not require a trade-off; rather, these two actions can positively interact (Katila & Ahuja, 2002; Uotila et al., 2009). This opens the door to the possibility of engaging in both rather than having to choose one focus over the other. Instead of conceptualizing ambidexterity as a trade-off between two mutually exclusive options, the view of these pressures as orthogonal, rather than continuous, has led to a conceptualization of OA as a paradox (Raisch & Birkinshaw, 2008).

A growing body of theoretical and empirical research has refined the concept of OA in an attempt to ascertain its antecedents, moderators, outcomes, and contextual boundaries (Raisch & Birkinshaw, 2008; Simsek, 2009). In fact, two thorough review articles (Raisch & Birkinshaw, 2008; Simsek et al., 2009) detail the dramatic advancement of the concept of OA across more than twenty empirical articles that have attempted to isolate the antecedents (Beckman, 2006; Gibson & Birkinshaw, 2004b; Kyriakopoulos & Moorman, 2004), moderators (Ebben & Johnson, 2005; Li & Atuahene-Gima, 2001) and outcomes (Rothaermel & Deeds, 2004; Han, Kim, & Kim, 2001; Katila & Ahuja, 2002) of ambidextrous operations. Studies have examined firms in Korea (Han et al., 2001), Singapore (He & Wong, 2004), China (Li & Atuahene-Gima, 2001), the Netherlands (Kyriakopoulos & Moorman, 2004), Spain (Revilla, Prieto, & Rodriguez, 2011) and the United States (Bierly & Daly, 2007; Hill & Birkinshaw, 2006). The robustness of this theory can be seen clearly through the variety of these studies that expand the boundaries and applicability of OA across contexts.

The synthesis of this literature stream has produced a new typology of ambidextrous behavior types (Simsek et al., 2009). Although it is possible to engage in these two competing actions simultaneously within a single structural unit, splitting the structural and temporal dimensions apart to resolve the inherent tension between these two demands results in four possible types of ambidexterity (Simsek et al., 2009). The temporal facet of ambidexterity focuses on whether organizations pursue exploration and exploitation simultaneously or sequentially. The structural facet of ambidexterity focuses on whether organizations pursue exploration and exploitation within a singular organizational structure or across multiple structures. Juxtaposing these two facets yields four possible combinations for understanding OA,

and by shifting the time and place that these two paradoxical cognitive approaches occur, this research has attempted to tease out the underlying processes within OA to better understand how these pressures are able to co-exist. The development of this typology offers a way beyond the mindset that exploration and exploitation are trade-offs to focus future ambidexterity research onto more systematic investigations of the specific processes, structures, and contexts that facilitate OA (Simsek et al., 2009).

Table 1 presents an overview of quantitative studies that have linked OA to different outcomes using a variety of research methods and industry contexts. Inclusion criteria for this table were a quantitative or mixed methods study design and OA as an independent variable in the study. The following section details some of the key research findings from this literature stream, as well as opportunities that have yet to be explored and the hypotheses that emerge from the unanswered questions in the literature.

Antecedents of Ambidexterity

Given its generally favorable relationship with organizational outcomes (Venkatraman et al., 2007), researchers and managers are interested in better understanding the conditions that facilitate OA.

Contextual Antecedents

The organizational context is comprised of the systems, processes, and beliefs that shape individual-level behaviors within an organization (Burgelman, 1983; Ghoshal & Bartlett, 1994).

Ghoshal and Bartlett (1994) proposed four key interpersonal aspects of the organizational context for developing a culture of ambidexterity: discipline, stretch, support, and trust.

Discipline asks organizational members to contribute more than the minimum in order to achieve

organizational goals. Promoting stretch within an organization pushes members to pursue more ambitious goals, rather than focusing on safe and predictable ones. Support allows individuals to assist each other and to gain access to needed resources. Finally, trust requires that organizational members honor the commitments they make so that others can rely on them to accomplish needed goals. The concept of trust, echoed in later work (Adler et al., 1999), as well as worker training and job enrichment, has been found to facilitate effective work across multiple situations. These contextual and behavior factors do not automatically create ambidextrous organizations (Gibson & Birkinshaw, 2004a), but they do permit ambidexterity to emerge as organizational members engage in these practices.

Leadership Antecedents

Research focusing on the leadership aspects that facilitate ambidexterity has explored the concept of ambidextrous managers as well as how a CEO's functional background influences ambidexterity (O'Reilly & Tushman, 2004; 2007). In this sense, the concept of ambidexterity resides in a manager's mind and experience rather than in the specific structures or processes put in place to engage in both actions at once (Raisch & Birkinshaw, 2008). Beckman (2006) describes how founding team composition and former company affiliations influence exploitive and exploratory behavior. Lubatkin and colleagues (2006) also look at top management characteristics that may influence OA and suggest that smaller firms may benefit more ambidexterity based on individual characteristics (Chang & Hughes, 2012) and cognitions (Thongpapanl, De Clercq, & Dimov, 2012) rather than structurally-driven factors such as creating separate units to pursue different goals. Other interpersonal factors, such as decision-making authority at the managerial level, increase the likelihood of managerial ambidexterity

(Mom, Van Den Bosch, & Volberda, 2009). Decision autonomy also strengthens the relationship between adaptability and organizational performance (Thongpapanl et al., 2012), suggesting that providing individuals with more opportunities to engage in novel behaviors will increase their likelihood of exploratory actions. Different managerial leadership styles also influence OA; middle managers can facilitate exploitative learning through a transactional leadership style and top managers can facilitate explorative learning through a transformational leadership style (Sun & Anderson, 2012).

Structural Antecedents

Studies of OA's structural antecedents downplay the effects of the top management team, board of directors, and other members of the organization's upper echelon to focus on the organization itself as the key actor (He & Wong, 2004). Spatial separation offers one way to reconcile the tension between exploration and exploitation. The act of physically moving units with different goals farther from the rest of the organization (e.g., PARC Xerox, Lockheed Martin Skunkworks) permits some parts of the organization to focus on exploratory goals while other parts of the organization focus on exploitative goals. The use of loose coupling between different types of work units permits different goals, management styles, and incentive plans to drive the simultaneous pursuit of exploration and exploitation (O'Reilly & Tushman, 2004). Structural antecedents to ambidexterity focus on how parallel structures allow organizational members to switch between different structures depending on specific tasks. Processes such as outsourcing are also ways to offload exploitation processes. In the Internet banking industry, the use of outsourcing positively influences efficiency but negatively influences adaptability (Weigelt & Sarkar, 2012). In addition to the physical location and layout of organizations, other

structural factors, such as the degree of informal connectedness between organizational members and the degree of work unit formalization, also influence ambidextrous operations (Jansen, Tempelaar, Van Den Bosch, & Volberda, 2009). In this same setting, highly-centralized decision-making structures can negatively impact exploratory innovation. Structured hierarchical replication processes, such as those at IKEA, permit variance at the individual store level, but the organizational structure minimizes variance at higher levels in order to ensure consistency in values, vision, and image across different locations (Jonsson & Foss, 2012). These direct effects provide an understanding of the factors that influence the likelihood of ambidextrous behaviors occurring. In addition to describing the types of structures, leaders, and contexts that influence OA, other research has examined the different types of moderators that influence the relationship between OA and a variety of outcomes.

Moderators of Ambidexterity

Many studies have also explored the contingent relationships that interact to influence the impact of ambidextrous organizational operations on organizational performance. Consistent with the idea of a liability of newness (Freeman, Carroll, & Hannan, 1983), the liability of senescence (Ruef, 2002), or firm age, has been shown to negatively impact the relationship between ambidextrous operations and firm sales growth (Venkatraman et al., 2007). Firm size has also been empirically determined to be a moderator of the relationship between product development path and the number of products on the market (Rothaermel & Deeds, 2004). Larger firms typically have more rigid routines that make ambidextrous operations more difficult, but some of these challenges may be overcome with effective alliance portfolios (Lavie, Kang, & Rosenkopf, 2011). Levels of exploitation moderate the relationship between exploration

and strategic learning (Sirén, Kohtamäki, & Kuckertz, 2012), suggesting that the most effective learning occurs when exploration is coupled with the utility derived from exploiting new knowledge. Additionally, the proportion of shareholders representing particular global regions moderates the relationship between exploitation and strategic renewal (Kwee, Van Den Bosch, & Volberda, 2011), suggesting that particular stakeholder blocs may be more receptive to the exploratory actions necessary for growth. In addition to these organizational-level factors, many individual-level factors also influence the relationship between OA and organizational performance, including the orientation of customer service representatives (Jasmand, Blazevic, & de Ruyter, 2012), the degree of task conflict (Kostopoulous & Bozionelos, 2011), the behavioral complexity of top management teams (Carmeli & Halevi, 2009), and informal personal coordination between organizational members (Mom et al., 2009).

Finally, externalities that moderate the impact of OA on performance include factors such as environmental competitiveness, which positively impacts the relationship between exploratory innovation and financial performance, and environmental dynamism which negatively impacts the relationship between exploitive innovation and financial performance (Jansen et al., 2009). In addition to these antecedents and moderators of OA, other research has explored the impact of OA on performance outcomes at a variety of levels of analysis.

Outcomes of Ambidexterity

One of the prime goals of any organization, long-term survival (Andriopoulos & Lewis, 2009; De Geus, 2002; Tushman & O'Reilly, 1996) is a result of ambidextrous operations. Beyond a systematic mindset towards continual renewal, adaptation, and growth, OA has also been empirically linked with performance outcomes such as a greater number of products on the market (Rothaermel & Deeds, 2004), sales growth within the software industry (Venkatraman et

al., 2007), and new product development (Revilla et al., 2011). Hill and Birkinshaw (2006) also found support for a positive relationship between ambidexterity and venture unit performance and He and Wong (2004) found support for an interactive effect between exploration and exploitation when studying the effect of ambidexterity on sales growth rates. Ambidextrous behaviors have been linked to lower levels of efficiency in a sample of customer service representatives (Jasmand et al., 2012), which supports the view of exploration and exploitation as trade-offs, but these findings are outweighed by many other studies that report positive outcomes of ambidexterity.

Despite the overwhelmingly positive support for ambidexterity's effects on organizational performance, three studies reported non-significant relationships or were unable to support the interaction of exploration and exploitation on performance (Ambrosini, Bowman, & Schoenberg, 2011; Bierly & Daly, 2007; Lin, Yang, & Demirkan, 2007). These findings add support to the idea that these concepts may not be orthogonal, even though other studies (Atuahene-Gima, 2005; Katila & Ahuja, 2002) find support for a significant interactive effect of exploration and exploitation on organizational performance. With a few exceptions, the empirical studies presented in Table 1 report positive relationships between ambidexterity and a range of organizational outcomes. As a result of the findings typically reported in this body of literature, the following hypotheses are offered:

H1a': Ambidextrous organizations within Figure 1 (Quadrant 4) will experience greater financial performance than organizations that attempt an exploitation focus (Quadrant 2).

H1b': Ambidextrous organizations within Figure 1 (Quadrant 4) will experience greater financial performance than organizations that attempt an exploration focus (Quadrant 3).

The overall positive impact of ambidexterity on organizational performance also permits the following hypothesis regarding the lack of either focus or balance:

H2: Organizations with equally low levels of exploration and exploitation (Quadrant 1) experience the lowest financial performance.

Finally, in order to assess the overall impact of ambidexterity on financial performance, the following hypothesis is offered:

H3: Organizational ambidexterity will have a significant, positive effect on financial performance.

Synthesizing and Extending Organizational Ambidexterity

To date, OA research has focused on the for-profit sector, excluding NFPs entirely. High-tech industries such as software development (Venkatraman et al., 2007), new product design (Andriopoulos & Lewis, 2009), robotics (Katila & Ahuja, 2002), and biotechnology (Rothaermel & Deeds, 2004) are common settings for empirical tests of OA. These types of industries, where creativity, innovation, and efficient production are all necessary, may make the impact of OA more direct. Methodologically, most studies have either employed case-study or survey-based approaches to determine an organization's ambidextrous abilities (Gibson & Birkinshaw, 2004a). More recent studies (Andriopoulos & Lewis, 2009; Kwee et al., 2011; O'Reilly & Tushman, 2011; Sun & Anderson, 2012) have begun to incorporate qualitative methods to delve deeper

into the processes and mindsets found in ambidextrous organizations. Although this research has been helpful in clarifying the concepts central to OA as well as the impact of OA on organizational performance, a major context that remains unexplored is that of NFPs.

Although the mission of NFPs is radically different from that of for-profit firms, NFPs must also compete for scarce resources (Stone & Crittenden, 1993), develop novel strategies to ensure their ongoing survival and relevance (Sherlock & Gravelle, 2009), and deliver adequate performance levels to satisfy various stakeholders (Kaplan, 2001). Given the similar demands yet contradictory outcomes desired, as well as the increasing need to improve NFP performance (Herman & Renz, 1998), knowledge of how OA influences performance within this sector seems particularly appropriate. Because continued survival alone is, at best, a weak indicator of efficiency, effectiveness, or social impact (Dees, 1998), NFPs are coming under greater pressure from various stakeholder groups to efficiently use resources (e.g., cash donations, gifts, volunteers) to accomplish the organization's stated mission (Salamon et al., 2010) and must also effectively communicate their successes to various stakeholder groups. The modern environment requires non-profits to seek novel funding sources, engage in new forms of outreach to communicate with members, develop new measures for effectiveness (Ritchie & Kolodinsky, 2003; Sawhill & Williamson, 2001), implement practices and reports that facilitate transparency and accountability (Herman, Renz, & Heimovics, 1996; Speckbacher, 2003), and begin to incorporate best practices from the for-profit business world. Extending the OA paradigm from strategic management to NFPs offers an opportunity to understand if and how this sector is managing the competing demands of exploration and exploitation.

Literature Review Conclusion

This chapter provided an overview of the relevant literature related to OA within the strategic management literature. A review of current research, both empirical and conceptual, shows a paucity of literature outside the for-profit domain, suggesting that the present study offers a contribution by extending this well-known strategic management concept to a unique and important context. The following chapter presents the methods used to test the three hypotheses stated above, the measures used to operationalize each of the variables within the study, the control variables that will be included to minimizing confounding, and a discussion of the unique challenges in assessing organizational performance and effectiveness in NFP research.

Chapter 3 – Methods and Context

This chapter presents the methodology used to conduct this study. A general overview of the unique not-for-profit context is provided, with a discussion of the inherent difficulties that researchers encounter while attempting to relate NFP activities to organizational performance or effectiveness. This chapter also describes the sample, measures, and data collection process and concludes with an explanation of the statistical analyses employed.

The recent focus on NFPs as a force for improving communities and alleviating major social issues has received a great deal of recent attention from academics (Calás, Smircich, & Bourne, 2009; Dart, 2004; Korosec & Berman, 2006; Tan, Williams, & Tan, 2005) and practitioners (Geller, Abramson, & de Leon, 2010; Salamon et al., 2010) interested in ameliorating persistent social problems. The non-profit and charitable sectors of the United States economy are comprised of more than 1.5 million organizations, employ nearly 10% of the workforce (12.9 million individuals), and contribute more than 5% of the overall gross domestic product (\$1.4 trillion in total revenue) (Sherlock & Gravelle, 2009). These organizations cover the full spectrum of organizational missions and range from highly specialized local charities (e.g., Knox Area Rescue Ministries, Virginia Beach SPCA) to nationwide organizations that oversee the efforts of multiple chapters (e.g., Red Cross, Planned Parenthood, Habitat for Humanity).

The changing face of government and its shrinking role in the provision of social and welfare services in the United States necessitate the expansion of services offered by non-profit and charitable organizations (Boris & Steuerle, 1999; Salamon, 1995; Smith & Lipsky, 1993) in

order to alleviate social issues (e.g., homelessness, hunger) or improve artistic or cultural offerings (e.g., symphonies, zoos, botanical gardens). Performance measurement has not always been highly valued in the world of charity and social improvement (Dees, 2007; Speckbacher, 2008), largely due to the difficulty in reporting reliable, timely, and cost-effective results. Failure to efficiently allocate funds to the organization's stated mission results in rebuke from the NFP rating community, such as this warning to donors found on the rating website VolunteerGuide:

“For every dollar you donate, very good charities will use 80 cents or more towards their charitable purpose, while the rest of your donation pays for fundraising costs, administrative expenses, and management salaries. On the other hand, for every dollar donated to a bad charity, as little as 40 cents (or worse) will go towards the charitable purpose. The rest of your donation will pay for a poorly managed or *inefficient bureaucracy*, perhaps with the involvement of too many for-profit middlemen in the fundraising efforts,”
(volunteerguide.com, emphasis added).

VolunteerGuide provides no explanation for why 80 cents determines the cutoff point between very good and good charities and all attempts to contact the organization's administrators for clarification on their methodology have gone unanswered. CN offers a similar warning to donors: “We believe that those spending less than a third of their budget on program expenses are simply not living up to their missions. Charities demonstrating such *gross inefficiency* receive zero points for their overall organizational efficiency score,” (emphasis added). Like VolunteerGuide, CN offers no rationale for 33 cents on the dollar as the

determinant of “gross inefficiency.” This unwavering emphasis on efficiently delivering services and having expense ratios reported by third-party organizations places pressure on NFPs to report high levels of efficiency (Tinkelman, 2009); however, OA suggests that these same organizations must resist the temptation to simply cut expenses to the bone and risk falling into a competency trap (Liu, 2006) whereby they are unable to adapt their service offerings as needed. In order to ensure their long-term survival, NFPs must be flexible enough to respond to changing conditions within the greater environment as new opportunities and threats arise (Sherlock & Gravelle, 2009), which are often riskier and more expensive (March, 1991), and potentially less efficient in terms of reported expense ratios.

NFPs are facing greater limits of social support and must meet expectations for delivering services efficiently while growing and innovating (Salamon et al., 2010). Despite these demands, unlike their for-profit counterparts, NFPs are often locked into narrow, mission-based offerings with limited ability to diversify beyond their stated mission without facing backlash from donors, board members, and volunteers (Salamon et al., 2010). Even without the ambidexterity terminology in the NFP literature, the sentiment that NFPs must balance the need for new and innovative programs with existing service provisions is expressed by the comments reported in a recent Johns Hopkins University study on non-profit innovation and performance measurement. In the words of one frustrated executive director:

“Innovation can be challenging when private funders have committed to organizations based on what they know already works. Funders are mixed about whether or not they are willing to take risks on innovation. Risk taking is a general challenge in our

sector and needs to, when appropriate, be rewarded not penalized when something doesn't work 100 percent," (Salamon et al., 2010: 17)

A second executive director expressed the need to explore new options for the organization, but felt constrained by the boundaries of the organization's mission and the need to focus on existing services instead of new opportunities:

"Innovation is great, and I support it, but there is also a huge need for funding to support the programs (that get more expensive every year) that are part of our current operations. I think it is a dangerous practice to encourage innovation when organizations are finding it hard to sustain their core mission due to difficulty in attracting funding for basic operating costs (Salamon et al., 2010: 17).

Because of these competing pressures to continue with existing programs while also seeking new innovations in the field, managers may find themselves overwhelmed at having to pursue both simultaneously. These quotes mirror the inherent tension within the ambidexterity literature, but couch the trade-offs in terms unique to the NFP sector. As organizations seek to broaden their impact, pursue new funding opportunities, or increase their visibility, they must temper this growth and exploration with an expectation from stakeholders that the first goal is to provide demanded services and products with a high level of efficiency. This perception that the organization must explore innovative new missions in order to keep the organization relevant is

also noted in this quote from an executive director who understands the need to do both, but is hampered by a lack of time and staffing to actually capitalize on exploration:

“Staff time is a huge problem, not just time to attend conferences or read periodicals, but the time that’s necessary afterward, to digest, think about how to apply / implement what one has learned,” (Salamon et al., 2010: 8).

In this regard, the executive director is describing an organization that, even if it had the resources to actively explore for new options, would be limited in its ability to exploit them effectively afterwards. This “failure trap” (March, 2003; Siggelkow & Rivkin, 2006) is common in cases where a lack of adequate exploitation results in failure, thus spurring more exploration and a constant shifting of different strategies to find one that will work with minimal exploitation. This tension, especially within these types of organizations with scarce resources, demanding stakeholder groups, and a commitment to a constraining mission, makes the concept of ambidexterity particularly relevant to an NFP context. Many for-profit organizations cope with the same constraints, but under a mandate to maximize shareholder or owner value, may engage in very different activities as a way to generate revenue. The constraints from the stated mission make it difficult for NFPs to explore too widely beyond the scope of their organizational goals, but NFP managers likely still need to engage in both actions for continued success. Linking the use of OA practices to an objective, measureable outcome would prove beneficial in a sector traditionally plagued by performance measurement challenges (Ritchie & Kolodinsky, 2003; Sawhill & Williamson, 2001) because NFP managers would be able to point to the demonstrable impact of efficiently seeking new growth opportunities.

Challenges in Assessing NFP Effectiveness

Given criticism in the for-profit strategy literature of the unwavering focus on performance (Cameron, 1986), the NFP arena is a particularly fertile area for exploration because performance is both a poorly-defined topic (Rojas, 2000; Sawhill & Williamson, 2001) and one of great interest to NFP managers (Herman & Renz, 1998), volunteers (Murnighan, Kim, & Metzger, 1993), donors (Salamon et al., 2010), and watchdog organizations (Szper & Prakash, 2011). These various stakeholder groups are only able to assess the organization's effectiveness at achieving its stated mission if information is made available about ongoing efforts (Speckbacher, 2003). The topics of measurable progress and impact, accountability, and organizational effectiveness are of interest to practitioners and scholars alike (Ritchie & Kolodinsky, 2003; Rojas, 2000), but these topics also defy measurement in a way few variables do (Herman & Renz, 1998; Sawhill & Williamson, 2001), which has led some scholars to wonder if the task of measuring NFP performance is even possible (Sawhill & Williamson, 2001).

Clearly, one of the main challenges of assessing NFP effectiveness is that the "simple elegance of a financial measure" (Kaplan, 2001: 354) of organizational performance is not applicable. Common accounting-based ratio measures employed in traditional strategy literature such as return on assets (ROA), return on investment (ROI), return on sales (ROS), as well as market-based measures such as Tobin's Q and market capitalization are all irrelevant within an NFP context. In response to these challenges, models have emerged in an attempt to measure organizational effectiveness rather than performance (Balser & McClusky, 2005; Herman & Renz, 1998; Kushner & Poole, 1996; Rojas, 2000).

Rather than attempt to measure NFP performance using traditional financial measures typically seen in strategy literature, other measures of organizational effectiveness have been proposed (Cameron, 1986), and the ultimate choice of measure is driven by the organization's idiosyncratic goals and mission (Herman & Renz, 1998). One shortcoming of this approach is that organizations can rate themselves and benchmark their own efforts against their stated goals, but outsiders unfamiliar with the terminology of a particular NFP cannot easily compare different organizations.

When case studies are used to focus on one particular organization's attempt at defining measureable goals, researchers report dozens of metrics that organizations use to track their performance, few of which may be applicable to another organization (Sawhill & Williamson, 2001). For example, the leadership at The Nature Conservancy spent one year developing a list of ninety-eight performance indicators. While some measures were generic enough to permit comparison to other organizations (e.g., dollars raised per capita, percentage of operating budget spent on fundraising), many others were Conservancy-specific (e.g., number of acres acquired for protection). Unfortunately, these contextually-specific measures can lead to "even greater fractioning of knowledge and incommensurability of theories and findings," (Herman & Renz, 1999: 122).

Other methods that have attempted to introduce more rigorous and generalizable performance measurement to the NFP sector include the balanced scorecard (Kaplan, 2001), which focuses on different stakeholder metrics such as customer needs, organizational learning and growth, economic value, and internal organizational processes. The competing values framework (CVF) (Quinn & Rohrbaugh, 1983; Quinn & Spreitzer, 1991) uses multi-dimensional

scaling to map values into a 2x2 matrix of different effectiveness models based on organizational goals and resulted in four possible models: human relations, internal process, open systems, and rational goals. Each model has its own underlying values for rating organizational effectiveness. Bhargava and Sinha (1992) use a four-factor model to predict organizational effectiveness. Seven-point Likert-type scales assess the level of production, leadership, interpersonal conflict, and commitment within the organization. Taken together, these components represent an individual's perception of how effective an organization is in its performance of its stated mission. The multiple constituency model assumes that various organizational stakeholders (Freeman, 1983) all desire different outcomes from the organization and the extent to which NFPs can meet these various dimensions will influence stakeholder perceptions of effectiveness (Zammuto, 1984). This model is adequate for case study research and offers the ability to focus on one particular organization's determination of its own level of effectiveness. For larger-scale empirical work that generalizes across contexts, a common measure of organizational effectiveness is required for comparisons within and between groups of NFPs.

More recent research on NFP performance measurement has addressed this issue by developing financial measures of NFP performance that are comparable across contexts. The use of measures based on common data such as IRS filings permits cross-context comparison, long-term benchmarking, and a common vocabulary for organizational researchers (Ritchie & Kolodinsky, 2003). By developing ratios related to fundraising expenses, executive compensation, and growth potential, donors can compare organizations across a common set of metrics. With these types of measures, NFP researchers, donors, and managers can begin to

incorporate financial measurement terminology into their strategic plans as easily as for-profit managers incorporate terms such as “return on assets” and “return on sales.”

The Rise of Not-for-profit Watchdog Organizations

Assessing NFP effectiveness has been mired in a lack of transparency and objectivity (Szper & Prakash, 2011) and, because the direct social impact of any particular program is difficult to measure, NFP stakeholders can experience difficulty ascertaining how efficiently resources are being used, the organization’s prospects for growth, and the appropriate level of executive compensation. In the absence of traditional market-based measures of organizational effectiveness (Kaplan, 2001), third-party organizations have emerged to parse financial and perceptual data from NFPs into usable effectiveness metrics for consumption by various stakeholders, including donors, volunteers, board members, and funding agencies (Szper & Prakash, 2011). These metrics are comparable across different organizations and permit easy comparisons of NFPs. The overall aim of NFP watchdog organizations is to provide stakeholders with information about how organizations are performing relative to other organizations within the same scope of operations. Watchdog organizations that issue ratings based on financial metrics typically rely on the data contained in IRS filings that all 501(c)(3) NFPs are required to file. Form 990 financial information is a commonly used and widely-accepted data source for NFP research (Herman & Renz, 1998; Herman, Renz, & Heimovics, 1996; Hwang & Powell, 2009; Ritchie & Kolodinsky, 2003). These organizations then interpret the IRS forms, analyze the operational data, and report it back to donors, board members, community leaders, and volunteers in a standardized, comparable format that is easier to understand. The purpose of these ratings is similar to those of creditworthiness ratings assessed by companies such as

Standard and Poor's or Moody's, where the overall goal of the rating agency is to provide analysis and guidance from industry experts so that donors, volunteers, boards, and executives can make more informed decisions. By improving the transparency of NFP operations through the dissemination of financial data and subsequent ratings, watchdog organizations attempt to influence donor and NFP behavior (Szper & Prakash, 2011). One of the largest and oldest NFP watchdog is CN—the primary data source for this study.

Description of Charity Navigator

Founded in 2001, CN is a 501(c)(3) NFP itself and one of many watchdog organizations that have emerged in recent years as a way to add transparency to the NFP arena (Szper & Prakash, 2011). As of 2012, CN provided ratings on more than 5,500 NFPs. NFPs are categorized into one of nine broad categories (e.g., human services, animals, health) and then further subcategorized into one of thirty-four narrower causes (e.g., food banks, wildlife conservation, medical research) based on the activity code reported to the IRS on the 990 form. In order to be included within the CN database, NFPs must be classified as a 501(c)(3) organization and file a 990 form. CN requires that organizations have at least four years of 990 forms on file. Organizations must be based in the United States, but may perform work internationally as part of their mission. Public support must exceed \$500,000 and total contributions must equal a minimum of \$1,000,000 in the latest year of Form 990 filings. From these inclusion criteria, CN rates approximately 6% of NFPs within the United States. Upon receipt of the publicly-available 990 form data, CN presents it in a way that is uniform, comparable, and more accessible to donors and other NFP stakeholders. Donors, managers, board members, and other stakeholders can then use these ratings as a benchmarking metric to

compare across NFPs. Figure 2 presents an example of a CN ratings report. CN focuses on rating growth potential and efficient operations for NFPs, but stops short of relating these two constructs to a meaningful performance outcome.

Based on its history of presenting publicly-available financial data for the purposes of influencing NFP and stakeholder behavior (Tinkelman, 2009), as well as its accepted use in other empirical studies of NFPs (Andreoni & Payne, 2011; Gordon, Knock, & Neely, 2009; Seo, Kim, & Yang, 2009; Szper & Prakash, 2011), CN permits data for evaluating the ambidexterity hypothesis (Simsek et al., 2009) within a NFP context. Prior studies that have used CN data have either looked at NFPs in one state (Szper & Prakash, 2011) or one particular industry (Seo et al., 2009). This is the first study to take a broad look across the entire dataset to examine patterns of ambidextrous operations and their relationship to fiscal performance within NFPs. This large sample that encompasses various causes allows for the examination of the relationship between these two concepts and their relationship to an organization's financial performance.

Study 1 Methods and Context

For the quantitative portion of this study, data were collected from the CN database during February and March of 2011, reflecting the most current ratings on file for each of the NFPs in the database. These data report financial filings for fiscal year 2010 and prior. Although CN makes the 990 form data available on their website, these data are not presented in a way that makes comparison or analysis straight-forward. The inability to download the CN dataset in its entirety necessitated use of the Visual Web Ripper (sequentum.com) data extraction program. Visual Web Ripper extracts data from user-selected portions of web pages and organizes the output into spreadsheets for the purposes of conducting additional statistical analyses. Figure 3

contains an image of the Visual Web Ripper tool and highlights to portions of the webpage that for inclusion in a spreadsheet for the purposes of statistical analysis.

Research Design and Quantitative Analytic Techniques

This research seeks to understand the phenomenon of ambidexterity within a sample of NFP organizations by examining the CN dataset for patterns related to the OA and to identify the impact on ambidextrous operations on financial performance.

Study 1 Variables and Description of Measures

CN calculates ratings for NFPs from by analyzing official IRS Form 990 data and parsing the financial data into meaningful comparisons. The two financial measures, organizational efficiency and organizational capacity, approximate the competing pressures first laid out by March (1991) and further refined by contemporary scholars who continue to use the language of exploration and exploitation in their studies of OA (Raisch & Birkinshaw, 2008; Raisch, Birkinshaw, Probst, & Tushman, 2009; Simsek et al., 2009).

Organizational Efficiency (Exploitation)

The first independent variable, exploitation, is described by March as activities such as “refinement, *efficiency*, selection, and implementation” (March, 1991: 102, emphasis added), and is measured by CN’s rating of organizational efficiency (OE). OE is one of the two major areas rated by CN. According to CN, “analyzing a charity’s efficiency reveals how well it functions day to day. Charities that are efficient spend less money to raise more. They devote the majority of their spending to the programs and services they exist to provide” (charitynavigator.org). OE demonstrates a high degree of theoretical correspondence with the concept of exploitation

(March, 1991) in that it attempts to measure the degree to which contributions are being efficiently applied to the organization's ongoing operations within the stated mission.

OE is determined by four underlying financial ratios: *program expenses*, *administrative expenses*, *fundraising expenses*, and *fundraising efficiency*. A rating for *program expenses* is calculated by dividing direct program expenses by total functional expenses (the sum of a charity's program expenses, administrative expenses and fundraising expenses) to determine a percentage. Higher percentages are rated more favorably by CN. A rating for *administrative expenses* is calculated by dividing administrative expenses (executive compensation and other staff salaries) by total functional expenses. For this measure, lower percentages are rated more favorably by CN. A rating for *fundraising expenses* is calculated by dividing an organization's fundraising expenses by its total functional expenses. For this measure, lower percentages are rated more favorably by CN. A rating for *fundraising efficiency* is calculated by dividing an NFP's fundraising expenses by its total contributions. For this measure, lower percentages are rated more favorably by CN.

Each of these four categories is worth 10 possible points. The sum of the ratings from these four sub-categories results in overall OE ratings that range from 0-40 points. In cases where an NFP spends less than 33% of their total budget on program expenses, CN automatically gives these organizations a zero (0) for organizational efficiency. This portion of the rating methodology shows the bias towards organizations who are not operating at the peak of efficiency, although such levels of efficiency may actually be detrimental to overall effectiveness (Adler, 1999; Benner & Tushman, 2003).

Organizational Capacity (Exploration)

The second major area that CN rates is organizational capacity (OC). March conceptualizes exploration as “search, variation, experimentation, and discovery,” (1991: 102) and the OC rating accurately taps this future-oriented posture by defining OC as “how well a charity is positioned to pursue *long-term systematic change*. They have the financial flexibility to plan strategically and pursue long-term objectives. These charities can more ambitiously address our nation’s challenges, envisioning and working toward long-term solutions” (charitynavigator.org, emphasis added). Higher OC ratings indicate an ability to “continue pursuing change in the future and will generate both short-term and long-term results for every dollar they receive from givers.”

OC is determined by calculating the four-year average of two financial ratios: *primary revenue growth*, *primary expenses growth*, plus an assessment of an NFP’s *working capital ratio*. *Primary revenue growth* includes donor-based contributions, corporate donations, and grants. Growing these revenue streams over time demonstrates that NFPs are maintaining support for their programs and will continue to operate in the future. *Primary expenses growth* demonstrates that programs are reaching a larger audience, continuing to fulfill a need, and developing new programs as needed. The methods for rating primary revenue growth and primary expenses growth are the same: these growth rates are calculated by computing the annualized growth rate for both measures is $[(Y_n/Y_0)^{(1/n)}]-1$ where Y_0 is the value measured in the first year of the interval and n is the length of the interval in years. CN uses proprietary conversion tables to translate the calculated growth rates into ratings for this aspect of OC. The ratings indicate how close an NFP is to industry standards and how it compares with the other charities in the dataset.

For these measures, higher percentages are rated more favorably by CN and NFPs may earn up to 10 points for each category.

A rating for *working capital ratio* is calculated by dividing working capital by total expenses. Working capital assets include cash, savings, accounts receivables, grants receivable, pledges receivable, and investments in securities. Liabilities include accounts payables, accrued expenses, and grants payable. This measure provides an estimate of how long an NFP could continue to engage in operations without generating any new revenue. NFPs may earn up to 10 points for their working capital ratio and similar to the measures of primary revenue growth and primary expenses growth, CN converts the raw working capital ratio to a rating using proprietary, industry-specific ratings tables. The sum of these three sub-categories results in overall OC ratings that range from 0-30 points.

Controlling for Industry Differences

After determining the raw percentages for each dimension of OE and OC, CN applies an industry-specific algorithm to convert the four measures into one rating. To permit cross-industry comparison, ratings are adjusted to reflect industry norms. For example, in the food banking industry, in order to receive the highest possible rating for the *administrative expenses* subcategory of OE, a food bank must keep their administrative expenses between 0% and 3% of total functional expense (the sum of a charity's program expenses, administrative expenses and fundraising expenses). Thus, for a food bank with total functional expenses of \$1,000,000, staff salaries must remain below \$30,000 in order to earn the full 10 points for this rating; however, a museum must may report administrative expenses up to 17.5% and still receive the highest rating for this portion from CN. Although an administrative expense rating of 15% would yield a food

bank 0 points from CN for this measure, a museum with the same expense ratio would receive the full 10 points possible for this measure. These types of industry-adjusted ratings allow for comparisons between NFPs within the same industry as well as NFPs across diverse industries.

Creating a Measure of Organizational Ambidexterity

Consistent with prior OA research (Atuahene-Gima, 2005; Katila & Ahuja, 2002), the measures for OC and OE are multiplied to create a measure of OA. By conceptualizing these as orthogonal constructs rather than trade-offs, it is possible for an organizational to engage in high levels of both exploration and exploitation. The range of possible ratings is from 0-40 for OE and 0-30 for OC and the product of these two measures ranges from 0 to 1200.

Across the entire dataset, the mean score for exploration was 16.17 on a scale from 0 to 30 and the mean score for exploitation was 35.39 on a scale from 0 to 40. This mean split resulted in 1,054 to 1,975 NFPs per quadrant. By categorizing organizations into quadrants based on these mean-split values, it is possible to compare the average level of fiscal performance between the NFPs that inhabit the different quadrants. This classification yields an understanding of how many organizations out of the total sample exhibit ambidextrous behavior. If the sample were normally distributed, each quadrant would contain approximately 1,300 NFPs; however, given the difficulty of achieving ambidexterity reported in the literature (Adler et al., 2009; Benner & Tushman, 2003), it is surprising that so many NFPs within the CN dataset can be classified as ambidextrous organizations. Table 2 presents a partial correlation matrix with descriptive statistics for the variables of interest. Table 3 presents a full correlation matrix including the industries in the CN dataset. Table 4 presents a description of the sectors and industries rated by CN.

Fiscal Performance

The dependent variable in this study is fiscal performance (FP), a ratio measure derived from IRS Form 990 data and calculated as an NFP's total revenue (line 12) divided by total expenses (line 17). The resulting ratio represents an NFP operating at a state of surplus or deficit; an FP greater than 1.0 represents a state of surplus and an FP less than 1.0 represents a state of deficit. For NFPs, a state of surplus is highly desirable for a number of reasons, including providing a buffer against environmental shocks (Bowman, 2011) as well as allowing for the accumulation of funds to pursue new growth initiatives in future years (Bowman, Tuckman, & Young, 2010). Public charities such as the ones represented in the CN dataset may carry as large of a surplus as they like (Fremont-Smith, 2004).

Unlike the CN ratings, this ratio is not adjusted for industry differences. Through the process of factor analysis, researchers have found that FP is conceptually and statistically distinct from other measures of organizational performance, such as fundraising efficiency or public support (Ritchie & Kolodinsky, 2003). Other studies of NFP performance have also used FP (Siciliano, 1996; 1997) because it provides a comparable measure of financial performance across NFPs beyond idiosyncratic performance measures.

Control Variables

This study includes relevant controls in order to limit the influence of potential confounds. As organizations age and grow, they tend to exhibit greater levels of structure, rather than flexibility (Sørensen & Stuart, 2000); hence, I have controlled for both of these possible confounding variables in order to limit their influence on the outcomes of this study. Firm age influences the impact of simultaneous and sequential ambidexterity on organizational

performance (Venkatraman et al., 2007). Organizational size has also been found to moderate the relationship between exploration and the development of new products (Rothaermel & Deeds, 2004). Consistent with other strategic management research at the organizational level of analysis, organizational size is operationalized as the NFP's net assets (Russo, 1992), taken from the fiscal year's income statement. Each organization provides its founding date in the CN database, so organizational age is calculated as the number of years since the organization's founding. CN reports data that span nine broad categories and thirty-four different causes, which essentially represent different "industries" within the NFP sector. Cost structures can vary widely across different categories and some categories may also be overrepresented within the database (charitynavigator.org), so I have controlled for the different industries in the CN dataset to prevent the likelihood of confounding noise across different segments and mission types.

Validity

Validity refers to the establishment of evidence that a measure depicts the intended construct (Kerlinger & Lee, 2000). Although there are many types and conceptualizations of validity (Schriesheim, Coglisier, Scandura, Lankau, & Powers, 1999), two are of particular importance to the present study. First, content validity refers to the representativeness of the content contained in the instrument. The two independent variable measures—OC and OE—closely relate to the two ambidexterity concepts proposed by March (1991): exploration and exploitation. Second, external construct validity refers to whether the findings from the sample are generalizable to a larger context (Messick, 1988). Based on the large sample size, which is more than five times greater than the next largest empirical ambidexterity study (Venkatraman et al., 2007) as well as the inclusion of all reported "industries" within the largest NFP rating

organization in the sector, it is likely that the results derived from this study will demonstrate a high degree of external construct validity, i.e., generalizability. The inclusion of a full correlation matrix (see Table 3) that depicts the strength of relationships between all variables within a study may also contribute to the evidence of validity (Crook, Shook, Morris, & Madden, 2010).

Study 2 Methods and Context

In order to address the second research question of this dissertation, “*How* do NPFs manage ambidextrous operations?” I selected four sites from the CN dataset of 108 possible food banks. All of the food banks are affiliates of the Feeding America national network and are located in the Southeast United States. I conducted site visits and semi-structured interviews with executive directors and other senior members of the leadership team. Three of the four food banks rate highly on both CN ratings for efficiency and capacity, which makes them an excellent research setting to begin to understand how these types of organizations are able to deliver their services efficiently while also seeking new programs, sources of funding, sources of food, and donors. The fourth is very high on exploitation and moderately high on exploration. Figure 4 presents a scatter plot of the four food banks analyzed for this study and presents their relative positions in the 2x2 matrix of exploration and exploitation.

The operational context for food banks has recently shifted in a dramatic way (Etter & Jargon, 2007). From the grass-roots beginnings of the first food banks in the 1970s, modern food banks are large, professionally-managed organizations responsible for covering every county in the United States. In 1979, the independent food banks created a national organization to handle fundraising, advocacy, and partnerships at the national level. This structure is different from a case of a headquarters spawning smaller local subsidiaries; rather, in this case, the local

subsidiaries decided to form a national headquarters. The mission-based operational focus of food banks suggests that they would have difficulty innovating beyond their core mission of providing food to hungry individuals. Food banks within this network are called affiliates and each food bank is given a service area consisting of a set number of counties. Affiliates are not permitted to solicit donations of food or money from donors outside their service area, nor are they able to expand their offerings into counties served by other affiliates in the network. As sources of food have shifted from large-scale corporate donations to purchased food, food banks have needed to find additional sources of food to distribute (Etter & Jargon, 2007). Food banks have also come to rely more heavily on private donations in the face of shrinking federal and state funding. All of these new demands require that food banks be resourceful in terms of finding new sources of healthy food and new donors to fund programs. These two needs—purchasing more food on the open market and searching for new sources of funding—also come at a time when food banks and donors are looking beyond the raw number of pounds distributed to the community to determine the nutritional make-up of the food as well. Rising rates of childhood obesity and diabetes have pushed food banks to see themselves as a source of food as well as a source of good nutrition.

The additional logistical issues of storing and distributing refrigerated foods such as milk and meat, along with fast-spoiling foods such as bread and vegetables, pose challenges for food banks. These warehouses have not always been equipped to deal with tractor-trailer loads of frozen food, deliveries of fruit that will spoil within days, or bread that must be handled and stored without being damaged. These changing dynamics are not yet reflected in the CN dataset since their description of the food banking industry states, “As primarily non-cash operations,

these charities demonstrate very little need for spending on overhead. Their median administrative expenses fall below the median for all of the charities we rate.” Furthermore, “Because the bulk of their expenses take the form of donated food and goods, these charities need only small amounts of working capital” (charitnavigator.org). To compensate for this deficiency in the quantitative data, I conducted site visits at four food banks to interview executive directors and other members of their leadership team to determine the mechanisms by which food banks are engaging in ambidextrous operations.

Study 2 Data Collection

Prior to conducting interviews with the food bank top managers, I submitted a request to the Institutional Review Board (IRB) to obtain permission from the board to conduct interviews. Figure 5 shows the approval letter required to conduct human subjects research and Figure 6 shows the informed consent sheet that each participant signed, indicating their willingness to participate in the present study and their right to end participation at any time.

Following this approval process, I interviewed, at a minimum, the executive director for each of the four food banks selected for the study. Where possible, I also interviewed other members of the senior leadership teams, including CFOs and vice presidents. Interviews ranged from 30 to 60 minutes in length. Some interviews were conducted in office settings while others were conducted during walking tours of the food bank facilities. Interviews followed a semi-structured format that began with probing questions about employees’ experience and background prior to becoming leaders in the food bank organization. Following these introductory questions, I asked about theoretically-relevant topics related to OA such as growth, change, organizational turning points, efficiency, and ratings agencies such as CN. I asked the

top managers to describe at least one successful growth initiative, one unsuccessful growth initiative, and how their organization interacts with other types of organizations. Figure 7 presents the interview protocol used to guide the questions. To protect the identity of the respondents, the names and locations of the food banks have been altered:

Central is regarded as the innovator of the group by other affiliates. Central serves the largest population of clients and they also have the deepest pockets. All three of the other executive directors were impressed by what the staff at Central has accomplished. Central's FP is 1.03.

Riverside also moved from an urban location to a suburban location. Unlike many of the other food banks, they require individuals to come to the food bank in person to pick up food. Riverside's FP is 1.03.

Wright has exceeded warehouse capacity and their lack of available space is causing problems with efficiency. They are planning a move to a new space to accommodate the growing demand in their service area. Wright's FP is 1.04.

Orange recently completed a move to a larger warehouse. After outgrowing their previous space, they relocated to a corporate park in a different county from their previous location. Orange is the only food bank in the sample that is not fully located in Quadrant 4 of Figure 1. With exploration scores of 15.65 and exploitation scores of 36.68, Orange has similar CN ratings to the other three and the interviews at this site reflected themes similar to those described at the other sites. Due to this similarity, Orange remains included in the study. Orange's FP is 0.99.

Following best practices set forth by Eisenhardt and Bourgeois (1988), all interviews were transcribed within 24 hours. I kept a notebook during the site visits in order to record my first impressions of the facilities, the people I met with, and other thoughts that were not captured by the digital audio recorder. Where possible, I requested permission to take pictures of the facilities and their operations. In addition to the audio recorder, I took notes throughout the interviews and site tours to record my impressions regarding what I was seeing and hearing from the NFP managers. All interviews were transcribed using a professional transcription service and checked within twenty-four hours of receipt of each transcription to ensure consistency and to fill in any words or gaps that the transcriptionist was unable to interpret from the audio recording.

After all of the interviews were transcribed, they were entered into a text analysis program, QDA Miner (provalis.com), to facilitate the isolation and identification of common themes across the interviews. Each interview was coded for broad themes related to processes in place at the food banks that may contribute to ambidextrous operations and then re-analyzed to look for more detailed themes under each process. Because participants often discussed other issues that related tangentially to core ambidexterity concepts, I also looked for themes that were not expressly in the interview protocol that might offer new theoretical insight to the ambidexterity literature. The main themes that emerged are presented in the following chapter.

Research Methods Summary

This chapter has provided an overview of the present study, its analytical approaches, and the measures used to test the hypothesized relationships between the variables of interest for the quantitative portion of the dissertation. This chapter also described the procedure for receiving permission to conduct human subjects research, the sample of food banks used in the qualitative

portion, the interview and transcription process, and the method of analysis used to identify the major themes seen in the interviews. The following chapter presents the results of the two studies.

Chapter 4 – Results

Study 1: Organizational Ambidexterity and Financial Performance

This chapter presents the quantitative results of this study. The STATA IC version 11 statistics package was used for the mean-comparison ANOVA and clustered regression analysis. Hypothesis test results are reported in the following tables: Table 5 presents the results from the ANOVA test that compares the fiscal performance scores for organizations at high and low levels of exploration and exploitation. Table 6 presents the results of the clustered multiple regression that tests the overall impact of OA on fiscal performance from the overall CN dataset. Form 990 data reflects the operations of the organization itself; thus, the unit of analysis for this research project is the NFP. All of the NFPs in the dataset are “nested” within larger sectors, requiring clustered robust regression for hypothesis testing. Organizations within the same cause and category are likely to share other characteristics and clustered regression accounts for potential non-independence between organizations by employing robust standard errors. Rather than use sums of squares to estimate an overall F statistic for the model, clustered regression uses a Wald test to estimate an F statistic. For clustered regression, the r -squared statistic is equivalent to an adjusted r -squared statistic so only the r -squared statistic is reported in Table 6. Fiscal performance scores have been scaled up by a factor of 100 to facilitate interpretation of regression output as a percentage of deficit or surplus.

A caveat of this study is that the quantitative results should be interpreted with caution. Despite calls in the NFP performance assessment literature to use measures that are comparable across organizations (Herman and Renz, 1998; Rojas, 2000), the use of IRS-reported financial indicators as proxies for the independent variables of this study—OC, OE, and OA—and the

dependent variable—FP—resulted in a high degree of multicollinearity between the predictor and outcome variables. In addition to the issue of multicollinearity, FP was not normally distributed across the CN sample. The combination of non-normality for the dependent variable as well as the multicollinearity between the financial variables suggests that although the results of the multiple regression analysis reported may provide some guidance for researchers and managers, the true relationships between the constructs of interest may vary from those presented here. Until additional NFP-appropriate measures are developed and widely adopted, it is likely that successful attempts to assess NFP activities and outcomes quantitatively will remain elusive (Sawhill and Williamson, 2001).

Results of Hypothesis Tests

The overall mean fiscal performance score for the CN dataset was 1.01, indicating that, on average, the organizations were operating at a slight (1%) surplus over their expenses. To test Hypotheses 1 and 2, organizations were grouped into four quadrants based on the mean scores for exploration and exploitation. Table 5 presents the mean FP values per cell based on a mean split of exploration and exploitation, the number of NFPs per cell, the FP difference between each cell and the significance level of these differences. All four mean cell values for fiscal performance differed significantly ($p < .05$) from the overall mean of 1.01. Each of the cell means also differed significantly from each other ($p < .05$) with the exceptions of quadrants 3 and 4, which were not significantly different from each other. This table forms the basis for testing hypotheses H1a, H1b, H1a', H1b', and H2.

Consistent with the traditional concept of ambidexterity from the organizational learning literature (March, 1991), the following hypotheses were proposed to suggest that organizations

that attempt to simultaneously engage in high levels of both actions may be at a disadvantage relative to organizations that attempt to specialize in either exploration or exploitation.

Hypothesis 1 offered the general hypothesis that focused organizations would outperform ambidextrous organizations, with more specific hypotheses for each condition.

Hypothesis H1a suggests that exploitation-focused organizations will outperform ambidextrous organizations. Specifically:

H1a: Exploitation-focused organizations within Figure 1 (Quadrant 2) will experience greater financial performance than organizations that attempt an ambidextrous strategy (Quadrant 4).

Table 5 illustrates that ambidextrous firms (i.e., quadrant 4) report an average FP of 1.08. This performance score is significantly different from the average FP of .95 reported by exploitation-focused organizations (i.e., quadrant 2); thus, **H1a is not supported**.

Hypothesis H1b suggests that exploration-focused organizations will outperform ambidextrous organizations. Specifically:

H1b: Exploration-focused organizations within Figure 1 (Quadrant 3) will experience greater financial performance than organizations that attempt an ambidextrous strategy (Quadrant 4).

Table 5 illustrates that ambidextrous firms (i.e. quadrant 4) report an average FP of 1.08. This performance score is not significantly different from the average FP of 1.05 reported by exploration-focused organizations (i.e. quadrant 3); thus, **H1b is not supported**.

In addition to these hypotheses, two alternates were also proposed: H1' suggested that ambidextrous organizations would outperform focused organizations. Specifically, H1a' proposed:

H1a': Ambidextrous organizations within Figure 1 (Quadrant 4) will experience greater financial performance than organizations that attempt an exploitation focus (Quadrant 2).

Table 5 illustrates that ambidextrous firms (i.e. quadrant 4) report an average FP of 1.08. This performance score is significantly higher than the average FP of .95 reported by exploitation-focused organizations (i.e. quadrant 3); thus, **H1a' is supported.**

Specifically, H1b' also proposed:

H1b': Ambidextrous organizations within Figure 1 (Quadrant 4) will experience greater financial performance than organizations that attempt an exploration focus (Quadrant 3).

Table 5 illustrates that ambidextrous firms (i.e. quadrant 4) report an average FP of 1.08. This performance score is not significantly higher than the average FP of 1.05 reported by exploration-focused organizations (i.e. quadrant 3); thus, **H1b' is not supported.**

The second main hypothesis considered the case of NFPs that were rated as low on both dimensions to determine the relationship between these factors and FP. The original hypothesis suggested:

H2: Organizations with equally low levels of exploration and exploitation (Quadrant 1) will experience the lowest financial performance.

Table 5 illustrates that firms with low exploration and exploitation scores (i.e. quadrant 1) report an average FP of .90. This performance score is significantly lower than the average FP of the entire dataset (1.01), and is also significantly lower than the average FP of the other three quadrants; thus, **H2 is supported**.

Finally, clustered regression was used to assess the overall impact of ambidextrous operations on fiscal performance and evaluate Hypothesis 3.

H3: Organizational ambidexterity will have a significant, positive effect on financial performance.

Table 6 presents the clustered regression output with robust standard errors. Prior to this test, all outliers were removed in order to eliminate their influence on the results. The sample size reported is reduced due to lack of data recorded data either of on the control variables, age or size, leaving the final sample for clustered regression analysis at 3,935 NFPs. From this test, the relationship between exploration and FP was significant, but exploitation was non-significant. OA was also non-significantly related to FP, and the negative sign indicates that ambidexterity may actually be detrimental to FP. From these results, **H3 was not supported**.

Robustness Checks

To assess the robustness of these analysis from potential points of influence or outliers, I also conducted the ANOVA and regression analyses with all cases dropped that reported a zero (0) score for either exploration or exploitation, which would have yielded a zero (0) score for

ambidexterity. Dropping these seventy-four cases had no effect on the overall results in post-hoc checks, and did not change the degree of support for any of the hypotheses; consequently, these cases were included in the final analyses to leave the dataset intact.

A second robustness check for the possible influence from cases with zeros with exploration or exploitation was to adjust these scores from 0 to 1 in order to minimize the impact of a zero for an ambidexterity score. After making these 74 adjustments, the ANOVA and regression analyses were repeated, but this change had no effect on the overall results, nor did it change the degree of support for any of the hypotheses.

Industry-specific Results

Although no specific hypotheses were offered regarding the impact of industry differences that may influence the relationship between OA and FP, a post-hoc ANCOVA test indicated significant differences based on the range of industries present in the CN dataset. The ANCOVA to ascertain the presence of between-group differences resulted in an overall model F of 6.14, indicating that levels of FP varied by industry and an adjusted r -squared of .05, indicating that OC, OE, OA, organizational age, and organizational size accounted for approximately 5% of the variance in FP. In addition to the ANCOVA test, a regression model with all 34 industries included as dummy variables was also evaluated. The first block of control variables (industry, organizational age, and organizational size) resulted in an adjusted r -squared of .02. The inclusion of OE, OC, and OA in a second block of variables increased the adjusted r -squared for the full model to .05 for a change in r -squared of .03. Table 7 presents the OLS regression results for the six industries where exploration, exploitation, or ambidexterity have a significant impact on fiscal performance: animal rights, private elementary and secondary

schools, private universities, food banks, international development, and fundraising. These industries cover a broad swath of institutional missions, and it is especially puzzling that although ambidexterity has a significant positive effect on fiscal performance for one industry (private elementary schools), it actually has a negative impact on fiscal performance for the others. These findings will be discussed in detail in chapter five. These results provide some answers to the first research question; specifically, *what* is the impact of OA on organizational performance. A qualitative approach allows for insights into the underlying processes in use in a sample of ambidextrous organizations. The results from the qualitative portion of the dissertation follow.

Study 2: Processes for Managing Ambidexterity

Although the role of watchdog organizations was expected to be a major part of the discussion, most of the executive directors glossed over the topic. Rather than changing organizational goals and programs to maximize specific ratings from organizations such as CN, they were more interested in operating at their peak performance and allowing the ratings to fall where they may. When asked about whether or not the managers at the food bank are concerned about ratings from CN, the executive director from Orange remarked,

“I don’t pay too much attention to it really. We are required to be audited every year, we are required to file a 990 every year, so we meet on those obligations and that is public data. So as long as we are doing our fiscal accountability they really don’t bother us much at all.”

The desire to earn high ratings from CN did not appear to be a catalyst for growth and efficiency, but the inductive analysis of the interviews revealed three main processes that enabled food banks to engage in exploration and exploitation as a way to remain competitive. All of the executive directors, and many of the vice presidents, indicated that the field had changed in a number of ways over the past decade. The executive director of Central commented,

“Food banking was created to take that waste from food industry and make sure that it didn’t get thrown in the Dumpster and make sure that it fed hungry people.”

From this shared beginning, all four of the executive directors noted that successful, modern food banks are now essentially operated as businesses. The executive director at Central remarked,

“Non-profits have changed from being what we might call just a ‘do-gooder’ organization in that they have to run it just like any other business because you have to have a cash reserve in order to be able to continue funding your program during the good years and the bad years. Having a cash reserve or having a cash surplus at year-end is a positive thing and that’s where foundations are looking.”

Likewise, one of the vice presidents at Wright commented,

“I would say food banking [has] become a pretty fine-tuned business kind of operation”

The managers in this study all anticipated the need for organizational change before the changing situation became a major crisis. Although all of the executive directors described a dynamic environment characterized by declining support, none indicated that this would present a challenge that could result in the dissolution of their food bank or network. By proactively developing responses to changing situations, executive directors have been able to stay ahead of the curve, even when that has led to decisions that may be locally unpopular. The executive director of Orange remarked,

“When we announced we were moving to [this county], people thought we were leaving them. But we had to move if we wanted to keep doing what we were doing without changing our mission.”

By moving to a larger space with the capacity for refrigerated storage, the food bank was able to adapt to changing demand patterns and calls for increased nutritional requirements without having to sacrifice its ability to meet the needs of its recipients.

The ability to balance the tension inherent in exploration and exploitation appears to have come from three main processes: managing knowledge, retaining professional talent, and enabling leadership. Each of the executive directors talked about all three processes in use at their food bank. The unique finding from this inductive study is that food banks used the same three processes simultaneously to explore for new programs and funding sources, as well as to exploit existing resources for program refinements. Table 8 provides examples of the different processes and quotes to illustrate how each process allowed the food banks to operate ambidextrously within their local community and across a larger national network. Executive directors at all four sites discussed these processes and sub-processes.

Managing Knowledge

The first process that emerged from analyzing the interviews was the collaborative nature of affiliates within the network. They shared ideas for new projects and refinements to existing projects through two major channels: an annual conference organized by Feeding America and ongoing interactions with staff and executive directors at other affiliates. Each of these two processes, knowledge coordinated through national meetings and knowledge shared through networks of local affiliates, permitted food banks to more effectively explore for new programs and exploit existing programs and facilitated ambidextrous operations.

Coordinating Best Practices

The four food bank sites in this study are affiliates of the Feeding America network. In exchange for annual dues of \$6,000, each affiliate is able to access the resources and connections at the national headquarters. One of the main resources the executive directors described is an annual conference organized by the Feeding America headquarters. At this meeting, food banks are presented with awards based on their performance and innovative new strategies for meeting Feeding America's mission are showcased. The executive director of Riverside described:

“You know you go to conferences, they highlight something and you think, ‘Well that might work for us’ and you bring it back.”

Some of these innovative programs start from distant sites, such as New Mexico, and through the national network end up making into the local service area for food banks. As the executive director at Orange explained,

“I said to the board, ‘You know that backpack program's working in New Mexico and we have five thousand dollars in [this county]. Would you give me permission to try the backpack program in [this county] and if it doesn't work, it won't?’”

From this beginning as an innovative new program for Orange, they were able to take the backpack program, refine it locally, and eventually be recognized by the Feeding America headquarters as a food bank with a backpack program worth emulating. The executive director of Orange described their role as an identified success story at the national conference for other managers:

“Our network has Food Bank of the Year awards and recognitions so we all apply. Now we’re recognized for our backpack program because we are the third largest backpack program in the country.”

In this case, the national meeting provides new ideas for programs and facilitates the cross-pollination of best practices between different food banks. For Orange, the children’s backpack program was started after hearing about its use in New Mexico. The executive director brought the idea back to her affiliate, asked for funding from the board, and began replicating the program locally. Once the Feeding America headquarters identifies exemplary affiliates, they may ask them to mentor other food banks as a way to help a novice affiliate quickly learn how to operate a new program without having to start with a completely blank slate. The executive director at Orange will work with a manager from another affiliate to teach them how to start up a successful backpack program:

So Chicago just contacted us, “Will you mentor a new food bank employee that’s running their backpack program?”

Because of this national coordination, innovative programs and best practices are distributed through the network and executive directors can learn from the most effective programs in the country. The opportunity to explore for new programs and exploit best practices from other food banks is one of the major advantages of the network. In addition to learning from the national network of affiliates, executive directors also talked about engaging with affiliates who were geographically closer. This proximity makes it easier to travel between sites to exchange ideas and cross-train employees. The second theme of managing knowledge relates to interactions with these more proximate food banks.

Leveraging Local Relationships

Although the national meeting and other conferences are opportunities to identify innovative new programs being tested across the network, another type of knowledge exchange happens between proximal affiliates as programs are refined. The vice president of operations at Central came from a for-profit company within the automotive industry and expressed his surprise at how easy it was to communicate with other affiliates about ongoing process refinements and benchmarking:

“There’s a lot more knowledge sharing in this group. I just don’t remember calling up another plant manager at another automotive company to say, ‘Hey, can I come over and look at your facility?’

The benchmarking wasn’t as easy in those industries.”

In addition to visiting different sites to see how different affiliates conduct their operations, the vice president of operations at Central also had standing meetings on the third Wednesday of every month with six other food banking operations managers in order to compare notes. At this same site, the executive director of Central said:

“I call all my coworkers, and my other directors and say ‘I am going to have an issue with this and I am not really sure how I should do it’ and ‘can I bounce this off of you and will you give me some feedback’, or ‘I heard you are doing this could you send me your job description on that? I would love that so I don’t have to recreate the wheel.’”

These collaborative relationships with other local executive directors and managers within the network of affiliates helped to lower the risks associated with new programs and to increase the efficiency of day-to-day operations because the managers were able to work from pre-existing routines that other affiliates had already refined. In addition to communication between the top managers, the executive director of Orange described the process for socializing new hires into the food bank’s mission and procedures by sending staff to different affiliates.

“That’s the best thing about the network. When we get new employees we send them to another [affiliate] just to see how they do it.”

This system facilitates knowledge sharing and the informal contacts necessary for effective exploratory behavior. The executive director at Wright also mentioned how an

innovative piece of machinery increased the food bank's efficiency by reducing the rate of discarded cans from 60% to 20%, but remarked: "We didn't develop this. This is in another best practice from another food bank." By exchanging staff and ideas at the local level, the executive directors are able to refine their ongoing operations. These two means of knowledge exchange, national conferences and local interactions, both act as a source of new information for food bank managers. As a method for managing ambidextrous operations, innovative new programs are highlighted at the national conference, and existing programs are refined through contact with other local or regional affiliates. Table 9 presents additional quotes related to managing knowledge to facilitate exploratory and exploitive actions in the food banks. These two complementary processes allow the food banks to promote their unique innovations on a national scale while simultaneously learning from other local affiliates in order to minimize the time and effort spent inventing new programs and reducing the likelihood of failure. In addition to managing knowledge, a second process that emerged from the interviews was that of retaining talent. Directors and other interviewees alluded to this concept in terms of two sub-processes: hiring professional management and outsourcing non-core routines.

Retaining Talent

Exploitation leads to consistent returns from process refinements that result from the reduced costs associated with repeated routines. Because CN considers management and executive compensation as a negative factor when calculating ratings for efficiency, I asked about maximizing the use of volunteers to minimize salary and overhead expenses. The vice president at Wright responded, "There are some of our charities that we serve that operate like that (i.e. all volunteer labor), but not for very long." Although the executive directors expressed

their gratitude to their dedicated volunteers, they all agreed that their organizations were too large and complex to operate without specialized full-time management, which lead to the first sub-process related to retaining talent: hiring professional management. The executive director of Central described the changing face of food bank managers:

“When I started my career back in 60’s and 70’s, any kind of non-profit or social work job was done by a woman because it didn’t pay enough for a man to get involved in unless they got in at the administrative level. So back then if you did a survey of who ran nonprofits and how long they ran them, they were all women and they were all social workers ... If I was graduating from college today, I wouldn’t get a degree in social work. I would get a degree in business or marketing. Then I would probably get an MBA of some sort, maybe a law degree.”

This sentiment is reflected by the other managers who have seen the industry change dramatically from its grass-roots beginnings. The vice president of operations at Central remarked:

“This organization is starting to get so big that it’s you know, it needs to run more like a corporation. It needs to have more of a mindset of, ‘We need to look at everything that we invest our money in and our time in to make sure that we’re going to be good stewards of our resources and our donors’ money and our donors’

food and we're doing the right thing with it.' So it's not as grassroots as it was."

The changing dynamics of the food banking industry have influenced the types of managers best suited to operate in this environment. Rather than the social workers described by the executive director of Central, the focus on efficiency, accountability, and reporting necessitates managers whose skills have been honed in formal bureaucracies can be transferred to a NFP context.

Hiring Professional Management

This description of the type of managers who would typically be found in a food bank twenty or thirty years ago stands in sharp contrast to the professional managers found in today's food banks. Food banks have become so much larger in terms of their complexity, staffing, and number of programs, that they now draw from backgrounds in the management of for-profit businesses, the military, and academia. The executive director of Central described the benefits of managers with these types of skill sets:

"I'll never forget when a gentleman went to work as the CEO of the food bank in Chicago and he was a one-star General that came out of the Marine Corps. I wondered what does a one-star General know about food banking? Well, you know what? You have to know how to work with people and you got to know how to assess and how to measure outcomes and all those things."

The vice president of operations at Central explained how the introduction of engineering, military, and professional managers played a role in influencing the growing culture of efficiency at Central and a reduction in non-routinized practices:

“You got some push back for awhile and you had some turnover and had some few folks that didn’t really like the way that uh that I managed and you know, because it was. It was really very ‘fly by the seat of our pants’ out here. You know, running around with hair on fire every day. I don’t like doing that. I keep going back to, “You know what? It’s not our money.” We are helping people and if we can do it safer and we’re protecting with our quality of food and we’re doing it, we’re protecting our donors’ money and our donors’ resources by doing it more efficiently, then that is helping people which is our mission.”

Incorporating managers from the for-profit world allowed food banks to begin to tap into new skill sets that improved both exploration and exploitation. Former marketers and salespeople became externally-focused vice presidents for community relations, and managers with logistics, engineering, or operations experience became internally-focused vice presidents of operations, overseeing the efficient storage and distribution of food within a large, fast-moving warehouse environment. The purposeful inclusion of these professionals allows each executive director to take advantage of new ideas and refinements. The vice president of operations at Central described the impact that his presence has had on the day-to-day warehouse operations:

“The big dips and the peaks and valleys are leveled out a little bit more. So that was a big kind of a paradigm shift here. It was just like, “Look there’s a lot of things that we think we can’t control here that we actually can if we just put some process and procedure in place.” And we’ve been working really hard at that for the last six to eight months, really trying to implement a lot of those processes and procedures and standardize things as much as we can.

In addition to improving exploitive processes in the warehouse through ongoing refinement, the addition of an on-staff professional chef at Central allowed the food bank to build a demonstration kitchen to engage in a variety of exploratory strategies for community awareness. Central is located in a large corporate park with few alternates for meals during the day, so they open to the public for lunch two days per week. They also host a cooking camp for teens in the summer, and provide space for other organizations to hold meetings and events. This exploratory approach to community outreach developed as a direct result of the executive chef and the executive director.

Another result of this influx of skill sets and expertise is an environment that became progressively more professionalized, with each group of managers focusing on either exploration or exploitation strategies. This account from the vice president of community relations at Wright describes the need for a more standardized approach to grants:

“I remember one turning point was a grant that I helped work on for Kraft. When Kraft Foods got really involved with food banking, I still remember seeing their grant. They wanted a business plan more or less. You know, they really wanted us to lay out well, ‘Who are you going to get the food from? How much is it going to cost you to transport it?’ You know, at that point we had been factoring in those kinds of things with programs, but they really took it to the next level as far as being very exact on what we were going to do with the money and you know, and how um our plan.”

By bringing in more professional talent to explore for new programs as well improve efficiencies in existing programs, food banks were able to attract more grants from large, for-profit companies such as Kraft that wanted to see a professionally-managed food bank receiving their donated money and products. The only way to present this level of professionalism to large corporate donors was through the use of skilled managers, and hiring and retaining skilled managers required offering market-level compensation in order to stay with the food banks. The executive director of Riverside described having to pay market wages to attract and retain talented people.

“You can’t operate with all volunteers. Nothing like this. You have to have the best that you can afford and that’s always been rough on us. You get the best, you pay as much as you can, and you get the best that you can get for that. And if you are competitive it

comes back to good staff and people. You don't want to train people and have them jumping ship to go someplace where they can make a lot more money. So you either provide benefits, make the pay equitable, or other intrinsic things that people appreciate. We can't have people working here who are below the poverty level themselves. That's a goal that we need to adhere to."

This concept of minimizing turnover came through in interviews as a much stronger desire than minimizing labor costs. Directors and executive directors were committed to keeping these managers employed with the food bank so that they could develop the experience and connections needed to help the food bank succeed. The executive director of Orange explained that their food bank had not previously paid a competitive salary and kept losing talented people until she went to the board to ask for more money for staff salaries:

"So my first five to seven years of not doing a very good job of managing was getting the right people on the bus. You couldn't pay the people to do the job you needed them to do so of course, they'd leave the minute they got a better job. So after about five years of watching that occur, I said [to the board] 'Okay, if you guys let me pay this person this much per year, if we're not going forward after a year, we'll go right back to where you wanted them paid.'"

This process of hiring people, only to quickly lose them to higher-paying jobs elsewhere, worked counter to the food bank's goals, but actually yielded favorable ratings from CN for a high rate of efficiency in terms of administrative expenses. Although the food bank managers said that business-savvy donors understand the concept of paying for talent, "Kraft and some of these bigger companies realize that we can't feed 38,000 people a month without the staff support" (vice president, Wright), some of the smaller donors did not see this as a worthwhile expenditure of organizational funds. The executive director at Central remarked,

"I don't think it's a hard sell to [business leaders], but it is a hard sell to the person that gives me five dollars a year and says, 'I can't believe they are paying you that much money. I can't believe that you have this many staff.'"

Likewise, the executive director of Orange said,

"When some people think you're working for a non-profit, you should be making thirty grand a year and love every minute of it because you're helping the needy. If I don't pay my quality people what they would make on the market, they're not going to stay here. I mean, everybody wants to help a hungry person, but they also want to feed their children too."

Despite this trend towards more professional managers, some functions remain outside the scope of what the food bank can most efficiently execute with their current staff, leading to the second sub-process related to retaining talent: outsourcing non-core activities.

Outsourcing Non-Core Activities

Executive directors were also outsourcing non-core activities to other organizations in order to free up in-house employees for other tasks and to raise funds more efficiently with professional fundraising organizations. In each interview, the top managers mentioned that fundraising specialists were able to generate donations more efficiently than the food banks themselves were. Consequently, all four food banks had turned to professional fundraisers to bring in revenue, as described by the executive director of Riverside:

“We use outside fundraisers for direct mail, which has been very beneficial. If we didn’t do that we would not be able to keep the doors open. It was a hard sell when we first started it because the cost is considerable. It is about twenty-five percent of what you bring in and a lot of it’s up front so that was a hard thing to sell to the board, but we have been doing it for five years now and it’s proven to be a success.”

The executive director at Orange also described transitioning from fundraising in-house to using an outside organization to handle direct mail:

“We now hire a direct mail company in Boston that does our direct mail. Back when I started, we were writing our own letters and this is the whole food bank world. We all started with maybe four people and \$300,000 budgets and handwriting letters to people. It costs us a ton. It’s totally efficient and they’re very astute in how

they write it. They know how to get that dollar. So it's a no-brainer."

Beyond direct mail for marketing and fundraising, the executive director of Central also described using an outside firm for personnel until the need became great enough to hire a full-time employee:

"We have used outside consultants in personnel until we grew to be larger and now we have hired that person who was on contract and they are now full-time staff. So I think that if you just look and see what's new and who can do it better and maybe at a much more reasonable cost. I don't think that we always have to have everything in-house."

This newfound level of professionalism made food bank managers more willing to look beyond the boundaries of the organization for both exploratory needs (personnel consulting) or exploitative needs (efficient fundraising). This minimization of non-core processes increases efficiencies by relying on the unique expertise that professional fundraisers have and allows the full-time staff to focus on exploring for new programs and services. Table 10 presents additional quotes related to the ways that retaining talent facilitated exploratory and exploitive actions in the food banks. By identifying the non-core processes that could be offloaded to another organization, the food banks keep their professional, mission-focused staff engaged in the day-to-day work of food banking, rather than shifting them to monotonous tasks such as addressing envelopes for fundraising.

Enabling Leadership

The third major process described in the interviews dealt with the concept of leadership, specifically a hands-off approach to encouraging experimentation within the organization. The interviewees described this leadership style as a function of both the top managers internal to the food bank as well as the leadership from the national Feeding America headquarters. The first leadership sub-process, headquarters coordination, facilitated ambidextrous operations by exposing distant food banks to innovative new ideas as well as efficient best practices that had already been refined.

Facilitating Connections Nationally

From their early days as food pantries serving a small radius of local communities, food banking operations have become increasingly more structured as a function of the national Feeding America network that was originally created to improve efficiencies. Since then, Feeding America has taken on other roles as well, as described by one of the vice presidents at Central:

“Food banks have been around since the late 70s into the 80s and then Feeding America started in the 90s. They do a lot of our national marketing. So they have really pulled our resources together which has been very good.”

Although Feeding America operates as a national network with one headquarters in Chicago, the executive director of Central explains that there are differences between their network and other large NFPs:

“Our food bank network was or is different than, say the Red Cross or the Girl Scouts or Boy Scouts, which based it on a national level and then came down. It’s a much different format and structure. We started at a grass-roots level and came up. After we all started to rise across the country, we realized that we needed a national platform in which to carry our message, or advocacy for food donations or fund raising or marketing. So that’s really helped.”

From this grass-roots start in the 1970s, food banks have become a large, cooperative network of affiliates, first under the Second Harvest brand, and more recently under the Feeding America brand. The executive director at Wright describes how Feeding America has facilitated the growth of affiliated food banks.

“We are very blessed to have a national organization that gives us best practices that really guides us in the strategic planning process, that you know, we have a contract with them so we have some guidance and some road map to stay, you know, to not stay where we are but to go to the next level from where we were in 1986 to maybe 1992, we were in that grass-roots organization stage and then get to a larger organization.”

Beyond providing a “road map” for growth, the national headquarters also facilitates donations of food and funding from large donors who may be otherwise hesitant to donate food

to a local food bank that lacks the backing of a national organization. According to the executive director of Central,

“On a national level, what they do is they solicit all the large food companies and get mega truck loads of products that we could never access and get. In addition to that, they advocate on a national level in Washington, D.C. at all for federal nutrition programs ... to ensure that we are going to have access to those kinds of items. We can’t do that at a local level. It would take too much energy and too much money to do that.”

This network provides a variety of opportunities and connections for the affiliated food banks but does not directly intervene in day-to-day food bank operations. Each affiliate is given a set service area consisting of a number of counties and one of the conditions of membership in the network is that affiliates are not allowed to solicit donations of money or food outside their service area. Although Feeding America sets some standards and channels resources to the affiliates, all of the executive directors commented that Feeding America provides the affiliates with a great deal of freedom to operate their programs as they see fit. The executive director of Riverside explained the relationship between the food banks and the headquarters in the following terms:

“They don’t tell us what to do and how to do it, but they monitor our storage practices. We have a contract. And as long as we are within that contract, you know, we are good. They will come every

other year and visit us and see how we keep our warehouse and all our inventories. They raise funds on a national level. They will allocate those around the network. They raise food on a national level with a lot of national donors and they will allocate that around.”

The legitimacy of working with a Chicago-based national organization facilitated partnerships between local affiliates and branches of other national organizations in their immediate area. The executive director of Orange explained how having a national organization with its own board of directors benefitted the local affiliates by providing a venue for major for-profit partners to contribute to ending hunger. She also explained how the headquarters was able to increase the visibility and legitimacy of ending hunger in America by involving executives from major for-profit businesses as Directors.

“They’ve got Kraft’s president on their board and ConAgra’s president on their board. American Airlines’ president is on their board. They’re in Chicago and it’s a national organization and they feed people, so a lot of people want to be affiliated with that. And so we gain from that in a major way.”

In addition to the connections brokered at the national level to improve exploration and exploitation, the local leadership also approached their role with an eye towards encouraging innovation from their managers. Encouraging experimentation at the local level provided a

steady stream of innovative ideas and efficient refinements for the food bank as well as the other affiliates in the network.

Encouraging Experimentation Locally

Although the Feeding America headquarters plays two roles by facilitating the spread of new ideas and the spread of best practices between affiliates, the local executive directors also fostered a culture of experimentation, as this quote from the Executive Chef at Central describes:

“[The executive director] is probably one of the greatest visionaries. She surrounds herself with creative and innovative people and then lets them do their thing. But there [are] always parameters and as long you operate within the parameters, she allows you to make mistakes.”

This type of enabling leadership style may be a result of the hands-off management from the Feeding America headquarters, but the interviewees described a culture of experimentation where new ideas for continuous improvement were championed by the executive director. The Vice President of Operations at Central described the process by saying,

“We capitalized on getting smart people that were in for-profit worlds and bringing them over to non-profit and just setting them loose and saying, ‘If you’ve got an idea and it is going to be able to bring revenue into the food bank and help us feed more people inside our service area, then let’s do it. Let’s try it.’”

This desire to create innovative ideas resulted in a number of idiosyncratic programs that were started at one food bank and subsequently copied by others. Programs were developed based on specific local needs, unique opportunities, or even particular geographic endowments, such as the natural environment that permitted a community garden at Riverside. From its inception as an urban food bank, Riverside had a community garden staffed by area senior citizens. When the food bank outgrew its original site and moved to a more suburban location, they kept the concept of the community garden and placed a small agricultural area in their back yard, complete with potting sheds, greenhouses, a water cistern, and raised vegetable beds. The executive director at Riverside explained:

“There are seven programs. The garden is one that we started. We teach a lot of classes on gardening and farming and rain barrels and maintenance and all sorts of environmental things. When we built this building, we had some land available, and we knew we wanted to put up a garden here. This is a teaching garden as well as a growing garden. The teaching part of it was just a way to sustain it and you know we charge for the classes and it brings money into the program and covers supplies and plants.”

Master gardeners volunteer to staff this program and the garden provides fresh vegetables for the food bank, making the community garden a more efficient source of nutritious food than waiting to receive donations of expired perishable goods of questionable quality from nearby grocery stores. Because of the linkages between the other affiliates, as well as the relationship with the national headquarters, programs such as this one, which are developed at a single food

bank, can be recognized by the headquarters for its innovative method of efficiently producing fresh food without reliance on donors. Once this program has been sufficiently refined, it can be replicated at other food banks across the country through the knowledge sharing networks. Table 11 presents additional quotes related to the enabling leadership style that facilitated exploratory and exploitive actions in the food banks.

These two sub-processes, facilitating connections and encouraging experimentation, are both ways that the food banks were able to explore for new opportunities and then successfully exploit their own knowledge. The connections forged at the national level brought in new resources for the food banks in the form of monetary donations, food, new trucks, and lasting partnerships with other national food producers and retailers. The national headquarters also maintained standards for storage practices to make sure that food banks were operating in a safe, efficient manner. At the local level, a culture of encouraging experimentation allowed the professional managers the latitude to experiment and implement new ideas. The top managers and boards of directors were, on the whole, receptive to new ideas and allowed other employees to contribute their innovative ideas for exploration and exploitation.

Combining these three processes—managing knowledge, retaining talent, and enabling leadership—presents a narrative of an industry undergoing major transformation as sources of donated food dwindle and government funding shrinks at the same time that needs for services grow. In response to these changes, the food banks have developed an efficient system of knowledge management by using the national meetings to explore for new ideas and leveraging local network connections to refine ideas for greater efficiencies. These food banks look beyond the traditional social work background to bring in leaders with military, operations, or for-profit

business experience and then socialize these new entrants into the industry through repeated interactions with other affiliates. From their prior experience, managers with functional backgrounds in marketing and sales may develop innovative new programs to meet growing needs while managers with experience in operations or logistics may turn their expertise to improving the efficiency of operations so that productivity gains can be reinvested into the mission's programs. The enabling leadership style from the national headquarters presents opportunities for best practices and connections to new sources of revenue, while a culture of experimentation at the local level provides a source for new ideas to spread throughout the network. As the executive directors have a better understanding of the unique skills and abilities that their staff bring to the food bank, they also understand that the best way to maximize these talents is by giving staff enough leeway to operate. Whether an individual's skills lie on the exploration side (e.g., marketing, sales, community outreach) or the exploitation side (e.g., operations, warehousing, logistics), these executive directors have found that the best results occur from managerial autonomy rather than bureaucratic, top-down direction.

The output of this model is the creation and recombination of ideas to develop and refine new programs: Idiosyncratic programs develop based on the specialized local knowledge at each affiliate. These novel programs range from the culinary arts center at Central, the award-winning backpack program for children's nutrition at Orange, or the year-round community garden for teaching and supplying fresh vegetables to the food bank at Riverside. Any of these local innovations are ripe for transplantation to other sites within the network and Feeding America facilitates the cross-pollination of ideas by organizing the national conference. This cycle of exploration at the local level, followed by dissemination at the national level, and then

subsequent exploitation and refinement at the local level again, results in an ongoing process of ambidextrous operations. The main contribution of the network of affiliates is the feedback loop that emerges as top managers and other staff members communicate with each other to discover new programs and ways to operate existing programs more efficiently. Through these learning loops, individual food banks harness the collective power of the network to take on new ideas for efficient growth and to contribute their own ideas into the network for replication and amplification (Plowman et al., 2007). Individually, each of these concepts—professionalization, knowledge exchange, and leadership—all influence the food bank’s ability to operate ambidextrously. Together, they create a coherent narrative of different ways that local food banks are importing new knowledge and skills into their network from other industries and then using the power of the Feeding America to influence exploration and exploitation.

Chapter 5 – Discussion

Discussion of Quantitative Results

As previously mentioned in the results chapter, there are a number of caveats associated with interpreting the quantitative findings of this study; however, despite these challenges, the quantitative portion of this study makes three main contributions. First, it extends the research begun by Szper and Prakash, (2011) and Seo and colleagues (2009) by analyzing the entire CN dataset. Previous studies that have looked only at single industries or state-wide service areas are inherently limited in their generalizability to other contexts. Because the entire CN dataset is not easy to download in its entirety, undertaking multi-industry studies such as this one become more complicated. This study shows the utility of novel data collection tools such as Visual Web Ripper to organizational research. Without the ability to download a single dataset that had been pre-packaged for analysis, manually gathering the 5,450 CN records into a spreadsheet for analysis would have taken a considerable amount of time and would likely contain more errors than the automated retrieval from Visual Web Ripper. Removing the hurdle of needing pre-existing datasets in order to conduct large-scale research of secondary data means that researchers may find themselves asking new questions that previously would have been considered unanswerable without an existing data source. This type of data collection tool has utility beyond this project and can be leveraged in a variety of different data collection projects to gather data that may not otherwise exist in a pre-existing spreadsheet format.

Second, this study highlights a number of questions about the nature of specific industry effects related to OA. The fact that so many of the industries from the CN dataset did not yield

significant results for either exploration or exploitation on fiscal performance suggests that different industry structures may contain more subtle differences than initially thought. Many of the industries from Table 1 are in creative or high-tech industries such as robotics (Katila & Ahuja, 2002), biotechnology (Rothaermel & Deeds, 2004), electronics (Atuahene-Gima, 2005) and product design (Andriopoulos & Lewis, 2009). Finding organizations that are actively exploring for new products and markets and also refining existing competencies may be easier to do in industries like these than in NFPs, which may be more conservative in terms of growth goals. Across the 33 industries of the CN dataset, this study was unable to replicate the overwhelmingly positive impact of ambidexterity on organizational performance reported in Table 1. Possible reasons for this outcome are discussed in greater detail in the limitations section of this study.

Third, this study offers three possible explanations for why NFPs may differ from their for-profit counterparts in terms of their ability to pursue ambidexterity across a variety of industries. The first possibility is that NFPs are qualitatively different from their for-profit counterparts. Despite the fact that they face similar constraints to for-profit firms, it is possible that the theoretical underpinnings of OA are too deeply grounded in the for-profit sector and do not translate to an NFP context that focuses on high levels of efficiency and a narrow mission. A second possible reason for this finding could come from the proxies used to measure exploration and exploitation. Although they claim to measure organizational growth and efficiency, if the CN ratings are actually poor measures for assessing exploration and exploitation in organizational research, they are likely to report skewed results. Finally, the multi-industry nature of this study may highlight a file-drawer problem present in much of organizational

research (Rosenthal, 1979). The preponderance of studies in Table 1 reporting positive impacts of ambidextrous operations on organizational outcomes may simply be a selection bias in the publishing process, such that studies with negative or non-significant findings are less likely to be published.

Despite these contributions, the use of the datasets such as CN is ill-equipped to answer this study's second research question: specifically, *how* NFPs are engaging in ambidextrous behavior and the underlying processes. The following section describes and discusses the findings from the qualitative portion of this study.

Discussion of Qualitative Results

The qualitative portion of this study illuminates processes undertaken by a sample of food banks as they pursue the efficient delivery of the services their mission demands while simultaneously seeking new growth initiatives for diverse projects such as equipment purchases, the development of new programs to reach more clients, and capital campaigns to fund new building projects. The processes of managing knowledge, retaining talent, and enabling leadership allow the food banks to operate ambidextrously and the findings from this study have the potential to speak to other organizational theories that may explain some of the motivations for these processes.

Managing Knowledge: Headquarters and Subsidiary Relationships

The concept of strategic stickiness (Austin, Stevenson, & Wei-Skillern, 2006) assumes that NFPs are constrained in their ability to explore new options by their founding missions that dictate the type of strategic options that NFPs may pursue. In addition to the inability to deviate

substantially from their mission, the food banks in this study are also geographically constrained by nature of their service area. Each food bank has a particular territory of counties to serve and is unable to solicit donors outside this service area. Despite these constraints of geography and mission scope, the food banks found many ways to develop new programs that meet their stated mission and to share these new initiatives with other affiliates.

The top managers of each food bank leverage their connections with other network affiliates to maximize opportunities for exploration and exploitation. Exploration derives from large meetings such as the national conference where executive directors and other managers get exposure to best-in-class innovations and improvements made by food banks all over the country. As a result, affiliates are able to tap the best practices of other partners within the network to identify possible opportunities for new programs. In this regard, network affiliates are acting in the capacity of subsidiaries of the headquarters in Chicago, and like their for-profit counterparts, the creation of new knowledge, innovation, and competitive advantage has become a collective effort across the entire network (Birkinshaw, Hood, & Jonsson, 1998).

Although the headquarters is assumed to control most of the firm-specific knowledge and advantages (Rugman & Verbeke, 1992), subsidiaries can contribute local innovations to the rest of the organization (Bartlett & Ghoshal, 1986). When subsidiaries develop their own initiatives, it is a result of identifying opportunities and committing resources to that opportunity (Birkinshaw, 1997). The development of the first mobile food pantry perfectly illustrates this concept. In this example, the Grand Rapids food bank committed excess equipment (i.e., an unused truck) to an unmet opportunity that they saw in needing to distribute food quickly before it would be discarded. Following the development of this initiative, other affiliates were able to

exploit their membership in the Feeding America network to attend the national meeting and learn more about the mobile pantry initiative in Grand Rapids.

With exposure to new ideas, other managers can begin to adapt these initiatives for their local service areas. In addition to meetings, local affiliates also exploit the research and connections that the headquarters develops at the national level. The food banks are unable to serve populations or solicit donations from beyond their service area; ideas must be adopted by other food banks in order to take root in other locations. Managers are also unable to execute their own strategy in other territories; rather, they must demonstrate its utility in their own territory in order for it to spread to other territories. The national conference is one way to gain large-scale exposure to ideas that begin in distant territories.

A second way that knowledge moves through the food bank network is between other network affiliates without coordination from the national headquarters. Executive directors and other senior leaders of different affiliates suggested a number of reasons for this system including the hands-off approach to strategic direction from the headquarters in Chicago. Because the creation of the national headquarters was a comparatively recent event in the history of the food banking network, the food banks retained a great deal of autonomy at the local level, including which services they would or would not provide. This dynamic of informal communication between different executive directors reflects their level of connectedness (Jansen et al., 2006) and influences the refinement of ideas currently in use at local affiliates. In addition to communication between executive directors, affiliates also expose their employees to different sites within the network to facilitate the flow of program refinements between affiliates. By physically going to different affiliates, employees have an opportunity to see different

operational systems and structures, apply their own specialized knowledge at remote sites, and bring refinements back to their home affiliate.

These two dynamics—formalized meetings from the headquarters and informal knowledge-sharing routines between the affiliates—suggest that the literature on subsidiaries and multi-national organizations may benefit from a better understanding of how ideas develop locally, are channeled upwards by the headquarters, expand and adapt through the network, and are refined through the informal connections inherent in the subsidiaries. In addition to identity and knowledge sharing, the final major theme to emerge from interviewing the executive directors and managers was that of leadership, both from the executive directors themselves and from the board of directors.

Retaining Talent: Organizational Identity and Image

As previously discussed, the changing external context has required a major shift in how food banks operate. These changes required the food banks to shift from their-grass root beginnings as organizations run by volunteers and social workers to efficient, accountable businesses. To meet the organization's needs and to fulfill their mission, food banks became increasingly professionalized in order to enhance their legitimacy with larger donors and improve their organizational reputation (Brown, Dacin, Pratt, & Whetten, 2006) as efficient and business-savvy. The food banks studied here have all embraced the concept of professionalization as a way to continue to meet their mission. By creating their own national organization based out of a major United States metropolis to negotiate with other national organizations on their behalf, they have enhanced the legitimacy of all of the food banks in the network. Directors have also embraced the concept that previous models (e.g., donated food,

extensive volunteer labor) no longer work effectively to meet the mission and have adapted their strategies to stay ahead of these changes.

The executive directors believe in the value of hiring experienced people from industries other than social work and paying them a competitive wage. Despite the departure from their grass-roots founding, the fact that the mission has not substantially changed makes it easier to justify strategic shifts such as these in order to meet their organizational mission. Further, the food banks' organizational identity (Dutton & Dukerich, 1991) is malleable enough to not be threatened by professionalization; thus, hiring professional managers from the for-profit sector is actually seen as consistent with their need to make existing routines more efficient to attract new corporate donors while also exploring for innovative new programs to meet a growing demand from their base of recipients. Executive directors say that business leaders understand this shift towards professionalization because of the same dynamics that they cope with in the for-profit sector. Because the executive directors and managers see this trend toward professionalization as congruent with their changing identity (Dutton & Dukerich, 1991), initiatives for more paid staff, routinization of work, and outsourcing relationships with other vendors do not damage their organizational identity and they understand that these changes are both necessary and consistent with their mission.

The opposite side of identity is image (Dutton & Dukerich, 1991), which represents the perceptions of external stakeholders. Although the executive directors see this shift towards professionalization as consistent with their identity to provide food to hungry individuals, not all of the stakeholders believe that these changes tarnish the food banks' image. The incongruity between the food bank's intended image (i.e., what the organization wants others to think about

it) and the food bank's reputation (what stakeholders *actually* think about the organization) may lead to conflicts (Brown, Dacin, Pratt, & Whetten, 2006). This sector presents a unique challenge for organizations that engage in ambidexterity because stakeholder expectations constrain them in two ways. First, the focus on a strong mission reduces the apparent need for exploratory activities. Because the goal is feeding hungry people, deviating too far from this mission may result in pushback and concern that a particular program is too unrelated to the food bank's goals; thus, focusing on existing programs that are already feeding people is the easiest course of action to follow. Second, the nature of charitable work means that external stakeholders assume that money spent on non-programmatic expenses is wasteful or inefficient. Directors noted that smaller donors and other community members do not understand that the need for well-compensated leadership or new facilities and underscored the importance of educating external stakeholders on the ongoing needs at the food bank.

Watchdog organizations such as CN report expenditures such as fundraising costs, staff salaries, and utilities as overhead expenses that count against efficiency ratios. What these ratios fail to account for are the intangible benefits of long-tenured professional staff such as management experience, social networks, and other aspects of human capital. Directors must counter these claims with donors who also believe that paying staff is inefficient. In response to these attitudes from external stakeholders, executive directors could respond by lowering salaries or cutting staff in order to reinvest wages into mission-based programs, but this strategy is unlikely to lead to long-term success given the turnover reported by the executive directors.

In addition to challenges surrounding rising salaries, directors must also convince outside stakeholders that the growth initiatives they are pursuing are in the best interest of the

organization. The managers understand that the changing operational context requires exploring for new investments in space, refrigerated storage, and trucks to continue to meet their mission and feed a growing number of hungry people. Communicating this need for growth and exploration requires a certain level of issue selling (Dutton, Ashford, O'Neill, & Lawrence, 2001) to convince external stakeholders that these changes are necessary and that money spent on things other than direct program costs still contributes to the food bank's mission. Consequently, expenditures for salaries, buildings, and new equipment present a challenge that NFP managers must sell to donors and other external stakeholders who may not understand the whole picture.

As the field has become more professional and more efficient in its operations, these expectations of market-level salaries for talented employees and modern warehouses have collided with stakeholder expectations of how their money is being spent on food bank programs. Part of this misalignment may stem from a lack of education between the food banks and their donors and other external stakeholders. The executive director of Central related a story about a donor who said "Oh I thought that you go out in one little truck and go around." To which she replied, "What? I cover 22,000 square miles with 22 trucks." The overall dependence on external stakeholders for sources of funding and food donations means that managers are particularly sensitive to claims of malfeasance. They understand, however, that the competency trap (Levitt & March, 1988) may result in decreased performance because of attempting to operate at the peak of efficiency. Without growing into larger spaces, the smaller spaces become progressively less efficient over time as the mission remains unchanged and the need for supplying food continues to grow. Despite the threats that professionalization brought to the

image of the food banks, the overall impression is that these steps are necessary to continue meeting their stated mission by facilitating exploratory new approaches to ending hunger and the ongoing refinements that come from the efforts of professional managers.

Enabling Leadership: A Complexity Perspective

Traditional models of organizations assume that the world is knowable and that effective leaders can rely on planning and control to direct organizational actions (Plowman & Duchon, 2008). Complexity leadership describes modern organizations in terms of adaptation and emergence, rather than mechanistic descriptions of bureaucratic organizations (Uhl-Bien & Marion, 2009), suggests that leadership emerges as the outcome of interactions among agents, and focuses on the ways in which leaders facilitate interactions between organizational members (Lichtenstein et al., 2006). Although none of the interviewees expressly referred to it as such, this attitude towards leadership is seen at many levels throughout the food banking industry, including between the top managers and the staff, the board of directors and the executive directors, and even between the Feeding America headquarters and the local affiliates. The overarching leadership style seen in the food bank network is to create basic structures such as the affiliate network, hire professionals, and then, in the words of the vice president of operations at Central, “setting them loose.” This style of leadership allows the professional managers to develop creative solutions to novel challenges and to use their ideas and experience to bring in more revenue to the food bank or to minimize costs, each of which influences a particular side of OA.

At the local level, managerial autonomy generated unique programs within the scope of the organization’s mission. Although the managers were free to explore for new program

options, the interdependent nature of their work necessitates coordination with the other organizational members.

At the national level, Feeding America gave the food banks autonomy to develop and implement the programs that would best serve their local communities. In a way, the enabling leadership style that developed across the food bank network was driven more by what Feeding America did *not* do, rather than what it *did* do for the affiliates. Local-level autonomy was permitted in many ways, including not mandating that food banks change their name after the national network was created, not requiring standardized programs across the network, and not directing how donated money would be spent. By playing the role of facilitator (Uhl-Bien, Marion, & McKelvey, 2007), Feeding America was able to spread ideas between food banks, organize partnerships with food manufacturers and retailers at the national level to influence local donations, and channel resources from national fundraising events to local affiliates. After making these connections, the local food bank leadership was responsible for implementing and adapting the strategies. In this way, the enabling leadership style of the Feeding America headquarters allowed affiliated food banks to exploit their network membership to receive information, funding, and food donations. This leadership style also allowed affiliated food banks to explore for new programs and refinements and new strategies for meeting the need in their local community.

These three main factors—a robust organizational identity that can withstand professionalization, strong relationships and different functions for subsidiaries and the Feeding America headquarters, and a complexity leadership focus for handling emergent challenges as

they arose—all appear to contribute to the food banks’ ability to successfully pursue exploration and exploitation.

Finally, one of the key contributions of this study to the ambidexterity literature is to suggest that within the typology of different types of OA (Simsek et al, 2009), these organizations are leveraging their new professional identity, their knowledge-sharing routines, and their complexity leadership style to engage simultaneously in multiple forms of ambidexterity: harmonic, cyclical, partitional, and reciprocal (Simsek et al., 2009). Structure and time, two components suggested by Simsek and colleagues (2009), appear to play a key role in affiliates’ abilities to explore and exploit. In contrast to some of the received viewpoints in the ambidexterity literature, executive directors and senior managers of food banks neither consider exploration and exploitation as dichotomous outcomes (March, 1991) nor do they engage only one type of ambidexterity or another (Simsek et al., 2009). In contrast, food banks engage in multiple types of OA simultaneously. At any particular moment, an affiliate may be engaging in cyclical ambidexterity through a capital campaign to raise funds for a new building, while also engaging in partitional ambidexterity by outsourcing fundraising to another entity. Refining the concept of OA into sub-categorizations is helpful as future research on ambidexterity can begin to tease out different processes in play. Qualitative studies such as this one extend our understanding of how organizations manage multiple types of ambidextrous operations both simultaneously and sequentially. From these findings, the following section describes managerial implications for practice in organizations.

Managerial Implications

Understanding both the *what* and the *how* of OA present opportunities for managers to employ some of the findings from this study in their own practice. The results from the quantitative portion of this dissertation suggest that particular industry effects may moderate the impact of high levels of efficiency; thus, what works well in one industry may not translate to another. Benchmarking against close industry competitors (or in the case of NFPs, affiliates) when possible, will likely provide a more accurate picture of the relationship between exploratory actions, exploitive actions, and financial performance. The qualitative results suggest a number of processes associated with ambidextrous operations in the food banking industry that may benefit other organizations as well.

First, this sample of food banks illustrates the importance of managing knowledge at two levels. Although the Chicago headquarters acts in a coordinating role, the best ideas may not necessarily come from this office. The truly innovative programs may come from subsidiaries that need the centralized resources of a headquarters to both refine the program and disseminate it across the network. By facilitating connections between the different affiliates and arranging an annual conference, the headquarters occupied a central role in the network's structure, but did not use this role to impose their strategic goals on the local affiliates. The local directors also understood the value of sending their employees to different locations to see how similar tasks were performed differently. Managers may want to consider the role that standard operating procedures play in their daily operations, how these standards came to be, and how exposure to possible alternates may yield process improvements.

Second, each of the managers described the importance of human resources to their ability to remain both efficient and innovative. Comments such as, “We capitalized on getting smart people that were in for-profit worlds and bringing them over to non-profit and just setting them loose,” from the vice president of operations at Central echo Pfeffer’s (2005, 2010) sentiments that humans are the final frontier for competitive advantage. Retaining talent became a key theme throughout the interviews as the directors described how the food banking industry had shifted from one dominated by volunteers and social workers to a fine-tuned business model with connections across multiple industries. Although many of the executive directors could point to innovative programs or idiosyncratic initiatives that were only in operation at their site, none of them believed that the programs themselves were the value in the organization. All of the executive directors commented on their staff members’ dedication and creativity in developing and implementing ideas to meet the food bank’s ongoing mission. A key take-away for managers is that the ongoing training and motivation of employees is just as important in a non-competitive setting like NFPs as it is in for-profit organizations.

Third, an enabling leadership style was seen across the different levels of the organization. At the local level, enabling leaders manage the organization’s internal conditions in a way that is consistent with the overarching mission (Uhl-Bien, Marion, & McKelvey, 2007). From the food banking context, the directors were receptive to new ideas that enabled the organization to more effectively meet its stated mission. Leaders with an enabling style can also help shepherd projects from idea to implementation (Howell & Boies, 2004) by championing new initiatives to other stakeholders such as boards of directors. At the national level, the Feeding America headquarters demonstrated an enabling leadership style through the degree of

autonomy given to the local affiliates. Kauffman (1995) has suggested that leaders need to forego searching for perfect solutions and instead focus on achieving a series of “workable” solutions that will advance the organization’s mission. Managers interested in maximizing the value of the professional talent within their organization may want to consider a new style of leadership that focuses less on predicting a knowable future and more on enabling others to leverage their creativity and skills for the organization’s benefit.

Study Limitations and Future Research Directions

Despite the theoretical and managerial contributions from this study, there are a number of limitations inherent within the study design that may be overcome by future studies. Despite the myriad advantages of large datasets for theory testing, there remain a number of disadvantages that must be noted.

Limitations of Charity Navigator

First, by limiting the analysis to data collected from IRS-reported financial statements, assessing the degree of theoretical correspondence between the extant theory and the measures of OA cannot be directly assessed. This dataset was not created to test specific hypotheses and the measures calculated by CN are atheoretical in nature. The measures used in the quantitative study closely approximate the original concepts of exploration and exploitation popularized by March (1991), but the ratio measures themselves lack the ability to calculate reliability statistics (Crook et al., 2010). Only future longitudinal studies would be able to determine where each of these organizations are in a particular cycle of exploration or exploitation. The present study looks at a cross-sectional slice of the CN data to describe the relationship between OC, OE, and

FP, but future studies may find it valuable to examine lagged timeframes such as examining whether surpluses in earlier years lead to longer periods of positive financial performance. The high degree of multicollinearity seen between the independent variables (OC and OE) and FP raises questions about how to conduct research in the NFP sector that generalizes beyond singular studies when the only extant measures that permit interorganizational comparison are financial in nature and drawn from the same IRS filings. Due to the strong positive relationships seen between OC and OA as measured in this study, the findings reported to test hypothesis 3 should be interpreted with caution. Until additional performance measures are introduced that permit comparison between NFPs, research methods such as case studies, surveys of idiosyncratic measures, and interviews are likely to remain the methods of choice for organizational researchers in the NFP sector. The use of IRS Form 990 data as either an independent or dependent variable, although convenient and translatable across organizations, leaves little room for other financial measures in a research study. Future research in this area will hopefully result in other measures that are internally consistent and generalizable.

Second, the goal of capturing the entire CN dataset is a moving target, as new IRS-990 filings are reported annually. With a long enough time horizon, longitudinal analysis of this data may be able to better detect cycles of exploration and exploitation as well as overall periods of growth and decline for charitable giving. Collecting more data will likely improve our understanding of concepts such as reciprocal ambidexterity (Simsek et al., 2009), but researchers must be sure that the system to calculate ratings has not changed drastically. One example of this caveat is that CN has refined its own rating systems. In 2012, CN began using a new rating methodology to translate the ratios from IRS-990 filings into their ratings for exploration and

exploitation (charitynavigator.com). Consequently, comparing ratings between different periods will be quite difficult. Future research will need to assess the level of agreement between pre-2012 ratings and post-2012 ratings to determine how to incorporate both of these periods into a longitudinal research design.

In addition to comparisons between these different measurement methods over different periods, another way to develop a more complete picture of NFP performance would be through triangulation with other NFP rating agencies. Although CN looks exclusively at financial figures provided to the IRS, other rating agencies such as GuideStar, the Better Business Bureau, LiveWell.org, and GreatNonprofits.org consider perceptual appraisals from various stakeholders including volunteers, donors, and industry experts when developing their assessment of NFP performance. Attempting to integrate a dataset that incorporates a variety of different measures of performance will likely reduce the overall sample size given that organizations with missing data on one or more dimension will no longer be included for analysis. Despite this potential shortcoming, the ability to correlate different measures of performance may outweigh the limitation of a reduced sample size.

Third, this study looks broadly at the entire NFP sector, as well as narrowly on a sample of organizations from one industry within it. The insights gained from the interviews and site visits to four food banks may not generalize to other contexts within the NFP sector or back to their for-profit counterparts. Because many of the organizations reported in the CN dataset are members of a larger organization (e.g., Habitat for Humanity, United Way, Girl Scouts), the findings from this study may offer suggestions to these types of organizations that need refinement to be meaningful in a more competitive for-profit setting. The inherently non-

competitive nature of the food banks studied suggests that translating the network learning findings to a for-profit context may be difficult. Rather than contact counterparts within the same industry, organizations trying to leverage learning relationships may need to look to adjacent industries with similar functions but indirect competition.

Future research in this area may want to consider how NFPs in non-affiliate settings attempt to leverage networks to which they do have access. Some questions to consider are how NFPs partner with other organizations such as universities to improve their ability to explore new options. The concept of partitional ambidexterity (Simsek et al., 2009) suggests that NFPs may be able to engage in ambidextrous operations by partnering with structurally-distinct entities. In the present study, food banks are using alliances and outsourcing relationships that are not reported in the CN dataset. Research methods such as social network analysis could use data from websites such as muckity.com to trace relationships through funding networks, alumni networks, or boards of directors. The implication that many of the organizations in this study found new ideas from other branches within their network, rather than from a top-down hierarchy (Plowman et al., 2007), suggests that this type of structure may need more network-based methods to gather and analyze data. Despite these limitations, the possibility to understand some of these unanswered questions makes this topic one worthy of further investigation.

Chapter 6 - Conclusion

The need to engage in exploration and exploitation activities will continue to present challenges to managers who must find ways to refine existing competencies without falling prey to the competency trap (Levinthal & March, 1993; Liu, 2006) or engaging so heavily in innovation and novel strategies that they actually steer their organization into a failure trap (March, 1991; March, 2003). This study begins to look at how the relationship between these two types of behaviors is related to financial performance within the unique context of NFPs. These organizations do not exist to maximize owner or shareholder value (Sherlock & Gravelle, 2009), but face even more stringent constraints than their for-profit counterparts due to the stakeholder focus on efficiency and the narrow mission focus. The previous ambidexterity studies that have looked at single industries have tended to find strong positive support for ambidexterity, yet this study was unable to replicate those findings across a broad, multi-industry sample of NFPs. These mixed results suggest that measures of ambidexterity may strongly influence the relationship between exploitation, exploration, and financial performance. Three key factors that facilitated ambidextrous operations emerged from the qualitative analysis of interviews with executive directors at a sample of food banks: embracing professionalism, knowledge exchange, and leadership.

These food banks provide examples of organizations that can undergo changes to their bureaucratic structure and identity, while continuing to engage in a new and innovative ways of meeting their stated mission. Additionally, the food banks leveraged two different network levels to minimize the risks associated with innovation by watching others refine new programs first, then exploiting second-mover advantages (Lieberman & Montgomery, 1988) in order to

transplant successful programs to their home territory. Finally, an enabling culture of leadership between Feeding America, the boards of directors, and top managers allowed high-performing employees to create new ideas and disseminate them across the network. NFPs provide a unique context for understanding how organizations engage in OA in resource-constrained environments with highly specific missions. Understanding how these collaborative organizations function as an interdependent network of ideas and talent may foster the growth of new ideas for improving performance in their for-profit counterparts as well.

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Appendix

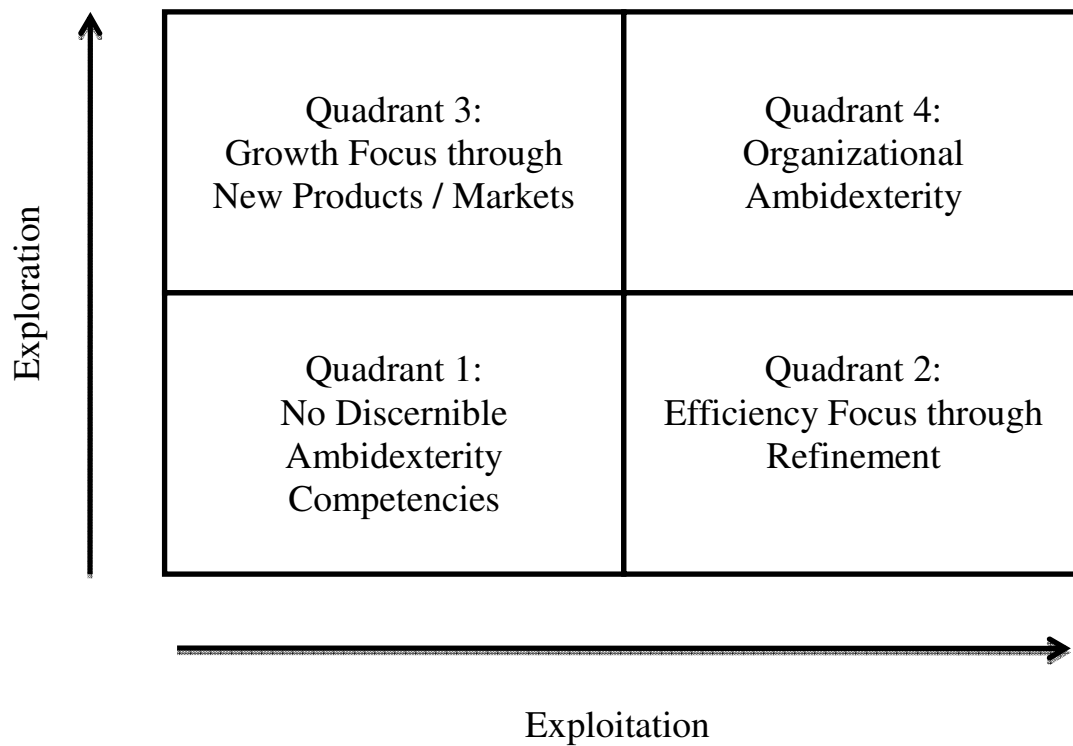


Figure 1 presents the 2x2 matrix of organizational classifications that result from examining organizations that engage in high and low levels of exploration and exploitation.

Figure 1: Organizational Ambidexterity Classification by Exploration and Exploitation

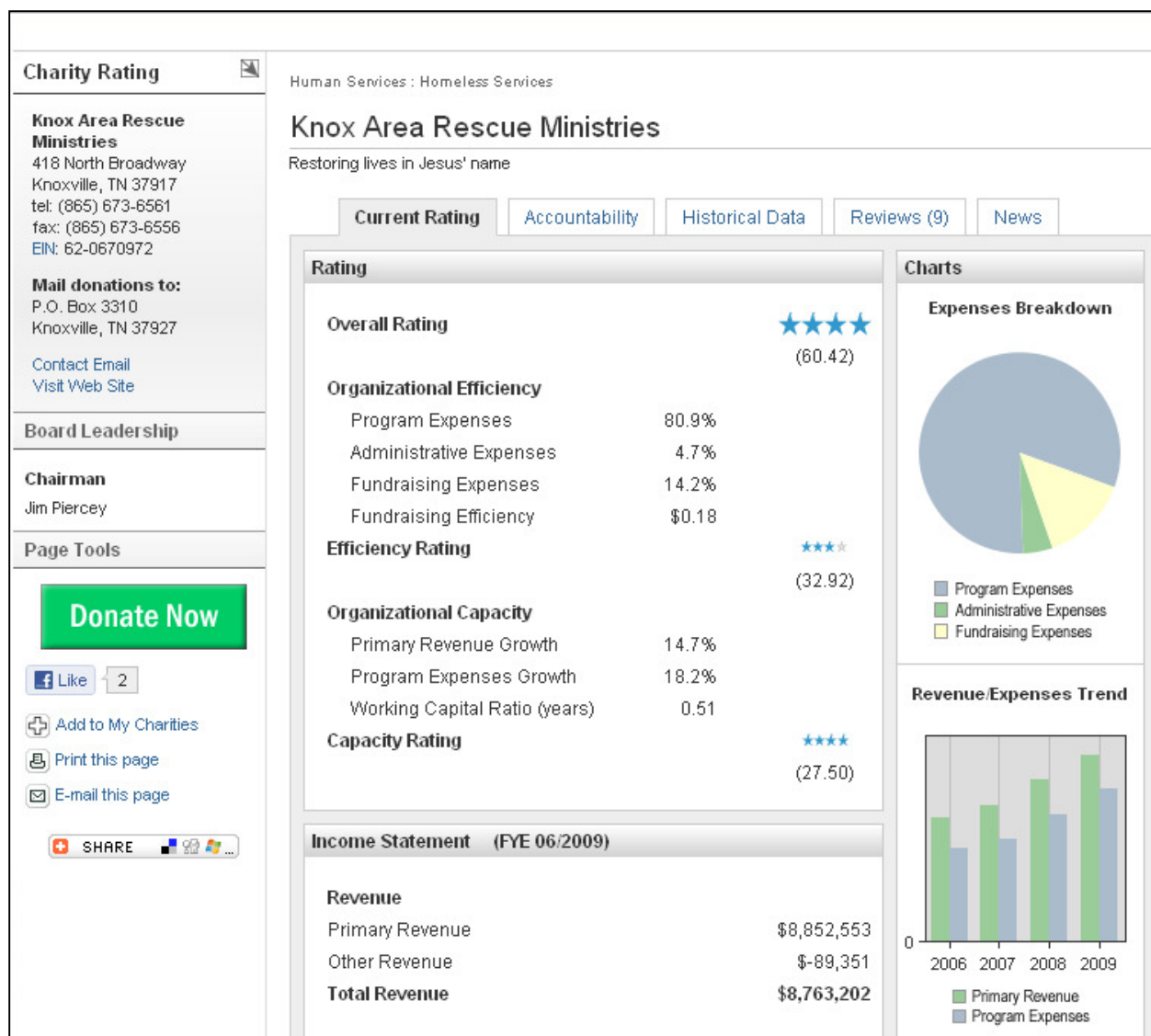


Figure 2 presents Charity Navigator data as website users see it. IRS Form-990 data is parsed and displayed for donors, volunteers, and managers. Statistical analysis cannot be performed on the data in its current state.

Figure 2: Charity Navigator Data Source Example

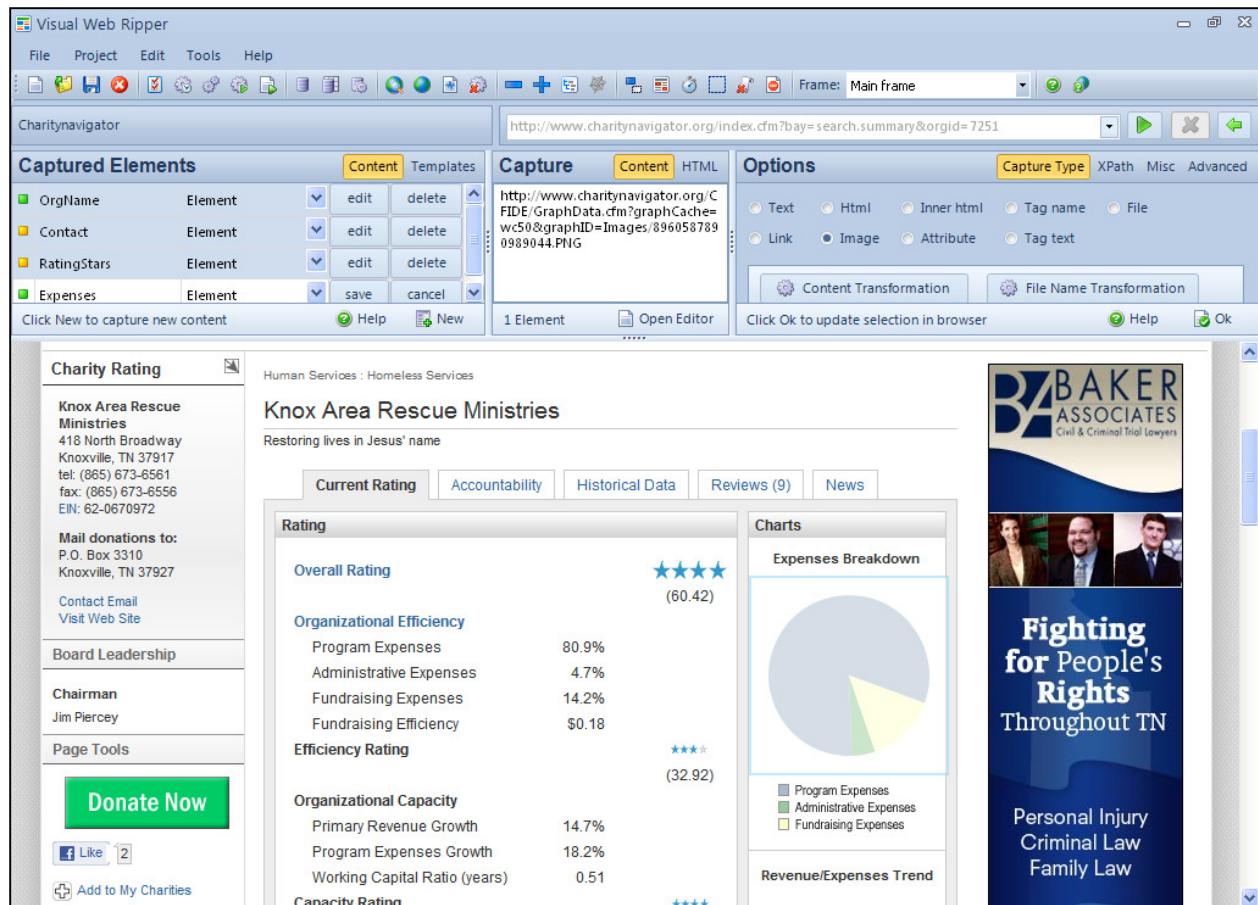


Figure 3 presents the Visual Web Ripper interface used for extracting data in order to conduct statistical analysis on the variables of interest.

Figure 3: Visual Web Ripper Data Extraction Example

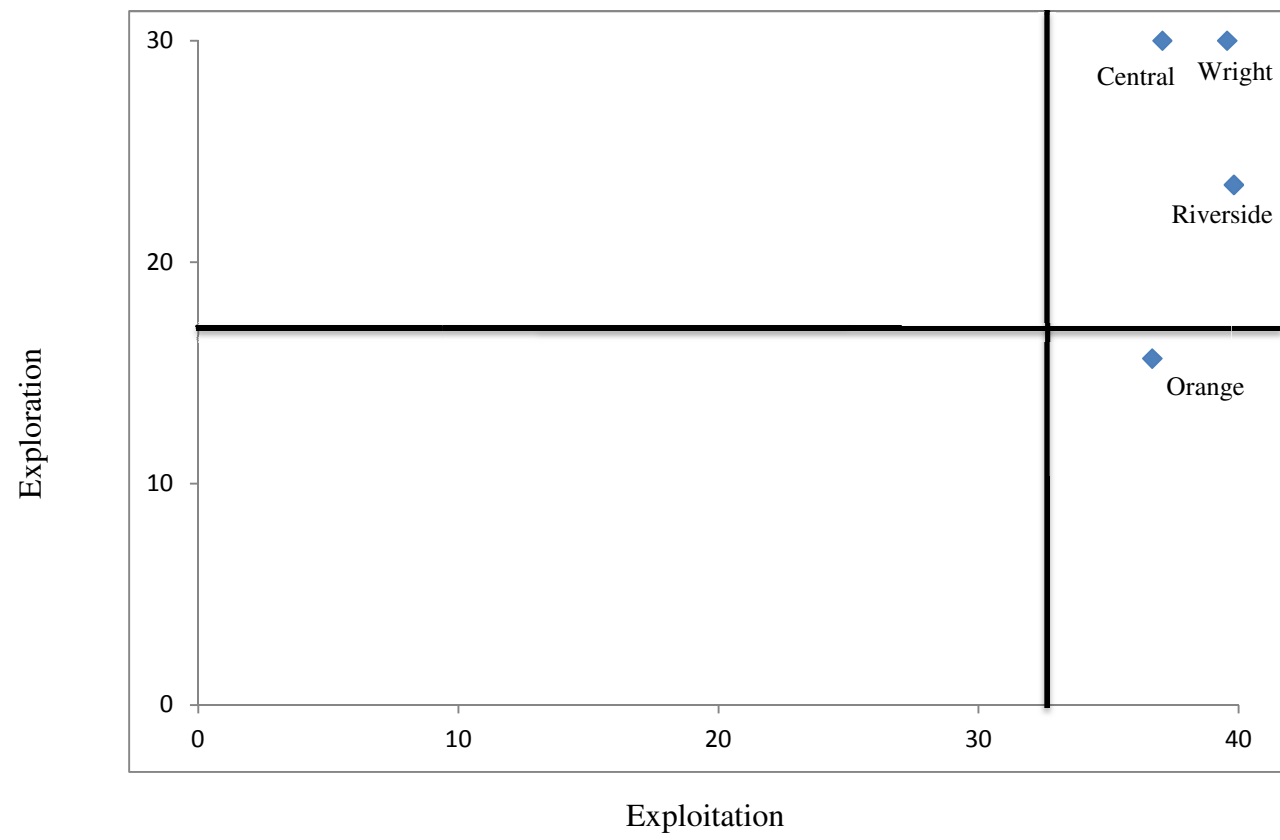


Figure 4 presents the four site food bank sites on the basis of their Charity Navigator exploration and exploitation ratings.

Figure 4: Scatter Plot of Food Bank Interview Sites

March 16, 2012

IRB#: 8798 B

TITLE: Organizational Ambidexterity and Not-for-profit Performance

Madden, Timothy M.
Management: Organizations & Strategy
422 Stokely Management Center
Campus - 0545

Smith, Anne D.
Management: Organizations & Strategy
416 Stokely Management Center
Campus - 0545

Your project listed above has been reviewed and granted IRB approval under expedited review.

This approval is for a period ending one year from the date of this letter. Please make timely submission of renewal or prompt notification of project termination (see item #3 below).

Responsibilities of the investigator during the conduct of this project include the following:

1. To obtain prior approval from the Committee before instituting any changes in the project.
2. If signed consent forms are being obtained from subjects, they must be stored for at least three years following completion of the project
3. To submit a Form D to report changes in the project or to report termination at 12-month or less intervals.

The Committee wishes you every success in your research endeavor. This office will send you a renewal notice (Form R) on the anniversary of your approval date.

Sincerely,



Brenda Lawson
Compliances

Enclosure

Figure 5 presents the IRB approval necessary to engage in human subjects research and conduct interviews with participants.

Figure 5: Institutional Review Board Approval

INFORMED CONSENT STATEMENT

Not-for-Profit Ambidexterity – Timothy M. Madden

You are invited to participate in a research study that addresses how not-for-profit organizations balance efficiency with growth. This is a research project and is not an assessment of your performance or the company's performance.

The outcomes from this research will contribute to our academic understanding of how not-for-profit organizations engage in two types of actions. A summary of the major findings will be presented to the top management of this organization.

Your participation in this project will include one interview. Notes will be taken during your interview. The interview will contain general questions about your daily management in the firm. The interview should take no longer than 45 minutes. All comments will be confidential and only used in conjunction with comments by other employees.

The information from the interviews will be kept confidential. Data will be stored securely and will be made available only to persons conducting the study. No reference will be made in oral or written reports that could link individual participants to the study.

If you have questions at any time about the study or the procedures, you may contact Timothy Madden, PhD Candidate in Management, SMC 422 College of Business, Knoxville, TN 37599-0545, 865-974-4843. If you have questions about your rights as a participant, contact the Office of Research Compliance Officer at (865) 974-3466.

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at anytime without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study before data collection is completed, your data will be destroyed.

I have read the above information. I have received a copy of this form. I agree to participate in this study.

Participant's signature _____ Date _____

Investigator's signature _____ Date _____

EXPEDITED REV.

MAR 16 2012 
UTK IRB
FWA 6629

Figure 6 presents the IRB-approved informed consent statement that each interviewee received and signed prior to participating in any in this study.

Figure 6: Human Subjects Informed Consent Statement

Describe your career path.

How long have you worked for this organization? Did you work at an organization before this one? How is this company different?

If you have worked in for-profit before this, what are some differences you've seen between the two?
 What do you think for-profits can learn from not-for-profits and vice versa?

How would you describe a very successful not-for-profit organization?

Can you tell me about a successful growth initiative that you know of here?
 Can you tell me about a failed growth initiative that you know of here?

Are there any programs that you would like to see added?
 Are there any programs that should probably be eliminated?

Do you see your organization continuing to expand into other areas of the region or country?
 Would you want it to?
 Which places do you think would be likely targets for expansion?

Can you think of any major turning points in the history of this organization?

Are people more interested in trying new things or focusing on things that have been successful in the past?

If you had to divide the time you spend on daily tasks into five different buckets, what would those look like?

What metrics do you use to define organization performance? Are those benchmarked against other organizations?

Are you familiar with any of the rating NFP rating agencies? How do people here feel about them?

How does this chapter interact with other chapters within the system?

Are there other major organizations that you partner with? What do they do for your organization?

Can you think of anything we haven't covered that I should know about your organization?

Figure 7 presents the interview protocol used to assess concepts of exploration and exploitation with food bank executive directors and other senior staff members.

Figure 7: Interview Protocol

Table 1: Quantitative Impacts of Organizational Ambidexterity on Performance

Citation	Year	N	Sample / Industry	Method	Country / Region	Mixed-Method	Multi-Industry	Performance Impacts	Performance Outcomes
McDonough & Leifer	1983	21	Manufacturing and insurance	Interviews and surveys	Not specified	Yes	Yes	+	Work unit effectiveness
Han et al.	2001	127	Consumer products	Survey	Korea	No	No	+	Market share and ROI
Katila & Ahuja	2002	124	Robotics	Archival	Europe, Japan, and North America	No	No	+	Number of new products introduced
Kyriakopoulos & Moorman	2004	96	Packaged food business units	Survey	Netherlands	No	No	+	New product financial performance
Rothaermel & Deeds	2004	325	Biotechnology	Archival	Global	No	No	+	More products on the market and in development
He & Wong	2004	206	Manufacturing	Survey	Singapore and Penang	No	No	+	Sales growth
Auh & Menguc	2005	260	Manufacturing	Survey	Australia	No	No	+	Profit, market share, and sales growth
Atuahene-Gima	2005	227	Electronics	Interviews and surveys	China	Yes	No	+	Radical innovation performance
Han	2005	2	Merrill Lynch and Comdirect Bank	Case study	United States	No	No	+	International sustainability
Lubatkin et al.	2006	139	SMEs	Survey	United States	No	Yes	+	Growth and profitability
Jansen et al.	2006	283	Financial services	Survey	Europe	No	No	+	Average profitability
Bierly and Daly	2007	98	SME manufacturers	Survey	Global	No	No	n.s.	Financial performance

Table 1. Continued.

Revilla et al.	2011	80	Product development	Survey	Spain	No	Yes	+	New product development
Cegarra-Nevarro & Dewhurst	2007	269	SMEs	Survey	Spain	No	Yes	+	Customer capital
Venkatraman et al.	2007	1005	Software	Longitudinal archival	Global	No	No	+	Sales growth
Lin, Yang, and Demirkan	2007	5	Multi-industry	Archival and simulation	United States	Yes	Yes	n.s.	Net sales / current assets
Cao, Gedajlovic, & Zhang	2009	122	High-tech	Survey	China	No	Yes	+	Firm performance scale: sales growth, profit growth, share growth, reputation
Rothaermel & Alexandre	2009	141	Random, multi-industry	Archival	Archival	No	Yes	curvilinear	Firm performance
Chang, Yang, and Chen	2009	474	Academic patents	Survey	Taiwan	No	Yes	+	Academic research commercialization
Dunlap-Hinkler, Kotabe, & Mudambi	2010	1500	FDA drug approvals	Archival	United States	No	No	+	Breakthrough drugs
Sanyal & Sett	2011	108	Information Technology	Archival	India	No	No	+	Operational and financial performance
Kostopoulos & Bozionelos	2011	142	Pharmaceuticals	Survey	UK, Italy, Greece	No	No	+	Team performance
Chang, Hughes, & Hotho	2011	265	SMEs	Survey	Scotland	Yes	No	+	Firm performance
Ambrosini et al.	2011	130	Multi-industry	Survey	UK	No	Yes	-	Acquisition performance
Thongpapanl et al.	2012	200	Multi-industry	Survey	Canada	No	Yes	+	Financial performance

Table 2: Partial Correlation Matrix with Descriptive Statistics

Variable	Mean	Std. Dev.						
Fiscal Performance (FP)	1.01	0.39	1					
Exploration	19.67	7.65	0.19***	1				
Exploitation	33.38	6.00	0.06***	0.24***	1			
Ambidexterity	667.81	298.51	0.18***	0.93***	0.55***	1		
Organization Age	53.36	42.55	-0.11***	0.01	-0.03†	-0.01	1	
Organization Size (log)	15.80	1.92	-0.01	0.17***	0.05***	0.16***	0.35***	1

Note: *** $p < .001$; ** $p < .01$; * $p < .05$; † $p < .10$

n = 5,450

Table 3: Full Correlation Matrix with Industries

Variable Name	Variable #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Fiscal Performance	1	1.00																					
Exploration	2	.19*	1.00																				
Exploitation	3	.05*	.25*	1.00																			
Organizational Ambidexterity	4	.18*	.93*	.55*	1.00																		
Organizational Age	5	-.11*	.01	-.03	-.01	1.00																	
Organizational Size (log)	6	-.01	.17*	.05*	.16*	.35*	1.00																
Animal Rights	7	.01	.07*	-.02	.05*	.09*	.00	1.00															
Wildlife Conservation	8	.04*	.00	-.01	-.01	-.05*	-.01	-.03	1.00														
Zoos and Aquariums	9	.02	.03	.01	.03	.04*	.04*	-.02	-.01	1.00													
Libraries	10	-.01	-.02	-.05*	-.04*	.09*	.07*	-.02	-.01	-.01	1.00												
Museums	11	-.01	-.03*	-.08*	-.06*	.09*	.14*	-.05*	-.03	-.02	-.03	1.00											
Performing Arts	12	-.02	-.08*	-.02	-.08*	.00	.04*	-.05*	-.03*	-.03	-.03	-.05*	1.00										
Public Broadcasting	13	-.01	-.02	.01	-.02	-.05*	-.02	-.03*	-.02	-.01	-.01	-.03*	-.03*	1.00									
Private Elementary / Secondary	14	-.02	-.03*	.02	-.03	-.08*	-.03*	-.05*	-.03	-.02	-.02	-.05*	-.05	-.03*	1.00								
Private Liberal Arts Colleges	15	-.02	.02	-.06*	-.01	.21*	.11*	-.04*	-.02	-.02	-.02	-.04*	-.04*	-.02	-.04*	1.00							
Universities / Graduate Schools	16	-.05*	.03	.00	.02	.30*	.14*	-.02	-.01	-.01	-.01	-.02	-.02	-.01	-.02	-.02	1.00						
Other Education Programs	17	-.03*	.05*	.02	.06*	.31*	.18*	-.03*	-.02	-.02	-.02	-.03*	-.03*	-.02	-.03*	-.02	-.01	1.00					
Botanical Gardens and Parks	18	.04*	.00	-.02	-.01	.00	.01	-.03*	-.02	-.02	-.02	-.03*	-.03*	-.02	-.03*	-.02	-.01	-.02	1.00				
Environmental Protection	19	.05*	.04*	.04*	.05*	-.09*	-.07*	-.04*	-.02	-.02	-.02	-.05*	-.05*	-.03*	-.04*	-.04*	-.02	-.03*	-.03*	1.00			
Diseases and Disorders	20	-.03*	-.07*	-.08*	-.09*	-.07*	-.12*	-.05*	-.03*	-.03*	-.03*	-.05*	-.06*	-.03*	-.05*	-.04*	-.03	-.03*	-.03*	-.05*	1.00		
Medical Research	21	.03*	.00	-.02	-.01	-.04*	.04*	-.02	-.01	-.01	-.01	-.02	-.03	-.01	-.02	-.02	-.01	-.02	-.01	-.02	-.03*	1.00	
Patient and Family Support	22	.01	.05*	-.05*	.01	-.01*	-.03*	-.03*	-.02	-.02	-.02	-.03*	-.04*	-.02	-.03*	-.03*	-.02	-.02	-.02	-.03*	-.04*	-.02	1.00
Treatment and Prevention Services	23	.01	.02	.02	.02	-.03*	.01	-.03*	-.02	-.01	-.01	-.03*	-.03*	-.02	-.03*	-.02	-.01	-.02	-.02	-.03	-.03*	-.01	-.02
Children and Family	24	.01	.01	.03*	.03	-.01	-.02	-.04*	-.02	-.02	-.02	-.04*	-.04*	-.02	-.04*	-.03*	-.02	-.02	-.02	-.04*	-.04*	-.02	-.03*
Food Banks, Food Pantries	25	.02	.11*	.13*	.15*	-.09*	-.02	-.04*	-.02	-.02	-.02	-.04*	-.04*	-.02	-.04*	-.03*	-.02	-.02	-.02	-.04*	-.04*	-.02	-.03*
Homeless Services	26	.03*	.06*	.00	.05*	.01	-.05*	-.04*	-.02	-.02	-.02	-.04*	-.04*	-.02	-.04*	-.03*	-.02	-.03	-.03	-.04*	-.05*	-.02	-.03*
Multipurpose Human Services	27	-.02	-.03*	-.06*	-.05*	.08*	.02	-.04*	-.02	-.02	-.02	-.04*	-.04*	-.02	-.04*	-.03*	-.02	-.02	-.02	-.03*	-.04*	-.02	-.03
Social Services	28	-.01	-.01	.04*	.01	-.01	-.01	-.05*	-.03*	-.03*	-.03*	-.05*	-.06*	-.03*	-.05*	-.04*	-.03	-.03*	-.03*	-.05*	-.06*	-.03*	-.04*
Youth Development	29	-.04*	-.03*	-.01	-.03*	.01	-.01	-.05*	-.03	-.02	-.02	-.05*	-.05*	-.03*	-.05*	-.04*	-.02	-.03*	-.03*	-.04*	-.05*	-.02	-.03*
Development and Relief	30	.02	.02	.10*	.06*	-.09*	-.07*	-.04*	-.02	-.02	-.02	-.04*	-.05*	-.03	-.04*	-.03*	-.02	-.03*	-.03	-.04*	-.05*	-.02	-.03*
Humanitarian Relief	31	.00	.04*	.10*	.07*	-.06*	-.03*	-.02	-.01	-.01	-.01	-.02	-.02	-.01	-.02	-.02	-.01	-.01	-.01	-.02	-.02	-.01	-.02
International Peace, Security	32	.01	.01	.00	.02	-.04*	-.04*	-.03*	-.02	-.02	-.02	-.03*	-.04*	-.02	-.03*	-.03*	-.02	-.02	-.02	-.03*	-.04*	-.02	-.02
Single Country Support	33	-.01	.02	.04*	.04*	-.06*	-.05*	-.03*	-.02	-.02	-.02	-.03*	-.03*	-.02	-.03*	-.03	-.02	-.02	-.02	-.03*	-.04*	-.02	-.02
Advocacy and Civil Rights	34	-.01	-.01	-.06*	-.03*	-.08*	-.06*	-.04*	-.02	-.02	-.02	-.04*	-.04*	-.02	-.04*	-.03*	-.02	-.03*	-.03	-.04*	-.05*	-.02	-.03*
Community and Housing	35	-.01	.05*	.08*	.07*	-.01	.18*	-.03	-.01	-.01	-.01	-.03	-.03	-.01	-.03	-.02	-.01	-.02	-.02	-.02	-.03*	-.01	-.02
Community Foundations	36	.02	.05*	.05*	.06*	-.08*	-.02	-.03*	-.02	-.02	-.02	-.03*	-.03*	-.02	-.03*	-.03*	-.02	-.02	-.02	-.03*	-.04*	-.02	-.02
Fundraising Organizations	37	-.03*	-.07*	-.02	-.07*	.00	.03*	-.06*	-.03*	-.03*	-.03*	-.06*	-.06*	-.03*	-.06*	-.05*	-.03*	-.04*	-.04*	-.06*	-.07*	-.03*	-.04*
Research and Public Policy	38	.01	.02	.01	.01	-.03	-.02	-.03*	-.02	-.02	-.02	-.03*	-.04*	-.02	-.03*	-.03*	-.02	-.02	-.02	-.03*	-.04*	-.02	-.02
Religious Activities	39	.01	-.06*	.01	-.05*	-.05*	-.09*	-.04*	-.02	-.02	-.02	-.04*	-.05*	-.03	-.04*	-.04*	-.02	-.03*	-.03*	-.04*	-.05*	-.02	-.03*
Religious Media and Broadcasting	40	.01	-.07*	-.02	-.07*	-.04*	-.03	-.03*	-.02	-.02	-.02	-.03*	-.03*	-.02	-.03*	-.03*	-.02	-.02	-.02	-.03*	-.04*	-.02	-.02

Table 3. Continued.

Variable #	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
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24	-.02	1.00																
25	-.02	-.03*	1.00															
26	-.02	-.03*	-.03*	1.00														
27	-.02	-.03*	-.03*	-.03*	1.00													
28	-.03*	-.04*	-.04*	-.05*	-.04*	1.00												
29	-.03*	-.04*	-.04*	-.04*	-.04*	-.05*	1.00											
30	-.03	-.03*	-.03*	-.04*	-.03*	-.05*	-.04*	1.00										
31	-.01	-.02	-.02	-.02	-.02	-.03	-.02	-.02	1.00									
32	-.02	-.03*	-.03*	-.03*	-.03	-.04*	-.03*	-.03*	-.02	1.00								
33	-.02	-.03	-.02	-.03*	-.02	-.04*	-.03*	-.03*	-.02	-.02	1.00							
34	-.02	-.03*	-.03*	-.04*	-.03*	-.05*	-.04*	-.04*	-.02	-.03*	-.03*	1.00						
35	-.01	-.02	-.02	-.02	-.02	-.03*	-.02	-.02	-.01	-.02	-.02	-.02	1.00					
36	-.02	-.03	-.03	-.03*	-.03	-.04*	-.03*	-.03*	-.02	-.02	-.02	-.03*	-.02	1.00				
37	-.03*	-.05*	-.05*	-.05*	-.04*	-.07*	-.06*	-.05*	-.03*	-.04*	-.04*	-.05*	-.03*	-.04*	1.00			
38	-.02	-.03*	-.03	-.03*	-.03	-.04*	-.03*	-.03*	-.02	-.02	-.02	-.03*	-.02	-.02	-.04*	1.00		
39	-.03	-.03*	-.03*	-.04*	-.03*	-.05*	-.04*	-.04*	-.02	-.03*	-.03*	-.04*	-.02	-.03*	-.05*	-.03*	1.00	
40	-.02	-.03	-.03	-.03*	-.03	-.04*	-.03*	-.03*	-.02	-.02	-.02	-.03*	-.02	-.02	-.04*	-.02	-.03*	1.00

Note: * $p < .05$; $n = 5,450$

Table 4: Description of Charity Navigator Sectors and Industries

<i>Sector Name</i>	Count	% of Dataset
<i>Industry Name</i>		
<i>Animals</i>	386	0.07
Animal Rights	240	.04
Wildlife Conservation	77	.01
Zoos and Aquariums	69	.01
<i>Arts</i>	675	0.12
Libraries	71	.01
Museums	248	.05
Performing Arts	268	.05
Public Broadcasting	88	.02
<i>Education</i>	567	0.10
Private Elementary / Secondary	163	.03
Private Liberal Arts Colleges	61	.01
Universities / Graduate Schools	104	.02
Other Education Programs	239	.04
<i>Environment</i>	321	0.06
Botanical Gardens and Parks	95	.02
Environmental Protection	226	.04
<i>Health</i>	584	0.11
Diseases and Disorders	303	.06
Medical Research	65	.01
Patient and Family Support	131	.02
Treatment and Prevention Services	85	.02
<i>Human Services</i>	1195	0.22
Children and Family	161	.03
Food Banks, Food Pantries	153	.03
Homeless Services	190	.03
Multipurpose Human Services	146	.03
Social Services	308	.06
Youth Development	237	.04
<i>International</i>	510	0.09
Development and Relief	207	.04
Humanitarian Relief	57	.01
International Peace, Security	133	.02
Single Country Support	113	.02
<i>Public Benefit</i>	880	0.16
Advocacy and Civil Rights	193	.04
Community and Housing	123	.02
Community Foundations	73	.01
Fundraising Organizations	365	.07
Research and Public Policy	126	.02
<i>Religion</i>	332	0.06
Religious Activities	210	.04
Religious Media and Broadcasting	122	.02
Totals	5450	1.00

Note = % of Dataset column does not total to exactly 1.00 due to rounding.

Table 5: Pairwise ANOVA Comparison for Average Fiscal Performance Differences between Charity Navigator Quadrants

	n	Mean FP	Quadrant 1	Quadrant 2	Quadrant 3
Quadrant 1	1242	0.90 (.08)	-	-	-
Quadrant 2	1052	0.95 (.01)	.04*	-	-
Quadrant 3	1170	1.05 (.02)	.15*	.11*	-
Quadrant 4	1975	1.08 (.09)	.18*	.13*	0.02

Note: * $p < .05$, Standard deviations in parentheses

Table 6: Clustered Regression Analysis of Complete Charity Navigator Dataset with Fiscal Performance as the Dependent Variable

Variable	β	Robust S.E.	<i>t</i> -Value
Intercept	84.68 *	8.10	10.45
Exploration	1.34 *	.59	2.26
Exploitation	.27	.25	1.07
Ambidexterity	-.01	.02	-0.67
Organizational Age	-.11 ***	.02	-6.40
Organizational Size (Log)	-.38	.45	-0.84
Adjusted R^2	0.04 ***		
Model F	38.23		

Note: *** $p < .001$; * $p < .05$

$n = 3,935$.

Table 7: Regression Results for Industries with Significant Exploration, Exploitation, or Ambidexterity Effects

	Animal Rights	Private Elementary	Private Universities	Food Banks	International Development	Fundraising Organizations
Exploration	8.01* (3.75)	-10.91* (3.94)	7.34** (2.67)	-1.19 (.93)	5.11* (2.18)	2.63† (1.43)
Exploitation	4.66† (2.65)	-5.67* (2.78)	4.24** (1.56)	-1.02* (.55)	2.12 (1.32)	-0.09 (.82)
Ambidexterity	-0.2† (.11)	0.42** (.13)	-0.21* (.08)	0.03 (.02)	-0.13* (.06)	-0.05 (.04)
Organizational Age	-0.15† (.08)	-0.06 (.06)	-0.07 (.05)	0.04 (.11)	-0.37** (.13)	-0.03 (.08)
Organizational Size (log net assets)	-2.91 (2.19)	1.31 (1.83)	-0.89 (.91)	0.85† (.49)	1.74 (1.45)	-3.64* (1.43)
Constant	-24.48 (92.27)	213.23* (95.36)	-27.87 (50.32)	129.09** (20)	7.21 (50.41)	143.23** (35.26)
	n = 189 <i>F</i> = 3.55** Adj. <i>R</i> ² = .06	n = 139 <i>F</i> = 8.88*** Adj. <i>R</i> ² = .22	n = 90 <i>F</i> = 2.39* Adj. <i>R</i> ² = .07	n = 108 <i>F</i> = 1.42 Adj. <i>R</i> ² = .02	n = 147 <i>F</i> = 3.99** Adj. <i>R</i> ² = .09	n = 207 <i>F</i> = 3.61** Adj. <i>R</i> ² = .06

Note: *** *p* < .001; ** *p* < .01; * *p* < .05; † *p* < .10

Robust standard errors in parentheses

Table 8: Representative Examples for Each Process and Relationships to Exploration or Exploitation

	Exploration	Exploitation
Managing Knowledge		
Coordinating Best Practices	“Grand Rapids, Michigan started the mobile pantries. They put food that was going to be thrown away on a pantry that rolled. They took an old Coke truck or Pepsi truck, put food on it and they invented the mobile pantry. So you know, you go there to see how they started it, but now we all do mobile pantries because they did it so well. You know, that just goes on network wide.” (Executive director, Orange)	Our network has "Food Bank of the Year" awards and recognitions. Now we're recognized for our backpack program because we are the third largest backpack program in the country. Chicago just contacted us, "Will you mentor a new food bank employee that's running their backpack program?" (Executive director, Orange)
Leveraging Local Relationships	[I took a trip to two other food banks in the network] one much bigger than us and one much smaller so a lot to gain from both. It was pretty cool and you say "Man I can't believe we weren't doing that." And you see things that we were doing better than them. But they both do some really, really cool things that I want to get introduced here as soon as we're ready. It gets you out of the box very quickly which is necessary. (Volunteer coordinator, Orange)	I just don't remember calling up another plant manager at another automotive industry to say, "Hey, can I come over and look at your facility?" The benchmarking wasn't as easy in those industries because everybody's very competitive whereas I think we all tend to now share more freely in this organization and in this type of industry. (Vice President of operations, Central)

Table 8. Continued.

Retaining Talent		
Hiring Professional Management	You can't operate with all volunteers. Not like this. You have to have the best that you can afford and that's always been rough on us. You pay as much as you can, and you get the best that you can get for that. And if you are competitive it comes back to you with good staff. You don't want to train people and have them jumping ship to go someplace where they can make a lot more money. So you either provide benefits, make the pay equitable or other intrinsic things that people appreciate. We can't have people working here who are below the poverty level themselves. That's a goal that we need to adhere to. (Executive director, Riverside)	I'm sure there's still some non-profits that feel like they need to pay their director twenty grand and their other people ten thousand dollars, but I don't think there are many that are successful because you've got to have the commitment and the positive energy and wanting to come to work and wanting to do what we're supposed to do. (Executive director, Orange)
Outsourcing Non-Core Activities	We have used outside consultants in personnel until we grew to be larger and now we have hired that person who was on contract and they are now full time staff in foods. So I think that if you just look and see what's new and who can do it better and maybe at a much more reasonable cost. I don't think that we always have to have everything in-house. But I think you just have to be business savvy. (Executive director, Central)	We now hire a direct mail company in Boston that does our direct mail. Back when I started we were writing our own letters. We all started with maybe four people and \$300,000 budgets and handwriting your letters to people. It costs us a ton. It's totally efficient and they're very astute in how they write it. They know how to get that dollar. So it costs us \$500,000 and we make a million. So it's a no brainer. (Executive director, Orange)

Table 8. Continued.

Enabling Leadership		
Facilitating Connections	Four or five years ago, we did not have Wal-Mart and Sam's Club donating to us at all because liability issues, but now they do donate to us. A partnership was formed at the national level. We couldn't get the local donations from some of the larger companies until that partnership was formed at the national level. (Vice President of community relations, Wright)	We are very blessed to have a national organization that gives us best practices that really guides us in the strategic planning process. We have a contract with them so we have some guidance and some road map to not stay where we are, but to go to the next level from where we were in 1986 to maybe 1992, we were in that grass roots organization stage and then get to a larger organization. (Executive director, Wright)
Encouraging Experimentation	[The executive director] is probably one of the greatest visionaries I've ever seen ... she has an idea and she wants you to get it done and she surrounds herself with the people who get things done. Part of her great skill, is having a vision and bringing it to fruition. She surrounds herself with creative and innovative people and then lets them do their thing. But there is always parameters and as long you operate within the parameters, she allows you to make mistakes. (Executive chef, Central)	Well, we started with the [garden] downtown, which was a grant for a community garden, and we got property from the Housing Authority. So we put that one in and people could just come and have a plot maybe the size of this room and they could grow whatever they wanted and they could keep whatever they grew. The Housing Authority Director said, "That's terrible land. You'll never grow anything because it's fill." And it's beautiful. So he was wrong. We are growing for our own use and not for someone else. (Executive director, Wright)

Table 9: Managing Knowledge Quotes

Sub-Process	Exemplary Quote	Influencing	Source
Coordinating Best Practices	Grand Rapids, Michigan started the mobile pantries. They put food that was going to be thrown away on a pantry that rolled. They took an old Coke truck or Pepsi truck, put food on it and they invented the mobile pantry. So you know, you go there to see how they started it, but now we all do mobile pantries because they did it so well. You know, that just goes on network wide.	Exploration	Executive director, Orange
Coordinating Best Practices	You know you go to conferences, they highlight something and you think, “Well that might work for us” and you bring it back, yeah.	Exploration	Executive director, Riverside
Coordinating Best Practices	Our network has "Food Bank of the Year" awards and recognitions. Now we're recognized for our backpack program because we are the third largest backpack program in the country. Chicago just contacted us, "Will you mentor a new food bank employee that's running their backpack program?"	Exploitation	Executive director, Orange
Coordinating Best Practices	We are very blessed to have a national organization that gives us best practices that really guides us in the strategic planning process. We have a contract with them so we have some guidance and some road map to not stay where we are, but to go to the next level from where we were in 1986 to maybe 1992, we were in that grass roots organization stage and then get to a larger organization.	Exploitation	Executive director, Riverside
Leveraging Local Relationships	And we just sent our volunteer coordinator who's new to [another territory] because it's such a bigger facility and a lot more volunteers come through there and we are trying to grow our volunteer program because we have a bigger building now so we can accommodate them. And then we sent him to [a different territory] to watch their volunteer program because they're about our same size. But you'll see something they do well that you weren't doing well. And you'll see something they're not doing as well as you. It's just really good to send your people to other affiliates. They just get a bigger picture of what they're doing. So we just kind of keep growing that way.	Exploration	Executive director, Orange
Leveraging Local Relationships	I have never seen them as cooperative and as supportive of one another as they are here. We really aren't that competitive in that. We are always competing for money but we are not like, "That's mine and you don't get it." You try not to take total ownership in everything.	Exploration	Executive director, Central
Leveraging Local Relationships	When I first came here we didn't really have a lot of programs. We're primarily a food bank where we secure the food, store it and give it out to charities. We weren't doing any direct service much where we would actually give it to individuals and one of our first big programs of that type was our Food for Kids program. It started with other food banks doing it and so some people here thought, “Hey, that's a great idea.”	Exploration	Vice President, Wright
Leveraging Local Relationships	I just don't remember calling up another plant manager at another automotive industry to say, “Hey, can I come over and look at your facility?” The benchmarking wasn't as easy in those industries because everybody's very competitive whereas I think we all tend to now share more freely in this organization and in this type of industry.	Exploitation	VP of Operations, Central

Table 10: Retaining Talent Quotes

Sub-Process	Exemplary Quote	Influencing	Source
Hiring Professional Management	So back then if you did a survey of who ran nonprofits and how long they ran them, they were all women and they were all social workers. If I was graduating from college today, I wouldn't get a degree in social work. I would get a degree in business or marketing. Then I would probably get my Masters or get a MBA of some sort, maybe a law degree.	Exploration	Executive director, Central
Hiring Professional Management	We capitalized on getting smart people that were in for-profit worlds and bringing them over to non-profit and just setting them loose and saying, "If you've got an idea and it is going to be able to bring revenue into the food bank and help us feed more people inside of our service area, then let's do it. Let's try it."	Exploration	VP of Operations, Central
Hiring Professional Management	I think any nonprofit today, if you wanted to survive you must be adaptable and you must be flexible and your employees have to be adaptable and flexible and I tell people that come to work here, "If you don't like change, you don't need to work here. If you don't like being on a fast-pace and some days feel like you are like that little mouse running on that wheel, you don't need to work here," cause in any one second you can have a disaster out there and we move into disaster mode.	Exploration	Executive director, Central
Hiring Professional Management	I'm sure there's still some non-profits that feel like they need to pay their director twenty grand and their other people ten thousand dollars, but I don't think there are many that are successful because you've got to have the commitment and the positive energy and wanting to come to work and wanting to do what we're supposed to do.	Exploitation	Executive director, Orange
Hiring Professional Management	I guess it would be comparable to starting a little business. We were managing it [a new program] with volunteers to begin with, but then we needed to bring on a staff person. We were just selecting product out of the warehouse that would work with the program, which is healthy snacks and things children can prepare on their own. But then as it grew, we had to start fine-tuning our planning to make it more standard. We had to start ordering the food. We had to start associating a specific cost per child and we finally got it down to a real workable thing and its own little program under our umbrella.	Exploitation	Vice President, Wright
Outsourcing Non-Core Activities	We have used outside consultants in personnel until we grew to be larger and now we have hired that person who was on contract and they are now full time staff in foods. So I think that if you just look and see what's new and who can do it better and maybe at a much more reasonable cost. I don't think that we always have to have everything in-house. But I think you just have to be business savvy.	Exploration	Executive director, Central
Outsourcing Non-Core Activities	We now hire a direct mail company in Boston that does our direct mail. Back when I started we were writing our own letters. We all started with maybe four people and \$300,000 budgets and handwriting your letters to people. It costs us a ton. It's totally efficient and they're very astute in how they write it. They know how to get that dollar. So it costs us \$500,000 and we make a million. So it's a no brainer.	Exploitation	Executive director, Orange
Outsourcing Non-Core Activities	We use outside fundraisers, direct mail, which have been very beneficial. If we didn't do that we would not be able to keep the doors open.	Exploitation	Executive director, Central

Table 11: Enabling Leadership Quotes

Sub-Process	Exemplary Quote	Influencing	Source
Facilitating Connections	They've got Kraft's president on their board and ConAgra's president on their board. They're way up here. American Airline's president is on their board. They're in Chicago and it's a national organization and they feed people so a lot of people want to be affiliated with that.	Exploration	Executive director, Orange
Facilitating Connections	On a national level, what they do is they solicit all the large food companies and get mega truck loads of products that we could never access and get. In addition to that, they advocate on a national level in Washington, D.C. for federal nutrition programs or other programs affect local food banks to ensure that we are going to have access to those kinds of items. We can't do that at a local level. It would take too much energy and too much money to do that.	Exploration	Executive director, Central
Facilitating Connections	Food banking has become a pretty fine-tuned business operation. Four or five years ago, we did not have Wal-Mart and Sam's Club donating to us because of liability issues, but now they do donate to us. A partnership was formed at the national level. We couldn't get the local donations from some of the larger companies until that partnership was formed at the national level.	Exploration	Vice President, Wright
Facilitating Connections	In order to say we are an affiliate of Feeding America we must maintain those standards and they come and inspect us every two years and write a report and say, "Yep, you're above standard, or you are minimal, or you need a lot of help and you need to maybe think about shutting down."	Exploitation	Executive director, Central
Facilitating Connections	They don't tell us what to do and how to do it, but they monitor our storage practices. We have a contract. And as long as we are within that contract, you know, we are good. They will come every other year and visit us and see how we keep our warehouse and all our inventories. If it's in line, if we can account for everything, how well we work with the agencies, what they are doing.	Exploitation	Executive director, Riverside
Encouraging Experimentation	Surrounding yourself with the people who have the strengths you don't. And it doesn't matter what your strength is, you just make sure your trusted staff does what you don't do well.	Exploration	Executive director, Orange
Encouraging Experimentation	[The executive director] is probably one of the greatest visionaries I've ever seen ... she has an idea and she wants you to get it done and she surrounds herself with the people who get things done. Part of her great skill, is having a vision and bringing it to fruition. She surrounds herself with creative and innovative people and then lets them do their thing. But there is always parameters and as long you operate within the parameters, she allows you to make mistakes.	Exploration	Executive chef, Central
Encouraging Experimentation	Non-profits have had to say "Look, our top line is shrinking. We're going to have to become more efficient to be able to provide the same number of pounds, same meals, and the same number of people from last year to this year with fewer donations. We're going to have to be better at what we do.	Exploration	CFO, Central
Encouraging Experimentation	My board is here to set policy and procedure and help lend that total strategic vision and support that and make sure that they are being good stewards of the money that we receive and make sure that we are spending it wisely and properly. That's their role. Their role is not to hire or fire or tell me what to do or direct my programs or tell me where I need to run my truck.	Exploitation	Executive director, Central

Vita

Timothy Madden is from Downingtown, Pennsylvania and graduated from Downingtown High School in 1999. He graduated from James Madison University with a Bachelors of Business Administration degree in Marketing in 2003 and a Masters of Business Administration degree in 2008. He was part of the inaugural cohort to begin the Organizations and Strategy PhD Program at the University of Tennessee in 2008. During his time at the University of Tennessee, his research was published in the *Academy of Management Review*, *Organizational Research Methods*, the *Journal of Business Ethics*, the *International Entrepreneurship and Management Journal*, and presented at the annual meetings of the Academy of Management, the Southern Management Association, and the Midwest Academy of Management. The University of Tennessee conferred his Doctor of Philosophy degree in the summer of 2012 and he began his academic career as an Assistant Professor of Management at Old Dominion University in Norfolk, Virginia in the fall of 2012.