Dear Author/Editor,

Greetings, and thank you for publishing with SAGE. Your article has been copyedited, and we have a few queries for you. Please respond to these queries when you submit your changes to the Production Editor.

Thank you for your time and effort.

Please assist us by clarifying the following queries:

<table>
<thead>
<tr>
<th>No</th>
<th>Query</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PLEASE PROVIDE REFERENCE FOR FORBES, 1998, OR ALLOW US TO DELETE THE REFERENCE.</td>
</tr>
<tr>
<td>2</td>
<td>PLEASE PROVIDE REFERENCE FOR MOYNIHAN &amp; PANDEY, 2005, OR ALLOW US TO DELETE THE CITATION.</td>
</tr>
<tr>
<td>3</td>
<td>PLEASE INDICATE WHAT DOES 990 SPECIFY. FOR EXAMPLE, IT IS THE NUMBER OF….., IN THE SENTENCE BEGINNING, “FOLLOWING CARMAN WE USE TOTAL BUDGET AS REPORTED…”</td>
</tr>
<tr>
<td>4</td>
<td>PLEASE INDICATE WHERE SHOULD POISTER, 2003, APPEAR, OR ALLOW US TO DELETE THE REFERENCE.</td>
</tr>
<tr>
<td>5</td>
<td>PLEASE INDICATE WHERE DOES *** APPEAR IN TABLE 3 TEXT.</td>
</tr>
</tbody>
</table>
Does Performance Measurement Improve Strategic Decision Making? Findings From a National Survey of Nonprofit Social Service Agencies

Kelly LeRoux¹ and Nathanie S. Wright¹

Abstract
Nonprofits have encountered increased pressures for accountability and performance in recent years, both from their funding entities as well as the public. The adoption of performance measurement systems assumes that managers will use performance information to make better decisions. However, little research has focused on performance information use in the nonprofit sector. This study seeks to address this gap in the literature. Using survey data from several hundred nonprofit social service organizations in the United States, this article examines the extent to which reliance on various performance measures improves strategic decision making within nonprofit organizations. Authors find a positive relationship between the range of performance measures used by nonprofits and their level of effectiveness in strategic decision making. Other factors that also contribute to strategic decision making within nonprofits include effective governance, funding diversity, and education level of the executive director.

Keywords
performance, decision making, strategic management, outcomes, accountability

¹University of Kansas

Corresponding Author:
Kelly LeRoux, University of Kansas, Department of Public Administration, 1445 Jayhawk Blvd, 4060 Wescoe Hall, Lawrence, KS 66045
E-mail: kleroux@ku.edu
In the early years of American charity and philanthropy, little thought was given to measuring performance, as nonprofits were held to account to the members of their communities who financially supported their works. In most cases, they were simply trusted because religious and social values were largely homogenous (Hammack, 2006). As the nonprofit sector has grown larger, more professionalized, and agencies have expanded their range of stakeholders, issues of accountability and performance measurement have become increasingly important. Over the past two decades, demands for nonprofit accountability have increased dramatically, both from the public as well as funders. Today, the vast majority of nonprofit human service agencies engage in some formalized method of evaluation or performance measurement in an effort to maintain public accountability (Carman, 2007; Morley, Vinson, & Hatry, 2001).

The increased efforts of government to measure performance, along with a “crisis of accountability” are two important trends that have shaped the contemporary era in which nearly all nonprofit service agencies engage in some form of performance measurement. Management reforms emphasizing accountability and results that began to take root throughout government in the early 1990s quickly trickled down to government contract partners, including nonprofits. Results-oriented management philosophies such as reinventing government and the new public management led to the passage of the Government Performance and Results Act (GPRA) of 1993, which required all federal agencies to establish a strategic plan outlining goals and objectives to be measured and reported on each year in the annual budget process. Soon after the passage of GRPA, many state bureaucracies passed similar legislation and performance measurement programs diffused throughout local governments (Moon & DeLeon, 2001). Whereas public bureaucracies at all levels have thus sought to extend performance measurement to their private sector partners, the passage of GPRA at the federal level had the effect of systematically extending performance measurement mandates to nonprofits via dozens of federal funding programs granted by agencies housed under the Department of Health and Human Services and the Department of Housing and Urban Development (Frederickson & Frederickson, 2007).

Another factor compelling increased concern for nonprofit accountability can be traced to the “crisis of accountability” suffered by third sector organizations in recent times (Fitzgibbon, 1997; Spitzer, 2002). Public confidence and trust in nonprofits has begun to erode as high-profile scandals such as the Aramony case at the United Way of America and questionable nonprofit financial practices illustrated by the American Red Cross in the wake of 9/11 have been publicized by the media. Given their privileged status as tax-exempt organizations, nonprofits are expected to act as stewards and to responsibly and ethically manage funds from donors, government, and foundations, to carry out their mission in the interest of the public good. Measuring performance or evaluating services is seen as one path for restoring public confidence in nonprofits (Carman, 2009).

Although research related to accountability and performance measurement within the nonprofit sector has expanded in recent years, there remain many significant gaps in the literature, particularly related to performance-based management and performance
information use. In theory, managers develop and implement performance measurement systems to document performance and support decision making (Moynihan, 2005; Wholey, 1999). However, there is a distinct lack of research specifically examining whether and to what extent performance information is used by nonprofit managers to make strategic decisions. Examining the literature on strategic management within nonprofits over a period of 20 years, Stone, Bigelow, and Crittenden (1999) concluded, “Crucial relationships among strategy components are missing, and links between these components and organizational performance have yet to be made” (p. 378). Our article offers a starting point for addressing this gap in the literature on the relationship between performance measurement and use of information generated by it for purposes of strategic decision making.

We examine the question of whether performance measurement promotes more strategic decision making within nonprofits using data from a large-scale study of nonprofit social service and community development organizations throughout the United States. By using this method we also make a unique contribution to the research on nonprofit performance measurement, as most studies are on the basis of one or a few organizations using the case study method (see Murray, 2005, for a review of this literature) or are limited to a single state (Carman, 2007, 2009). Large-scale quantitative studies are also lacking in the literature on strategic management within nonprofit organizations, as Stone et al. (1999) find the majority of these to be case studies, or examine a single organizational type.

Much of the research related to the performance of nonprofits is seen in literature on organizational effectiveness (Baruch & Ramalho, 2006; Crittenden, Crittenden, & Hunt, 1988; Forbes, 1998; Herman & Renz, 1998, 2008; Sowa, Selden, & Sandfort, 2004) and strategic planning and management (Crittenden, Stone, Crittenden, & Robertson, 2004; Siciliano, 1997; Stone et al., 1999). In the next section, we briefly highlight some of the literature on the use of performance measurement in the nonprofit social services sector, followed by a discussion of the literature linking performance measurement to strategic planning and decision making. We then test a model in which strategic decision making is explained by organizational reliance on a range of performance measures, as well as a number of internal and external organizational factors. Lastly, we conclude with a discussion of our findings.

**Measuring Performance in the Nonprofit Sector**

Nonprofits can evaluate their performance by developing performance measures and then collecting data related to those measures. Some of the most common measures used by nonprofits include workload and output indicators, unit cost and efficiency measures, outcomes and effectiveness measures, client or customer satisfaction, external audits, and industry standards and benchmarks (Carman, 2007). Fine and Snyder (1999) suggested that performance measurement “involves the selection, definitions, and application of performance indicators, which quantify the efficiency and effectiveness of service-delivery methods” (p. 24). Smith (1988) defined performance measures...
through the development of specific measurement ratios of efficiency and effectiveness. Efficiency “measures the relationship between resources and the results obtained from using them” (p. 24). In contrast, effectiveness “measures are directed at determining how well a service is provided or how successful a department or program is meeting previously established objectives” (p. 24). Others rely on the term “outcomes” to describe effectiveness. Morley et al. (2001, p. 5), for example, defined outcomes as “a specific desirable result or quality of an organization’s services.” In a study of 189 nonprofit social service, developmental disability, and community development organizations, Carman found that these were some of the most common targets of data collection, with approximately 60% of organizations collecting data on outcomes and results and 97% collecting data on program expenditures or other expenditures. Similar results were reported by Carman and Fredericks (2008) who found 67% reporting that they assessed whether they were meeting program goals and objectives and 71% reporting that they produced reports for funders about financial expenditures related to program activities.

In addition to efficiency and effectiveness (outcomes), nonprofits also rely on workload and output indicators as a way of measuring performance. In fact, this is one most common types of measurement engaged in by nonprofits. A study of 36 organizations conducted by Morley et al. (2001) suggested that nonprofits are most likely to monitor things that are “easy” to measure, such as the number of clients served, quantity of program units delivered, activities provided, or number of volunteer hours contributed. Research by Carman (2007) further confirms the prevalence of using these types of measures; 100% of social service organization in her study collected data on the number of persons served and 89% collected information on demographics, and 67% reported collecting data on other outputs. Similarly, Carman and Fredericks (2008) found that approximately 60% of nonprofits gather information on program activities or outputs on a regular basis.

Client or customer satisfaction indicators provide another important means of measuring performance for nonprofits. Although client or customer satisfaction may serve as one outcome or one indicator of effectiveness, the two are distinct because clients may report satisfaction with their services even though a more rigorous measure of treatment outcomes may reveal the client’s condition is not improving. Morley et al. examined the use of client surveys by nonprofits and found that this method of soliciting client input is quite common. Their study revealed that approximately 78% of nonprofits conducted client surveys designed to measure client satisfaction, client outcomes to be used as performance measures, or both. These authors also found that about half of these surveys also collected information from clients on other aspects of service quality such as timeliness of service provision and helpfulness of staff (Morley et al., 2001). This finding is comparable to Carman and Frederick’s (2008) result that 67% of nonprofits collect data on consumer or participant satisfaction on a regular basis.

Two other ways nonprofits might measure performance are through external audits and the use of industry standards and benchmarks. Many nonprofits that operate within specific industries adopt standards or benchmark their performance against industry
standards or agreed upon best practices. Carman (2007) found that approximately 43% of social service agencies collect data on industry best practices or benchmarks, whereas 55% of disability service organizations report doing so. Benchmarking against industry standards is a particularly common way to measure performance in the child welfare and behavioral health (mental health and substance abuse) fields. For example, nonprofits that provide Medicaid-funded behavioral health services are often required to conform to timeliness standards and to collect and report data on this feature to the government contracting or granting organization. For example, nonprofit service providers must conduct an initial intake with new clients within the state-determined standard timeframe from the clients’ first call to the agency. External audits are another method by which nonprofits measure performance, but they are slightly different from other methods discussed thus far in that external audits involve an independent evaluation of an organization’s performance. External audits can be programmatic, financial, or both. Organizations with large budgets may be especially likely to rely on external audits as a means of establishing and maintaining their reputation and legitimacy with the public and with funding entities. Previous research reveals this form of performance evaluation is also quite common. Carman and Fredericks (2008) find that 86% of nonprofits have financial audits conducted on a regular basis, usually at the request or requirement of one or more of their funders, whereas 55% experience program audits or “site visits” by funders or regulatory agencies.

Though this discussion of the methods and indicators that nonprofits use to measure performance is not exhaustive, we chose to focus on these because they are some of the most commonly used by nonprofits and are, therefore, the ones we examine in this study. Other methods nonprofits may use to measure or evaluate performance include the use of logic models, use of balanced scorecards, reviewing program documentation such as client records, direct observation of program activities, and formal program evaluation (Carman & Fredericks, 2008).

**Use of Performance Data in Strategic Decision Making**

Introducing performance measurement systems into organizations assumes that managers will use the information generated by these systems to make decisions (Moynihan, 2005; Wholey, 1999). Generating performance information assumes that it will lead to its purposeful use by organizational leaders to manage their programs or allocate resources in ways that improve performance (Moynihan et al., in press). Performance data can provide managers with valuable insights into organizational strengths and weaknesses, thereby equipping managers with information to guide strategic decision making. As Moynihan and Ingraham (2004) have argued, “Setting strategic direction and obtaining performance data allows leaders to judge the performance of existing management systems, and make decisions on the reorganization of these systems for the purposes of closer coordination and greater effectiveness” (p. 430).

However, not all nonprofit managers are convinced of the benefits of collecting performance data. Although Carman and Fredericks (2008) found that some nonprofit
managers view performance measurement as a strategic management tool, others simply view it as a marketing and promotional tool, and still others regard it as a “resource drain and distraction” (p. 51). By the same token, they report that two thirds of the organizations in their study indicated using performance evaluation data for strategic planning purposes.

The nonprofit strategic management literature has examined the relationship between formal planning and performance (Siciliano, 1997; Stone et al., 1999). Stone et al concluded that even though the relationship between the two remains unclear, it is believed that the two are connected to the growth within an organization and who is involved in the process. In one of the few large-scale studies of strategic planning by nonprofits, Siciliano examined the relationship between formal planning and performance among 240 YMCA agencies and found that the setting of goals and the monitoring of results were linked to better performance. Other key findings of the study were that competitive analysis is positively linked to improved financial performance and that the formalization of environmental trends was essential to performance (Siciliano, 1997).

Though the nonprofit literature pertaining to performance information use described above is relatively sparse, the public management literature contains greater evidence of the link between performance information and decision making. For example, in a large-scale study of U.S. municipalities, Poister and Streib examined the extent to which cities use five types of performance measures influence decision making: workload or output measures, unit cost or efficiency measures, outcomes or effectiveness measures, service quality measures, and client or citizen satisfaction measures. These authors show that more than 75% of the 243 cities they surveyed reported that each of these performance measures either “moderately” or “substantially” helped to improve the quality of city decision making (Poister & Streib, 1999). As further evidence of how performance measurement can influence organizational decision making, a majority of cities in these authors’ study also reported that the use of these performance measures led to changes in program priorities, changes to the focus of program, and changes in the way budget allocations were made (Poister & Streib, 1999). Moynihan and Ingraham surveyed public officials working in state government in all 50 states and found that the range of information available had no effect on level of performance information use, but several other factors increased performance information use, such as leadership and agency professionalism (for a more thorough review of the literature on performance information use in the public sector see Moynihan, 2005; Moynihan & Ingraham, 2004; Moynihan et al., in press).

**Data and Method**

The data used in this analysis are from a larger project known as the Meeting the Needs of America’s Communities study. This project surveyed nonprofit social service organizations in 16 U.S. metropolitan areas about the service roles and responsibilities of these organizations and about their relationships with other institutions in the
communities in which they are located.\(^2\) Organizations included in the study were randomly selected from the Guidestar database. Samples were drawn from sixteen different metropolitan statistical areas (MSAs) of selected NTEE organizational codes.\(^3\) These subsamples were merged for a final sampling frame of 634 organizations.

Surveys were administered by mail in three waves during the summer of 2008.\(^4\) Surveys were addressed to the executive director, and the vast majority of completed responses indicated that the executive director or CEO completed the questionnaire.\(^5\) A total of 314 completed responses were received over the course of the three mailings, for a final response rate of 49.5%.\(^6\) Organizations included in this sample are all located in census-designated metropolitan statistical areas and are about equally divided between urban and suburban cities, with 56% located in central cities and the remaining 44% in suburban communities of various sizes. The nonprofits included in this study are all 501(c)(3) organizations and they perform a wide range of social service functions. Table 1 provides a frequency distribution describing the types of organizations represented in the sample.

This study seeks to answer a basic question about performance information use: Does performance measurement lead to increased effectiveness in strategic decision making by nonprofit managers? We hypothesize that nonprofits that rely more heavily on a wider range of performance measures will report greater effectiveness of strategic decision making within their organizations. Though the relationship between performance measurement and effectiveness of strategic decision making is the primary focus of this study, it also accounts for several other internal and external organizational factors that may influence the effectiveness of strategic decision making, which we discuss below.

**Variables and Measures**

The dependent variable in this analysis comes from a survey question that asked respondents to indicate “How would you describe the effectiveness of your organization at making strategic decisions?” This question is measured on scale of 1 to 5 with

<table>
<thead>
<tr>
<th>Primary mission (on the basis of NTEE prefix)</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health and crisis intervention</td>
<td>34</td>
<td>11</td>
</tr>
<tr>
<td>Legal services</td>
<td>11</td>
<td>3.5</td>
</tr>
<tr>
<td>Employment</td>
<td>10</td>
<td>3.2</td>
</tr>
<tr>
<td>Food programs</td>
<td>10</td>
<td>3.2</td>
</tr>
<tr>
<td>Housing and shelter</td>
<td>23</td>
<td>7.3</td>
</tr>
<tr>
<td>Human services</td>
<td>159</td>
<td>50.6</td>
</tr>
<tr>
<td>Civil rights and social action</td>
<td>16</td>
<td>5.2</td>
</tr>
<tr>
<td>Community improvement</td>
<td>51</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>314</td>
<td>100</td>
</tr>
</tbody>
</table>
1 being *not at all effective* and 5 being *completely effective*. Our dependent variable is comparable to the Likert-type responses used in other quantitative studies of performance information use (Moynihan & Ingraham, 2004; Moynihan & Pandey, 2005 [AQ: 2]).

The key independent variable of interest is reliance on a *range of performance measures*. This measure was constructed from six items in the survey asking, “How much do you rely on each of the following to measure the performance of your organization?” (1) workload and output indicators, (2) unit cost and efficiency measures, (3) outcomes and effectiveness measures, (4) client or customer satisfaction, (5) external audits, and 6) industry standards and benchmarks. Reliance on each of these forms of performance measurement is measured on a 5-point scale from 0 to 4 with 0 being *none* and 4 being *high*. These six items were combined into an index measuring organizations’ extent of reliance on a range of performance measures (Chronbach’s alpha = .773). These six items do not constitute an exhaustive list of the performance measurement methods used by nonprofits, but they were chosen for inclusion in this study because they represent some of the most common parameters (Carman, 2007; Morley et al., 2001), and they replicate measures used in previous studies (Poister & Streib, 1999).

In addition to performance measurement, we test seven other independent variables in our model of strategic decision making. Previous research has found that performance information use increases in organizations that are more professionalized (Moynihan & Ingraham, 2004). We include two measures of professionalism: executive director’s education level, and organizational size (total budget), and we would expect both to have a positive effect on effectiveness of strategic decision making. Executive director’s education level is measured through a survey question asking respondents to indicate their highest level of education, and these were coded as 0 = *high school or less*, 1 = *some college*, 2 = *bachelor’s degree*, 3 = *master’s degree*, 4 = *doctoral degree* or *juris doctorate*. Either the number of full-time staff or total budget can be used as measure of nonprofit organizational size (Salamon, 1999), and we chose the latter to be consistent with recent research on nonprofits’ use of performance measures (Carman, 2009). Following Carman we use total budget as reported on the agency’s most recent 990 [AQ: 3] as a measure of organizational size.

We also account for two other aspects of leadership that may have a positive effect on strategic decision making. The first is functional training of the executive director. Although the executive ranks of social service agencies have historically been populated by individuals trained in social work or the human services (Smith & Lipsky, 1993), these positions are increasingly being filled by persons with business degrees (Ott, 2001). Strategy is a core value of the business discipline, and educational programs emphasize it heavily throughout courses on management, planning, budgeting, and decision making. Therefore, we include a dummy variable in the model measuring whether the executive director is business trained (0 = *no, 1 = yes*), with the expectation that nonprofits led by directors with business training will report higher levels of strategic decision making.
The second measure of leadership pertains to governance. Herman and Renz (1998) examined less effective and very effective nonprofit organizations and found a strong correlation between organizational effectiveness and the overall judgments of board effectiveness. In reviewing the literature on organizational effectiveness, these authors later noted that nonprofits that are highly effective are more likely to use more sophisticated management tools within their agencies (Herman & Renz, 2008). Boards are the policy making and oversight body of nonprofit organizations, and their influence on organizational decision making is often substantial (Green & Griesinger, 1996). We expect that nonprofits with more effective governance will be more effective at making strategic decisions. We created a measure of governance effectiveness relying on three items from the survey: (1) The board and executive director have a good working relationship, (2) the board provides sufficient direction and overall leadership for the organization, and (3) the board has difficulty making clear decisions (reversed). Each of these items were measured on a scale of 1 to 5 with 1 being strongly disagree and 5 being strongly agree. These three items were combined (Cronbach’s alpha = .672) to measure governance effectiveness.

Previous research suggests that competition in the resource environment may also affect strategic decision making. For example, LeRoux and Goerdel (2009) found that high levels of competition encourage nonprofit managers to focus on the present-day task of preserving their reputation through providing quality services, rather than devote organizational resources to activities that may help organizations further their mission in the long run. Therefore, we expect that nonprofits situated in a highly competitive environment might be less effective in making strategic decisions. We measure market competition as the number of nonprofits in the metro area with the same NTEE (National Taxonomy of Exempt Entities) code as the respondent organization.

Organizations with diverse revenue portfolios may also be more effective at making strategic decisions. Recent evidence has shown that funding diversity promotes organizational stability and longevity among nonprofits (Carroll & Stater, 2009). Revenue diversification permits organizations a degree of autonomy, the freedom to take some risks, and the ability to make decisions in the context of the “big picture.” On the other hand, funding diversity may affect strategic decision making because organizational leaders are too constrained by daily challenges of reconciling the diverse expectations of their multiple stakeholders or principals (Romzek, in press). We measure funding diversity as the number of different sources from which the organization receives at least 15% of its funding. Finally, we control for the age of organization on the basis of previous research (Carman, 2009) with the expectation that older, more well-established organizations will have greater effectiveness in strategic decision making. Descriptive statistics for all model variables are reported in Table 2.

**Method of Analysis**

As our dependent variable is measured on an ordinal scale, we use ordered probit regression, which is the most appropriate method of estimation for single-item variables with
responses measured on a Likert-type scale (Long & Freese, 2006). In our model of strategic decision making, observations are clustered by state, and robust standard errors are used to correct for heteroskedasticity that is common in cross-sectional analyses. For ease of interpretation, we used Stata’s listcoef function which rescales $y^*$ to compute standardized coefficients (Long & Freese, 2006). The $y^*$ standardized coefficients are reported, along with fully standardized coefficients $B(\bar{y})$ that allow us to examine the marginal effects of each independent variable.

**Findings**

The purpose of our analysis is to assess the extent of performance information use among nonprofit agencies. Does reliance on a range of performance measures increase effectiveness of strategic decision making within nonprofit human service organizations? The results from the ordered probit analysis in Table 3 help to shed some light on this question.
The results suggest that nonprofit managers indeed appear to use performance information in making decisions. We find that for each unit increase in the range of performance measures index, effectiveness of strategic decision making is expected to increase by 0.04 standard deviations \((p < .01)\), holding other variables constant. Consistent with our expectation, governance effectiveness also promotes strategic decision making. For each unit increase in the governance effectiveness, strategic decision making is predicted to increase by 0.15 standard deviations \((p < .01)\). Other factors that have a positive influence on strategic decision making are executive director’s education level \((p < .10)\) and funding diversity \((p < .01)\). As our hypothesis suggested, competition in the environment has a harmful effect on strategic decision making \((p < .01)\). The remaining variables fail to achieve statistical significance.

Examining the marginal effects provides some additional insights into the factors that promote strategic decision making. Interestingly, governance effectiveness has the largest marginal effect \((0.34)\) on effectiveness of strategic decision making, followed by reliance on a range of performance measures \((0.24)\). In other words, each standard deviation increase in governance effectiveness increases the effectiveness of strategic decision making by 0.34, and each standard deviation increase in reliance on a range of performance measures (index) increases the effectiveness of strategic decision making by 0.24. Executive director’s education level has the third largest marginal effect \((0.16)\), whereas funding diversity and competition have the smallest marginal effects, although the former is positive \((0.12)\) and the latter has a negative effect \((-0.12)\).

Though our analysis confirmed that greater reliance on a range of performance measures increases the effectiveness of strategic decision making, it masks the impact that specific types of performance measures may have on this activity. To examine these effects, we took apart our index and estimated the influence that each of the six types of performance measure has on strategic decision making while controlling for the same factors as the last analysis. The results from this analysis are displayed in Table 4.

As the dependent variable measured is the same across all models, all models are estimated using ordered probit regression. In the interest of space, however, we report only the marginal effects and their levels of statistical significance in this table. As the results in Table 4 indicate, four of the six types of performance measures examined in this study produce a statistically significant increase on the effectiveness of strategic decision making. Information collected on unit costs and efficiency measures produces the largest discrete change \((0.24)\) in effectiveness of strategic decision making \((p < .01)\). To further interpret, each standard deviation increase in nonprofits’ reliance on unit cost and efficiency measures increases the predicted effectiveness of strategic decision making by 0.24. Information generated by outcomes and effectiveness measures has the second largest impact on strategic decision making \((0.17, p < .01)\), followed by workload and output indicators \((0.16, p < .05)\). Information that is produced through external audits has the smallest impact on strategic decision making \((0.14, p < .05)\). Most of the control variables that were statistically significant in Table 3 have consistent effects across the six models reported in Table 4, and in the predicted directions, suggesting that our model of strategic decision making is fairly reliable.
Table 4. Ordered Probit Models Examining Effects of Various Performance Measures on Strategic Decision Making

<table>
<thead>
<tr>
<th>Performance measures</th>
<th>B(xy)</th>
<th>B(xy)</th>
<th>B(xy)</th>
<th>B(xy)</th>
<th>B(xy)</th>
<th>B(xy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workload and output indicators</td>
<td>.16**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit cost and efficiency measures</td>
<td></td>
<td>.24***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outcomes and effectiveness measures</td>
<td></td>
<td></td>
<td>.17***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client or customer satisfaction</td>
<td></td>
<td></td>
<td></td>
<td>.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External audits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.14***</td>
<td></td>
</tr>
<tr>
<td>Industry standards and benchmarks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.11</td>
</tr>
<tr>
<td>Governance effectiveness</td>
<td>.33***</td>
<td>.31***</td>
<td>.32***</td>
<td>.35***</td>
<td>.34***</td>
<td>.36***</td>
</tr>
<tr>
<td>Executive director business trained</td>
<td>-.05</td>
<td>-.08</td>
<td>-.05</td>
<td>-.04</td>
<td>-.04</td>
<td>-.06</td>
</tr>
<tr>
<td>Executive director’s education level</td>
<td>.15*</td>
<td>.16*</td>
<td>.18**</td>
<td>.16**</td>
<td>.17**</td>
<td>.17**</td>
</tr>
<tr>
<td>Competition</td>
<td>-.11**</td>
<td>-.10*</td>
<td>-.00*</td>
<td>-.08</td>
<td>-.10*</td>
<td>-.010</td>
</tr>
<tr>
<td>Age</td>
<td>.00</td>
<td>-.02</td>
<td>-.01</td>
<td>-.01</td>
<td>-.02</td>
<td>-.01</td>
</tr>
<tr>
<td>Budget (log)</td>
<td>-.03</td>
<td>.03</td>
<td>-.08</td>
<td>.07**</td>
<td>.04</td>
<td>.05</td>
</tr>
<tr>
<td>Funding diversity</td>
<td>.10**</td>
<td>.12**</td>
<td>.10**</td>
<td>.11**</td>
<td>.12**</td>
<td>.12**</td>
</tr>
<tr>
<td>N</td>
<td>267</td>
<td>262</td>
<td>265</td>
<td>265</td>
<td>265</td>
<td>264</td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>1259.07***</td>
<td>340.39***</td>
<td>239.42***</td>
<td>368.41***</td>
<td>343.13***</td>
<td>364.87***</td>
</tr>
<tr>
<td>Pseudo $R^2$</td>
<td>.091</td>
<td>.100</td>
<td>.092</td>
<td>.081</td>
<td>.086</td>
<td>.087</td>
</tr>
</tbody>
</table>

Note: Robust standard errors are used to correct for heteroskedasticity; B(xy) represents fully standardized coefficients.
*p < .10, **p < .05, ***p < .01.
However, two of the individual types of performance measurement fail to achieve statistical significance: client or customer satisfaction measures, and industry standards and benchmarks. This null finding suggests that information generated through client or customer satisfaction feedback mechanisms is largely overlooked by nonprofit managers in the process of strategic decision making. This is particularly surprising given that social service agencies have largely shifted their orientation toward clients as “consumers of services” over the past two decades (Pollitt, Birchall, & Putman, 1998; Simmons & Birchall, 2005). On the other hand, many consumers of social services are not consumers in the economic sense because their services are paid for by a third party such as Medicare, Medicaid, or some other funding source. When clients are paying customers, nonprofits have an incentive to become more responsive to their input, but when they are not, nonprofit leaders may allocate more of their time and attention to ensuring responsiveness to those entities that do pay (LeRoux, 2009). The lack of influence that industry standards and benchmarks have on strategic decision making is also an unexpected finding. Industry standards for some sectors such as child welfare and mental health for service variables such as timeliness, length of stay in treatment, and so on are determined at the state level and subject to change with new leadership. It is possible that nonprofit leaders view these too much as moving targets to rely on them too heavily in making strategic decisions. However, more in-depth research is needed to better understand why nonprofit managers find some of these performance measures more useful than others in making strategic decisions.

Conclusions and Implications

The purpose of our study was to examine the extent to which nonprofits’ use of various performance measures promotes strategic decision making by organizational leaders. We find positive tendencies for performance information use by nonprofit managers. Reliance on a range of performance measures increases nonprofits’ level of effectiveness in strategic decision making, as do several specific types of performance measures including workload and output measures, unit cost and efficiency measures, outcomes and effectiveness measures, and external audits. Future studies might examine whether other types of performance measures improve strategic decision making and to what extent.

This analysis also sheds some light on other factors, including performance measurement, which shape nonprofits’ capacity for strategic decision making. An effective governance body and a more highly educated executive director are organizational assets that can increase nonprofits’ effectiveness at strategic decision making. Both of these are intuitive. Executive directors may acquire skills related to decision making and facilitating consensus through their academic training, so the more education they have, the more likely these skills will be put to use. When nonprofits are governed by boards that provide sufficient direction and overall leadership for the organization, have a good working relationship with the executive director, and are able to make clear decisions, it is only natural that they will be more effective at strategic decision
making. On the other hand, high levels of competition affect the capacity of nonprofits to make strategic decisions in a negative way. Nonprofits embedded in highly competitive environments may devote most of their administrative energies to more pressing activities such as day-to-day service delivery, at the expense of other fundamental tasks such as planning and decision making.

Though our model of strategic decision making produced some new insights and offers some avenues for further investigation, our study is not without limitations. Though there are benefits of a large-scale quantitative study, there are also drawbacks. Perhaps most obvious is the fact that a survey approach relies on self-reported information, which captures respondents' perceptions as opposed to directly observed behavior or objective data. There are many nuances to the process and practice of strategic decision making within an organization, including how often it occurs, who is involved, and the scope of issues that are decided upon. There are similar nuances for the process of performance measurement that cannot be captured in a survey. Qualitative research is needed, including interviews with nonprofit managers, to fully discern how performance information is used to make organizational decisions. Ideally, future studies would combine quantitative and qualitative approaches. Another limitation is that we collected data on a somewhat limited range of the methods nonprofits use to measure performance. Future studies should consider the effects that other performance measurement methods have on decision making and seek to identify which ones nonprofit managers find most useful for the purposes of strategic management (see, for other forms of performance measurement used by nonprofits, Carman, 2007; Carman & Fredericks, 2008).

Despite these limitations, this study moves us one step further in what we know about the use of performance information by nonprofit human service organizations. Performance measurement can have significant benefits for nonprofits. As Halachmi (1999) has argued, nonprofits can use performance measurements not only to report achievements but also to ensure their survival and success within the sector. Performance measurement can help nonprofits to better manage their programs, services, and resources, in their marketing efforts; in strengthening their relationship with stakeholders; and in conveying their record of performance to current and prospective clients, donors, volunteers, and board members. Yet these benefits can only be realized if nonprofit leaders are committed to using the data generated by performance measurement systems to make decisions about how to better manage programs and allocate resources. As this study suggests, nonprofits that rely on a range of performance measures and also have an effective governance body should be well positioned to strategically manage and make decisions in the best interest of their organization and its stakeholders.

Acknowledgment

Several graduate and undergraduate students deserve thanks for research assistance on this project, including Megan Dodge, Dustin Swartz, Matthew McGinley, and Michael McRoy. We also wish to thank two anonymous reviewers for their helpful comments and suggestions.
Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interests with respect to the authorship and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research and/or authorship of this article: This study was funded by a research grant from the University of Kansas Center for Research.

Notes

1. Organizations in the following 16 U.S. metropolitan statistical areas were Atlanta, Baltimore, Buffalo, Cincinnati, Cleveland, Detroit, El Paso, Memphis, Miami, Milwaukee, New Orleans, Newark, Philadelphia, Pittsburgh, St. Louis, and Kansas City. These areas were selected to provide geographic variation and for their large concentrations of nonprofit organizations.

2. The questionnaire was too lengthy to include as an appendix. Please contact the primary author for a copy.

3. As social service organizations were the population of interest in this study, 10% samples of the following NTEE codes were drawn from each metropolitan area: F (mental health and crisis intervention), I (legal services), J (employment and job training), K (food programs), L (housing and shelter), P (human services) R (social action), and S (community improvement).

4. The survey was pretested by two nonprofit executive directors, one deputy director, and two senior academics with extensive survey research experience. The questionnaire was revised on the basis of feedback from the initial pre-testing process and then pretested again before the survey was finalized and administered.

5. In a few instances, the questionnaire was completed by another top agency administrator such as a vice president or chief operating officer, responding on behalf of the executive director.

6. Response rates for each category were as follows: F (mental health and crisis intervention) = 50.7%, I (legal services) = 57.8%, J (employment and job training) = 62.5%, K (food programs) = 62.2%, L (housing and shelter) = 58.9%, P (human services) = 48.3%, R (social action) = 57.1%, and S (community improvement) = 39%.

References


Bios

**Kelly LeRoux** is an assistant professor in the Department of Public Administration at the University of Kansas. Her research interests include government–nonprofit relationships, service contracting, municipal service delivery, and metropolitan governance. She is the editor of “Service Contracting: A Local Government Guide,” by ICMA Press.

**Nathaniel S. Wright** is a doctoral student in the Department of Public Administration at the University of Kansas, Lawrence, Kansas. His areas of research are nonprofit management and the role of community development corporations in urban neighborhoods.