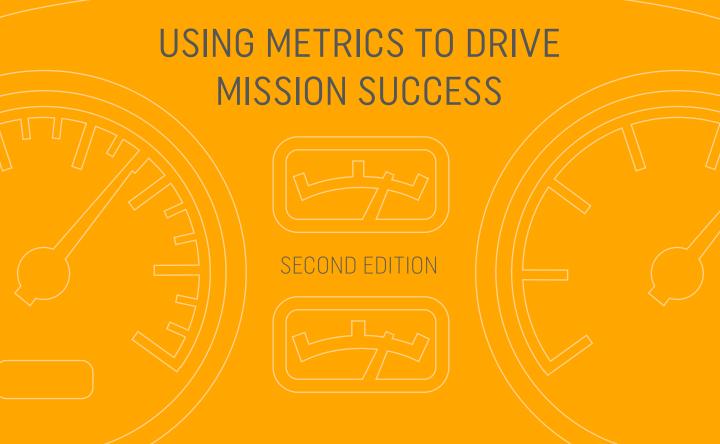
# LAWRENCE BUTLER

# THE NONPROFIT DASHBOARD



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### INTRODUCTION

It's been said that "if you don't know where you're going, any road will take you there." But knowing the destination — even having a road map — while essential, is not enough. What if there were no road signs, speed and fuel gauges, and warning light indicators? No external signals to indicate progress along a chosen path and internal signals to keep the driver aware of the vehicle's speed, condition, and performance?

Like the instrument panel on the dashboard of an automobile, dashboard reports present a quick, comprehensible overview of an organization's status and overall direction. Instead of speed, RPM, and engine temperature, the dashboard typically displays preselected, critical measures of organizational performance and mission effectiveness. With dashboard reports that present key indicators in consistent formats, board members can readily spot changes and trends in these measurements. And like the dashboard inside a car, these reports often display the equivalent of warning lights that only flare up when there is an impending problem or when certain variables stray outside of predetermined limits.

### WHY CREATE A DASHBOARD?

Board members and senior staff may wonder why they need another report adding to the already overwhelming array of documents disseminated to the board in thick meeting binders, attached to e-mail messages, and on Web sites or intranets. What does a dashboard report give them that any number of other reporting formats don't already accomplish?

The answer, of course, is that governing boards do not need more reports or more information. What they do need is more meaning — and the dashboard report is one practical tool for conveying meaning directly and succinctly to hard-pressed board members. The dashboard report helps nonprofit leaders focus their attention on what matters most in their organizations, and, in doing so, gain greater insight and ascribe greater meaning to other available data. The learning opportunities gained from defining key performance indicators and tracking, reviewing, and evaluating them allows nonprofit leaders to improve and further fulfill the mission of their organizations. Learning is the major driver for this kind of information — why do it if not to learn from it, act upon it, and, ultimately, make better decisions about the organization's future?

At a time when governance has come under increased scrutiny by the media, regulatory agencies, and the public at large, the board's ability to quickly access critical outcome and performance information is being encouraged as never before. More and more, the board's information resources are being viewed as vital to effective governance — from general oversight and monitoring of performance, to raising red flags and making strategic decisions. And yet, board members claim that as they receive more data than they can handle, they continue to receive less meaningful information.

Dashboards also provide a great opportunity for partnership between board and staff. Creating these reports is largely a staff-driven process in support of the board's oversight role. The reports themselves help in maintaining both staff accountability and board focus on overall organizational performance rather than operational detail.

There are at least 10 benefits that boards can gain from using dashboards (which I explore in greater detail in Chapter 4):

- 1. Save time by reviewing highlights.
- 2. Track progress toward goals.
- 3. Understand system dynamics.
- 4. Spot potential problems.
- 5. Identify patterns and anomalies among similar entities.
- 6. Identify patterns and anomalies among diverse factors.
- 7. Expand board member comfort zones.
- 8. Bring all board members up to speed around a shared knowledge base.
- 9. Maintain a governance perspective.
- 10. Reinforce board oversight by linking to structure and process.

### **ABOUT THIS BOOK**

In updating the 2007 edition of this book, I recognize that this particular reporting format is no longer the novelty for nonprofit organizations it may have been five years ago. Dashboards, it seems, have caught on just about everywhere. Most notably, so-called "digital dashboards" have proliferated on the Web where the 24/7 accessibility and highly interactive nature of this medium enables users whenever and wherever to view the current dashboard and selectively click on hyperlinks, pop-ups, and drop-down menus to drill down to more detailed layers of data.

Digital dashboards permit huge amounts of data to be drawn from multiple sources and instantly pulled together in a high-level overview of the enterprise. What's more, these data can be continuously updated. The savings in time and effort on the part of the user (not to mention the savings in paper and trees) is astonishing.

And yet, as I considered how best to revise my earlier treatment of dashboards. I kept returning to one important reality: Most board members of nonprofit organizations are not senior managers of complex, multiproduct, multidivisional corporations for whom dashboards have become essential executive reporting and control tools. The needs of nonprofit board members have not changed in five years. Their fiduciary and governance responsibilities remain the same. They still need to understand how well their organizations are performing along key dimensions that are ultimately driven by mission, values, and institutional aspirations.

So, other than the promise of greater accessibility and interactivity offered by digital dashboards, what has really changed for boards of trustees and other members of nonprofit governing boards? In my view, very little. The key to effective dashboards is what it has always been — knowing what to measure and why. To be sure, those organizations with the technical resources to develop digital dashboards for presentation online will be able to offer their boards the benefits of greater accessibility and interactivity; but they will not necessarily be able offer them greater insight and understanding. In this regard, even organizations that continue to use paper copies and three ring binders are capable of deriving the true benefits of dashboards — namely, the benefits of a thoughtful process of identifying what should be measured in order to better understand whether and to what degree the nonprofit enterprise is achieving its goals.

Chapter 1 sets the stage by orienting those boards that are considering dashboards to help them better understand how this reporting technique fits within the context of effective governance practice and the cycle of program planning and evaluation. In Chapter 2, I tackle the central task of any dashboard development effort determining what to measure. Toward that end, I suggest several ways boards in collaboration with staff might define the kinds of performance metrics that appear on the dashboard. Chapter 3 is intended primarily to help the board and staff to design dashboards that have real communicative power. In Chapter 4, I discuss how dashboards can be most effectively used in the context of board meetings and decision making. Finally, in Chapter 5, I describe a process that board and staff may undertake to develop an ongoing dashboard capability as part of a broader board information enhancement program.

Remember: No two organizations are exactly alike. The information an organization chooses to display in a dashboard should reflect its own particular strategic plan, goals, and mission. Each organization that undertakes this process needs to pick and choose the key indicators, design format, and board-staff collaboration process that

works best for its particular circumstances. This book is not intended to be a one-size-fits-all instruction book that gives a nonprofit an exact blueprint for developing, designing, and maintaining a dashboard reporting system. It does, however, present the options, offer detailed illustrations and considerations, and provide a template from which to start.

### USING THE BONUS DASHBOARD GENERATOR MATERIAL

To help organizations get started with their own dashboard reports, the downloadable bonus material includes dashboard generator files, using Microsoft® Excel, with templates for creating customizable dashboards and how-to instructions for working with the files (also see the Dashboard Generator Instructions beginning on page 63).

Also included in the bonus material is a survey for creating a baseline assessment of how the board views the kind of information it currently receives and the way in which it receives it. The information gathered is intended to help staff identify how it can communicate more effectively with the board and assist in developing the dashboard (see Chapter 5 for more detail).

The bonus material may be found at: https://boardsource.org/nonprofit-dashboard-content/ Enter password dc\_356\_284

### **CHAPTER 1**

## **Understanding the Role of Dashboards**

Dashboards, like any report format, are limited in what they can accomplish. To provide meaning and insight, a dashboard report needs to be understood and used within the context of effective governance practice and organizational planning and evaluation.

### WHAT ARE DASHBOARDS?

Dashboards are really nothing more than user-friendly tools for displaying performance measures. These measures, whether in the form of indicators, variables, or ratios, are not the end product of organizational or program evaluation but the top layer — the high-level view that points board and staff to where they might need to drill down into a more detailed, refined understanding of organizational and program effectiveness. They provide a learning opportunity for both board and staff: What is working well? What went wrong? How can the organization improve and further fulfill its mission? Dashboards are not only a powerful tool for staff to communicate important information to the board, but also for alerting staff to internal or external changes that could affect the way programs are administered.

Again, dashboards contain several key indicators of organizational performance: measures that demonstrate progress toward a goal and warning lights that only turn on when there is a pending problem. This latter feature allows the board to ignore a great deal of operational information, knowing that it will be alerted if a problem arises that requires attention.

But all the fuel gauges and warning lights in the world can't possibly tell a driver if he or she is on the wrong road. So, there needs to be a methodical process of determining what a governing board really must know in order to gauge whether it is achieving its mission goals and strategic objectives.

### RESULTS-ORIENTED GOVERNANCE

The connection between thorough planning and successful boards has been investigated and well established by governance experts. Dashboards may not seem, at first glance, to be crucial — but organizations have found that creating dashboards profoundly and directly affects performance. Indeed, in the BoardSource book *The Source: Twelve Principles of Governance That Power Exceptional Boards*, Principle 9 states: "Exceptional boards are results-oriented. They measure the organization's advancement towards mission and evaluate the performance of major programs and services." <sup>1</sup>

The book goes on to say that while most responsible boards monitor organizational performance by reviewing year-end financial reports and programmatic progress, truly exceptional boards measure overall efficiency, effectiveness, and impact. Board and staff need to agree on critical indicators that flow from the organization's mission, vision, and strategic priorities in addition to consideration of the community's needs, the work of comparable organizations, and the organization's operating environment. Exceptional boards routinely monitor progress by investing in the thoughtful development of key indicators and in the organizational infrastructure to report on them. Together, board and staff use these indicators to identify early successes so they may be maximized and potential problems so they can be addressed before they escalate.

# PLANNING AND EVALUATION: WHERE DOES A DASHBOARD FIT IN?

In *The Nonprofit Board's Role in Mission, Planning, and Evaluation, Second Edition*, the connection between strategic planning and evaluation is very clear:

Strategic planning allows the board to measure whether (or the extent to which) the organization has been effective in accomplishing its mission. It offers a road map and benchmarks to measure organizational effectiveness because the performance measurements identified through strategic planning are key indicators of organizational performance.<sup>2</sup>

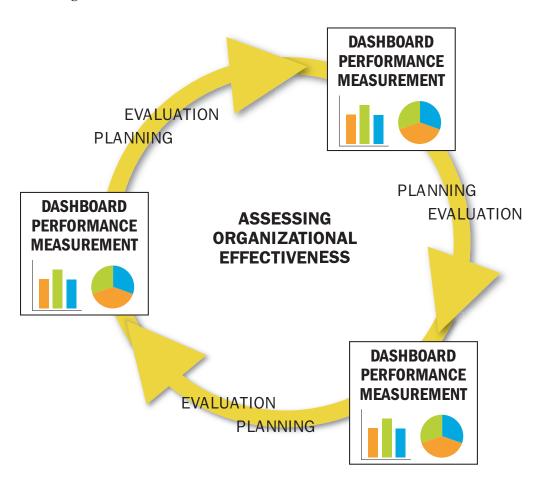
The authors note that "many organizations do not include performance measures or evaluative components in their strategic plans, but some choose to do so to enhance the organization's ability to successfully implement the plan." For each strategic goal and accompanying objectives, the authors emphasize that the organization needs to define what success would look like if they were achieved. Or, to put it another way: "A strategic plan ultimately determines the design of an organization's performance measures."

<sup>&</sup>lt;sup>1</sup> The Source: Twelve Principles of Governance That Power Exceptional Boards. Washington, DC: BoardSource, 2005.

<sup>&</sup>lt;sup>2</sup> Grace, Kay Sprinkel, Amy McClellan and John A. Yankey. *The Nonprofit Board's Role in Mission, Planning, and Evaluation, Second Edition*. Washington, DC: BoardSource, 2009.

Figure 1 below, adapted from The Nonprofit Board's Role in Mission, Planning, and Evaluation (2009), portrays the ongoing, alternating sequence of planning and evaluation in the assessment of organizational effectiveness over time. Performance measurement is essential for each round of evaluation to take place. And it is within this performance measurement module that dashboards reside. Here, dashboard reporting can be seen as an integral part of the cycle of organizational or program evaluation and assessment.

Figure 1. Program Planning and Performance Evaluation Cycle



### **CHAPTER 2**

# **Defining Dashboard Metrics**

If there is one key takeaway from this book, it is that the real value of dashboards is in the thinking and discussing that boards do before beginning to create the dashboard. It is in deciding what to measure — not what the dashboard looks like — that the whole exercise proves its value to the organization.

Flashy graphic displays in a dashboard format that highlight issues of tactical or secondary consequence would only succeed in focusing the board's attention on the wrong things. The goal is focusing the board's attention on the right things.

The reality is that there is no single set of right things to measure for every organization and for every board; each board must choose what's best in light of its circumstances. Where an organization is in its lifecycle may have a lot to do with what the board considers important to measure. A founding board that is establishing a new organization may have a set of concerns related to institutional establishment, formation, and initial survival. The board of an organization with a deeper history may want to assess its impact on a clientele or population group. Issues of outcome may be the primary focus for those organizations whose purpose is the promotion of particular, definable changes in the behavior, condition, or status of a population.

Organizations with more amorphous goals that are less easily assessed may choose to focus on the quality of their services and the satisfaction levels of those they serve. And, because all boards have clear fiduciary obligations regardless of their institutional purpose or lifecycle stage, there may well be a common set of measures that assure any board of the financial solvency and ongoing viability of the enterprise.

### **DECIDING WHAT TO MEASURE**

So, how can boards go about choosing the key performance indicators that will be featured on its dashboard? Six approaches to defining dashboard metrics have proven to be useful:

- 1. Outcomes
- 2. Mission as spine
- 3. Strategic initiatives
- 4. Drivers of success
- 5. Risk factors
- 6. Services and resources

These approaches are neither exhaustive nor mutually exclusive. Each offers a way to systematically identify performance indicators that are high-level in terms of their significance for institutional (or program) success, informative as to key aspects of organizational performance, and sensitive to critical changes, especially negative changes. Staff leadership, in collaboration with the board, should feel free to choose among these approaches and, if considered appropriate to their particular organizational experience and needs, combine features of these different approaches in moving toward a manageable set of meaningful dashboard metrics.

### **OUTCOMES**

Any organization with a mission that aims to produce a societal benefit, especially one that seeks through specific programs to produce some sort of change in a defined population, needs to address the question of how it should measure its success by first defining the beneficial changes it seeks to achieve (outcomes). As the United Way of America Web site characterizes it: "Outcomes are not how many worms the bird feeds its young, but how well the fledgling flies."<sup>3</sup>

Outcome measurement is the gold standard when it comes to defining dashboard metrics because it comes closest to measuring a program or institution's ultimate effectiveness in pursuit of its mission. In *Measuring Program Outcomes: A Practical Approach*, United Way of America defines outcome measurement as the "regular systematic tracking of the extent to which program participants experience the benefits or changes intended." Some examples of outcomes are new knowledge, increased skills, changed attitudes or values, improved condition, or altered status.

Measuring Program Outcomes: A Practical Approach. Alexandria, VA: United Way of America, 1996.

Increasingly, regulatory, accrediting, and funding agencies, as well as private foundations and individual donors, are insisting that governing boards of charitable and social service agencies and even institutions with more broadly defined health, educational, and cultural missions demonstrate that they have a disciplined process of outcome definition and measurement in place. Committing to outcome measurement requires a clear and robust "theory of change" to articulate the desired changes that result from the organization's activities in relation to its audiences, clientele, or participants (see Suggested Resources for more information on the "theory of change").

Defining outcomes, however, can prove difficult in practice, especially for those organizations with broad missions. Even if a relatively amorphous outcome within, say, a population of homeless clients who are provided free meals — an outcome such as "lives saved through improved nourishment" — were measurable via followup tracking of these clients, it would be impossible to gauge precisely the extent to which that particular homeless shelter was responsible for that outcome.

Fortunately, there are other program attributes that can be measured in the course of assessing an organization's overall efficiency, productivity, fiscal responsibility, and operational effectiveness. While less definitive than outcomes, they can provide useful evaluative insights. In decreasing order of utility, they are

### • Outputs

Outputs classify the direct products of program activities. For example: number of classes taught, number of counseling sessions conducted, number of educational materials distributed, hours of service delivered, or number of participants served.

### • Activities

Activities describe what the program does with inputs to fulfill its mission. For instance: feed and shelter homeless families, provide job training, educate the public about signs of child abuse, counsel pregnant women, or create mentoring relationships for youth.

### • Inputs

Inputs are defined by the resources that are dedicated to or consumed by the program, such as money, staff and staff time, volunteers and volunteer time, facilities, and equipment and supplies.

In short, seek to define true outcomes. It is well worth making the effort, as doing so helps to clarify the organization's purposes and sharpen its methods. If outcome measurement proves impossible, however, measure outputs, activities, and/or inputs.

### **MISSION AS SPINE**

Another approach to defining dashboard metrics begins with the organization's mission. Think of the mission as the spine of the enterprise — the essential, underlying framework of values and purpose that gives it shape and resiliency. By recasting the mission as a set of phrases that speak to the organization's purposes, audiences (or populations served), methods, and desired outcomes, this set of phrases becomes the spine upon which relevant performance indicators can be hung. Even complex mission statements can be broken down and key mission themes identified.

Figure 2 is an example of the mission as spine for a natural history museum. The mission statement happens to be a single sentence: "The Sample Museum of Natural History tells the story of our planet and its inhabitants to families and students of all ages through artifacts, specimens, and programs that reveal the process of scientific research and discovery, leading to an appreciation of how scientists answer current questions while raising new ones." When broken into its component phrases, it becomes possible to define performance indicators and metrics that speak to the institution's success at fulfilling its mission imperatives of purpose, audience, methods, and outcomes.

Figure 2. Linking Performance Indicators to a Mission Statement

Mission Statement					
Purpose	Audience	Methods	Outcomes		
The Sample Museum of Natural History tells the story of our planet and its inhabitants	to families and students of all ages	through artifacts, specimens, and programs that reveal the process of scientific research and discovery	leading to an appreciation of how scientists answer current questions while raising new ones.		
Performance Indicators					
Number of exhibits and programs that use stories and engaging narratives.  Diversity of human cultures and other living species featured in these stories.	Percentage of admissions, memberships, and other participants who are families and students, by age.	Involvement of scientists in presenting their research agenda/ results.  Use of collection of specimens and artifacts for educational purposes.	Visitor responses re: lessons learned about the scientific method of inquiry and before/after appreciation of scientific research.		

Even if their mission statements aren't as specific or concise as this one, most organizations should be able to address each of these four mission imperatives. If not found in the actual mission statement, the pertinent language typically exists in fundraising and marketing materials. And if the information is not there, then the effort of creating dashboard reports built upon a mission spine can itself be the catalyst for bringing clarity to the organization's mission.

### SENDING MISSION SIGNALS

The board's understanding of institutional mission creates a set of predispositions and sensitivities that works like a spotlight shining across a vast information landscape, picking out particular issues for special attention and closer scrutiny. The signals the board sends by aiming that spotlight in certain directions rather than others can be especially powerful in guiding the enterprise toward its mission objectives. In this sense, dashboards are as much about the board informing the organization regarding what it considers of fundamental mission significance, as it is about the staff informing the board about the organization's condition and performance.

The board should try to make broadly stated values and mission more specific and thus more helpful in shaping the performance metrics it receives and, more importantly, the decision making that flows from those metrics. When the board is more specific in defining the terms and expressions that tend to be fuzzy and open to diverse interpretation, it helps make these critically important concepts actionable in the life of the organization. For example, when a college's board states a commitment to "diversity," what does that really mean? Greater specificity around "diversity" might achieved by establishing student mix target levels against which the actual student profile is periodically compared.

How can the board begin to identify the core values and mission of the institution? Governing boards have a special obligation to draw upon primal sources of inspiration and commitment as a way of continually energizing their institutions. The means by which the board explores this realm of values and mission can vary. During one or more dedicated retreats, for example, the board might review a timeline of key historical events and achievements, share personal stories or discuss the institution's traditions and the values of founders and sponsors. Through visioning exercises the board might articulate possible future manifestations of a historical mission and traditional values. All of these techniques can get help clarify mission and values that offer real guidance as to appropriate performance metrics.

### STRATEGIC INITIATIVES

Strategy can be made far more complicated than it needs to be. In its book *Strategic Decision Making: Key Questions and Indicators for Trustees*, the Association of Governing Boards of Universities and Colleges defines strategy for purposes of this discussion:

Strategic issues are... associated with effectiveness in... the few areas which are critical to the success of the institution. The key... for most organizations is to focus their most limited resources — the time of trustees and top administrators — on those issues which really make the difference between success and failure.<sup>4</sup>

When the board, in collaboration with the chief executive and staff, has compiled the set of strategic issues deemed most relevant to the organization, the question arises as to how to translate a concern about any one of these issues into a means of assessing the organization's effectiveness, performance, or status in relation to that issue.

This process of translating concern about a strategic issue into a dashboard indicator is illustrated in Figure 3. In this case, a college's board is concerned about how a declining applicant pool might affect the institution's ability to maintain its selectivity standards.

<sup>&</sup>lt;sup>4</sup> Frances, Carol, et al. *Strategic Decision Making: Key Questions and Indicators for Trustees.* Washington, DC: Association of Governing Boards of Universities and Colleges, 1987.

Figure 3. Linking Key Indicators to a Strategic Issue

STRATEGIC ISSUE: INFLUENCING THE SELECTIVITY OF THE INSTITUTION				
Questions	Key Indicators			
What is the image of the institution?	Self-selection among applicants			
How popular is the institution among potential students?	Popularity index (number of applicants per matriculants freshmen or transfers)			
How strong is the drawing power of the institution on students who have applied?	<ul> <li>Admission drawing power index (matriculants as percentage of admitted freshmen and transfers)</li> <li>Surveys of students who decline admission</li> </ul>			
How successful is the institution in retaining students through graduation?	Retention index (percentage of freshmen who graduate)			
What would be the impact on the applicant pool of changing student selectivity?	Projected number of qualified applicants based on SAT or ACT cutoff scores			
What would be the impact on incoming student quality of more (or fewer) matriculants?	Projected SATs or ACTs of students based on different enrollments			
Will the image of the institution help or hinder the recruitment of desired students?	Image studies among potential and random students			
How effective are the institution's recruitment materials and plans in stimulating applications and matriculations?	Communications audits of recruitment materials and plans			
Adapted from Strategic Decision Making: Key Questions and Indicators for Trustees by Carol Frances et al.				

Adapted from Strategic Decision Making: Key Questions and Indicators for Trustees by Carol Frances et al. Washington, DC: Association of Governing Boards of Universities and Colleges, 1987.

This example presents several ways the board might understand the interplay between, say, a decreasing applicant pool and the desire to increase selectivity (by admitting more capable students). In this instance, they may want to use a combination of different types of indicators — some quantitative (popularity and admission drawing power indices) and some qualitative (surveys and image studies). The precise number and combination of indicators needed to ensure effective monitoring of any particular issue will vary with each board's level of concern and the institution's capacity to produce or acquire the requisite information.

If a strategic plan already exists, the major strategic themes, directions, or initiatives identified in the plan can and most likely should define the dashboard metrics. For example, a museum defined a set of dashboard performance indicators based on the strategic initiatives in its strategic plan, as shown in Figure 4.

In the absence of a strategic plan, identifying appropriate dashboard measures will be a challenging effort and may as a result make the creation of a strategic plan a priority for the organization. At minimum, identifying appropriate dashboard measures can help to shape and inform important aspects of an upcoming strategic plan.

Figure 4. Linking Performance Indicators to Strategic Initiative Goals

Strategic Initiative	Goal	Performance Indicator
Build support for the museum.	Increase attendance by 10% per year.  Build membership by 10% per year and move 20% of renewals to higher levels.	Year-to-year changes in attendance Year-to-year changes in total membership and individual categories
Cultivate more diverse audiences.	Build a more diverse staff and board.  Attract new audiences and encourage repeat visitation.	Demographic characteristics and trends on board and staff composition  Visitation by target audiences
Make the museum a forum for different perspectives.	Schedule exhibits and programs that present different views on timely topics.  Encourage visitors to share their perspectives with other visitors and with museum staff.	Presence of visitors interests/viewpoints in exhibits and programs  Use of visitor feedback in newsletter

### DRIVERS OF SUCCESS

An organization may already have identified a set of outcomes, goals, or intermediary activities deemed essential for fulfilling its mission. How best to measure and monitor these drivers of success (sometimes called key performance indicators — KPIs — or critical success factors) would then become the organizing principle of the dashboard design process.

An internship organization (see Figure 5) took this approach by deciding that its effectiveness was largely determined by: a) maximizing the number of placement matches achieved and b) the number of weeks worked by each intern (or "Associate"); and c) minimizing the number of work experiences cut short for various reasons ("Early Ends"). In light of these drivers of success, they designed a dashboard report featuring them.

### RISK FACTORS

The board and senior staff may wish to adopt a more defensive posture and identify those worst-case situations that constitute grave threats to institutional survival or, at least, risk factors negatively affecting organizational success. Indicators of campus security at a college, for example, might call for close monitoring of incidents by frequency and type, not merely because of the liability implications but because of the inordinate damage that even a single unforeseen incident might cause to the institution's image and appeal to prospective students and their parents.

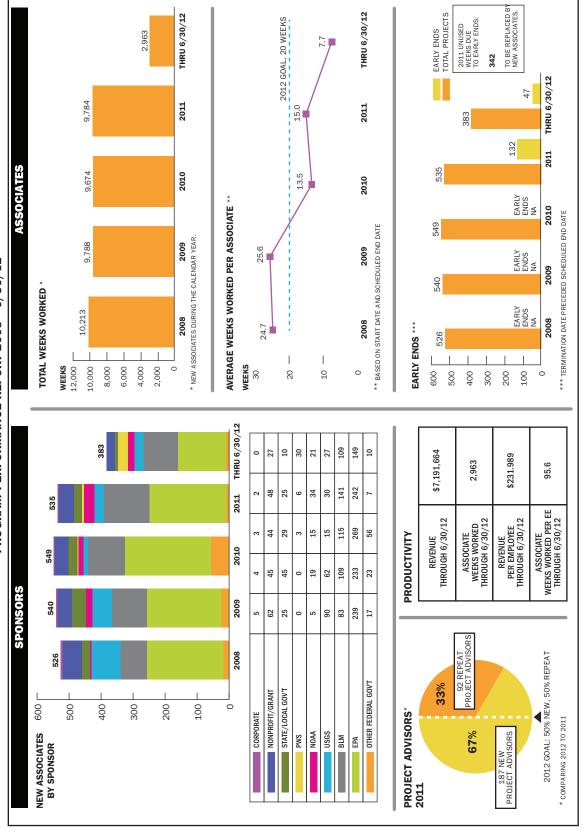
The kinds of risk factors that a board might choose to track, in addition to security and safety issues, include the number and status of pending lawsuits related to employment discrimination, sexual harassment and the like, negative accreditation or regulatory agency findings, and financial risk indicators such as the prospect of default on debt obligations.

One way to identify those risk factors of greatest concern to the board is to ask the members what keeps them awake at night. What would you as a board member least want to be surprised to read about their organization in tomorrow morning's newspaper? And what would they need to track in a dashboard report that would provide the necessary reassurance against such an eventuality?

### SERVICES AND RESOURCES

Another more generic approach to dashboard design is depicted in Figure 6 as a 2x2 matrix. It uses four broad categories related to the institution's services and resources viewed from both an internal and external perspective: internally, service quality and resource management; externally, service responsiveness, and resource acquisition. Placing mission at the center overlapping all four quadrants makes the point that performance measures for each quadrant would be shaped by mission considerations.

Figure 5. A DASHBOARD REFLECTING DRIVERS OF SUCCESS SAMPLE INTERNSHIP PROGRAM PROGRAM PERFORMANCE REPORT 2008 - 6/30/12



**EXTERNAL INTERNAL SERVICE** SERVICE **RESPONSIVENESS QUALITY SERVICES SERVICES** MISSIO **RESOURCES RESOURCES RESOURCE** RESOURCE **ACQUISITION MANAGEMENT** EXTERNAL **INTERNAL** 

Figure 6. The Service-Resource Matrix

### SERVICE RESPONSIVENESS

In responding to the needs of the community, is the organization providing an appropriate mix of services? Service responsiveness might be gauged by client satisfaction scores, student retention rates, or trends in numbers of clients served. A dashboard report that highlights such indicators might not directly measure the services needed in a population, but could help the board understand the degree to which existing services are responsive to existing needs. For example, a museum's mission that calls for enhancing appreciation of the cultural traditions of a particular ethnic community might require continuous tracking of pre- and post-visit perceptions of museum visitors with regard to that ethnic community.

### SERVICE QUALITY

Are services being provided at an acceptable level of quality — acceptable to both the public and to the organization itself? Service quality indicators might include measures of repeat business, complaints, or referrals. Or indicators might explicitly gauge mission accomplishment or outcomes. For example, a nonprofit that stresses the highest standards in service delivery may monitor the quality of its services by sending out client surveys on a regular basis.

### RESOURCE ACQUISITION

How effectively is the organization acquiring the necessary resources? This may cover financial resources (e.g., donations, endowment value) as well as human resources (e.g., filling of key staff vacancies). For instance, a summer camp's mission to reach out to the underprivileged may require the organization to monitor fundraising for scholarships and other forms of support for disadvantaged children.

### RESOURCE MANAGEMENT

Is the organization managing its resources with proper stewardship? Is it efficient in its use of financial resources and fair in its dealings with constituents? These could include a whole range of financial indicators that speak to operational efficiency, budget adherence, and so forth. In the human resources realm, measures such as staff turnover could be monitored. For example, a hospital's mission that highlights the values of human dignity as well as fiscal integrity might call for monitoring of its debt collection procedures to ensure they are both humane and effective, for example, by setting reasonable collection periods and using a sliding payment scale.

Once defined (using some of the methods mentioned above under "Mission as Spine"), these mission imperatives can be translated into performance metrics by using mission as a lens to focus in on the answers to the foregoing questions of: Service Responsiveness, Service Quality, Resource Acquisition, and Resource Management. The 2x2 matrix can also be used as an initial sorting mechanism for reviewing information currently flowing to the board. Mission and values can then be used to prioritize and refine the information in each quadrant.

### DETERMINING WHETHER A METRIC IS GOVERNANCE OR MANAGEMENT RELATED

Because dashboards are merely formats for reporting key performance indicators, they are not the exclusive tools of governing boards. Administrative staff need to monitor the same metrics and doing so via dashboard displays is entirely appropriate. Indeed, were it not for the popularity of executive dashboards in the management realm, the whole notion of applying the concept at the governance level would probably not have gained such traction in recent years.

While conceptually similar to governance dashboards, however, executive and other management-oriented dashboards tend to differ in their focus on the performance of organizational units in addition to the performance of the overall enterprise. And while online, digital dashboards (to be discussed in the next chapter) enable board members to drill down via hyperlinks to greater levels of detail, dashboards that are specifically intended for staff use typically begin with a more detailed, operational perspective than do those specifically designed for board use.

So, where does governance information end and management information begin? There are, of course, no strict rules, as any board at any time might well determine that it should receive data normally distributed to management. Board committees often require more detailed reports in their respective areas of interest. But here are eight questions that a board might want to ask about a particular item of information or dashboard metric to determine its appropriateness for governance as distinct from management use.

### 1. Board's Special Duties

Will this help the board do those things that the board is ultimately responsible for — e.g., fiduciary oversight, selecting its own members, evaluating its own and CEO's performance, high-level fundraising, set and ensure adherence to policy, meeting local, state, and federal legal obligations?

### 2. Progress toward Goals/Outcomes

Will this tell us how, as an institution, we're doing in achieving our enterprise goals or desired outcomes?

### 3. Best Practice Insights

Will this tell us the best practices for achieving desired outcomes — e.g., most effective interventions and ways to leverage our resources?

### 4. Risk Warning

Will this apprise the board of a critical or high-risk problem in time to take corrective action?

### 5. Comparative Context

Will this tell us where our enterprise stands relative to others that are striving to solve the same problems, competing with us for similar resources, or that might be potential allies in a common cause?

### 6. Completeness

Is this premature or partial information that could be misleading?

### 7. Accountability

Will this cause the board to substitute its judgment for that of staff thereby compromising the board's desire to instill accountability or need to assess staff performance?

### 8. Level of Detail

Is this being reported at a level of detail that invites micro-management, misuses the board's scarce time, and/or masks the meaning or significance of the data?

To further assist gauging where on a governance-management continuum an item of information might reside, Figure 7 offers some examples (in each of the four Service/ Resource categories referred to earlier) of different kinds of information located along this continuum. The range shaded in gray suggests an intermediate zone that might be deemed either governance or management-related.

Figure 7. GOVERNANCE-MANAGEMENT INFORMATION

بير	Service Responsiveness	Service Quality	Resource Acquisition	Resource Management
GOVERNANCE	Overall impact on target audience(s)	Pending lawsuits	Progress toward development/fund- raising goals	Actual performance vs. budget
?	Progress toward strategic outreach goals Major initiatives and effectiveness of peer institution(s)	Sexual harrassment, racial and safety incidents  Progress toward quality goals  Constituency feedback survey results	Board's fundraising effectiveness  Comparative pricing studies (tuition, fees etc.)	Auditor's report on financial operations Comparative analysis of investment returns Key staff turnover and vacancies
MANAGEMENT	Interim milestones for specific program Operational details of programs	Interim results of quality studies Operational details of programs	Proposals from vendors Operational details of programs, events	Comparative salary and overhead studies Staff recruitment activities

One of the benefits of periodically asking these questions about what constitutes appropriate information to be included in a governance dashboard is that doing so can help to clarify the working relationship between the board and the CEO/staff. Developing a mutual understanding in advance as to what kinds of information the board expects and does not expect on a routine basis removes the sometimes contentious matter of performance measurement from the realm of the ad hoc, ad hominem, and anecdotal. Because a well-designed dashboard requires mutual agreement as to performance indicators, it can create a kind of "buffer zone" between governance and management. In effect, through the dashboard the board agrees to refrain from micromanagement and staff assures the board that key performance indicators are tracked, reported, and explained.

### **CHAPTER 3**

# **Designing the Dashboard**

Up to this point I have purposely resisted discussing what tends to be regarded as the most interesting aspect of dashboards: their visual appeal. Particularly when they were still relatively novel as decision-support tools, interest in dashboards seemed to be all about data visualization. But now that information dashboards are everywhere and all sorts of display technologies have become accessible online, dashboards as data presentation formats can be more readily appreciated not as an end in themselves but for what they have always really been: a powerful means to a much more important end, namely, helping senior decision makers derive meaning from key performance metrics. It is only after identifying those metrics (the work of Chapter 2) does it make sense to think about how best to visualize them in a dashboard format.

This chapter offers a theory of effective dashboard design and some specific tips for creating dashboards that add meaning to particular aspects of an organization's operations.

### BASIC STYLES OF DASHBOARD REPORTING

These days one is likely to encounter dashboards that combine charts, numerical tables, and text elements in any number of formats; the possibilities are endless. For purposes of our discussion, let's focus on three basic dashboard styles: Scorecard, Graphic, and Digital.

### SCORECARD DASHBOARDS

The "scorecard" style of dashboard reporting is the one most recognizable to those familiar with the evolution of this concept in the for-profit sector (popularized by techniques such as the Balanced Scorecard<sup>5</sup>). Scorecards have become increasingly common in nonprofits, especially in health care institutions where there has long been an awareness of the need to monitor critical variables that have an impact on patient health outcomes.

Figure 8 is an example of a dashboard of this kind. In this case, the board of a hospital receives a quarterly report that summarizes on a single page 40 key performance indicators. The actual year-to-date numbers are presented for each indicator along with predetermined goals or targets and the resulting variances between actual and targeted performance. By scanning the color-coded icons (also signified by shape so that black and white copies of a color-coded report can still be interpreted), the user is able to quickly spot where the hospital is performing positively in relation to the goal (green arrow pointing up), not so well (red arrow pointing down), or where there is some possible early indication of negative performance (yellow diamond).

See Kaplan, Robert S. and David P. Norton. "The Balanced Scorecard: Measures That Drive Performance." *Harvard Business Review*, July 2005.

### Figure 8. Scorecard-Style Dashboard

Sample Medical Center

# Board of Trustees Quarterly Dashboard Year to Date / Second Quarter 2012

FINANCE ADJUSTED DISCHARGES				/ \ _	
ADJUSTED DISCHARGES				( ) = UNFAVORABLE	
	$\Diamond$	5,184	5,236	(52)	BUDGET
CONTROLLABLE COST PER ADJ. DISCHARGE (CMA)*	À	\$ 3,824	\$ 3,905	\$ 81	BUDGET
NET PATIENT REVENUE PER ADJ. DISCHARGE		\$ 6,451	\$ 6,124	\$ 327	BUDGET
NET INCOME		\$ 3,315,979	\$ 2,381,115	\$ 934,864	BUDGET
CORE EARNINGS		\$ 1,080,177	\$ 1,280,667	(\$200,490)	BUDGET
DAYS IN ACCOUNTS RECEIVABLE	_	63.30	58.02		BUDGET
					BUDGET
					BUDGET
		3 378	3 447	(69)	BUDGET
				. ,	BUDGET
	T A				BUDGET
			'		BUDGET
		- / -	-		BUDGET
					BUDGET
			-		
		13,004	11,400	2,404	BUDGET
		00.00/	05.40/	0.40/	DDIOD VEAD
					PRIOR YEAR
					PRIOR YEAR
QUALITY INDEX SCORE	$\rightarrow$	4.25	4.28	(0.03)	PRIOR YEAR LESS THAN 10
WAITING TIME REGISTRATION		80.3%	80.0%	0.3%	MIN.
EMPL. MORE CONCERNED WITH PATIENT THAN SELVES	$\Diamond$	4.23	4.29	(0.06)	PRIOR YEAR
CLINICAL OUTCOME	Ť			(3.2.2)	-
C SECTION DATE		20.1	22.7	2.6	STATE DEP.
	<u> </u>				HEALTH
	1				PRIOR YEAR
·			-	. ,	PRIOR YEAR
					PRIOR YEAR
,		2.01	2.76	0.75	PRIOR YEAR
ACUTE LOS (ALL PAYORS)		5.14		0.05	BUDGET
ACUTE LOS (MEDICARE)	$\rightarrow$	6.62	6.59	(0.03)	BUDGET
TCU LOS (ALL PAYORS)		12.98	20.00	7.02	BUDGET
DRG 106 LOS (ALL PAYORS)	_	11.92	10.16	(1.76)	TARGET
DRG 107 LOS (ALL PAYORS)		6.54	6.87	0.33	TARGET
SAFETY/RISK MANAGEMENT					
PATIENT OCCURRENCE REPORTS		239	143	(96)	PRIOR YEAR
VISITOR OCCURRENCE REPORTS	_	7	2	(5)	PRIOR YEAR
EMPLOYEE INJURIES		59	145	86	PRIOR YEAR
DAYS LOST		9	148	139	PRIOR YEAR
WORKERS COMP. CLAIMS		9	26	17	PRIOR YEAR
MANAGED CARE					
COVERED LIVES	_	3,987	5,339	(1,352)	BUDGET
PHO NET INCOME (LOSS)	_	(\$395,104)	\$ 0		BUDGET
HUMAN RESOURCES		<u> </u>			
	<b>A</b>	4.0%	1 9%	0.0%	HEALTHCARE
		4.0 /0	4.5/0	0.370	ADVISORY
	<b>A</b>		4		ACI CTANDADA
				-	ASI STANDARD
NUMBER OF ETHICS COMMITTEE MEETINGS		_ 5	3	2	ASI STANDARD
	DAYS CASH ON HAND SUPPLY EXPENSE PER ADJ. DISCHARGE (CMA)*  * CMA = CASE MIX ADJUSTED  VOLUMES INPATIENT ACUTE ADMISSIONS TCU ADMISSIONS OUTPATIENT VISITS (INCLUDES OB) EMERGENCY ROOM VISITS INPATIENT SURGERY OUTPATIENT SURGERY OUTPATIENT SURGERY HOME HEALTH VISITS  CUSTOMER SATISFACTION WILLING TO RETURN WILLING TO RECOMMEND QUALITY INDEX SCORE WAITING TIME REGISTRATION EMPL. MORE CONCERNED WITH PATIENT THAN SELVES  CLINICAL OUTCOME  C-SECTION RATE  NOSOCOMIAL INFECTION RATE NUMBER OF DEATHS / 1000 DISCHARGES FALL RATE / 1000 PATIENT DAYS  MEDICATION ERRORS / 1000 PATIENT DAYS  MEDICATION ERRORS / 1000 PATIENT DAYS  MEDICATION ERRORS / 1000 PATIENT DAYS  ACUTE LOS (ALL PAYORS) ACUTE LOS (ALL PAYORS) DRG 106 LOS (ALL PAYORS) DRG 107 LOS (ALL PAYORS)  PRG 107 LOS (ALL PAYORS)  SAFETY/RISK MANAGEMENT  PATIENT OCCURRENCE REPORTS VISITOR OCCURRENCE REPORTS VISITOR OCCURRENCE REPORTS VISITOR OCCURRENCE REPORTS  WORKERS COMP. CLAIMS  MANAGED CARE  COVERED LIVES PHO NET INCOME (LOSS)  HUMAN RESOURCES  EMPLOYEE TURNOVER RATE  ETRHICS  NUMBER OF ETHICS COMMITTEE MEETINGS	DAYS CASH ON HAND  SUPPLY EXPENSE PER ADJ. DISCHARGE (CMA)*  * CMA = CASE MIX ADJUSTED  VOLUMES  INPATIENT ACUTE ADMISSIONS  TCU ADMISSIONS  OUTPATIENT VISITS (INCLUDES OB)  EMERGENCY ROOM VISITS  INPATIENT SURGERY  OUTPATIENT SURGERY  HOME HEALTH VISITS  CUSTOMER SATISFACTION  WILLING TO RETURN  WILLING TO RETURN  WILLING TO RECOMMEND  QUALITY INDEX SCORE  WAITING TIME REGISTRATION  EMPL. MORE CONCERNED WITH PATIENT THAN SELVES  CLINICAL OUTCOME  C-SECTION RATE  NOSOCOMIAL INFECTION RATE  NUMBER OF DEATHS / 1000 DISCHARGES  FALL RATE / 1000 PATIENT DAYS  MEDICATION ERRORS / 1000 PATIENT DAYS  WILLIZATION  ACUTE LOS (ALL PAYORS)  ACUTE LOS (ALL PAYORS)  ACUTE LOS (ALL PAYORS)  DRG 106 LOS (ALL PAYORS)  DRG 107 LOS (ALL PAYORS)  DRG 107 LOS (ALL PAYORS)  PATIENT OCCURRENCE REPORTS  VISITOR OCCURRENCE REPORTS  WORKERS COMP. CLAIMS  MANAGED CARE  COVERED LIVES  PHO NET INCOME (LOSS)  HUMAN RESOURCES  EMPLOYEE TURNOVER RATE  ETRHICS  NUMBER OF ETHICS EDUCATION PROGRAMS  NUMBER OF ETHICS COMMITTEE MEETINGS	DAYS CASH ON HAND	A   384.65   225.39	DAYS CASH ON HAND

What is important to note about this "scorecard" style of dashboarding is the high degree of analytical insight required to produce the report. Senior management and the board will have already determined which key performance indicators to measure, along with a desired level of performance in each case. These performance goals or targets are often referred to as benchmarks and they can be externally derived — an industry norm or standard, for example — or a "best practice" performance level achieved by peer institutions. Or, they can take the form of internal benchmarks based on the organization's own historical performance, budget projections, or mission-driven aspirations.

Armed with this depth of prior understanding, a board member can quickly review the report and know which aspects of organizational performance are under control and which others require deeper analysis or probing. The scorecard dashboard is a powerful data presentation format not only because it employs compelling, visual metaphors (like traffic-light colors, arrows, meters, and gauges) to direct the viewer's attention to the critical issues, but also because it rests upon this foundation of prior analytical and collaborative effort.

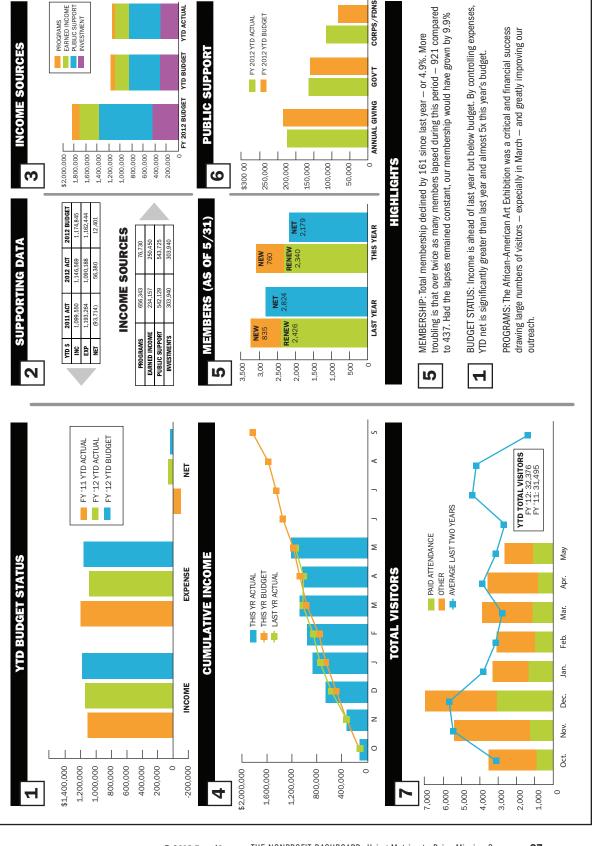
### GRAPHIC DASHBOARDS

Another more graphically oriented style of dashboard reporting is illustrated by Figure 9. This one-page report was designed to meet the needs of an art museum board. It combines graphic displays with numbers and brief narrative comments. At first glance, this report seems quite complex — a lot of numerical and graphic information is communicated on a single page. Looking at each window individually reveals multiple perspectives on the institution's progress. Combining them on the same page enables the viewer to see connections among these various perspectives.

Window 1 compares actual year-to-date revenues to the current and previous years' budgets in a graphic form similar to museum revenues by source as shown in window 3. Window 2 provides numerical details for windows 1 and 3, combining graphic and numerical terms to communicate with board members who have different preferences for receiving information.

Since this museum is interested in expanding revenues from public support, this is examined further in other windows. Window 5 shows membership trends over the past two years and window 6 breaks down the sources of public support. The placement of window 4 (with its monthly display of cumulative income versus budgeted income) above window 7 (which shows the monthly visits this year versus the average of the past two years) permits the eye to spot relationships between attendance levels and income.

Figure 9. GRAPHIC DASHBOOARD
Sample Art Museum
Monthly Status Report May 2012



Throughout this dashboard report there is an attempt to provide comparisons — actual versus budget, this year versus last year. These and other comparisons give the board a context for extracting meaning from the data. The window on the lower right is reserved for words highlighting and explaining key points revealed by the data. Each point is bulleted with the window number it refers to.

Of these two basic styles of dashboard reporting, the scorecard approach (Figure 8) works well not only in hard copy but online where the color-coded icons can be used as hyperlinks that, when clicked, allow the user to jump to another page with greater explanatory detail. The graphic style (Figure 9) with its multiple charts, numbers, and words arranged on a single page tends to work better in hard copy. Online versions of such dashboards often require scrolling to clearly see all the detail, which can offset the user's ability to take in the entire page at a glance and spot patterns. Whatever style of dashboard — be it a scorecard dashboard, a graphic dashboard, or some combination — they share the basic principle of combining a set of well-chosen indicators of organizational performance and impact that quickly conveys meaning.

### DIGITAL DASHBOARDS

Digital dashboards that are specifically designed for online display represent a significant advance in the utility of the dashboard concept. Freed from the constraints of the printed page, they are continuously updatable and linked to databases accessible to the user at whatever level of detail is deemed desirable. As noted earlier, the immediate, top-level display can be designed in scorecard, graphic, or hybrid format, depending upon the expressed needs of a particular audience — in this case, members of the board. And because access can be password-protected, only those data are available that are most appropriate for the board's use.

A good source of examples, books, and articles on digital dashboards is the blog Data-To-Dashboard.com (www.datatodashboard.com). The dashboard in Figure 10 is cited in that blog<sup>6</sup> as one with an abundance of "drill-down" or "drill-through" capabilities that can be accessed by the user via tabs, pop-up menus, and hyperlinks imbedded in charts. A huge amount of current and historical data is instantly available via a rich dashboard portal.

Osted on October 9, 2011, by Emilio Basaldua on www.datatodashboard.com. Reprinted with permission.



Figure 10. Example of a Digital Dashboard

This particular dashboard (which uses color-coding throughout) collects key information about how social media marketing efforts are translating into Web traffic via the use of social media like YouTube, Facebook, Twitter, and other channels. In this example, the goal is to raise brand awareness and drive relevant traffic to the particular client Web site.

### PRINCIPLES OF GOOD DASHBOARD DESIGN

Whatever style of dashboard makes the most sense for your organization, you will want to give careful thought to the following seven design principles:

- Tailor to Organizational Needs
- Consistent Formats
- Priority Structuring
- Comparative Context
- Brief Explanations
- Narrative Journeys
- Graphic Enhancement

#### TAILOR TO ORGANIZATIONAL NEEDS: Make IT RELEVANT.

Organizations with different needs require different dashboards. For example, if a nonprofit is undergoing a period of rapid development, the dashboard report might deliver information on the status of strategic initiatives designed to produce orderly growth. Key indicators might be reported to reflect the impact of these initiatives.

Similarly, if the organization is facing a problem that threatens its survival, there may be specific indicators to reflect the status of that problem and the efforts directed at managing it. These special items can be added to the dashboard when the board deems them necessary, and eliminated when they are no longer relevant.

For organizations just starting out or those that have yet to embark on more sophisticated data collection, many of the key indicators may not yet be available to track, compile, and display. Instead, some organizations may chart more basic information such as year-to-date fundraising results, new member enrollment, or basic financial data. Others may prefer to start out by choosing one or two key indicators and then gradually incorporate new indicators throughout the year or over the course of several years. By keeping the information simple, board members can focus on what is important to know without becoming overwhelmed with information that may distract them from the work at hand.

#### CONSISTENT FORMATS: Make IT EASY TO UNDERSTAND.

When a board becomes accustomed to seeing data in the same format over time, it is easier to spot patterns of change and problems that pose concern. This is not to say that, over time, the format for these reports cannot vary. Some evolution is certainly desirable and necessary as new issues arise and different indicators require monitoring. Some variation might also be deliberate. For example, a dashboard

might combine some displays that are the same at each board meeting with other displays that appear in a rotating sequence over the course of a year's board meetings in order to expose the board to a broader range of information.

Consistency in the coding schemes used in dashboards and other reports — the positioning of graphic elements, the meaning of different colors or shading patterns, the terms in which numerical values are expressed, etc. — enable users to decipher the data more efficiently and thus allow them to spend their time thinking about meaning and significance rather than basic comprehension.

The same concern about consistent usage should apply to terms of reference, names, and acronyms. Staff, being closer to the day-to-day activities of the organization, are more accustomed to variations in terminology and usage, but board members, whose involvement can be more sporadic, may became thoroughly confused — even alienated — by such changes.

#### PRIORITY STRUCTURING: FIRST THINGS FIRST!

A board's time is its most scarce, and, in many ways, its most valuable resource. The board should be able to quickly locate the information it needs to know and at the level of detail it finds most relevant and comfortable.

The dashboard report helps the board and staff to focus and prioritize. This type of presentation can be augmented with greater detail when the indicators reveal a potential problem or an issue to which the board should pay closer attention. For example, an unbudgeted loss shown on a dashboard report might require an additional page of detail on the expenses or services producing that loss.

Even though a dashboard report presents overall results, it may be necessary to break down some of the components. The key, of course, is not to go so far as to bury the board in excessive detail.

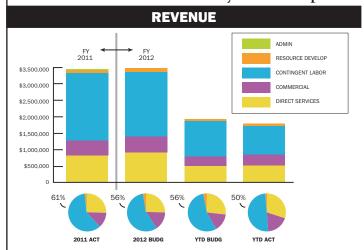
Major service categories or business units, client populations, or geographical areas are the types of categories into which operating results might be broken down. Board members should be able to relate the changes and variances in these particular categories to the expected values. Displaying them with respect to each other and with respect to their budgeted and historical performance can help board members get a sense of how each category affects the overall results.

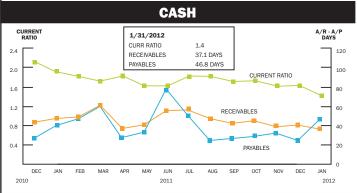
A social service agency, for example, created a financial dashboard (Figure 11) that not only portrays actual versus budgeted year-to-date revenues, but breaks down the resulting total variance from budget by business units to better indicate which ones contributed positively or negatively to the total variance.

## Figure 11. Example of a Financial Dashboard

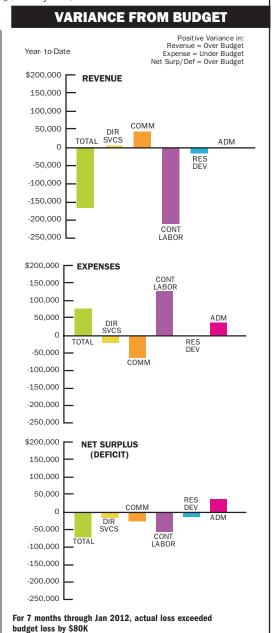
Sample Social Service Agency

Monthly Status Report YTD January 31, 2012









YTD 1/31/2012									
		DIRECT SVCS	сомм	CONT LABOR	RES DEV	ADMIN 0/H	TOTAL YTD ACTUAL	YTD Budget	DIRECT SVCS
R	EVENUE	525,569	330,095	887,490	22,689	2,258	1,768,101	1,933,505	(165,404)
F. B.	DIR COST	0	232,448	424,975	0	0	657,423	746,892	89,469
DIRECT	STAFF EXP	396,790	114,565	76,792	13,158	273,112	874,417	813,350	(61,067)
ᅙᇳ	DIR OP'S	71,026	82,358	0	15,945	0	169,329	218,017	48,688
ADN	MIN ALLOC	91,188	124,000	124,000	18,237	(357,425)			
0\	/ERHEAD					211,112	211,112	218,813	7,701
NET S	URPL (DEF)	(33,435)	(223,276)	(261,723)	(24,651)	(124,541)	(144,180)	(63,567)	(80,613)

#### **NOTES**

- Direct Services revenues on budget.
- Production revenues \$161K under budget.

ABC Co. + 47K XYZ Co. -208K

- ABC: 16% over budget Proj: 53% over
- XYZ: 17% under budget Proj: 30% under

In other words, what the full board receives on a routine basis is selective in the sense that it is the tip of an information iceberg that extends below the operational waterline to include more detailed information that in turn is routinely available to board committees and task forces and the staff supporting them. By coordinating committee and full board meeting agendas it becomes possible for certain topics to work their way up an "agenda ladder" to the full board at specific points during the year.

#### COMPARATIVE CONTEXT: COMPARED TO WHAT?

To derive meaning from raw data, or in other words to transform data into information, it is often useful to ask the question: Compared to what? Whenever possible, data should be presented in a manner that provides a comparative context. Even if experienced board members have a good sense of what the numbers mean, newer members will often lack such a frame of reference and will need a basis for comparison. Comparisons can be made with historical data (e.g., same period last year), norms (e.g., strategic goals, budgets, forecasts, industry ratios), and benchmarks based on the performance of peer organizations (what are the other guys doing?). Data can also be displayed in the context of historical trends because they might reveal an emerging problem.

The dashboard referred to in Figure 11 combines comparisons of revenues with previous year-to-date numbers, variances from the budget, trends in a client population, and in service volumes over time. These displays, shown together on a single page, give a multifaceted view of the organization's performance that raw data, without a proper context, cannot do. The Sample University financial overview dashboard (Figure 12.1) uses comparative, contextual elements in two ways — by providing five-year trend data and peer group data.

Often, the very exercise of setting comparative or normative standards requires the board to think through what it considers to be an appropriate level of good or bad performance. In doing this, the board should look for guidance from its mission, values, and strategic concerns. An organization with a value stressing stewardship of resources, for example, might call for heightened concern about managing cash flow. This concern might cause the board to focus on, among other things, the management of accounts receivable and, more specifically, on reducing the collection period. Selecting an indicator such as "accounts receivable days" would serve the board's needs. But specifying a norm or performance standard of 60 days as opposed to 90 would more explicitly reflect the board's concern and permit the board to more readily interpret whether reported performance is good or bad.

The use of "what-if" scenarios is another way to enhance data interpretation through comparative context — in this case, the context of alternative futures. Once a board feels it has a good grasp of current performance and historical trends, it will often want to gain a better understanding of the possible future outcomes of particular policies, or of the impact that various combinations of factors or events might have in the future. The simplest projection would extrapolate a trend that appears during the year to the full year (e.g., what if revenue remains 5 percent below budget for the remainder of the year?).

"What-if" projections can reveal the sensitivity of the organization's financial viability to changes in a key variable. The staff can also develop more elaborate models for examining scenarios of concern to the board — reflecting possible changes in pricing, competitor behavior, or governmental regulations. While dashboards by definition are not typically the best format for presenting what-if scenarios of any complexity, they can occasionally be used to alert the board to a range of possible outcomes.

#### Brief Explanations: What's the Point?

Limited amounts of accompanying text may help expand on the report's graphic or numeric indicators. Brief narrative summaries, for example, might describe the highlights of the previous time period. If the summaries are well written, they can tie together the links between current and past trends in ways that make it easier for the board to understand. Figure 9 is an example of a dashboard that includes comments describing how operating results are related to each other.

These narrative summaries would not replace the chief executive's regular report to the board, but can help him or her communicate the same information much more efficiently and thus leave more time for explanations, questions, and discussion.

## NARRATIVE JOURNEYS: WHAT'S THE STORY?

By using a combination of graphic charts, numbers, and descriptive text, the dashboard takes shape and conveys a story.

In certain cases, the use of narrative can add real value to the dashboard's charts and graphs. In the absence of more structured qualitative data, anecdotes and stories can help to round out the board's understanding and to put into words what the numbers may not be able to fully convey. Often by using stories, the board can better understand what impact the organization's mission is having or even put into perspective why the continuation of an organization's program may still be called for despite less encouraging performance data.

The items presented in a dashboard report can be linked in a manner that tells a story to board members. For example, data might indicate how unexpected financial results, such as revenues that have fallen below budget, are related to changes in volumes of services and/or changes in fees paid for those services.

A number of techniques can be employed to help tell the story. Along with the narrative comments box (discussed earlier), headlines can also be useful. These phrases lead the viewer's eyes from one display to the next, highlighting their interrelationships.

The advantage of presenting information in a story format is that it helps the reader interpret the information. The downside is that it can bias the reader and discourage board members from developing their own insights. The tension between these two impulses — to actively guide the board in interpreting information or to empower the board to understand the information on its own terms — will always exist. It can be difficult to find a balance between the two that satisfies all boards or be appropriate to all situations.

The extent to which a board welcomes, or even tolerates, staff guidance will be conditioned by the culture of the board and by its level of confidence in the staff's ability to provide accurate, timely, and dependable information. A financial or public relations crisis, for example, might call for telling a more prescriptive story, whereas the interpretations of trends affecting long-range planning might be left to the board to develop its own insights directly from the data.

A dashboard can lay the foundation for a productive, interactive discussion between board and staff. As such, the dashboard can be viewed as a launching point to understanding the full story.

Figures 12.1 and 12.2 attempt to strike a balance between the empowerment and guidance of board members by including narrative comments that clarify the graphic material. These comments, while drawing attention to the most salient points or trends, nevertheless stop short of explaining their full strategic significance.

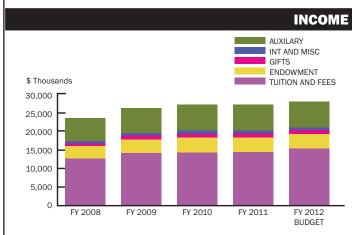
When the underlying story is not evident from an array of facts — presented in numerical and graphic displays, plus narrative points — a more explicit, storyline linkage between key indicators may be called for. Figure 13 reconstructs a story from some of the more significant indicators that appear in the dashboard pages for Sample University. While still lacking editorial comments, it is a more direct attempt at revealing the compelling story hidden within the data.

Figure 12.1. Telling a Financial Story through a Related Set of Annotated Dashboards:

Overview Page

Sample University

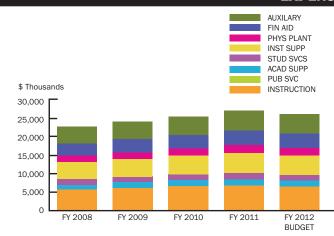
FINANCIAL OVERVIEW FY 2008 – 2011



Total income increased 11.6% between FY 2008 and FY 2011.

Income from auxiliary services, while second only to tuition and fees as a source of income, is largely offset by auxiliary expense (see below).

#### **EXPENSE**



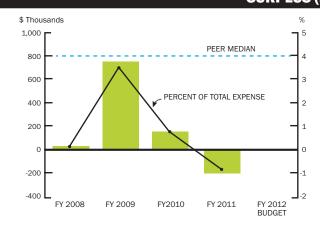
Significant components of expense and their average percent of total education and general expense (total expense less auxiliary) over the past four years are:

Instruction 34%

Instit Support 22%

Financial Aid 20%

#### **SURPLUS (DEFICIT)**



Sample University has operated generally on a break-even basis, earning a surplus of \$753K in FY 2009 – or 3.5% on total expenses.

Net surplus from auxiliary services contributed \$300K on average per year.

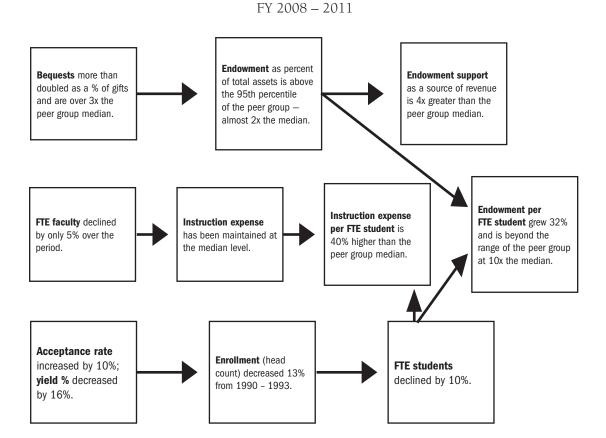
Figure 12.2. Telling a Financial Story through a Related Set of Annotated Dashboards: EXPENSE PAGE Sample University

FINANCIAL OVERVIEW FY 2008 - 2011



Figure 13. Telling a Story by Showing the Relationships among KEY INDICATORS

Sample University SUMMARY OF MAJOR TRENDS & INDICATORS



Only so much of a story can be captured in brief bullet points, however. Don't underestimate the value of anecdotes to round out the picture. Client stories can be used to illustrate mission impact and put a human face on the numbers. For example, the dashboard used by the board of a social service agency assisting the unemployed might contain not only a standard set of key performance indicators for the client population as a whole, but also brief capsule summaries of selected job placements that are noteworthy for what they reveal about the agency's impact on the lives of particular clients or about important trends and practices.

#### GRAPHIC ENHANCEMENT: WHAT'S THE BIG PICTURE?

This is, again, where it becomes important to keep in mind the different levels of detail that staff routinely receives versus what the board needs to see. Many of the examples cited in this book demonstrate that using certain basic graphic display techniques can make otherwise obscure, statistical reports not only comprehensible but also dramatic and powerful in portraying the big picture to the board. Through the use of line charts, bar graphs, pie charts, and data maps in place of dense tables of numbers or text, large amounts of information can be conveyed more efficiently and in ways that add meaning by revealing important patterns and causal relationships.

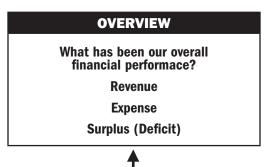
The Sample University reports in Figures 12.1 and 12.2, for example, were derived from the institution's annual fact book — a 50-page compendium of numerical data densely displayed in page after page of columns and rows. The facts were there for the board to see, but it was the rare board member who ever ventured into this data swamp. Through graphically enhanced dashboard formatting of key elements taken from that book, the board now has a fighting chance of interpreting the data.

These report pages appeal to the right and left brain through a combination of graphic, numeric, and narrative elements. The goal in combining numbers, words, and graphics is not so much to guarantee that each board member receives exactly the same message in the same way, but rather to empower each board member to derive his or her own meaning from the data. By posing questions and sharing perspectives with one another, the board emerges with a collective understanding that is richer and more complete than that of any individual.

The graphic overview structure diagram in Figure 14 that in this set of dashboards introduces those shown in Figures 12.1 and 12.2 serves as a kind of road map, showing the interrelationships among the various reports. It also provides a conceptual framework that can orient the user over time. For example, although the various reports that make up this particular set can be viewed as a single package produced annually, they need not be presented to the board all at once. Certain reports can be reviewed by different board committees at different points during the year. In fact, the board as a whole might only need to see the broadest trend data displayed graphically, while board committees would receive a more granular depiction.

Figure 14. Introducing a Set of Related Dashboards with a REPORT STRUCTURE GRAPHIC





#### **INCOME EXPENSE** Are we deploying our funds Is our revenue structure balanced? appropriatedly? **Tuition / Fees** Instruction **Endowment Academic Support Gifts** Plant & Maintenance

## **RESOURCE ACQUISITION RESOURCE MANAGEMENT** How well are we acquiring the

resources we need? **Tuition / Financial Aid** 

> **Endowment Development**

How well are we using and managing our resources? **Physical Plant** 

**Faculty Assets & Reserves** 

### **STUDENTS**

Are we attracting and keeping the kinds of students we want? **Enrollment** 

**Student Profile** Attrition

In his classic book The Visual Display of Quantitative Information, Edward Tufte<sup>7</sup> provides a number of useful ideas for presenting information graphically. Some of his principles of good graphic design are the following:

- Avoid misleading distortions. For example, the use of year-to-date numbers rather than month-to-month changes may help the board avoid focusing too much attention on random variations that have little significance. Similarly, avoid scales that exaggerate the importance of certain trends (e.g., percentage changes in small numbers).
- Focus attention on the substance rather than the method of presentation. Ironically, the very ease with which complex graphic displays can be created has contributed to unnecessary embellishment that may dazzle the eye but distract from the data's message.
- Use more than one set of graphic displays on a page. Combining multiple graphic messages on a single page and avoiding the need to flip through several pages to get the same information encourages the eye to compare and, in so doing, spot patterns and relationships among them.

Tufte refers to a particularly effective way to harness the visual power of many small graphic displays all using the same scales on a single page; he calls them "small multiples."8 Figure 15 is a dense tabular report that had been presented to a seniorcare holding company showing 12 months of current ratios for each of 12 elderly housing and nursing home facilities. The board found it very difficult to decipher. When these same data were converted into small multiples (Figure 16), they quickly distinguished which facilities had been consistently experiencing negative ratios (in black) from those with positive ratios (in grey).

<sup>&</sup>lt;sup>7</sup> See Tufte, Edward R. The Visual Display of Quantitative Information. Cheshire, CT: Graphics Press,

<sup>&</sup>lt;sup>8</sup> One particular type of small multiple is the "sparkline" — tiny historical line graphs, all using the same axis scales, set side by side — that conveys an extraordinary amount of data in a small space, while still being readily comprehensible to the viewer.

# Figure 15. Example of a Dense Tabular Report

# Sample Senior Care Network CURRENT RATIOS (CURRENT ASSETS/CURRENT LIABILITIES) 12 Months Ending 1/31/2012

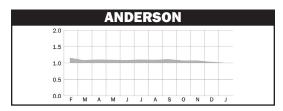
FACILITY	FEB '11	MAR '11	APR '11	MAY '11	JUN '11	JUL '11	AUG '11	SEP '11	OCT '11	NOV '11	DEC '11	JAN '12
ANDERSON	1.15	1.08	1.10	1.09	1.08	1.10	1.09	1.11	1.07	1.07	1.03	1.00
BENNINGTON	1.14	1.13	1.11	1.00	0.93	0.94	0.54	0.52	0.66	0.75	0.76	0.72
BRUNSWICK	1.05	1.01	1.66	1.67	1.67	1.31	1.38	1.41	1.25	1.29	1.28	1.15
CLYDESVILLE	1.84	1.10	0.99	1.00	1.05	1.14	1.19	1.17	0.68	0.74	0.74	0.91
COLUMBUS	1.22	1.32	1.75	1.53	1.76	1.45	1.65	1.69	1.59	1.57	1.41	1.38
HAMILTON	0.76	0.87	1.00	1.03	1.41	1.48	0.89	1.43	1.24	1.41	1.46	1.34
JEFFERSON	0.54	0.47	0.72	0.75	1.05	0.96	1.83	1.17	1.46	1.43	1.38	1.09
LAKEVIEW	0.66	0.67	0.67	0.75	0.79	0.94	1.02	0.90	0.92	0.98	0.95	0.69
LAUREL	0.84	0.76	0.77	0.76	0.70	0.75	0.76	1.02	1.04	1.06	1.02	0.91
LIBERTY	1.02	1.02	0.79	1.00	1.45	1.38	1.57	1.87	1.77	1.90	1.85	1.88
RIVERWAY	0.86	0.68	0.67	0.63	0.71	0.45	0.54	0.67	0.66	0.66	0.65	0.80
WADSWORTH	1.65	1.71	1.78	1.78	1.77	1.77	1.75	1.77	1.79	1.81	1.72	1.59

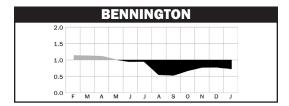
## Figure 16. Using Small Multiples to Bring Transparency to a Dense TABULAR REPORT

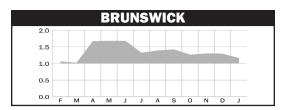
Sample Senior Care Network

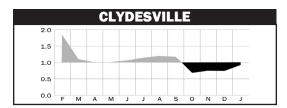
# CURRENT RATIOS (CURRENT ASSETS/CURRENT LIABILITIES)

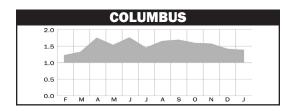
12 Months Ending 1/31/2012

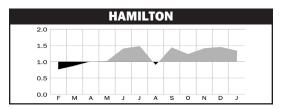




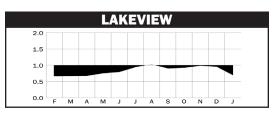


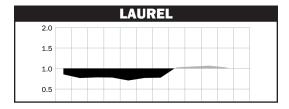




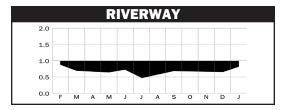


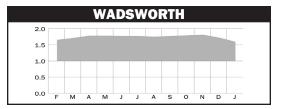












## CHOOSING DATA DISPLAY FORMATS — HELPFUL HINTS

The formats chosen for displaying data can either clarify or obscure their meaning. The following are suggestions to help make the meaning of data as clear and transparent as possible.

#### LEFT-TO-RIGHT TIME SERIES

It can be disconcerting for viewers to have to work against a natural impulse in reading charts or data tables. Most people are accustomed to reading from left to right. The same rule should be adopted in the presentation of time series data. The earliest time period in the series should be placed to the left and the more recent periods to the right.

#### PIE CHARTS

Pie charts are great for immediately conveying the percentage shares of a particular total quantity. When it comes to comparing pie charts, however, the human eye can have difficulty discerning small differences in the sizes of pie slices, especially when they occur at different angles in adjacent charts. To make the comparison clearer, each slice should be properly labeled with its particular value — either within or adjacent to the slice. The pie chart should also indicate the absolute value of the pie itself. However, this can be misleading when comparing two pie charts that differ in their total values but are depicted at the same size. Combining pie charts and column or bar charts, such as shown in Figure 12.2, helps to convey both absolute value as well as percentage share differences.

#### STACKED COLUMNS

Stacked columns (vertical bars as shown in the "New Associates by Sponsor" section of Figure 5) can be a useful alternative to multiple pie charts. The components of the column represent the relative shares of a total amount as well as the absolute value of that total. This can be particularly helpful when the stacked columns are arrayed in a time series. Including the numerical value for each of the stacked bar units makes it much easier to identify the value of each of the components, whereas relying solely on the vertical scale to the left of the bars to gauge the values can be difficult.

#### **DATA TABLES**

One way to provide the numerical support for any graphic chart without cluttering the chart itself with too many numbers is to create a data table below the chart. As the same chart in Figure 5 demonstrates, this format conveys both the graphic's visual appeal and the hard data all within the same visual space.

#### LINE CHARTS VS. SIDE-BY-SIDE COLUMNS

A line chart, also referred to as a fever chart, connects points on a graph to show changes over time. Trying to convey the same value sets as side-by-side columns

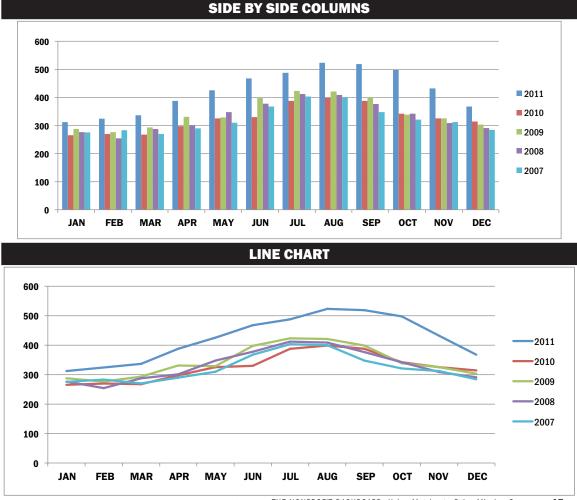
can become quite bewildering, as the columns (and the white spaces between sets of columns) are perceived as visually active. Essentially, a line chart connects the tops of related columns with separate lines, thereby eliminating the columns themselves. The eye is relieved of all this wasted visual activity and the trends and meaningful patterns become immediately apparent. The line chart titled "Monthly Paid Associates" in Figure 17 had previously consisted of a visually chaotic array of side-by-side columns representing different time periods.

These same data presented as a set of lines differentially colored by time period reveal both the underlying seasonal trends and the different levels of activity associated with each year.

Figure 17. Using a Line Chart Instead of Side-by-Side Columns

Sample Internship Program

### MONTHLY PAID ASSOCIATES



## **CHAPTER 4**

# **Deriving Maximum Benefit** From Your Dashboards

The real test of whether dashboards have value is whether they create enough meaning for individual board members and the board as a whole to engender thought, insight, and, perhaps above all, good questions. The well-articulated, timely question that leads to further exploration of a critical issue, which in turn leads to answers that inform high-level decision making, is the ultimate payoff of dashboard reporting. Effective dashboards will strengthen the ability to engage each and every board member in a way that is meaningful for him or her, drawing forth the full range of wisdom, talent, and experience that resides on the board.

## TEN COMMON BENEFITS

There are probably as many ways to work with dashboards to realize these benefits of critical thinking and board engagement as there are board members. The following are 10 common ways that have proven in practice to be valuable.

#### 1. Save time by reviewing highlights.

Dashboards are not meant to be a substitute for all of the information available to boards, but rather are designed as high-level overviews that combine an array of key indicators on a single page or on sets of pages. This allows them to fit naturally in board books as cover sheets that may appear on top of more detailed reports or online as a top-level link in an increasingly detailed nest of links, thereby permitting the user to drill down to greater levels of detail as needed. Just as with any logistical or navigational tool, dashboards can help the time-constrained board member employ his or her time more efficiently by using highlighted items in the dashboard as prompts to seek more detailed information residing beneath.

#### 2. Track progress toward goals.

Dashboards can be used as tools for monitoring progress toward agreed-upon goals. The scorecard dashboard style (Figure 8) explicitly incorporates actual performance versus goals or benchmarks. Another example of this is a vision dashboard created in the context of strategic planning. Each strategic initiative from the plan will have a set of measures that tell the board whether the intended effects of that initiative are being realized. A vision year is selected (maybe five or 10 years into the future) and the anticipated values for the various measures on the dashboard are set for that year. Depending on the time sensitivity of the measures in question, the board can request this dashboard at appropriate intervals (annually, semiannually, quarterly, etc.) and will be able to quickly gauge the progress (or lack thereof) that has been achieved in approaching the vision year value. Faced with inadequate progress, the board can ask some good questions as to underlying causes, which may result in changing certain policies and practices that will better ensure attaining the vision year goal in question, modifying the goal itself, or some combination of both.

## 3. Understand system dynamics.

A dashboard like the one depicted in Figure 13 brings together a set of key ratios and other metrics in a way that conveys to the board the internal system dynamics of the organization. In this case, the relationships among faculty size, student enrollment, endowment growth, and various per-student metrics are explicitly highlighted. For those board members who have a limited understanding of how one factor can affect another in producing certain bottom line results, using a dashboard such as this can become a valuable board education tool.

## 4. Spot potential problems.

As was noted in Chapter 3, dashboards can be designed specifically as exception reports that alert the reader when certain performance metrics stray outside of acceptable ranges. These warning light reports (for example see Figure 18) and the scorecard dashboards that use traffic light icons (Figure 8) are only as good as the metrics and ranges selected. When these reports are well-constructed, boards can use them secure in the knowledge that certain critical factors are being closely monitored. If the board, for whatever reason, lacks confidence in an exception or icons-only style of reporting, dashboards that are more complete and yet structured around critical metrics (such as risk factors) can still serve to alert boards to potential problems in a timely manner.

Figure 18. Example of a Warning Light Report

FINANCIAL RESOURCES WARNING LIGHT REPORT						
OPERATING INCOME RATIO Operating Income + E&G Expenses	Performance within acceptable range.					
CONTRIBUTED INCOME RATIO Contributed Income + E&G Expenses 8%	Has fallen below the warning light threshold of 10%. Down from 12% last year. Education and General (E & G) expense has remained relatively constant, but unrestricted private gifts and grants have declined from \$6.8 million last year to \$4.6 million this year.					
DEBT BURDEN Debt Service + Total Expenditures	Performance within acceptable range.					
DEBT COVERAGE Adj. Change in Net Assets + Debt Service  2.4 x	Has fallen below the warning light threshold of 2.5 x. Last year's debt coverage was 2.75 x. There was a greater than expected decline in unrestricted net assets from \$4.6 million last year to \$1.4 million this year.					
LEVERAGE Unrestricted and Temporarily Restricted Net Assets + Debt Outstanding	Performance within acceptable range.					

## 5. Identify patterns and anomalies among similar entities.

One of the most common uses of dashboards is to array on a single page the performance results of multiple programs or business operating units. This enables the user to efficiently discern any patterns that all programs or units share and/or any anomalies that may call out for explanation.

The use of small multiples in Figure 16 is a good example of how a series of graphic displays that all employ the same scales quickly reveal which units have experienced positive or negative performance over the course of a year (in this case, in terms of ratios of current assets to current liabilities). Analyzing the same numbers in tabular form (Figure 15) would be considerably more difficult and time consuming. With the graphic dashboard, it is easier for a board member to spot the change in the operating unit labeled Clydesville and ask: "What happened last October to increase the current liabilities?"

## 6. Identify patterns and anomalies among diverse factors.

The same sort of rapid recognition of patterns and relationships can result from using dashboards that display on the same page a variety of factors or variables relating to a single entity. A museum board member viewing the dashboard in Figure 9 might look at the two monthly calendar charts and easily observe how cumulative income gets a boost when the monthly number of visitors increases. The board member may then be prompted to ask staff whether the drop-off in visitors in April and May of this year, especially in comparison with the average figures for the previous two years, is likely to have such a negative effect on cumulative income that the museum will miss its budget goal of approximately \$1.9 million by the end of the fiscal year (four months from the time of the report). Will planned exhibitions generate sufficient visitors to compensate for this drop-off? If not, will there be sufficient income from other sources or cost savings to prevent a deficit for the year? Without having to look beyond this dashboard, the board member is equipped to ask a host of meaningful questions.

#### 7. Expand board member comfort zones.

If the board member asking the above questions is a member of the finance committee, one might assume that his or her special interest in the museum's financial condition prompted these queries, with the dashboard merely serving as a touchstone. But the board member might well have been a member of the curatorial committee who is typically far more interested in issues of an artwork's provenance or quality. When a dashboard's readily accessible metrics and graphic displays result in a board member expanding his or her comfort zone and becoming more fully engaged, then it's a gain for the entire board and organization.

## 8. Bring all board members up to speed around a shared knowledge base.

As the previous point illustrates, the more board members are conversant with multiple aspects of the organization's operations, the more effective the board can be as a governing team and, hence, the more valuable the board can be to the organization. Dashboards by themselves will not supply the shared knowledge base the board needs, but they can serve as a recurring reminder of the key factors at play and thereby equip all board members with a basic understanding of what makes the place tick. Incorporating the most recent set of dashboards in each new board member's orientation packet, coupled with an opportunity to review them under the guidance of a fellow board member serving as mentor, would be an excellent way to begin the process of sharing this knowledge base.

## 9. Maintain a governance perspective.

When a dashboard is designed with a governance perspective (gauging things like mission impact and outcomes, strategic effectiveness, and fiduciary oversight), it helps to encourage the board to perform its essential governance role rather than stray into some form of surrogate management role. In other words, dashboards can help to instill an organization-wide, policy-level perspective and reduce the tendency to micromanage from the boardroom. In a sense, the very process of defining dashboard metrics can be viewed as a collaborative exercise between board and senior staff that serves to clarify the domains of governance and management.

## 10. Reinforce board oversight by linking to structure and process.

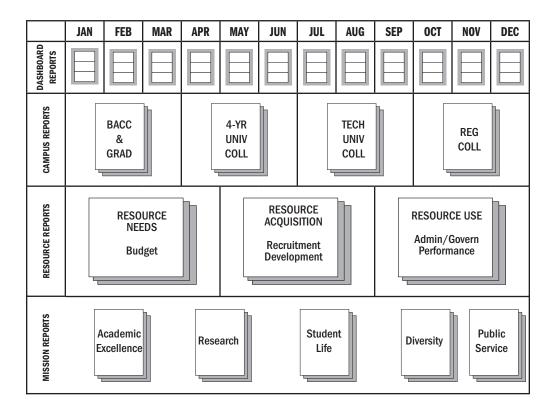
Finally, boards should be encouraged to use dashboards not only as stand-alone reports but also as key components in a more complete governance structure that also includes committee structure and meeting schedules and agendas.

One way this might work is make the dashboard the focus of particular board meetings and to refer to it at particular points on a meeting agenda. For example, a board's annual agenda plan may designate every Spring meeting as the one to focus on quality of services. At that meeting, the relevant board committee with oversight responsibility for issues of quality assurance could present the board with the "quality dashboard." The same procedure would apply to other board committees and their respective dashboards. In this way, all of a board's major oversight responsibilities are assured of receiving their moment in the spotlight — with the dashboard serving as the spotlight.

An approach along these lines (as depicted in Figure 19) was designed for a large, multi-campus public university system. The system governing board met monthly and received a monthly dashboard that reported on a basic set of key performance indicators. But in addition, the board's annual agenda plan called for an in-depth treatment of each of the university's four campuses once a year. In between these campus reports, they received so-called resource reports focusing on institutional finances and mission reports addressing the university system's key mission imperatives of academic excellence, research, student life, diversity, and public service.

In other words, every monthly board meeting featured both a basic dashboard and an in-depth report (which itself had its own dashboard as a front-end document). And each of these in-depth reports was overseen and developed under the auspices of a different board committee. While most organizations are unlikely to require or have the staff resources for such an extensive framework of dashboard and in-depth reporting, this particular model illustrates how meeting schedules, agendas, and committee structure can all be woven together by dashboards into a totally integrated governance information system.

Figure 19. Coordinating Different Types of Dashboards with an ANNUAL SCHEDULE OF BOARD MEETINGS



## **CHAPTER 5**

# **Embarking on a Dashboard Program**

The process of developing a dashboard reporting system — especially if it is part of a broader examination of the board's information resources — can be every bit as important as the report formats it produces. But creating and maintaining this reporting system requires a structured process and dedicated attention by both board and staff.

Improving board information can serve as an excellent point of entry for meaningful introspection and dialogue within the board and with staff on a broad range of important subjects, from the board's working relationship with senior staff to the organization's mission and strategy. And, if done properly, the process of dashboard development can not only produce meaningful, high-level metrics, but can engender a strong sense of board ownership of those metrics.

## ASSESSING THE BOARD'S READINESS

Before plunging into the world of dashboards, board and staff leaders may need to step back and assess whether they are ready to commit to this task. Here's a quick reality check:

- Is the board satisfied with the information it currently receives?
- Does the board feel it needs more meaningful measures of performance or mission effectiveness?
- Does the board know what these measures should be?
- Do board members already know what it is that should be measured in a dashboard?
- What kinds of data are already being gathered and compiled to address the board's needs?
- How difficult would it be to provide the data to fuel the desired dashboard measures?

#### ORGANIZING THE EFFORT

Good dashboards don't just happen; they are the result of an organized, intentional effort. The board's own "governance committee" (or another committee charged with overseeing internal board operations) may be tasked with guiding the development of a board-staff task force or working group that may include the board chair, the chief executive, a few board members, and one key staff person who will have the ongoing responsibility of accessing needed data and maintaining the system over time. The active involvement of the chief executive is an important signal to the staff that this work is of high priority and a truly collaborative effort. It is up to the staff to lead the process and communicate with the board on what it needs and wants.

#### DETERMINING THE BOARD'S NEEDS

As a first step, the task force will need to determine which elements make the most sense for inclusion in its dashboard development program.

1. Examine the information currently provided to the board. A good starting point for designing dashboards is to examine the information the board is presently receiving. This usually requires sitting down with the person who manages communications with the board (often the assistant to the chief executive) and reviewing a year's worth of information packets or meeting books. This review should provide a sense of the kind of information the board receives at each meeting and the items that are only sent out at certain times.

If there is an executive committee that meets more frequently than the full board and acts on its behalf, review the information sent to this group as well. Minutes of board and executive committee meetings might also be examined to see which items in the meeting books tend to provoke discussion and which items are relevant to actions taken by the board.

A review of other internal documents — from operating plans to reports sent to funding agencies — will reveal what information is already being collected. When information relevant to dashboard reporting is already being collected on a regular basis, it makes the whole exercise of creating dashboards more efficient and less daunting.

2. Interview key staff members. Supplement a review of the board's current information flows with interviews with the staff members who most closely interact with the board. This staff group would typically include the chief executive, chief financial officer, development director, and anyone else who works with the board or its key committees. The purpose of these interviews is to elicit the staff's perceptions of how the board uses information and of the types of information the board finds most valuable.

3. Ask board members what they need to know. The most straightforward way to identify the information and formats that will most help the board is to ask the board members themselves what information they need. This seems obvious, but more typically board members are given information that is produced as a byproduct of management information systems designed with different purposes in mind. In some cases, information is provided in response to a board member's one-time question but gets incorporated into a standard report that the board continues to receive long after it has ceased to be of any interest. In others, poor-performing boards might not even be clear as to their purpose or role, and may not act on guidance or requests from executive staff in the first place. These boards may only be interested in financial or operations measures rather than mission-focused information.

There are several ways to ask board members what they really need to know on an ongoing basis:

- **Interviews** of a cross-section of the board (including members who are heavily involved as well as those who are less active) can elicit many of the key variables that board members feel they need to monitor. The interviewer can help board members to distinguish between information that the board is accustomed to receiving and information that is actually used, and therefore important to continue receiving. The interviewer can also help board members to distinguish between information that the entire board needs, as opposed to items that are only appropriate for a specific committee.
- Questionnaires are another way to elicit the board's view of its information needs. These are especially useful with a large board or one whose members are geographically dispersed. The downloadable bonus material provides a sample board information survey that can easily be modified for any board. The questionnaire asks board members to rate how well the information they currently receive allows them to do their job and solicits suggestions for improving the information and its delivery system. Over time, the questionnaire can be periodically re-administered to assess where changes may be needed.
- Focus groups bring together board members for a focused discussion about board information needs. An advantage of a focus group is that comments made by one participant will often spark ideas and additional comments by others. A good facilitator can keep the discussion moving along, ask the right questions, and help record the insights that emerge. The discussion might focus on board roles, decisions, and organizational mission and goals as one set of topics. Another approach might be to have board members identify critical success factors for the organization (e.g., What must go right for us to do well? What must not go wrong?), and then to suggest indicators that reflect how well the organization is doing with respect to those factors. Focus groups can be used as the sole approach for gathering perceived information needs from the board, or in combination with interviews or questionnaires.

Whatever the technique(s) used, this process of information gathering should result in a relatively small set of variables that: a) are currently available, are used frequently, and tend to spark discussions; or b) are not currently available, but board members wish were available to use. For example, an organization may perceive service to indigent clients as an important part of its mission. However, as its board members think about mission, they might realize that they do not receive any information about the volume of services provided to such clients. This thought process can have great value, quite apart from how it shapes one or more dashboard reports.

4. Review "draft" formats with the board. Once a set of metrics has been identified for dashboard reporting, the next step is to find a suitable format for presenting it to the board (as discussed in Chapter 3). One of the best ways to develop an acceptable format is to create a first draft, show it to the board, and make the adjustments the board requests. Developing a dashboard is a very subjective process. What works for one person may not work for another. Showing a draft format to board members is likely to reveal displays that are unclear or misleading, important data items that are missing, and other problems that make the dashboard less useful than it could be. Several iterations might be necessary to get it right, but the final version should be one that the board is genuinely comfortable with and can adopt as its own. These iterations can involve the full board if it has a small number of members and meets frequently, or can be done with a smaller group of members. The board-staff task force can be a very effective sounding board for this purpose.

#### WHAT ABOUT TIMING?

How often should dashboards be produced? Much depends on how frequently the needed data can be collected, when it would be most meaningful to interpret it, and when the board (or one of its committees) prefers to receive it. For example, college enrollment data can only be collected when new students enroll. Typically, there is one major enrollment period per year. Collecting it more frequently is simply not possible, and reporting it more frequently than once a year would not be meaningful. On the other hand, cash flow and other financial data, especially in organizations concerned about their financial solvency, are typically collected monthly; the finance committee of the board, if not the board as whole, may want to receive a financial dashboard monthly. Similarly, risk factor data may require relatively frequent reporting so that the board can act in time to forestall negative consequences.

The board's meeting schedule over the course of the year can also determine which dashboard reports to receive and when. An annual board agenda plan that designates particular meetings for particular dashboards to be reviewed can assure the board that all of the key performance indicators or critical issues will be highlighted before the annual cycle of board meetings is completed.

## MAINTAINING THE DASHBOARD REPORTING SYSTEM

No matter how well designed a dashboard reporting system is, its ongoing value to the board and the organization is only as good as the quality and timeliness of the data it reports and its perceived utility to board members and other users. The key to effective system maintenance is assigning responsibility for doing so to someone on the staff who has access to the relevant data and familiarity with the internal data systems, external databases, and application software (such as Microsoft® Excel and PowerPoint). Typically, this individual is already on staff and charged with providing administrative support to the board. If there is no such person already assigned these duties, someone should be designated.

This individual would be responsible for gathering all of the data required to populate the dashboards. Because dashboards often draw from multiple sources and databases inside (and sometimes outside) the organization, they require the intervention of someone charged with bringing the data together on a regular schedule to create the dashboard report(s). Ideally, this would be an automated process with the relevant databases linked to the reporting software. And, in many cases, this can be accomplished by integrating the dashboard report as a worksheet in an Excel workbook (such as the dashboard generator included with downloadable bonus material) that also contains the database itself on another worksheet.

If a board-staff task force has already been established to assess the board's information needs and assist in the design of the dashboards, this group can continue to make improvements to the dashboards and pretest them on behalf of the board. But it is important to understand that the process of developing and maintaining the dashboard should be seen as an ongoing learning process that may never be finished — the initial dashboard report is not a finished product that only requires upkeep. Boards learn as they discover new and different things they want to know about. Over time, the reports may need to change focus or the task force may want to experiment with different levels of detail, identify alternative indicators, or discover new approaches to interpreting the data. The temptation, of course, is to keep adding more indicators until the dashboard looks like the cockpit of an airliner. Identifying new ways of looking at some dimension of the organization takes place over time, and the system is frequently under revision. For some boards, it could take a number of meetings to iron out a report's content and format. For others, the report may undergo regular revisions. Whatever a board's experience, it should be prepared to commit the time needed to work with staff on creating

and maintaining the dashboard reporting system. And, although it may seem selfevident, it is worth stressing that no dashboard can be any better than the quality of the data which it reports. So, if you don't have a good system of recordkeeping one that maintains accurate and timely data, you can't have a good dashboard, no matter how graphically rich and compelling it may appear.

It's not just a good system of recordkeeping that needs to be in place. The board itself needs to take a hard look at all aspects of its own operations to make sure that they plant information seeds in fertile soil. No matter how well dashboard reports or any other information regularly presented to the board is designed, if board members don't show up for meetings or the meetings are run inefficiently, the benefits of enhanced information will be lost. Just as effective dashboard reporting begins with accurate data, effective governance begins with board discipline.

# INCORPORATING DASHBOARDS INTO A SYSTEM OF BOARD COMMUNICATIONS

As compelling and useful as they are, dashboard reports represent only one component in an array of information resources available to a governing board. And, it is important to note that dashboard reports should not be substituted for more detailed reporting formats, auditor's reports, studies, and databases. The dashboard is just one of the tools for staff to better communicate with the board and prompt further board discussions.

Meeting minutes, budgets, financial statements, issue papers, and staff presentations are among other important pieces of a total system of governance information. All of these pieces can be enhanced through dashboard formatting. For example, a traditional line-item budget might still be provided in the board's meeting book, but its major implications can be summarized using a brief set of narrative points or graphic displays in dashboard form. This summary material could appear in the meeting book (or the board's online portal) to convey the most significant information before the reader is confronted with the backup detail.

Additional reading materials — articles, extracted text, Web sites — can be provided to supplement those dashboards that reveal significant changes or trends. The chief executive can weigh in with their explanation in a letter or presentation at a board meeting. Other experts from within or outside the organization can be invited to address the board on the significance of particular trends or noteworthy changes.

A comprehensive system of board information might consist of the following components:

### • Dashboard Reports

Typically limited to one or two pages, this report format assists the board in quickly assessing the status of the organization. Dashboards present selected key indicators in formats that are consistent from meeting to meeting.

## • Committee Reports

These reports document the activities and issues covered by board committees. By treating issues in greater depth, committee reports can often yield insights that might not surface in a dashboard report.

## Meeting Book

Dashboard and committee reports are among the set of materials contained in the packet of information sent out to the board prior to each board meeting. With some good organization, this packet can help facilitate the board members' access to and understanding of the information needed for effective meeting participation.

#### Board Member Handbook

Typically, the handbook is a separate, loose-leaf binder containing background information on the organization that tends not to change from meeting to meeting (e.g., mission and values statements, strategic plan, executive bios). The handbook should be regularly updated and provide board members with a ready reference guide and orientation manual.

## • Chief Executive's Report

The chief executive customarily produces a report that focuses on the accomplishments of the organization during the period in between board meetings. This can include the status of new programs, updates on fundraising efforts, books published by the organization, or the announcement of new senior staff members.

## • Consultants' Reports

Often, the board engages outside consultants or experts to advise on projects such as the annual financial audit, strategic planning, a capital campaign, or a board self-assessment. The consultant may submit a written report detailing his or her findings or provide a status report of an ongoing project.

In addition to the written materials, the use of e-mail and a password-protected intranet can serve as an effective way to communicate information (including dashboards) to the board. Accessible through the organization's Web site, an intranet allows board members and the chief executive to post new information in a timely manner that may be quickly downloaded. It also offers opportunities for written discussions between members and for board members to share information with the rest of the board without having to wait until the next board meeting.

# CONCLUSION

Dashboards have the potential for helping nonprofit governing boards do their work better, use their time more productively, conduct more effective meetings, and make more thoughtful and informed decisions. Dashboards can help boards monitor progress against a strategic plan and annual operating goals. They can support evaluation efforts by gathering key performance data on programs and services in the context of real-world outcomes. In short, dashboards can give board members needed information that speaks to their governance responsibilities in a compelling and readily understood way.

But creating a useful, meaningful dashboard is not something that simply happens. As should be apparent from the foregoing discussion, it requires some hard but gratifying work. Just keep these parting thoughts in mind:

- Less is more. Resist the temptation to show too many details on every program and activity. Give the board big enough pieces of the picture so members can get a general idea of the message being conveyed. If the board feels the need to delve deeper into details, that can be pursued in more depth later.
- Work with readily available data. Dashboards shouldn't require complicated or expensive data collection. What kinds of data are already available to the board? What else is needed and how feasible is it to gather?
- Carefully select what goes to the board. The board should not be burdened with operational information. That only invites micromanagement and misuses the board's valuable time.

Clearly, the value of a dashboard design process goes beyond the reports it generates. By identifying what is important to measure — those few key indicators that reveal the most salient aspects of institutional performance — dashboards can help improve board decision making and ensure institutional success.

# DASHBOARD GENERATOR INSTRUCTIONS

## **OVERVIEW**

The downloadable bonus material may be found online at https://boardsource.org/nonprofit-dashboard-content/ Enter password dc\_356\_284

It contains a Microsoft® Excel file designed to help get staff started on creating onepage dashboard reports. A few worthy notes:

- This dashboard generator requires that the metrics to be used in the dashboard have already been defined (perhaps by one of the methods suggested in Chapter 2) and that the data to fuel these metrics have already been collected.
- The user of this dashboard generator needs to be able to work with Microsoft® Excel. But, in general, dashboards do not need to be created in Excel. Other spreadsheet applications with a graphing capability can be used. Presentation software with an imbedded graphing function like Microsoft® PowerPoint is also effective. Even most word processing software can be used.
- The templates provided should be considered a starting point for thinking about how to design a dashboard that meets the needs of the organization in question. Not all of the features or options suggested need to be used, and others not found on the downloadable templates might make more sense.

The dashboard generator consists of three worksheets within a single Excel workbook. The first worksheet contains a set of generic, customizable data entry tables that can be adapted to the user's needs. The next two worksheets contain templates for the two styles of dashboard reports referred to in Chapter 3: a scorecard dashboard and a graphic dashboard. To create these dashboards, the user must substitute the organization's real data for the dummy data that appear in the data input worksheet and in the dashboard template worksheets themselves.

#### USING THE DASHBOARD GENERATOR

- 1. The Microsoft® Excel workbook titled Dashboard Generator.xls is a read-only file so that the original worksheets will never be lost. Resaving this file to a personal computer gives users the flexibility to make changes from month to month or year to year as metrics and data change.
  - Do not modify the original read-only file. Open the **Dashboard Generator.xls** file, go to File, Save As..., and resave to your hard drive or network.
- 2. Open the resaved version of the Excel workbook Dashboard Generator.xls. There are three worksheets in this workbook file with the following tabs:
  - Data Tables
  - Scorecard Dashboard
  - Graphic Dashboard

## **USING THE DATA TABLES TAB**

1. Click on the Data Tables tab at the bottom of the screen.

This worksheet is for inputting and changing data in the Data Entry Tables on the left side of the worksheet and having the ability to see instantly how those changes affect the charts that are generated in the Chart Gallery on the right side of the worksheet. This enables users to view changes to their work as they go along. (The second and third tabs will use information entered into the Data Entry Tables and tables from the Chart Gallery in the first tab to create tables in report form to give to board members so as not to confuse them with the rest of the data)

The Data Entry Tables on the first worksheet serve as the Source Data for generating the charts. To view the Source Data that are linked to a graph, click on the graph and the corresponding data will be highlighted on the chart

The tables and charts can be customized by inserting or deleting rows or columns in the Data Entry Tables and adjusting the Source Data to incorporate the changes into the graphs.

The Data Entry Tables already contain sample "dummy" data to show how the various charts appear when data are entered. In generating the dashboard report for your organization, substitute the organization's real data for the dummy data that appear in the Data Entry Tables.

Five different kinds of data displays can be produced via these tables:

- Performance vs. Budget. This allows the user to track actual performance against budget by entering the relevant figures in the spaces provided.
- Component Analysis. Looking at the share of a total quantity represented by one component of that quantity is a common and often useful way of viewing performance, especially in comparison to prior periods or an established goal or benchmark. An example of a component analysis would be a breakdown of revenue sources (earned income, grants, donations, etc.) or of expense categories (faculty salaries, equipment and supplies, etc.).
- Ratio Analysis. Relating a numerator to a denominator such as costs per visitor or current assets to current liabilities — can reveal aspects of operating efficiency, productivity, financial condition, or organizational effectiveness.
- Year-to-Year Change. Annual changes (positive or negative) in items or variables such as: membership, clients served, earned income, and satisfaction scores can help board members and managers focus on areas needing attention.
- Monthly Performance. Trends in numbers of museum visitors, enrolled students, hospital admissions, and other items can often be observed in calendar-based graphic displays, especially when juxtaposed with other monthly displays covering the same time period.
- 2. In the Monthly Performance table at the bottom of the worksheet, enter the first day of your organization's fiscal year in the month/day/year format (00/00/0000).
- 3. Entering data requires replacing the numbers and words in these tables. Click on the cell and type the new data or text, which will instantly replace the current contents.

### **USING THE SCORECARD DASHBOARD TAB**

1. Click on the Scorecard Dashboard tab at the bottom of the screen.

This worksheet is a template for a scorecard or scorecard style of dashboard. It is one design option for a dashboard that combines status icons (in this case, color-coded "arrowheads" and square "traffic lights") with numerical data, charts, and text. There are eight sections:

#### • Key Performance Indicators (KPIs)

This middle section is where the user can include up to 13 KPIs by entering the following: the names of each in the KPI or Metric column, the values of each metric under each of the next four columns (that could represent each of four months, four quarters, or four years), and the Benchmark value in the last column. This could be an internally or externally derived benchmark or goal. The Status column may contain a positive, green up-arrowhead; a negative, red down-arrowhead; or left empty, depending on how the most recent value of the KPI compares with the benchmark. Exceeding the benchmark by some predetermined percentage in either direction would result in placing a green or red icon; otherwise it would be left blank.

#### NOTE:

All of the headings in this dashboard can be changed directly on the worksheet to fit the organization's requirements.

The color-coded icons will not change automatically as the new data are entered. The user must determine what the new data mean in terms of positive or negative performance and will need to attach the appropriate icons in each space. These icons are objects that "sit on top" of the worksheet and can be selected, moved, copied, or deleted as necessary.

## • Other Important Metrics

This section can be used to highlight up to six key performance measures along with their current or most recent values, characterized by one of the square traffic light icons. A subset of KPIs can be featured here separately from the middle section of the report. They might be the cumulative, yearto-date values; while the corresponding values for the same metric in the middle section might be monthly or quarterly values.

#### NOTE:

The color-coded icons will not change automatically as the new data are entered. The user must determine what the new data mean in terms of positive or negative performance and will need to attach the appropriate icons in each space. These icons are objects that "sit on top" of the worksheet and can be selected, moved, copied, or deleted as necessary.

#### Alerts

This section can accommodate up to five significant events or facts that have occurred or will occur within the time frame designated, along with the appropriate icon to indicate whether this is a negative event or fact (red), one that bears careful watching (yellow), or one that is positive (green).

#### Other Notable Items

This section can be reserved for any additional items of interest to the board.

#### • Charts 1, 2, and 3

These three sections are reserved for charts that depict information of interest to the board. The charts included here were generated in the Data Tables worksheet and selectively copied, reduced in size, and placed in these sections. (Notice that as the numbers are changed in the Data Entry Tables, the related chart that has been copied to the dashboard template changes accordingly.) The user is free to select other charts from the Chart Gallery in the Data Tables worksheet or charts created in another application, or a graphic image from an online or other source.

### President's Message

In this section, the chief executive (or another senior staff member, the board chair, or a committee chair) can explain any significant changes in Key Performance Indicators or other noteworthy trends or events.

2. To see how this dashboard will appear when it is printed and presented to the board, click on the File menu at the top of the screen; then click on Print Preview. You will note that a heading appears. To change the heading — the name of the organization, the title of the report, and the date of the report — select Setup while in Print Preview, then Header/Footer, and then Custom Header where the changes can be made. Click OK to save changes.

### USING THE GRAPHIC DASHBOARD TAB

1. Click on the Graphic Dashboard tab at the bottom of the screen.

This worksheet is a template for the graphic style of dashboard reporting. The charts in the Graphic Dashboard are produced by the data entered into the Data Entry Tables in the Data Tables worksheet. These charts can be moved, resized, and reformatted. The techniques for doing so should be well within the capabilities of a staff member with a working knowledge of Microsoft® Excel. These techniques involve various combinations of the following operations:

• Double-click on the graphic display to bring up menus that permit adjustment of various features, such as axis scales and font sizes. Select the feature to be modified and double-click on it. Drag and adjust the size and shape of the display by moving the cursor to the outside edge of the frame surrounding the display and clicking on one of the adjustment handles at the corners or in the center of each side.

- Select the entire display by clicking on the white background and then either copy and paste to create a duplicate or delete it using Control + X.
- Insert new text into the text boxes that sit on top of the displays by dragging across the current text to select it and then typing the new text in its place.
- 2. To see how this dashboard will appear when it is printed, click on the File menu at the top of the screen, then click on Print Preview. You will note that a heading appears. To change the title of the report, select Setup while in Print Preview, then Header/Footer, and then Custom Header where the changes can be made. Click OK to save changes.

### **USING WHAT YOU'VE CREATED**

- 1. Always save the worksheets when they are completed (and at regular intervals during each work session). As each dashboard is completed, it should be saved and printed.
- 2. To facilitate the creation of the next version of the dashboard (e.g., the next month's version), copy the previous version as a new worksheet in the same workbook and use this copy as the basis for changes. In this way, an archive of completed dashboards can be maintained.
  - To create a duplicate of any Excel worksheet, right-click the tab you want to copy, then select move or copy. Click the location where it is to appear, and then click OK. Double click on the new tab at the bottom of the workbook to change the text and relabel that worksheet appropriately.

# SUGGESTED RESOURCES

#### **Publications**

BoardSource. The Source: Twelve Principles of Governance That Power Exceptional Boards. Washington, DC: BoardSource, 2005. Exceptional boards add significant value to their organizations, making discernible differences in the advancement of their missions. The Source defines governance not as dry, obligatory compliance, but as a creative and collaborative process that supports chief executives, engages board members, and furthers the causes they all serve. It enables nonprofit boards to operate at the highest and best use of their collective capacity. Aspirational in nature, these principles offer chief executives a description of an empowered board that is a strategic asset to be leveraged, and provide board members with a vision of what is possible and a way to add lasting value to the organizations they lead.

Butler, Lawrence. A Guide to Board Information Systems. Washington, DC: Association of Governing Boards of Universities and Colleges, 1999. This book discusses ideas and techniques for devising board information systems to inform board members of their key aspects of institutional performance that are mission sensitive and strategic, help define the boundaries between governance and management, and take into account the time constraints of board members. The book discusses the use of dashboard reports, design principles in preparing these and other reports, the value of specificity, and how board members can get up to speed in understanding a common base of information.

Connolly, Paul M. Navigating the Organizational Lifecycle: A Capacity-Building Guide for Nonprofit Leaders. Washington, DC: BoardSource, 2006. This evergreen resource encourages nonprofit board members and executives to be more proactive and informed about what comes with growth and change. It presents a theory of the evolutionary development of nonprofit organizations, explaining the nonprofit organizational lifecycle model and why it matters; core components of organizational capacity and how they influence an organization's successful development; how a board's composition and responsibilities change at each stage of the lifecycle; how to anticipate future challenges, strengthen capacities, and align lifecycle stages with capacities; and how to obtain funder support for nonprofit organizational development. Don't miss the organizational lifecycle assessment tool!

Eckerson, Wayne W. Performance Dashboards: Measuring, Monitoring, and Managing Your Business. New York: John Wiley & Sons, 2005. This resource shows how leading companies are using performance dashboards to execute strategy, optimize business processes, and improve performance through the use of case studies and industry research.

Few, Stephen. Information Dashboard Design: The Effective Visual Communication of Data. Sebastopol, CA: O'Reilly Media, 2006. Dashboards have become popular in recent years as uniquely powerful tools for communicating important information at a glance. This book will teach the visual design skills needed to create dashboards that communicate clearly, rapidly, and compellingly.

Fischer, Daryl and Lawrence Butler. Strategic Thinking and Planning: Templates for Trustees. Washington, DC: Museum Trustee Association, 2004. This resource contains 16 different tools to help museum leaders build an effective strategic plan and regularly monitor progress toward strategic goals.

Flynn, Outi. Meeting, and Exceeding Expectations: A Guide To Successful Nonprofit Board Meetings, Second Edition. Washington, DC: BoardSource, 2009. This resource is perfect for board members or chief executives who want to figure out what may be missing from their board meetings and how to improve upon old models of discussion and thinking. The book includes solutions to common board problems, tips to promote generative discussions, and suggestions to encourage board members to engage in innovative thinking to come up with new solutions to problems.

Grace, Kay Sprinkel, Amy McClellan, and John A. Yankey. The Nonprofit Board's Role in Mission, Planning, and Evaluation, Second Edition. Washington, DC: BoardSource, 2009. Boards may tend to look at mission, planning, and evaluation as separate processes. This book demonstrates how these concepts can be integrated to allow a clearer view of mission, improved strategy, and better information for effective goalsetting.

Kaplan, Robert S. and David P. Norton. "The Balanced Scorecard: Measures That Drive Performance." Harvard Business Review, July 2005. Authors Robert Kaplan and David Norton propose an innovative solution for managers who want a balanced presentation of measures that allow them to view the organization from several perspectives at once.

Measuring Program Outcomes: A Practical Approach. Alexandria, VA: United Way of America, 1996. This resource is a step-by-step manual for health, human service, and youth- and family-serving agencies on specifying program outcomes, developing measurable indicators, identifying data sources and data collection methods, analyzing and reporting findings, and using outcome information. It includes worksheets, examples, and a bibliography on measurement issues and performance indicators.

Murray, Vic. "The State of Evaluation Tools and Systems for Nonprofit Organizations." 2005. www.tess.org/misc/VMSummary.html. This Web article helps the reader determine what an ideal evaluation system would look like.

Trower, Cathy. Govern More, Manage Less: Harnessing the Power of the Nonprofit Board. Washington, DC: BoardSource, 2010. Though it is widely acknowledged that boards should govern, not manage, their organizations, it can be difficult to walk the line between these two objectives. In actuality, proper governance involves a balance between making sure the organization complies with legal and regulatory provisions and achieves its overall mission. This book offers guidance on how the board should engage with the organization and on what topics, offering guidelines for optimal governance.

Tufte, Edward R. The Visual Display of Quantitative Information. Cheshire, CT: Graphics Press, 2001. This classic book on statistical graphics, charts, and tables focuses on the theory and practice in the design of data graphics. The text includes 250 illustrations of the best (and worst) statistical graphics, with detailed analysis of how to display data for precise, effective, quick analysis.

#### WEB SITES

### www.chandoo.org/wp/excel-dashboards/

This site is an excellent place to find resources, templates, tutorials, downloads and examples related to creating dashboards using Microsoft® Excel. While most examples deal with business management, you can find many valuable tips and best practices that can be readily applied in nonprofit settings at the governance level.

#### www.datatodashboard.com

This blog is organized around the following topics: Dashboard Visualization, Dashboard Software, Facebook Dashboard, Business Intelligence, Management Dashboards, Dashboard Glossary, Find Dashboard Vendors, Dashboard Books, and Data Dashboard Store.

#### http://national.unitedway.org/outcomes/

The United Way of America's Web site provides an Outcomes Measurement Resource Network. Learn more about their outcome measurement program and find additional resources.

#### www.theoryofchange.org

A Theory of Change is an innovative tool to design and evaluate social change initiatives. By creating a blueprint of the building blocks required to achieve a social change initiative's long-term goal, such as improving a neighborhood's literacy levels or academic achievement, a Theory of Change offers a clear road map to achieve results identifying the preconditions, pathways, and interventions necessary for an initiative's success. On this site, please find: "Guided Example: Project Superwomen." ActKnowledge and the Aspen Institute Roundtable on Comprehensive Community Initiatives, 2003.

# **ABOUT THE AUTHOR**

Lawrence Butler is a senior consultant and strategic planning specialist with Maguire Associates (www.maguireassoc.com), a research-based consulting firm that helps colleges and universities advance their mission, strengthen their reputation, and enhance their vitality and effectiveness. He was also a senior fellow and former chairman of The Cheswick Center, a charitable trust dedicated to improving the governance function in nonprofit institutions.

Mr. Butler began his 45-year consulting career with The Boston Consulting Group, where he was responsible for strategy assignments on behalf of a broad array of corporate and institutional clients. He subsequently established a consulting firm specializing in strategic planning for nonprofits in fields as diverse as higher education, museums, health care, and philanthropy. He was principal investigator of a multiyear project funded by the Lilly Endowment, demonstrating in a variety of settings the value of specially designed board information systems for improving institutional governance. As an outgrowth of that work, he assists colleges, universities, and other organizations in enhancing the communicative power of board information.

Mr. Butler has written extensively on strategic planning and governance information enhancement. He is co-author of Strategic Thinking and Planning, published by the Museum Trustee Association. His other writings include: The Board's Role in Strategic Planning and A Guide to Board Information Systems (Association of Governing Boards of Universities and Colleges), and A New Tool for the Board's Kit: Board Information Systems and Dashboard Reports (The Governance Institute).

Mr. Butler holds a master's degree in business administration from Harvard Business School and a bachelor's degree from Harvard College.

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