Business Process is a hot topic at the moment. Depending on who you talk with, Business Process can include business performance management, business intelligence and executive dashboards, the creation of a business process architecture, process redesign and improvement, six sigma and lean, as well as a host of business process management software systems.

Surveys typically find that senior executives are not very happy with the way their organizations implement their corporate strategies. If you ask, senior managers will consistently say that one of the things they hope to get from BPM is an improved way of measuring corporate performance. If you look at most BPM methodologies, however, you will find them long on redesign and improvement techniques and on business process architecture concepts but surprisingly short on performance measurement.

Most business process redesign or improvement programs talk about the importance of measurements. Some projects, especially those led by Six Sigma practitioners, gather lots of data on process performance. Unfortunately, most of these measurement efforts are project focused. They start with the process and measure improvements in the process. They sometimes relate metrics to measures of customer satisfaction, but they very rarely show how the process measures are actually aligned with the organization’s goals and strategies. In other words, most organizations do not have a systematic way of tying specific measures derived from a particular process to the overall goals or strategies of the company. Nor is there a systematic effort to gather measures on all processes in the organization that could enable comparisons between changes in one process and changes in related processes.

This situation is about to reach crisis proportions within the BPM community as companies increasingly adopt BPM software products that are capable of automatically gathering process measures and transmitting them to executive dashboards. During the past year,
many of the leading BPM software companies have announced acquisi-
tions of Business Intelligence firms. Those acquisitions are predi-
cated on the assumption that companies will use these capabilities to
report metrics to executives, and then provide those executives with
advice about trends that can guide executive decisions. It will be
ironic if the BPM vendors acquire a lot of fancy technology and then
can’t offer their clients a systematic approach to determining what
process measures their fancy tools should actually monitor and
report.

The approach to corporate performance measurement that has
been most widely adopted over the past decade derives from Robert
Kaplan and David Norton’s work on Balanced Scorecards, which they
initially defined in the *Harvard Business Review* in the early 1990s.
In their original articles and subsequent books, Kaplan and Norton
focused on helping organization’s broaden the number of things they
measured. The “Balanced Scorecard,” as conceived by Kaplan and
Norton, was a grid that considered Financial, Customer, Operational,
and Learning and Growth measures. As they developed their ideas
over the course of the past decade, Kaplan and Norton have increas-
ingly sought to tie their Balanced Scorecard measures to an organiza-
tion’s strategic goals. Kaplan and Norton now speak of Strategy Maps
and seek to derive measures from a hierarchy of business activities.

Many organizations have explored the Balanced Scorecard
approach; some with notable success. Unfortunately, most organiza-
tions have used the Balanced Scorecard to reinforce their existing
organizational structures. Thus, organizations begin by creating a cor-
porate scorecard. The goals and measures defined on the corporate
scorecard are then delegated to divisional or departmental score-
cards, and then, in top-down fashion, to subdivisions or functional
units within departments. In too many organizations, scorecards have
served to reinforce the departmental silos and management practices
that are so detrimental to effective organizational performance.

Thus, in 2004, I was happy to discover Praveen Gupta’s book, *Six
Sigma Business Scorecard*. This book presented scorecards from a
process perspective, explicitly typing scorecards to business
processes. It also extended the four measurement categories, as many
other scorecard users have done, to a more extensive set of measures,
including Leadership and Profitability, Management and Improve-
ment, Employees and Innovation, Purchasing and Supplier Management, Operational Execution, Sales and Distribution, and Service and Growth. *Six Sigma Business Scorecard* initiated a very fruitful dialog within the business process community and has led a number of business process gurus to see how a scorecard approach can provide business process developers with a more systematic way of generating and maintaining an enterprise-wide process/performance measurement system.

While business process people have become more excited about the potential of scorecard systems, Praveen Gupta has continued to think about the challenges of aligning process measures with strategies and with corporate performance systems. In *Service Scorecard* Gupta has joined with Rajesh Tyagi to move from a Six Sigma focused view of scorecards to a broader view of processes. At the same time, reflecting a growing recognition among process practitioners that service processes are different from manufacturing processes, Gupta and Tyagi have written a new book that extends the scorecard concept, while simultaneously focusing it on the concerns of service business organizations.

As a generalization, manufacturing businesses generate products, which are then packaged and delivered to customers. Service businesses don’t so much create products as they create customer experiences. The actual “product” they deliver is modified as it is delivered, consisting, as it does, of interactions between the customer and the company employees engaged in providing the service. Obviously this isn’t a sharp distinction, but it is an important one and it results in particular challenges for business executives who seek to measure the success of service-oriented business efforts. Many books have been written on the problems of measuring manufacturing processes. It’s refreshing to find a book that focuses on the problems of monitoring and measuring the activities of organizations that focus on providing services.

*Service Scorecard* starts with the sevenfold scorecard that Gupta developed in *Six Sigma Business Scorecard* and refines it to support an organization that is trying to measure and organize its service processes. This new book clearly reflects Gupta and Tyagi’s experience over the past few years and provides lots of very practical advice.
on how to organize corporate scorecard development efforts. At the same time, they devote specific attention to how one can organize measures to predict business trends.

This is an important book that appears at a critical time in the development of corporate business process management efforts. It suggests a practical way to meld process management and performance measures into a well-aligned system. It provides BPM practitioners with a way to conceptualize how their efforts can support business strategies. This book shows you how Business Process Management will evolve into the next phase by merging business processes, performance measures, and management evaluations into a seamless whole. Thus, this is a book that everyone involved in process work or performance measurement should read.

— Paul Harmon
Executive Editor, Business Process Trends
The book that you are about to read, Service Scorecard: Creating Value Through Sustained Performance Improvement, represents an important contribution to the literature on performance measurement of services organization. As you know, service has become, by far, the dominant sector in the world economy. But, as you also know, services organizations are often very frustrating to deal with, both to work for and to do business with. We all have our favorite stories of services snafus. On the high end, there are some very effective organizations, but in general the quality of services is remarkable for its deficiencies and inconsistencies. The services exemplars invariably have better measurement systems.

In my recent book, Transforming Performance Measurement, I explain that no organization can be any better than its measurement system because management is based on measurement. That is why I am so enthusiastic about this book. If your organization uses even a few of the principles, methods, and tools contained in this valuable book, it will become more effective. The framework proposed in this book is both comprehensive and practical and reflects the state-of-the-art thinking on good performance measurement.

But innovative thinking about performance measurement in services is rare. It was the dearth of good thinking about performance of measurement in services that led me to found the Research Roundtable on Services Performance Measurement, with members invited from leading companies, non-profits, government, and academic institutions. Because of their thought leadership, the authors of this book, Praveen Gupta and Rajesh Tyagi, were selected as members.

Praveen is a prolific author, an excellent communicator, an innovative thinker, and a valued colleague. I have read many of Praveen’s previous books and have benefited greatly from his wisdom and his
counsel. I have frequently cited the *Six Sigma Business Scorecard* in my own writing. This book applies and extends that thinking specifically to services.

By reading this book, you are taking an important step toward the “sustained performance improvement” of your services organization.

—Dean Spitzer, Ph.D.

*Author of* Transforming Performance Measurement
*Founder of the Research Roundtable on Services Performance Measurement*
Introduction

As economic focus shifts to service businesses, performance management of service organizations becomes of interest. Most management work has been geared toward businesses comprised of manufacturing supported by associated service operations. Our experience teaches us that as the role of manufacturing in developed or developing economies shifts toward service businesses, performance of services suffer due to ineffective and inefficient management of service resources. For example, customers are more dissatisfied with services in the service economy than with services in the manufacturing economy. There is a consistent and steady decline in the perception of service quality. Customers today get less, and poorer, services in many business sectors—be it telecommunication, fast food, airline, or personal computers—and they feel helpless (Service quality ACSI index of 80.3 in year 1994 compared to an index of 78.3 in year 2004).

Business management for product-driven companies—such as Proctor & Gamble, Motorola, Rubbermaid, Exxon Mobil, Apple, Boeing, or Toyota—is not suitable for companies like Goldman Sachs, Bank of America, American Express, Disney, Starbucks, Southwest, or McKinsey. In other words, service organizations do have their uniqueness that must be managed to achieve sustainable, profitable growth. The main differences between services and manufacturing operations include service focus, interaction with customers and customer participation, job skills, intellectual component, compensation, process and experience management, perception of research and development in services, and performance measurements. Components of the cost of goods sold vary from that of the cost of services due to the lack of physical inventory involved. On the other hand, payroll dollars may be higher for services businesses than the manufacturing business due to the qualification level of service professionals. Even though service functions at the surface level
sound and appear to be similar to their manufacturing counterparts, adaptation to service intent becomes an implementation issue that creates a need for the Service Scorecard.

The authors have experience with a variety of scorecards, including the Balanced Scorecard and Six Sigma Business Scorecard, in a variety of industries. Channeling their personal academic and business experience has led them to develop the Service Scorecard. The Service Scorecard builds on the framework used in Six Sigma Business Scorecard, which is a hybrid of Six Sigma and Balanced Scorecard for ensuring completeness and ease of implementation. The authors have written the Service Scorecard book to enable service performance professionals to view their service operations in the business context and manage it for best in class performance. This book benefits from the historical performance management principles and presents the complete model that drives best in class performance, service innovation, and employee engagement. Eventually, service organizations need Service Scorecard to ensure sustained profitable growth for for-profit organizations, or sustained value for not-for-profit organizations. The sustained profitable growth implies that service businesses can grow and make money at the same time, rather than either grow or earn profit year after year through excellence in execution and innovation. Similarly sustained value implies that a not-for-profit must define its value proposition and continue to grow the value creation yearly.

The Service Scorecard book has been organized in three parts.

Part I, “Understanding Service Performance,” builds the background in performance management and presents its challenges. Part I also includes a chapter on Six Sigma for services, which introduces the concepts as the Six Sigma intent as incorporated in the Service Scorecard. The intent of Six Sigma is to accelerate improvement in order to achieve superior and best in class performance. At the end of Part I, you learn about the challenges of service performance management, various performance management models, gaps in performance management for service, and the need for the Service Scorecard.
Part II, “Learning Service Scorecard,” is written to introduce Service Scorecard. You will learn about Service Scorecard concepts and Glacier elements. Glacier is an easy way to remember all seven elements: Growth, Leadership, Acceleration, Collaboration, Innovation, Execution, and Retention. In service operations, collaboration and retention are two distinct aspects that differ significantly from manufacturing operations. You learn about the Service Performance Index (SPIN), which is based on the overall performance of the service organization and developed specifically for leadership of the organization for identifying opportunities for performance improvement. By the end of Part II, you will understand the framework of the Service Scorecard, its elements, associated measurements, and their applications for driving organization-wide performance improvement.

Part III, “Practicing Service Scorecard,” focuses on implementation aspects. It covers the step-by-step approach to implementation, integration with various existing improvement initiatives, and best practices for various elements of the Scorecard. Also, validation of the Service Scorecard demonstrates the importance and relevance of each element, and the causal relationship between each element and SPIN, which is a predictor of the service corporation in achieving sustained profitable growth. In identifying best practices, the authors have identified several successful service corporations that use various elements of the Service Scorecard. Practicing all elements in an organization is bound to make the service organization perform at a much higher level, thus making it a profitable and growing organization. Wall Street rewards profitable firms—however, employees love a profitably growing organization as it facilitates their growth and brings out their best. Finally, profitable growing organizations are fun to work for!
Performance Management and Scorecards

The service component of the U.S. economy has been growing continually for the past several decades. National economic development moves through stages of growth in agriculture, manufacturing, and service. The dominance of service is influenced by the role of support functions, value-sourcing, and evolving servicing enterprises. These support functions may include sales, purchasing, design, and human resources; value-sourcing really implies sourcing for value irrespective of national boundaries; and servicing enterprises include the service sector, such as finance, insurance, and real estate. More than two-thirds of the U.S. gross domestic product (GDP) has service components. Major corporations, like GM and GE, are shifting manufacturing and focusing more on the service side of the business, to the point where most of their profits are realized through service elements.

The transformation of the U.S. economy from an agricultural-based to manufacturing-based leading to a service-based economy has a profound impact on the way corporate performance should be measured. The agricultural process is inherently nature-dependent and supplemented by machines and people. The process of agriculture was originally learned through apprenticeship. In manufacturing, on the other hand, the definition, measurements, and improvement became more exact and, thus, a science. As a result, the manufacturing processes became learnable, repeatable, and measurable. Thus, the performance of the manufacturing processes improved over time to virtual perfection (i.e., Six Sigma level).
Service Industry Components

The service processes consist of interaction and transaction elements. The transaction-heavy service processes are similar to the manufacturing processes; however, the interaction-heavy service processes have their intricacies. Even the transaction-heavy service processes contain elements of interaction that make their definition and measurement somewhat difficult. The transaction processes are typically high-volume, process-dependent, formatted customer input; thus, they are more efficient and have a low value per transaction. On the other hand, the interaction processes contain low-volume, extensive-people-dependent, flexible customer input; thus, they are more responsive and have a high value per service. Interaction-based services could be classified as traditional services, such as a retail setting or financial services, or as experiences such as theme parks. The length and extent of interaction with the customer separates these types of interaction services.

Based on these types of services, we could describe services as a transaction or as an experience. Considering services as a transaction, the inputs to a service process include customer information, systems, methodologies, interpersonal skills, work environment, and response time. The output of a service process may be a transaction record document or personal service to a customer. The performance of the transaction record can be measured in terms of its accuracy, but the performance of a personal service can be somewhat difficult to measure because of human emotions and perceptions. Considering services as an experience, the firms usually “stage” the experience with customer involvement, and customers leave with a “memorable perception.”

A business is a collection of business processes. Each business contains common processes as well as unique processes. The common processes include management, sales, purchasing, human resources, quality, and customer support. The unique processes represent the focus of the business. In financial services, for example, these unique processes could relate to stock buying or selling transactions, loan
applications review, dividends distribution, banking services, and many more. Both transaction- and interaction-heavy businesses will contain common as well as unique service processes. The process errors observed in the transaction- and interaction-heavy businesses include information accuracy and integrity errors, product performance errors, delinquencies, errors in the misapplication of a tool, customer service errors, and other human errors.

Business Performance Measurement

Challenges in the Service Industry

The leadership of a service organization faces the challenge of measuring business performance. In a manufacturing business, the leadership tracks the number of turns, customer satisfaction, inventory levels, and/or asset utilization. Service businesses, however, do not have inventory levels, the number of turns, or significant assets to measure utilization. The most critical asset—human resources—is difficult to measure. Some companies attempt to remedy this challenge by measuring productivity in terms of revenue per employee, but doing so can have its drawbacks.

As an example, the leadership in one company hired a productivity consultant, and one of us was hired as a quality or performance consultant. During a casual discussion, we were told that whenever the productivity consultant met with employees or analyzed employee productivity, employees slowed down. Measuring human productivity has a negative connotation associated with it and is sometimes perceived to be detrimental to employee dignity. In addition, human productivity is difficult to measure for further improvement. If one measures revenue per employee as a measure of productivity, the only way to improve the productivity without any process improvement is to reduce head count or improve sales. Such action implies that scorecards must identify process-based measurements rather than events or outcome-based measurements.
The Balanced Scorecard

Beginning with the simple measurements of profit, growth, or customer satisfaction, to a series of financial measurements, there has been a perceived continual need for more nonfinancial measurements. The need for measurements is growing due to the increased expectation of more process knowledge coupled with the lack of information about the process. Both for-profit and not-for-profit organizations use a variety of scorecards. Whenever an activity is performed, interest in measurement begins with a need to know the “goodness” of the activity’s outcome. Measurements are taken related to the activity’s consistency and the “goodness” of inputs to the activity. A challenge with the outcome-related measurements, however, is the lack of information due to the nature of the measurements and their application.

Financial measurements are easier to assess than the output measurements because of commonality across processes and industries. The Balanced Scorecard was introduced by Robert Kaplan and Ken Norton in the early 1990s as a framework for diversifying measurements beyond financial measurements. Since its inception, many companies have implemented or attempted to implement the Balanced Scorecard; however, its impact is not known yet. The Balanced Scorecard consists of four perspectives: Customers, Financial Operations, Internal Operations, and Learning and Growth. After reviewing its performance in the field, the following observations are apparent:

- The Balanced Scorecard was designed as a Strategic Management System and thus geared toward the organization’s executives instead of toward operations. As a strategic management system, it does incorporate various aspects of the organization; however, it is not useful at the operations level.
- Employees at the operations level cannot relate to the Balanced Scorecard, thus causing a gap in communication between executives and employees.
- The Balanced Scorecard does not relate to the organization’s structures; thus, it appears to be an imposed set of measurements. No actual business is organized as four perspectives with clear responsibility for each perspective. Therefore, successful
implementation of the Balanced Scorecard appears to be questionable in the absence of clearly identified responsibilities.

• The Balanced Scorecard does not provide guidance for implementation at the process level. Although it can identify measures at the process output level, it does not clearly help in identifying relevant measurements at the process level, where all the opportunities in performance improvement reside.

• The Balanced Scorecard does not address the intangibles of an organization and thus remains incomplete. It does not address the issues of leadership, employee innovation, and improvement.

In several conferences we have asked the audience to raise their hands about using the Balanced Scorecard. Invariably, everyone raised their hand to demonstrate their use of the Balanced Scorecard. When we asked them how good they felt about the Balanced Scorecard’s impact on their company’s bottom line, no hand went up. In other instances when one of us asked about implementation of the Balanced Scorecard, we rarely saw any hand go up. Instead we got responses like, “It has been implemented in our Finance department,” or “It is for our management.” Such responses simply show that people are calling their measurements “the Balanced Scorecard” without using it as intended, implying that the Balanced Scorecard has been unable to address real business needs.

During the past 10 to 15 years, the business model has significantly changed. Factors such as globalization, increased competition, arrival of the Internet, outsourcing, and strength of Asian economies have all disrupted the current business model. In addition, the Balanced Scorecard has not changed its methodology since its inception. Although continual change is now fundamental to a business, the Balanced Scorecard has maintained its status quo. The measures of business performance within the Balanced Scorecard must change to represent the present reality.

Because the Balanced Scorecard, consisting of the four perspectives of Customers, Internal Operations, Financial Operations, and Learning and Growth, is the known measurement system to date, its variations have been implemented in several industries, such as human resources, healthcare, municipalities, and information technology. The conceptual breakthrough highlighted in the Balanced
Scorecard led to diverse measurements. For example, when imple-
mented at Halifax Regional Municipality in 2004, the Balanced
Scorecard was diversified based on the priorities of the municipality's
business strategies. Challenges faced in diversifying the scorecard in-
cluded too many priorities, conflicting demands, and operational ver-
sus strategic emphases.

Business Performance Evolution

According to Dean Spitzer, the author of Transforming
Performance Measurements, performance measurement has evolved
into a purely technical area using methodologies (i.e., the dashboard).
Measurement specialists lead the measurement initiative, and every-
one else in the organization just becomes an observer of performance
measurement. The complete cycle of performance measurement must instead be implemented effectively to realize its dual purpose of
organizational learning and business transformation.

According to documents at the Performance Measurement
Resources Center at The Enterprise Solutions Competency Center,
which provides support for the Department of Defense Executive
Branch, the current business environment is very different from what
it was ten years ago. Performance measures drive accountability, visi-
bility, and transparency; inspire and motivate all employees; provide
direction for the organization; and encourage alignment from top to
bottom. Strategy sets the direction for execution, and performance
measurement allows for improvement. In a nutshell, performance
measurement is the process of developing indicators using metrics for
driving progress toward business goals.

Fundamentally, enterprises realize that their primary challenge is
the disconnect that exists between strategy and execution. Strategy,
initiatives, resources, and risk are addressed at the senior executive
level of an organization, but they are not directly tied to the day-to-day
activities. As a result, organizations can measure performance, but
they are unable to manage it.

One of the reasons an organization has a performance measure-
ment system without a significant impact on the bottom line is a lack
of understanding of the role of measurements. Table 1.1 shows how the measurements have historically been utilized. These measurements were reviewed for various aspects such as basic purpose, driver, methodology, type, example, outcome, challenge, and beneficiaries. The need for a different set of measurements is apparent when you study the trend from the industrial age to the knowledge age. Interestingly, even the purpose of establishing measurements subtly changed from productivity, quality, and profit to profitable growth.

**TABLE 1.1 Evolution of Performance Measurements**

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Industrial Age</th>
<th>Quality Age</th>
<th>Information Age</th>
<th>Knowledge Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective/Scope</td>
<td>Increase productivity</td>
<td>Improve quality</td>
<td>Improve bottom line</td>
<td>Sustained profitable growth</td>
</tr>
<tr>
<td>Driver</td>
<td>Basic needs</td>
<td>Expectation</td>
<td>Shareholders driven</td>
<td>Customer value driven</td>
</tr>
<tr>
<td>Methodology</td>
<td>Metrics</td>
<td>KPIs</td>
<td>Balanced Scorecard</td>
<td>Business Scorecard</td>
</tr>
<tr>
<td>Type</td>
<td>Output</td>
<td>In-process</td>
<td>Organization wide</td>
<td>Supply Chain</td>
</tr>
<tr>
<td>Purpose of Establishing Measurements</td>
<td>Quantity—Units (Cost per unit)</td>
<td>Yield % Good (Defects per unit)</td>
<td>% Profit (Profit per unit)</td>
<td>% Profitable Growth (Value per unit)</td>
</tr>
<tr>
<td>Outcome</td>
<td>Fulfill customer needs</td>
<td>Get customer business through quality</td>
<td>Increase market value through profit</td>
<td>Achieve business growth through innovation</td>
</tr>
<tr>
<td>Challenge</td>
<td>Orders shipped</td>
<td>Quality received</td>
<td>Financials achieved</td>
<td>Performance achieved</td>
</tr>
<tr>
<td>Beneficiaries</td>
<td>Producer</td>
<td>Consumer</td>
<td>Shareholder</td>
<td>Stakeholders</td>
</tr>
</tbody>
</table>

Productivity increase was required to keep up with the customer demand, which led to sacrifices in quality and resulted in focusing on quality improvement. The quality improvement was related to the
cost of poor quality deducted directly from the profit, thus leading to a focus on profit. Excessive focus on profit led to adverse actions, such as layoffs, outsourcing, supplier squeeze, price wars, and the eventual demise of the business.

While the business progresses through its life cycle, experience and information are gained, technology is developed, and responsiveness becomes critical. Now customer delight—not just customer satisfaction—is expected. The explosion of knowledge has led to informed customers, intense competition, and more demand for better, faster, and more (not cheaper) value. This shift requires operation optimization, continual innovation, and mass customization. As a result, the leadership must become adept at multitasking, comprehending business complexity, and responding optimally.

All of this evolution in business development highlights the need for profitable growth, which requires measurements that represent all segments of the business—objective and subjective, machines and people, and strategy and execution. Kaplan and Norton's Balanced Scorecard was designed to improve the bottom-line performance of companies by focusing on nonfinancial measures of the vision, strategy, objectives, targets, and actions. Experience shows that most Balanced Scorecard measurements follow the “SMART” (specific, measurable, action, realistic, and target) principle. However, the real business also consists of difficult-to-measure, difficult-to-quantify, knowledge-driven, and subjective measurements. Service industries and operations are bound to have more subjective performance measurements.

The *Six Sigma Business Scorecard* book (Gupta, 2006) presented a holistic business scorecard framework consisting of seven categories and ten measurements. The seven categories and measurements are shown in Table 1.2.

As with any scorecard, the Six Sigma Business Scorecard needs to be adapted to various industries. The seven categories are applicable to most businesses; however, measurements need to be customized to represent needs of various industries. For example, in banking industries or similar service industries, physical inventory may not exist; thus, the purchasing performance could be measured differently.
Evolving business conditions continually highlight the outsourcing processes, growing collaboration or partnerships trends, and intellectual engagement of employees. In addition, service processes do have different dimensions and attributes of their own, especially in terms of the roles of people and machines. Unlike in manufacturing, which is equipment- or machines-heavy, service processes are more

<table>
<thead>
<tr>
<th>Category</th>
<th>Measurements</th>
<th>Significance (%)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership and Profitability</td>
<td>Profit</td>
<td>15%</td>
<td>12% profit implies 100% score.</td>
</tr>
<tr>
<td></td>
<td>CEO Recognition</td>
<td>15%</td>
<td>CEO recognition is accorded for significant value creation.</td>
</tr>
<tr>
<td>Management and Improvement</td>
<td>Rate of Improvement</td>
<td>20%</td>
<td>Each department must set an aggressive goal for improvement.</td>
</tr>
<tr>
<td>Employees and Innovation</td>
<td>Number of ideas per employee</td>
<td>10%</td>
<td>Idea generation implies employee engagement; thus, it is critical that employees continually input their ideas for improvement.</td>
</tr>
<tr>
<td>Purchasing and Supplier</td>
<td>Quality (Sigma)</td>
<td>5%</td>
<td>The aim is to have suppliers achieve higher quality.</td>
</tr>
<tr>
<td>Management</td>
<td>Cost of Purchase</td>
<td>5%</td>
<td>Cost of Purchase is measured as % of sales.</td>
</tr>
<tr>
<td>Operational Execution</td>
<td>Quality (Sigma)</td>
<td>5%</td>
<td>Internal operations must aim toward established performance targets.</td>
</tr>
<tr>
<td></td>
<td>Cycle time variance</td>
<td>5%</td>
<td>Cycle time variance requires setting delivery or activity completion targets.</td>
</tr>
<tr>
<td>Sales and Distribution</td>
<td>% new sales</td>
<td>10%</td>
<td>Emphasis on new sales for revenue growth.</td>
</tr>
<tr>
<td>Service and Growth</td>
<td>Customer Satisfaction</td>
<td>10%</td>
<td>This could be a measure of multiple internal measures leading to customer satisfaction and loyalty.</td>
</tr>
</tbody>
</table>
people-driven. Table 1.3 demonstrates the differences between service and nonservice businesses.

**TABLE 1.3 Service and Nonservice Business Differences**

<table>
<thead>
<tr>
<th>Business Attributes</th>
<th>Nonservice Businesses</th>
<th>Service Businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers</td>
<td>Customer requires tangible outputs, measurable performance, and ability to easily get it corrected; customer is less engaged from operations.</td>
<td>Customer requires intangible outputs; it is difficult to measure performance and easier to re-deliver rather than repair; customer is likely to be involved in the delivery operations.</td>
</tr>
<tr>
<td>Outputs</td>
<td>Products, parts, or systems create experience.</td>
<td>Experience creates the output.</td>
</tr>
<tr>
<td>Processes</td>
<td>Series of operations involving machines, material, method, and people.</td>
<td>Series of activities involving people, material, tools, and methods.</td>
</tr>
<tr>
<td>Inputs</td>
<td>Tangible raw material.</td>
<td>Intangible information.</td>
</tr>
<tr>
<td>Suppliers</td>
<td>Many suppliers depend upon the complexity of the solution.</td>
<td>Fewer suppliers with stronger relationships.</td>
</tr>
</tbody>
</table>

Recent emphasis on business governance, such as the Sarbanes Oxley (SOX) Act, has imposed compliance requirements regarding the business performance. Accordingly, public companies are required to evaluate and disclose the effectiveness of their internal controls and be audited by a third party to disclose their performance specifically relating to financial reporting. Privately held firms, on the other hand, have not been affected by the SOX Act. Industry perceptions of the SOX Act indicate it has an associated cost that has adversely affected business performance. However, the general perception is that SOX has improved awareness of the dependability of the reported business performance. Thus, having effective performance measures will help any type of governance regulations.

The post-information age trend is to use information or extract business intelligence. This initial emphasis on using the information led to the concept of dashboards. While dashboards remain, the necessary business intelligence is lacking without a comprehensive business scorecard model. Most of the dashboards are creative in
displaying and reporting the information; however, they are difficult to utilize on the operations side due to an inability to extract business intelligence from them.

Thus, there is a growing need for intelligent scorecards that can predict information. According to Jeff Hawkins in his *On Intelligence* book, intelligence implies the ability to predict. Therefore, holistic and comprehensive business scorecards that include leading indicators (rather than lagging indicators) provide the intelligence to optimally manage business performance.

The Six Sigma Business Scorecard, as shown in Figure 1.1, offers a predictive indicator of business performance, called BPIn (Business Performance Index), that is determined based on a set of ten measurements used to identify areas for improvement and to set goals to achieve overall business performance. The BPIn, which is based mainly on the operational measurements, can provide a good indicator of the company’s financial performance. An operations-based index can predict the financial performance, so the management team can take preventive actions to achieve the desired financial results.
The BPI can also be used to determine the corporate sigma levels, which are essential to sustain Six Sigma initiatives at a corporation. In the absence of the business-level performance measures, any corporate strategic initiatives become difficult to track, thus affecting their chances of success. According to Kaplan and Norton, only about 10 percent of strategies are successfully executed.

Service Scorecard

The Service Scorecard should balance cost and revenue, improvement and innovation, management and employees, and execution and growth. This Service Scorecard must also balance the objective and subjective measurements, which are sometimes difficult to measure but that must be measured.

No performance scorecard with only objective measures can present a complete picture of the performance, because all businesses incorporate tangible and intangible assets. Actually, the ratio of intangible to tangible assets increases from manufacturing to service operations. In other words, service operations deal with more intangibles than tangibles, because the service operations are more dependent on people and, thus, are more subjective in nature. In the manufacturing sector, the objective is to reduce the cost of each widget and make it more reproducible. However, in the case of service operations that are more customized, more flexibility and variations to delight customers are required.

With the integration of technology and globalization, certain shifts occur from manufacturing to service operations (i.e., from the Business Scorecard to the Service Scorecard). For example, the manufacturing operations deal with suppliers of parts, material, and services. In the service industries, however, the focus is on intangible relationships involving various stakeholders and even customers. Establishing partnerships and collaborating with customers and suppliers is the goal.

Another shift occurs from manufacturing to service industries in the sense of execution. In manufacturing the focus of execution is excellence first before timeliness to minimize waste. In the service
industries, however, the focus is often on responsiveness before perfection. Customers being served like to feel cared for before being served. Thus, the focus of execution in service operations must be on agility, care, and creativity in delivering customers what they love to have, which may be different every time a customer needs service.

The Service Scorecard Architecture presented in this book has seven categories or elements: Growth, Leadership, Acceleration, Collaboration, Innovation, Execution, and Retention (GLACIER). The Service Scorecard was created for achieving the fundamental strategy of any business: sustained profitable growth. Instead of focusing on making money (or profit at any cost), the leadership must focus on realizing profitable growth. This shift requires the utilization of other aspects of the business. A good performance scorecard must trigger critical aspects of the business for achieving its fundamental strategy, which must be constantly articulated for successful internalization by everyone on the executive team.

Growth requires critical thinking at the leadership level for assessing industry position and caring for customer needs. To grow the business, the leadership must clearly understand what its customers would love to have. Only when we care enough to listen to the customer’s love-to-have requirements will we establish a successful and profitable relationship with the customer. Knowing the future needs of current customers and the needs of potential customers allows the service provider to develop new solutions to serve its customers.

Leadership is considered great when it can bring out the best in its followers, be it 1, 10, 100, or 1,000s in number. Unless people are mobilized to achieve the fundamental business strategy and objectives, sustaining profitable growth will be a daunting task. One of the best known ways to bring out the best in people is to recognize the best of people. Good breeds more good, and success breeds more success; thus, recognition of success will bring out more success. Besides, the leadership must ensure that the business is profitable while it is growing; otherwise, employees will perceive their work as a waste of their time.

Acceleration is defined as the rate of improvement to achieve ideal or desired business objectives. Accelerating improvement and
reduction in waste will continually contribute to the bottom line of the company. Besides, customers ask for better, faster, and more value—not cheaper service. To provide more value faster and better requires each department manager to focus on producing more, better and faster. Ultimately, the best corporate performance will be governed by the worst departmental performance. Basically, the worst of a company is the best it can deliver to its customers. Acceleration in performance improvement continually raises the bar for higher value to the customer.

Collaboration is an imperative when accelerating performance. If a department or process has a goal to improve 5 percent per year, people usually wait for the change to come by itself; they generally do not challenge themselves to achieve improvement. The 5 percent improvement is not aggressive enough to challenge them and cause them to seek help. However, if the goals for improvement are set aggressively, collaboration from other departments, processes, or people will be required to accelerate improvement. Achieving 50 percent or more improvement requires passion to collaborate for achieving desired results.

Innovation is an outcome when people collaborate. When people work together, new ideas abound, creativity is cultivated, and innovative solutions are the outcome. Innovation to achieve growth through R&D (research and development) functions has been inefficient and slow at best. Typically, an R&D department develops a new product or service that is delivered through operations with a ton of challenges. The resulting quality and efficiency degradation leads to unsatisfactory results and delays delivery of products or services. Thus, the involvement of operations throughout the service life cycle accelerates improvement at any level.

Execution represents producing or providing service with optimum resources on time and delighting the customer. In service businesses, the customer experiencing joy matters because people are involved. Customers tend to be sensitive to receiving service without a smiling attitude. Thus, in service execution, people processes must be designed to facilitate agility, care, and creativity, as well as a sense of going the extra mile to please the customer. Basic process management principles still hold true for service processes as well; the people aspects just need extra attention.
Repeat business from customers receiving service, or Retention, is fundamental to survival as well as achieving sustained profitable growth. The cost of new customer acquisition in the service sector is much higher than that of keeping a repeat customer. Thus, effort must be invested in listening to the customer for growing requirements and customer feedback to identify opportunities for improvement. Repeat business pays for the expenses, and the new business pays for the profit. A service business cannot survive without repeat customers. Thus, specific strategies must be developed to bring the customer back continually, irrespective of the nature of the service.

Establishing the Service Scorecard Measurements

Identifying and establishing Service Scorecard measurements requires that we identify the purpose of the Service Scorecard and its expected value proposition. Is the purpose of the scorecard to display some information in the form of some dashboard, or to analyze and use the information to identify and exploit opportunities for improvement? The Service Scorecard can be used for realizing the fundamental business strategy of achieving sustained profitable growth, to monitor profit, or to communicate information with stakeholders. To establish measurements in different areas, answering the following questions can be helpful:

- What does one do?
- Why does one do it?
- Who does one do it for?
- How will one know one has done it?

The measures are identified based on strategic outcomes, client benefits, and the process outputs. Another way of establishing measurements for an element of the scorecard includes answering the following questions:

1. What is the purpose of the Service Scorecard for an organization?
2. What is the purpose of each element of the scorecard?

3. What is the expected deliverable as a result of each element of the scorecard?

4. What is the measure of success for each element of the scorecard?

5. What are the activities to be performed in implementing the required measurement?

6. What are the critical elements of the activities to be performed?

7. What are measures of success for critical elements in question 5?

Opportunities abound for a service operation to be striving for excellence. In the so-called “service economy,” our experience shows more customers are dissatisfied with the service due to a variety of reasons. The Service Scorecard can create the “love” for customers, improve business performance, and foster high employee participation and joy.

**Take Away**

- The service sector is an important sector in world economy.
- Service can be defined as a transaction or as an experience.
- Measuring the performance of services is challenging, and traditional models are inadequate for this purpose.
- The Six Sigma Business Scorecard needs to be adapted to the services context.
- The Service Scorecard Architecture has seven elements: Growth, Leadership, Acceleration, Collaboration, Innovation, Execution, and Retention (GLACIER).
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