

Balanced Scorecard

A Strategy Tool for the Precast Producer



Introduction

How do you communicate strategy through an organization? How do you align an organization and minimize superfluous activities so that everyone is working efficiently to the same ends? How do you measure the effectiveness of your strategy and its implementation? How do you promote a culture of agility to respond to an often difficult business climate?

“If you can’t measure it, you can’t manage it.”

Leaders also understand that performance measurement itself is not enough. The value of measurement is that it identifies where action should be taken. So, effective performance measurement systems must be able to:

- Accurately reflect the business's strategy.
- Guide employees to take the right actions in situations where action is required.
- Gauge the effectiveness of those actions.

A performance measurement system, then, is a closed loop system that embodies situational analysis of information, corrective actions, and result evaluation.

The Balanced Scorecard is a *proven* system to achieve organizational performance. It is a strategic performance management system and methodology. It is a framework for:

- defining, refining and communicating strategy,
- for translating strategy into operational terms, and
- for measuring the effectiveness of strategy implementation.



Bill Ray



Strategy outcomes depend upon how you put the pieces together

This paper briefly describes the history, evolution, and key elements of the Balanced Scorecard. It then identifies the critical success factors for a Balanced Scorecard implementation. This is illustrated with an actual Balanced Scorecard from a **precast producer**.

This summary of Balanced Scorecard makes use of *Bringing the Balanced Scorecard to Life*, published by **Insightformation, Inc.** <http://www.insightformation.com/>

About the Balanced Scorecard

Background and History

The Balanced Scorecard came into being starting about 10 years ago as a method to help companies manage their increasingly competitive business environments.

Corporations were faced with a number of challenges. Market share in many industries was vanishing at an alarming rate due to globalization, liberalization of trade, technology innovation, and quality issues. The economy was in transition from product-driven to service-driven. The composition of the workforce was changing, and companies' workforce needs were changing.

In spite of all these changes, most businesses still relied on budgeting to set strategy and on traditional financial measures of performance to evaluate results. This process failed to consistently implement good strategy and failed to accurately reflect the true health (and future prospects) of the organization.

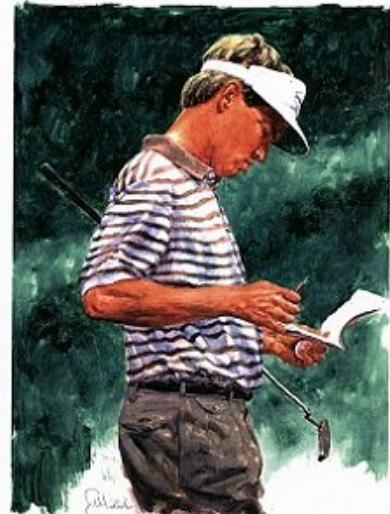
In response to these business conditions and the shortcomings of traditional management by financial performance measures, Professor Robert Kaplan, of the Harvard Business School, and David Norton began to shape the concept of the Balanced Scorecard during a research project with 12 companies in the late 1980s. They understood the limitations of relying too much on purely financial measures. They realized that many of the ways to improve short-term financial performance—such as reducing headcount, and cutting expenses for training, marketing, and customer service—might be detrimental to the future financial health of the company. Conversely, companies might appear to be doing poorly from a financial perspective because they were investing in the core capabilities that could drive superior future performance. Furthermore, they perceived the limitation of reliance on lagging indicators. Financial reports are lagging indicators.

Kaplan and Norton also perceived that employees throughout a company often did not understand how their role related to strategy and financial measures, leading employees to feel powerless to impact the things that were being measured.

So, Kaplan and Norton introduced the Balanced Scorecard as a way for companies to set strategy and measure and report performance in a way that *balanced*:

- Multiple perspectives.
- Both leading and lagging indicators.
- Inward-facing measures, like productivity, and also outward-facing measures, like customer loyalty.

The results of their initial research work with 12 companies were published in 1992 in the *Harvard Business Review*. Fueled by the positive response to their initial article and successful consulting work, they continued to develop the concept of the Balanced Scorecard, and published the book, *The Balanced Scorecard* in 1996. By that time, the focus of Balanced Scorecard had evolved from an emphasis on measurement and reporting, to a methodology for strategic management of the organization.



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Playing with an incomplete scorecard,
is worse than useless

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As more and more organizations began to embrace and experiment with the Balanced Scorecard concept, a growing number of tools and techniques emerged, building on many of the initial concepts. The methodology was modified to effectively include government entities and non-profit organizations. In 2000, Norton and Kaplan released their second book, *The Strategy Focused Organization*, which describes that evolution to a broader concept of enterprise strategic management.



Scott Medlock Fine Arts

Good strategy and good training
is a winning combination

Methodology of the Balanced Scorecard

The Balanced Scorecard is a methodology for developing and communicating strategies. It is also a way of selecting performance measures that will drive a unique organizational strategy. Dr. Norton describes the Balanced Scorecard as follows:

“A balanced scorecard is a system of linked objectives, measures, targets and initiatives which collectively describe the strategy of an organization and how the strategy can be achieved. It can take something as complicated and frequently nebulous as strategy and translate it into something that is specific and can be understood.”

Perspectives

Kaplan and Norton's Balanced Scorecard describes strategy and performance management from multiple perspectives. The classic Balanced Scorecard has four perspectives:

Perspective	Key Question for the Business
Financial	To succeed financially, what is required by your stockholders
Customer	To achieve your vision, what does that mean you must you do to satisfy the needs of your customers?
Process	To satisfy your customers and shareholders, at what business processes must you excel?
Learning and Growth	To achieve your vision, how will you sustain your ability to change and improve?

Each perspective is made clear by way of answering the key question with which it is associated. Those answers to each key question become the *objectives* associated with that perspective, and performance is then judged by the progress to achieving these objectives. With good strategy, there is an explicit cause and effect relationship between the perspectives. For example, good performance in the Learning and Growth objectives generally drives improvements in the Internal Business Process objectives, which should improve the organization's performance in the eyes of the customer, which ultimately leads to improved financial results.

Objectives and Measures

Objectives are desired outcomes. The progress toward attaining an objective is gauged by one or more measures. As with perspectives, there are explicit cause and effect relationships between objectives. In fact, the causal relationship is defined by dependencies among objectives. So, it is critical to set measurable, relevant, consistent, time-delineated objectives that will lead to achieving the organization's strategy. This is the heart of the work of Balanced Scorecard.

Measures are the indicators of how a business is performing relative to its strategic objectives. Measures, (or *metrics* to use a currently popular term), are quantifiable performance statements. As such, they must be:

- Relevant to the objective and strategy.
- Placed in context of a target to be reached in an identified time frame.
- Capable of being trended.
- Owned by the person or group who has the ability to impact those measures.

An organization is likely to have a variety of types of measures. Some will be calculated from underlying data. Others will be aggregated index measures that assign different weights to multiple contributing measures. Some are frequently measured and others may only be measured on a quarterly or annual basis.

It is important to balance lagging indicators—which includes most financial measures—with leading indicators—areas where good performance will lead to improved results in the future.

It is also important to balance internal measures, such as cost reduction, injury incident rates, and training programs, with external measures like market share, supplier performance, and customer satisfaction.

Initiatives

An initiative is a change process or activity designed to achieve one or more objectives. The initiative is what will move a measure toward its target value. Initiatives may be large or small in scope. They generally are owned by a person or group, and are managed like projects.

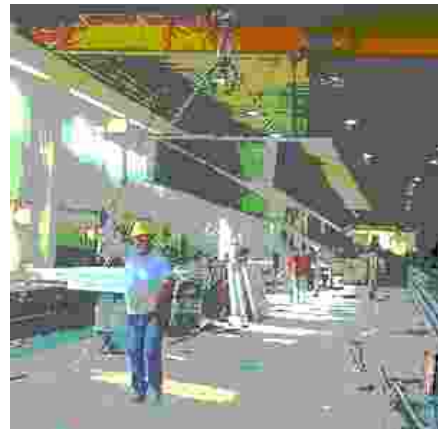
Strategy Maps, Strategic Themes, and Matrices

Since even a relatively simple scorecard can contain an overwhelming amount of information, several tools have been developed to help communicate large, complex quantities of information in simple, easily understood ways.

Strategy Maps

Mapping a strategy is an important way to evaluate and make visually explicit an organization's perspectives, objectives, and measures, and the causal linkages between them. Organizing objectives in each defined perspective, and mapping the strategic relationships among them, serves as a way to evaluate objectives to make sure they are consistent and comprehensive in delivering the strategy.

The strategy map is a visual way to communicate to different parts of the organization and how they fit into the overall strategy. It facilitates cascading a balanced scorecard through an organization, because it can be created at different levels of an organization, and each level's map can be viewed for alignment with the overall strategy map.



Lean manufacturing offers opportunities to improve productivity, if it fits the strategy

Illustration from a precast producer

For illustration, let's take the case of a precast producer with mediocre financial performance. Although profitable, that performance is not satisfactory to the owners. Benchmarking against the PCI Financial Survey reveals that the producer's financial performance is typical for the size of the producer. But, the return on investment is unsatisfactory to the owner compared to equity returns available in other closely businesses or to a portfolio of publicly traded stocks. Further examination of the Financial Survey reveals that the upper range of ROI for producers in the

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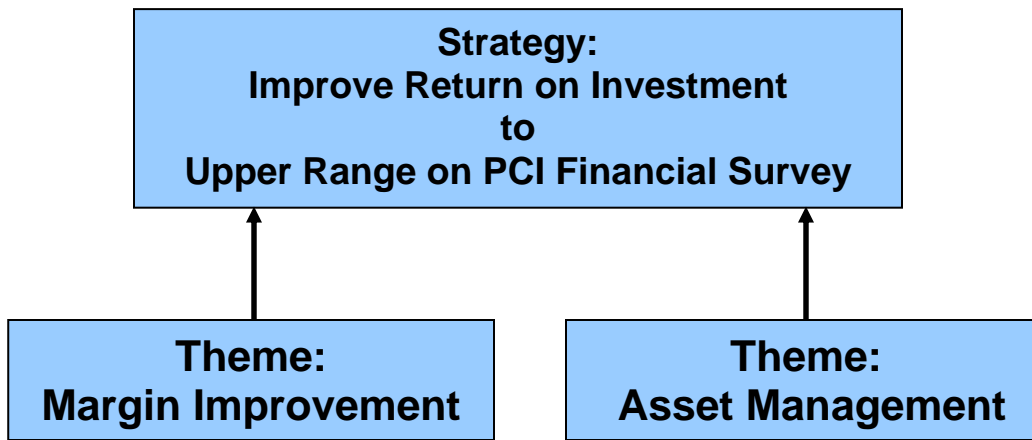
Survey is, in fact, satisfactory. The upper range is the simple average of the producers in the upper half. The owner's have determined that management steps must be taken to achieve the upper range of results.

<u>2003</u>	<u>ROI</u>	=	<u>Sales Margin</u>	X	<u>Asset Turnover</u>	(DuPont formula)
Company	6.4%		3.2%		2.0 X	
PCI Upper Range	13%		6.0%		2.2 X	

A strategy and specific initiatives were developed to improve sales margin and to manage the asset base so that ROI could be increased. Targets were developed for both financial and non-financial measures to guide this effort; indeed, this is a Balanced Scorecard.

Strategic Themes

The strategy map below shows the producer's strategy and the two strategic themes necessary. The strategic theme is a grouping of similar objectives and their measures across perspectives. It helps make a complex strategy more understandable by organizing and categorizing objectives and measures into themes. It also reduces the amount of information and number of causal linkages that need to be drawn on a strategy map. A complex organization might have several strategic themes, with objectives and measures designed to gauge the effectiveness of the organization in pursuing those themes.



Margin Improvement Theme

Continuing with the illustration of the margin improvement theme, margin improvement will be achieved through both cost reduction and developing new product lines.

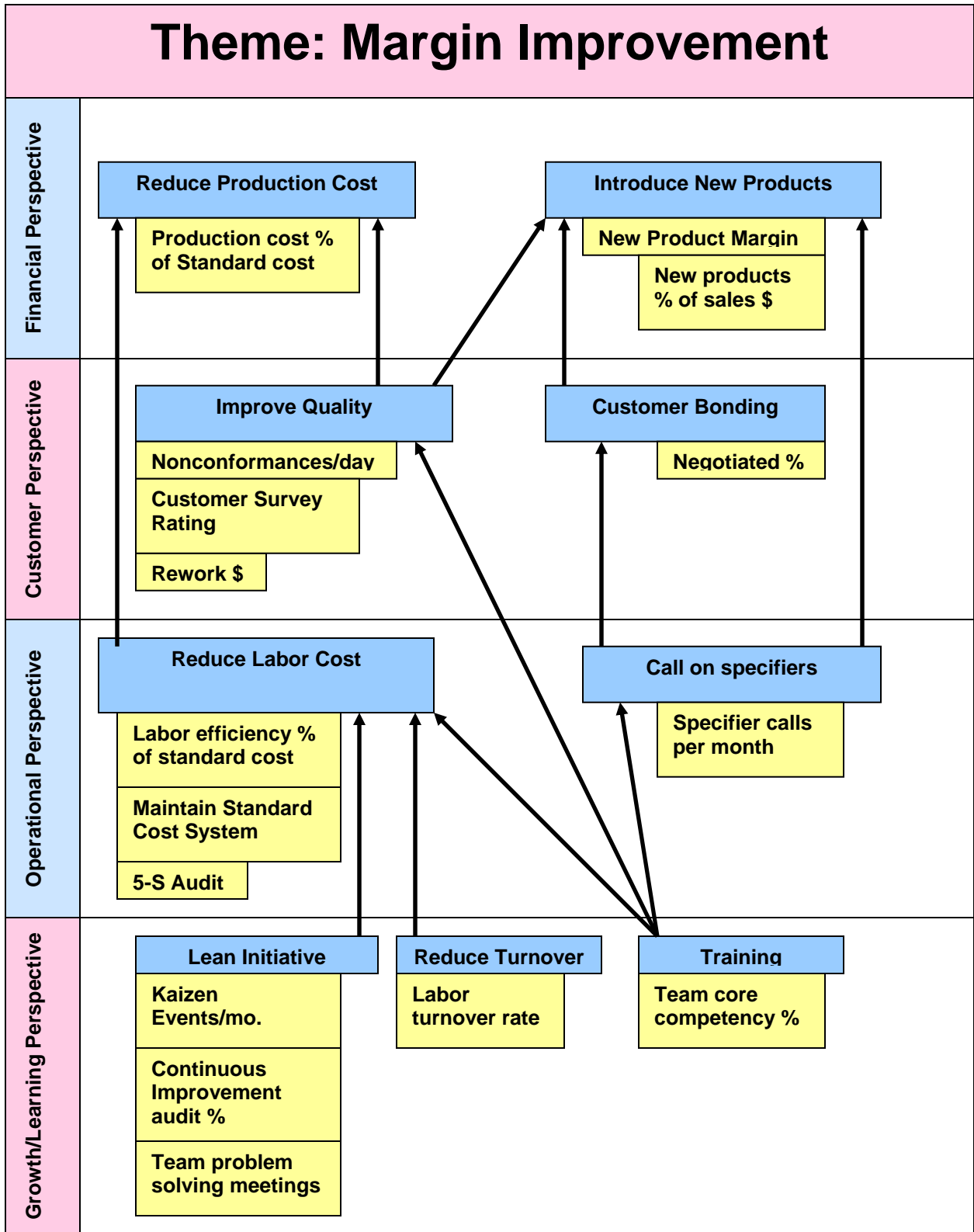
Lean Manufacturing was chosen as the method to improve efficiency in the plant. Lean Manufacturing is an Industrial Engineering discipline. It is based on reducing waste and on continuous improvement. About 5% of PCI producers have adopted Lean initiatives. They have been successful in improving productivity, typically by 20% or more per year.

Job analysis of margin by job revealed promising products and markets. Those markets could be characterized as bidding against other building systems, not other precast. Such work was typically negotiated or bid as an alternate by working with the specifier. A plan was developed to find and grow in these markets. Job analysis also revealed product lines and markets that were losers. Those markets and jobs were characterized as commodity in nature. As a strategy, management took initiatives to increase the amount of negotiated work through greater customer bonding and development of specifier relationships.

Fig. 1 Strategy Map

Major Objectives

Scorecard item



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Strategy Map

The margin improvement theme can be illustrated on Fig. 1. The strategy is broken into the four Perspectives: Financial, Customer, Operations, Learning/growth. Each perspective then shows the major objectives for that perspective, and the Scorecard item that is reported as the way of taking the temperature of progress in that objective. Arrows show the cause and effect linkages.

Strategy Matrix

The strategy matrix is another useful visualization and summarization tool. Table 1 displays objectives, measures, targets, and initiatives in a Strategy Matrix for the Fig. 1 Strategy Map. The strategy matrix can point to areas where scorecard elements might be out of balance. For example, there may be a cluster of initiatives around one objective, while other objectives have no supporting initiatives. Typically, the strategy matrix will reflect a strategic theme, so one matrix is prepared for each theme.

Strategic Theme: Margin Improvement				
	Objective	Measure	Target	Initiative
Financial	Reduce Installed Cost	Production cost as a % of standard cost	- 10% year 1 - 5% year to year	Reduce production cost through Lean
		Improve quality	Reduce rework by 50% year 1	Training & team problem solving
	Introduce higher margin new products	New Product Margin	> 5% year 1 > 15% year 3	Call on specifiers program
		New Products as a % of sales	> 5% year 1 + 10% per year	Call on specifiers program
Customer	Improve Quality	Nonconformances/day	- 10%/mo. year 1	Lean
		Rework expense	- 10%/mo. year 1	Lean
		Customer survey rating	3.7 year 1 + .2 per year	Customer bonding program
	Customer Bonding	Negotiated work % sales	> 25% year 1 + 15% per year	Project management Call on specifiers program
Operations	Reduce Labor Cost	Labor efficiency % of standard cost	< 80% year 1 - 10% per year	Lean
		Maintain standard costs system	Review schedule	Lean
		5-S Audits	Review schedule	Lean
	Call on specifiers	Call report	4/mo. year 1	Call on specifiers program
Learning & Growth	Lean Manufacturing	Kaizen events report	>1/mo. year 1 >2/dept. year 2	Lean
		Continuous improvement audit report	30 days after Kaizen event	Lean
		Team problem solving verbal reporting	Every workgroup meets consistently	Lean
	Reduce turnover	Labor turnover report	< 30% year 1 < 20% year 2 < 10% year 3	Lean Team Problem solving training
	Best Practices Training	Core Competency Report	> 80% year 1 all departments.	Training initiative

Tablet 1, Strategy Matrix (for the Strategy Map shown in Figure 1)

Critical Success Factors for BSC Development

The astute manager will observe that many producers have set goals like these. Here is the key point; those objectives typically fail because they are not managed consistently. The strength of Balanced Scorecard is its track record of keeping management and the organization focused on what's really important. This methodology gets results.

Extensive research and evaluation of hundreds of Balanced Scorecard implementations has been done by the Balanced Scorecard Collaborative (the consulting organization established by the founders of the Balanced Scorecard methodology) and various other practitioners. A consistent theme emerges from this body of knowledge: Balanced Scorecard is a cultural change initiative. Successful organizations use the Balanced Scorecard to create a culture of focus on strategy formulation, measurement, and revision. They create what Kaplan and Norton call a strategy focused organization.

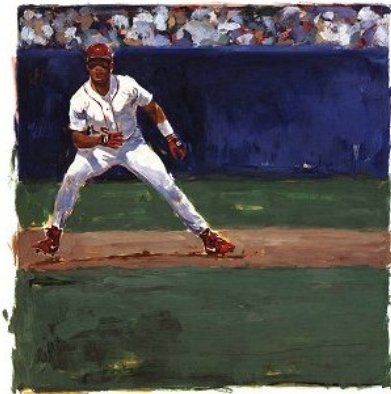
The key elements in creating this strategy focused organization are as follows:

1. Mobilize change through executive leadership. Building a strategy focused organization usually involves significant culture change. Organizational change is an evolutionary process. Consistent executive leadership, involvement, active sponsorship, and support are critical to maintaining momentum through the challenges that organizations inevitably encounter.

The executive team must be in agreement on strategies and must drive the scorecard process for it to be successful. Often executives are too busy to be intimately involved in the process, so a project team is formed. This can be successful if:

- The entire executive team has first participated in facilitated sessions at which the fundamental mission, vision, and strategic themes are established.
- The project team has the ear of the executive leadership and can readily escalate issues to executives for resolution.
- Executives continue to communicate their support for, and involvement in, the Balanced Scorecard initiative.

2. Make strategy a continual process. A strategic focus is not maintained if strategy formulation becomes a one-time activity. Feedback loops are needed to constantly focus attention on and reevaluate the strategy and the measures. Reporting should enable determination of success or warnings of failure of the Measures. The budget process also is often linked to strategy, and in some cases the Balanced Scorecard replaces traditional budget formulation.



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Balanced Scorecard builds strategy into every play

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3. Make strategy everyone's job. This is done through strategic education and awareness and by cascading the scorecard down through the organization, so that business units, departments—or even individuals—create their own scorecards. The linkages to strategy are explicitly defined at all levels. This helps departments and individuals understand and find new ways to support the strategy of the organization. It also helps ensure that employees at all levels are measured *and compensated* in ways that support that strategy.
4. Align the organization to the strategy. This involves evaluating current organizational structures, lines of reporting, and policies and procedures to ensure that they are consistent with the strategy. It can include re-alignment of business units or re-defining the roles of different units to make sure that each part of the organization is lined up to best support the strategy.
5. Translate the strategy into operational terms. Tools like the strategy maps, cascaded scorecards, and strategy grids are used to integrate strategy with the operational tasks that employees perform daily. This ensures that tasks are done in ways that support the strategies.

Common Pitfalls

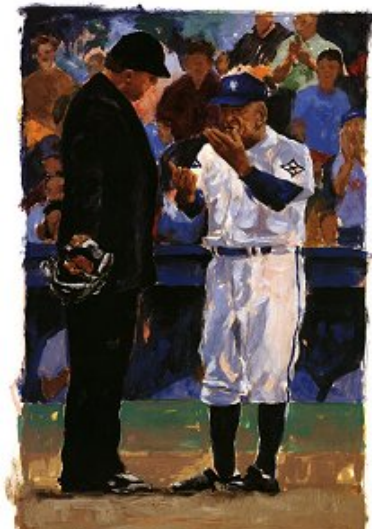
When Kaplan and Norton's second book, *The Strategy Focused Organization* was published, the editors of the *Harvard Business Review* hailed the Balanced Scorecard as one of the most significant contributions to management practice in the last 75 years. However, despite its well-publicized successes, the majority of organizations that adopt a scorecard fail to reap the rewards they expect. In researching these disappointments, some common reasons stand out:

1. Measures that do not focus on strategy. A common problem is that an organization will adopt new non-financial measures that fail to link to the financial aspects of the strategy. The linkage (or lack thereof) is not thought through. According to Dr. Norton,

“The biggest mistake that organizations make is thinking that the scorecard is just about measures. Quite often they will develop a list of financial and non-financial measures and believe they have a scorecard. This, I believe, is dangerous.”

The most important part of Balanced Scorecard is the strategy development process, typically facilitated by a consultant, and linked ultimately to financial objectives. Properly done, that process engages top management and the Balanced Scorecard becomes the implementation tool; the other way around doesn't work.

2. Failure to communicate and educate. A scorecard is only effective if it is clearly understood throughout an organization. Frequently, scorecards will be developed at the executive level, but not communicated or cascaded down through an organization. Without effective communication throughout the organization, a balanced scorecard does not spur lasting change and performance improvement.
3. Measures are tied to compensation too soon. It is generally a good idea to tie compensation to the Balanced Scorecard when it is established and stable. However, it can be a mistake to do that too early in the lifecycle of the scorecard.
 - Rarely is an initial scorecard left unrevised. So, if an organization ties compensation to measures that are not in fact driving desired behavior, a powerful motivator has been instituted that will drive unwise actions.
 - Data may be incomplete or inaccurate, so measures may not be correct. If employees' paychecks are adversely impacted, serious morale problems and loss of legitimacy of the scorecard inevitably result.
 - It may take time to determine realistic targets. Penalizing people for failing to achieve an unreachable target has a negative impact on morale and profits. Targets that are a piece of cake are worse than useless, they insure under performance.
4. No accountability. Accountability and high visibility are needed to help drive change. This means that each measure, objective, data source, and initiative must have an owner. Without this level of detailed implementation, a perfectly constructed scorecard will not achieve success, because nobody will be held accountable for key elements of performance. This seems obvious, but it happens all the time.



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Balanced Scorecard makes the facts apparent to all the players

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5. Employees not empowered. While accountability may provide strong motivation for improving performance, employees must also have the authority, responsibility, and tools necessary to impact relevant measures. Otherwise they will resist ownership. Balanced Scorecard often does not work well in a highly centralized organization.
6. Treating Balanced Scorecard as a systems project or an accounting project. This is an effective tool for deciding on basic strategy priorities and then aligning the organization on the strategy. Focus on the strategy, not on the reporting system. Don't turn the leadership over to the budget experts .



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