How KPIs can help motivate and reward the right behavior

Paper #1 – Introduction

Contents

Each month, most managers receive accounting reports that tell them how their business is performing and whether they need to take any action to meet the predetermined budget (see Figure 1). If they want more information, they can 'drill down' into lower levels of detail and find out what's going on by division, department or cost center. They can see reports that tell them how many blue pens were purchased in location X or Y compared with this year's budget and last year's actuals. They can tell whether 50 or more types of travel and entertaining expenses are within budget. They can analyze every detail about product sales and whether each product has met its gross profit target and kept within its estimated standard cost.

	This Year			Last Year
	Actual	Budget	Variance	Actual
SALES	2,950,000	2,900,000	50,000	2,400,000
Procurement	300,000	280,000	-20,000	240,000
Production	1,850,000	1,640,000	-210,000	1,370,000
Cost of sales	2,150,000	1,920,000	-230,000	1,610,000
Gross profit	800,000	980,000	-180,000	790,000
GP %	27.12%	33.79%	-6.67%	32.92%
Sales, General & Admin				
Salaries	244,000	196,000	-48,000	170,000
Marketing	42,500	40,000	-2,500	37,500
Information technology	45,000	40,000	-5,000	35,000
Office & Admin	46,000	45,000	-1,000	39,000
Total costs	377,500	321,000	-56,500	281,500
EBIDT	422,500	659,000	-236,500	508,500
Return-on-sales	14.32%	22.72%	-8.40%	21.19%

Figure 1: Typical accounting report

But, as I will argue in this paper, it is what these reports *don't* tell managers that's important. For example, they don't tell them much about where they are today, where they are heading in the near term, what is the trend and why is it occurring, how the results compare with peers (a far better context for performance evaluation than a budget) or what action they need to take to improve performance.

The reality is that few real insights are revealed because accounting numbers show only a one dimensional view of performance. They fail to show a host of other factors that can have a dramatic impact on financial performance from employee satisfaction and customer relationships to product quality and process efficiency. In other words, financial numbers tell you the score but don't help you to play and win the game.

These are not the only problems concerned with the management information system. The volume of data and the level of detail are escalating out of control. Until a few years ago, business leaders were shielded from much of the detail flowing through the organization, but now technology has delivered greater power, speed and capacity and the dataflow is not only overwhelming but can also be accessed instantly by senior people at increasing levels of detail. But for many senior managers the "overload" problems have outweighed the "control"' benefits. "Can't see the forest for the trees", "swamped with information" and "drowning in data yet thirsty for knowledge" are all comments you regularly hear relating to information systems. And these problems have gotten worse since the introduction of mandatory compliance procedures that require organizations to keep just about every document created in the organization every day (including e-mails). According to one expert, between 10 and 30 percent of this data is inaccurate, inconsistent or incorrectly formatted so you can only imagine how much time it absorbs and what the storage and retrieval problems might be.[1]

Another problem is that the number of measures and reports keeps growing as organizations add more systems and tools, such as customer relationship management systems and balanced scorecards. And most reports are long on detail and short on analysis. The average management report contains thousands of data points, yet managers typically use only a fraction of the information contained in any report.[2] This complexity slows down month-end reporting and makes organizational change a nightmare for finance departments. Most businesses probably have twice as many measures and reports as they need. Managers are lost in a fog of measurement. Instead of using information to improve decision-making, most use it to explain variances in the plan or budget and thus keep their noses clean and their jobs secure. The real casualty is learning and improvement.

It is often said that 'what you measure is what you get' or 'what gets measured gets done'. This should concern every business leader as measures based on short-term (usually negotiated) fixed targets (often reinforced by aggressive incentives) can cause a range of unbalanced (and often undesirable) behaviors, along with high levels of stress and burn-out, as managers strive and strain to meet them. Think of a purchasing manager with a target of reducing cost who is encouraged to order in bulk or pay suppliers late but has no responsibility for the poor quality of the products bought, the costs of high inventories or the deteriorating relationships with suppliers. Think of a pensions salesperson who is encouraged to sell those products that provide her with the highest commissions rather than those that best fit the needs of her clients. And think of a mortgage broker who is encouraged to ignore risk controls and sell mortgages to people who can't afford them to achieve his maximum bonus.

Few of these behavioral problems are caused by mischievous managers or salespeople. Nor are they isolated examples. The problems are *systemic*. They are all examples of Goodhart's law (when a measure becomes a target, it ceases to be a good measure).[3] Goodhart's law is a sociological analogue of Heisenberg's uncertainty principle in quantum mechanics. It basically states that measuring a system usually disturbs it. And the more precise the measurement and the shorter its timescale, the greater the energy of the disturbance and the greater the unpredictability of the outcome.

Most measures and reports are used to reinforce the top-down command and control management model. Strategy and targets are set by the senior executive team and sent down the organization so that every division, function and department can set their own budgets based on these higher-level parameters. Once agreed, the organization marches each month to the drumbeat of the budget. It is the primary (and often the only) context for success. The behavior expected of managers is compliance rather than creativity. But, as many organizations are now discovering, this is not enough. They need far more from their people. They need more initiative, creativity, collaboration and leadership. But to switch on these behavioral drivers takes not only new rhetoric but, more importantly, a change to the management model itself. Key changes include how targets are set, how performance is measured and how people are evaluated and rewarded. In this series of five papers I will outline some of the elements of a new management model that addresses these issues.

In 1992, the management information picture started to brighten when Kaplan and Norton introduced the concept of the balanced scorecard. Since that time the 'scorecard' has become a popular supplement to the traditional accounting system. But it is *how* the balanced scorecard is designed and used that is the key to its success. Kaplan and Norton have always insisted that it should be used to change the management model by placing strategy (rather than the budget) at the core of the management system. But as far as most users are concerned, this message has fallen on deaf ears because they still use the scorecard as a performance measurement system rather than as a strategic management system. As Figure 2 illustrates, the focus is on developing key performance indicators (KPIs), setting annual targets for each of them and measuring performance against them rather than on developing strategy maps and generating strategic action plans that drive performance improvement. In other words, the scorecard has been used as just another tool to reinforce the old command and control management model.

		Target	Actual	Variance
Financial Perspective	•EBIT	€400m	€300m	-€100m
	•ROCE	18%	14%	-4%
	•Debt/Equity %	67%	77%	-10%
Customer Perspective	•Sales growth	10%	4%	-6%
	•Satisfaction survey	85%	80%	-5%
	•Complaints	600	660	-10%
Operations Perspective	•On-time deliveries	85%	86%	+1%
	•Labour cost/Sales	20%	19%	+1%
	•Fixed cost/Sales	25%	24%	+1%
Learning & Growth Perspective	•Employee survey	80%	66%	-14%
	•LT Accidents	500	600	-20%
	•R&D Inv	€200m	€180m	–€20m

Figure 2: A typical balanced scorecard report

Despite these caveats, the balanced scorecard has been generally acclaimed as a great success, and for good reasons. The measurement, reporting and reward framework is more balanced between financial and non-financial measures and thus represents a more holistic view of business performance. And used as a strategic management system based on the principles outlined in Kaplan and Norton's books, it can be a powerful driver of strategic improvement. But problems remain, especially with reporting. For example:

- Measures are usually single-point (with no ranges or trends) and too many measures can easily be manipulated to meet agreed targets (for example, surveys show that working capital ratios fall significantly at corporate year-ends but rise rapidly in the first few months of the following year).
- There are too many financial and lagging measures (managers don't know where they are now, what are the trends, and what went right or wrong).
- The only context for good/bad performance is the annual target, which is negotiated and fixed (there is no relative context and no rate of improvement).
- Measurement bases are varied (for example, some are in dollars, some in absolute numbers and some in percentages).
- There is no weighting that reflects the relative importance of different measures.
- There are rarely any measures related to ethics, risk or external (for example, environmental) factors.

One of the primary problems (as with the budget) is that scorecard targets are negotiated, annual and fixed. Short-term fixed targets are the blunt instruments of command and control and invariably lead to dysfunctional (and often unethical) behavior. Dr Jan Wallander, visionary leader of Swedish bank Handelsbanken (one of Europe's most successful banks) knew what he was doing when he allowed teams to set their own goals but measured their performance in a completely different way, that is, relative to peers. This idea has been at the core of the company's success for over thirty years. Why don't other leaders see the point? The likely answer is that setting annual targets is deeply ingrained in the management practices of the vast majority of organizations. But it is deeply flawed. It emphasizes measurement over management, ends over means, blame over risk and result over method.

Professor Tom Johnson, co-author with Bob Kaplan of the seminal book on management accounting *Relevance Lost (1987)*, once said that "the only way to ensure satisfactory and stable long-term financial results is to work on improving the system from which those results emerge." Notes Johnson: "The fact that Toyota makes virtually no use of management accounting targets (or "levers") to control or motivate operations is no doubt an important reason why Toyota's financial performance is unsurpassed in its industry. Toyota focuses its operations on continuous system improvement through endless rapid problem solving."[4]

Johnson was also an eminent accounting historian. He reckoned that it wasn't until the 1960s and 70s that firms started using accounting numbers to drive and reward management behavior. He blames much of this change on the pseudo-scientific teaching of the world's leading business schools that attempt to show managers how to align their actions with "shareholder value."

So how should we design a measurement and reporting system that overcomes these problems and encourages the right behavior? Here are some features of such a system that would provide managers with the information they need to make a reasonable assessment of what is happening, whether their performance is good, bad or indifferent and what (if any) action they need to take to improve performance. Thus reports should tell managers:

- What is going on today.
- What is the trend and why is the trend moving up or down (trends provide many more insights than columns of numbers).
- What will be the likely outcomes over the next 6-12 months.
- How results compare with peers or best practices (the context for good/bad).
- What (if any) action needs to be taken.

Figure 3 shows six steps in a more holistic team-based performance measurement framework. It is important to understand that measures and reports should not require manually transferring from the information system onto spreadsheets or powerpoint slides. They should be updated in real-time and be available for monitoring by all managers (whenever required) directly from the management information system itself. A well-designed measurement and reporting framework should also form the basis of a fair and equitable management evaluation and rewards system as well as drive the right ethical and value-adding behavior.

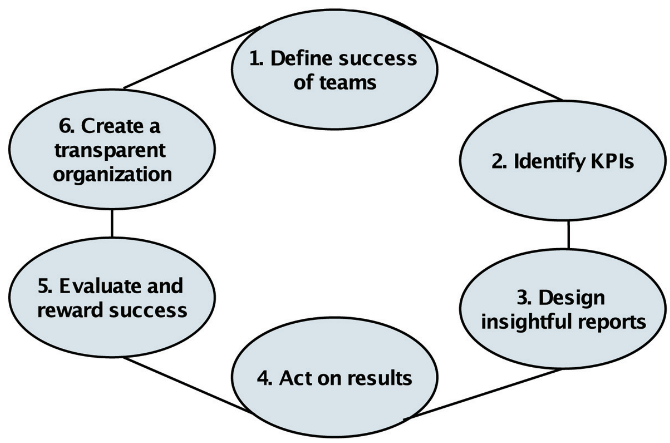

Figure 3: The six steps in a holistic, team-based performance measurement framework

This framework is the basis of the other papers in this series.

Further papers in the series

In this series of five papers my aim is to describe innovative ways of designing and using measures and reports to motivate managers to take the right actions to satisfy customers at the lowest cost and build a sustainable business over the longer-term.

Paper #2 – How to define team-based success and choose the right KPIs

Most organizations are trying to decentralize more decision-making, but their measurement and control systems remain top-down and designed for command and control. Decentralization and empowerment will not happen without radical changes in the measurement and reporting system.

In this paper, I will suggest that most organizations are comprised of only three permanent types of team (executives, support services and value centers) plus a number of temporary project management teams. In most medium- to large-sized organizations value center teams (integrated teams that directly provide products and services to external customers, also known as business units or profit centers) will be grouped into geographic clusters such as regions or countries. It is around these four teams that measures and reports together with management evaluation, recognition and rewards should be based. In other words, *teams are at the center of the information system*. The key question that systems designers need to ask is 'what does success look like' for each team? This helps teams to identify the best KPIs. Defining success in a more holistic way is the foundation stone of an effective measurement, reporting and reward system.

Paper #3 – How to use KPIs to build insightful reports

Too many management reports are filled with irrelevant detail and lead to little or no action. They should be eliminated. In this paper I will describe how to use KPIs to provide insightful information. While individual KPIs are important, they rarely capture enough knowledge about what's happening to tell managers whether one or another success criterion is being achieved. Some companies are creating clusters of KPIs (called analytics) to bridge the gap between the need to have just a few 'actionable' metrics and deeper knowledge of what's going on. With the use of dedicated software, reports based on analytics can be made available on demand and provide managers with early warning signals as well as sufficient depth to tell them where problems are occurring and thus where action needs to be taken.

Paper #4 – How to use KPIs to evaluate and reward performance

Most performance evaluation and reward systems are based on a formula related to individual targets. But, as I have noted, more often than not this leads to dysfunctional behavior. In this paper I will suggest that leaders use KPIs to supplement a team-based management evaluation scorecard that encourages the right value creating and ethical behavior. In other words, KPI scores are used to inform and supplement a judgmental assessment related to the chosen key success factors (often using peer reviews). Take a finance team. Most finance teams are evaluated on how well they manage costs. But imagine evaluating performance based on these criteria: How well are we satisfying the needs of our business partners? How well are we managing our people? How well are we managing our costs? How well are we improving our competences? How well are we providing fast, relevant, error free reports? Few of these 'value added' evaluations are currently done in practice (though much work is done on transaction cost benchmarking).

Paper #5 – How to use KPIs to create a transparent organization

The number one complaint of most managers and employees is poor communication. No one tells them what's going on. Managers only see what they need to see to carry out their work. Much can be done with the measurement system to overcome these problems. In this paper I will suggest that leaders need to promote a more open and transparent information system that builds trust and enables empowerment. KPIs are at the core of this type of organization. Finance leaders also have a key role to play as teachers of performance measurement (a key element of becoming an effective business partner). In a transparent organization every team can see the performance of every other team. This generates peer pressure which is a key driver of continuous improvement.

Conclusion

With so many detailed reports appearing each month it is often difficult for managers to see with any clarity what is really happening. Too many spurious measures are clouding key issues. The CFO needs to bring measurement back under control and provide clear guidance about its meaning. Measures should relate to success criteria and be used to enable local managers to learn and improve.

If, instead of using measures to control performance against a target, they are used to provoke inquiry and improvement, teams will begin to see how useful they can be. Liberated from the fear of failing to meet fixed targets, teams will learn to see measures as a friend that guides them rather than a whip that controls them. They will start to use them to ask questions and drive dialogue about context, purpose, meaning and action. Leaders will see patterns and trends and feel confident to open up the information system to everyone who is able to make sense of it and contribute ideas and suggestions for improvement. The result is a more accountable and transparent organization.

About the author

Jeremy Hope is a cofounder of the Beyond Budgeting Round Table. He has written four books on performance management including "Beyond Budgeting" (co-author Robin Fraser) and "Reinventing the CFO", all published by Harvard Business School Press. He has helped many large organizations to improve their performance management systems and is also a keynote speaker at many conferences on performance management. You can contact him at jeremyhope@bbrt.org or call 44-1274-533012

About IBM Cognos BI and Performance Management:

IBM Cognos business intelligence (BI) and performance management solutions deliver world-leading enterprise planning, consolidation and BI software, support and services to help companies plan, understand and manage financial and operational performance. IBM Cognos solutions bring together technology, analytical applications, best practices, and a broad network of partners to give customers an open, adaptive and complete performance solution. Over 23,000 customers in more than 135 countries around the world choose IBM Cognos solutions.

For more information

For further information or to reach a representative: www.ibm.com/cognos

Request a call

To request a call or to ask a question, go to www.ibm.com/cognos/contactus. An IBM Cognos representative will respond to your enquiry within two business days.

IBM Canada
3755 Riverside Drive
Ottawa, ON, Canada K1G 4K9

Produced in Canada
March 2010

Endnotes

[1] John Goff Drowning in Data CFO.com www.cfo.com/printable/article.cfm/3010723.

[2] See David A. J. Axson Best Practices in Planning and Management Reporting John Wiley & Sons, New Jersey, 2003

[3] The law was named after Charles Goodhart, a chief economic advisor to the Bank of England. The law was first stated in the 1980s in the context of the attempt by the UK government of Margaret Thatcher to conduct monetary policy on the basis of targets for broad and narrow money.

[4] H. Thomas Johnson "Manage a Living System, Not a Ledger" Manufacturing Engineering December 2006 Vol. 137 No. 6

Cognos® software

YTW03006-CAEN-00