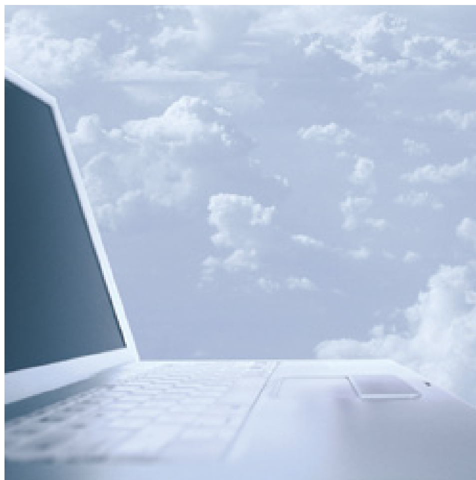
Innovation in Action Series
August 2009

IBM



How Performance Management Can Help You to Navigate through Turbulent Times

Paper #2 – Know Where You Are Today

Author: Jeremy Hope, Beyond Budgeting Roundtable

Information Management

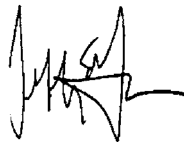
Cognos. software

Are you drowning in data yet thirsty for knowledge? How long does it take for you to get vital information that you need to understand where your company is? A week? A month? A quarter? In most organizations, information moves around at a snail's pace. Leaders and managers often don't know what happened in the previous month until six weeks after that month has passed. And when they do receive information, it's in the form of overly-detailed reports that are difficult to interpret quickly.

Would the recent global economic and banking crisis have been as severe if more company executives had been able to get important and relevant information in real time? We'll never know. What we can know, however, says Jeremy Hope, Research Director of the Beyond Budgeting Roundtable, is that when decision-making is driven by management need rather than an accounting calendar, companies can only benefit.

In this second in a series of five articles about how you can use performance management to weather and even thrive in turbulent times, Hope explains how integrated corporate performance management systems and a fresh approach to key performance indicators (KPIs) can help companies maintain control in an unpredictable world.

Jeremy Hope is an advisor to the IBM Cognos® Innovation Center for Performance Management. He is also a tireless champion for innovation in performance management theory and practice, believing that business-as-usual is not a route to success.



Jeff Holker
Associate Vice President
IBM Cognos Innovation Center for Performance Management

Introduction

Imagine that information about problems concerned with supply chains, product designs, customer orders, marketing campaigns, accounts receivable and service quality were shared around the organization in minutes instead of days and that the appropriate teams had the scope and authority to deal with them. How many problems that often fester and grow and soak up huge amounts of time and cost would be eradicated? How much more dynamic and profitable would the organization be?

The benefits of fast, relevant information are incalculable. Daily and weekly updates on, for example, customer orders, product quality, customer behavior and competitor actions enable managers to make faster and more informed decisions. Cisco CEO, John Chambers believes that fast, open information translates into higher profit margins. "Instead of the CEO and CFO making 50 or 100 different decisions a quarter," notes Chambers, "managers throughout the organization can make millions of decisions."[1]

Swedish bank Handelsbanken can produce a profit and loss account in four *minutes* (the time it takes to print it!). It runs a 'shadow' accounting system behind the real one that records the costs of all internal transactions. The whole management information system is fast, open, and delivers relevant information to the right people at the right time. According to former group controller, Ulf Hamrin, "Too many senior managers seem to accept that obtaining fast, relevant information is beyond their reach. These people don't know what they're missing… Our branch managers know the cost of every proposed transaction and can see what's happening across the customer base at any time. We at head office can also monitor this information but we don't use is to undermine the authority of the local manager. These are the checks and balances that make our system work. Managers know that we know what's going on, but they equally know that they have the freedom to take risks and fix problems without interference." In 2008, Handelsbanken again distinguished itself by raising its profits while most of its rivals were suffering dramatic reversals.

The three primary complaints of most CEOs about information systems, according to survey after survey is that they are too expensive, too slow and too inflexible. When author Ken McGee asked a number of Fortune 1,000 executives: "Is there information that would help you run your company far better if you had it in real time, and, if so, what is it?" the answer was always "yes" to the first part and then they reeled off a wish-list of key indicators. Dave Doman of AT&T said he wanted real-time customer transaction information such as contract renewals and cancellations. Rick Wagoner at General Motors wanted real-time progress reports on new vehicle development. Dick Notebaert at Qwest wanted customer satisfaction numbers.[2] But none of these executives or others interviewed by McGee could get what they wanted. Their information systems were just not up to the task.

The trouble is that in most organizations information flows around the business at a glacial pace (only eight percent of reports are available on demand[3]). It is often around mid-month before leaders and managers know what happened in the previous month. That means flying blind for around six weeks at a time. In fast changing markets filled with fickle customers, managers need to know immediately if things are starting to go wrong (or even when growth accelerates too quickly). Most reports are also far too long and contain too much irrelevant detail. It's a case of *drowning in data yet thirsty for knowledge*. Lost in a fog of measurement they can't tell what action to take because they can't separate the signals from the noise.

Needless to say, this is not a comfortable position to be in when orders suddenly take a dive, customer defections accelerate or profits take an unexpected tumble. The problem is that management reporting is driven by the accounting calendar instead of management need. In a fast changing market or in the first few months of a new product launch this can mean the difference between taking the right and wrong decision.

There are many reasons why information is too slow. For example, the average large organization wrestles with ten different ledger systems, twelve different budgeting systems and thirteen different reporting systems (by comparison, best practice companies have standardized on a single platform[4]). And within these systems there is too much detail. One large UK company had over 5,000 general ledger accounts but when it analyzed the data flow it found that only 250 accounts had more than two entries in a year. One public sector organization has over 25,000 cost centers! The trouble is that each account or cost center is a building block in the performance management system with time and cost consequences for data gathering, preparation, entry, analysis, budgeting and reporting. More detail means more errors with further time and cost implications. There are too many manual entries such as journals, cost allocations and inter-company charges that slow down month-end processes to around nine days for the average company (best practice companies close their books within three days and produce 44 percent fewer manual journal entries and 60 percent fewer general ledger reports than average firms[5]).

Lack of progress toward integration is at the root of these problems. In fact, most organizations still operate with "islands of knowledge" often contained in isolated spreadsheets and databases in, for example, supply chain, HR and marketing. Each function or department has its own data management system and KPIs are not available to other managers thus denying them access to the bigger information picture.

To deal with these problems, IT vendors have developed integrated corporate performance management systems. One immediate advantage is the time saved in re-keying data as well as reducing the need for huge numbers of month-end journals. The impact on costs can be dramatic. The Hackett Group report that companies that have just one ERP platform *and* embrace consistent technology and data standards incur 23 percent lower costs than those that don't.[6] Integration can reduce costs by 30 percent, according to Gartner.[7]

American Express is a believer in the CPM platform and former CFO Gary Crittenden was proud of the fast, open information system the company has developed over recent years. "A great benefit," noted Crittenden, "is that there are no more arguments about whether the numbers are right or comparable year over year. We used to spend a lot of time debating these issues. That's just gone away. The assumption now is that the numbers are correct, and management's attention is focused on acting on the information."

Key performance indicators (or KPIs) have risen to prominence in recent years to give managers some early warning signals of problems ahead. But it is important to focus on only a few at every level of the business - those that tell a story about what's happening daily and weekly. Examples in the plant include absentee levels, machine set-up times, first time through rates and warranty returns. These are all measures of day-to-day operations that, should they start to show variations from the norm, would ring loud alarm bells higher up. Examples in a bank would be customer transaction patterns, declining payment records and customer complaints. Again these are the advance warnings of dangers down the line. Other examples of widely-used KPIs include cost-to-income ratio, average age of receivables, total orders shipped, days inventory on hand, and marketing expense as a percentage of sales.

But for many companies the KPI revolution has turned into a minefield of misinformation and a driver of the wrong actions and behavior. Few measures provide useful information about what's happening now and where the business is heading (for the average company, 85 percent of measures are internal and 75 percent are based on lagging indicators[8]). Even fewer lead to action and change behavior (57 percent of companies still report all budget variances[9]). Another problem is that most measures focus on what can be easily measured (e.g., functions or activities) rather than what should be measured (e.g., end-to-end process performance and customer value). An effective measure should help managers to understand and improve performance and to this extent should be an integral part of the work they do. Few measures pass this test. Most are aimed at tightening the coils of control. The real casualty is learning and improvement.

What you need to do differently

The critical step is to liberate managers from the fear of failing to meet short-term targets. Teams will then see measures as a friend that guides them rather than a whip that controls them. Too many organizations fall into the trap of using KPI dashboards with 'dials' and 'graphs' that show how this or that indicator is performing against a short-term target. As soon as a KPI becomes a target then management behavior changes to "meet the target" rather than "make the right decision." We have to remember that any set of metrics only tells you part of the story. They should support management judgment, not replace it!

Targets need to be replaced by knowledge, and this comes from monitoring KPIs over a period of time and separating the signals from the noise. KPIs should be able to help managers to understand whether a value center strategy is working or an operating process is improving. And monitoring trends offers many more insights than columns of numbers.

Fast indicators that help managers to learn and improve are particularly critical in processes such as sales ordering and customer service. One important aspect of measurement is to understand the nature and frequency of demand on a process. An excellent measurement system will tell managers what percentage of demand is 'good' demand (work that satisfies customer needs) and what percentage is 'bad' demand (work that causes customers to make extra demands on the system usually relating to work that was not done right first time). The trouble is that 'bad' demand can amount to over 40 percent of transaction volumes thus causing huge amounts of 'hidden' costs. These are especially pernicious because as total volumes rise the unit cost per transaction appears to fall (seems like good news) – but because 'bad' transactions are such a high percentage of the total the wrong conclusions can be drawn.

KPIs should be reported and monitored on a daily or weekly basis. An effective KPI has a knock-on effect. Improving quality, for example, lowers defect rates, speeds up inventory turns, and ultimately increases profitability. Depending on which is the dominant customer value proposition, value center managers need to find KPIs that relate to that proposition. For example, an operational excellence strategy should point managers in the direction of KPIs in the supply chain (e.g., number of stock-outs), working capital turn (e.g., number of days of receivables or inventory turns) and process improvements (e.g., faster cycle times, higher quality or lower costs). At the process level, KPIs should be derived directly from the purpose of the process. When activities (pieces of a process) such as the average time it takes to answer the telephone in a service center become the primary focus of measurement, then the likely outcome will be to meet the activity target. Measures should focus on the process flow (the end-to-end customer delivery cycle) rather than how much of any activity has been completed. The result is that everyone focuses on improving the work by applying their own and other people's knowledge.

In a low cost airline, the typical KPIs are cost per average seat mile (ASM), load factor, average passenger fare, passenger revenue yield per revenue passenger mile, operating revenue yield per ASM, operating expenses per ASM, and fuel costs per gallon. Perhaps the most important indicator is the cost per average seat mile. Southwest consistently has the lowest cost per ASM of all the major airlines. One of the reasons is that it monitors time-at-the-gate. The short turnaround not only enables the airline to use many fewer planes than its rivals saving billions of dollars in capital and operational costs but also to build customer confidence in take-off times and continue to offer competitive prices.

Customer satisfaction in some organizations has moved from a key result (lagging) indicator to a key performance (leading) indicator. Using a survey scale from one-to-ten Bain & Co director Fred Reichheld discovered that the difference between "promoters" (those that scored a nine or ten) and "detractors" (those that scored between zero and six) known as the *"net promoter"* score had a statistically valid correlation with growth and profitability. No airline, for example, has found a way

to increase growth without improving this score. Used on a continuous sampling basis in such organizations as GE, the net promoter score is now one of *the* key performance indicators in the business. It can also be used to drive continuous improvement within front line units across the organization. One way to do this is to produce rankings lists or league tables and use the motivational power of peer pressure as a spur to improvement.

Another opportunity for implementing fast, relevant information systems is in the plant. Horizontal value streams enable companies to replace antiquated standard costing systems that have become increasingly inaccurate as indirect costs have escalated as a percentage of total manufacturing costs. In most organizations the standard cost is set at the start of a period according to a number of assumptions including output, capacity, material usage, labor requirements, machine time, material prices, and overheads. At periodic intervals, this standard cost is compared with actual cost. The ensuing variances are usually caused by price changes in materials or labor (price variances), or by producing products faster or slower than expected (efficiency variances). The trouble is that variance statements are difficult for operating people to understand (can you explain the meaning of 'overhead efficiency variance?') and are too slow to be actionable.

Instead of implementing new product costing systems that offer better ways of allocating overheads (such as activity-based costing) value center teams *are looking for ways of eliminating them!* Instead of focusing on allocating indirect costs, value stream costing assumes that all costs (there is no distinction between direct and indirect costs) are debited to a value stream account (e.g., a product line). The cost of any particular product is primarily dependent upon how quickly it flows through the value stream (particularly the bottleneck operations) thus managers are much more interested in the rate of flow than standard cost variances.

KPIs are reported weekly and show several weeks of prior history as well as this week's results (Figure 1). In this product-based example, the value center team can monitor their own performance week-by-week and compare it to the aspirational goals they have set. The top half of the report shows a number of operational KPIs and the bottom half is a summarized profit and loss account. The report also shows 'productive', 'non-productive' and 'available' capacity. These indicators show how much work is wasted (non-productive work caused by errors in the system) and if everything was right first time how much capacity would be left. You will note that the P&L account information shows costs in the same sequence in which they are incurred (we buy material, convert it into finished products and ship it to the customer). This type of report provides more insights than the traditional statement based on standard cost variances ever did. It enables the team to take swift action to remedy any glitches in performance while keeping their eye on the improvement trends.

Production **Lean 'Box' Report**	**Week 1**	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**GOAL**
Units per person	15.18	15.63	14.70	15.91	15.30	16.99	**20.00**
On-time shipment	82.0%	83.0%	78.0%	79.0%	84.0%	85.0%	**95.0%**
Dock-to-dock days	5.80	5.90	6.00	6.20	6.20	6.00	**5.00**
First time through	65.0%	68.0%	67.0%	70.0%	67.0%	70.0%	**90.0%**
Average product cost	£7.5	£7.3	£7.1	£7.4	£7.6	£7.5	**£6.0**
AR days	65	62	64	68	62	68	**35**
Productive capacity	26%	25%	26%	25%	24%	24%	50%
Non-productive capacity	54%	52%	53%	55%	56%	56%	30%
Available capacity	20%	23%	21%	20%	20%	20%	20%
Revenue	**60,000**	**59,000**	**56,000**	**57,500**	**58,250**	**59,500**	**70,000**
Material cost	6,000	5,900	5,600	5,750	5,825	5,950	**5,600**
Conversion cost	33,000	32,450	30,800	31,625	32,038	32,725	**33,600**
Distribution costs	4,800	4,838	4,368	4,543	4,777	4,939	**5,600**
Value stream GP	**16,200**	**15,812**	**15,232**	**15,583**	**15,611**	**15,887**	**25,200**
Return-on-Sales	27.0%	26.8%	27.2%	27.1%	26.8%	26.7%	36.0%

Figure 1 – Value center weekly report

Fast information is not restricted to a handful of KPIs. Some companies are able to produce daily profit statements. SlimFast is a US slimming products company with sales of around $1bn. Between 1996 and 2003 sales grew at a compound rate of approximately 20% p.a. Owner Danny Abraham managed the business using what he called the 20:20 approach. The goal was to always achieve 20% top line growth and return a 20% operating margin. That was the driving factor behind its stellar growth rate. The biggest issue for the finance team was producing information in real time so that the board could react quickly. So they decided to produce a *daily* profit statement that allowed them to compare the same day or week this year with last year and constantly monitor progress.

Monitoring the daily order intake was the key. Orders were cut-off at 5pm so they were able to print a daily profit statement by 7pm. Order intake today was always compared with the same day last year. That was the key metric they looked at every day. They knew the gross profit on every order so they could compute the actual gross profit based on the total order intake. Then they estimated the sales, general and admin (SG&A) costs from the most recently closed monthly financials to arrive at the net profit. It wasn't perfect but it was pretty close. Also there was no fudging the numbers. For example, no one would put orders in just to please the boss. This system enabled the CEO/CFO to monitor sales trends and to regulate spending. For instance, if the first ten days of a month this year compared with last year showed that business was flat or even declining then they would put a hold on spending in order to achieve their 20% margin. If they could trim SG&A costs by 1%, that saving didn't go to operating profit, it went toward more advertising to fuel more growth. They were always looking to save costs so they could spend more on advertising.

Six implementation guidelines

1. **Encourage every team to design KPI dashboards that they can monitor daily or weekly**. Ensure that teams have the authority to act on any warning indicators on the dashboard. Enable and encourage local teams to find their own KPIs (thus building commitment to them). The role of Finance is to help and guide managers to make the best choices and to challenge them to maintain only a small number of them.

2. **Derive measures from strategy.** Clarity of strategy leads to the selection of the right KPIs that, in turn, tells managers what action (if any) to take.

3. **Keep KPIs to a small number (3-5). Eliminate all measures and reports that do not help managers to learn and improve and take the right action (usually over 50%) if the trend line changes.** Any measure that doesn't pass this test should be questioned and probably abandoned. Remember that KPIs are *leading indicators* that represent the performance dashboard or management radar screen. They are not quarterly financial numbers

4. **Measure the end-to-end process rather than individual activities.** Measures should focus on speed, variation, quality, cost and customer satisfaction. Managers should see KPIs as time series trends rather than short-term targets that provide fast feedback and learning and that are subject to the principles of variation (i.e., you can separate the signals from the noise). It is the change in the trend that you are looking for and that prompts immediate action.

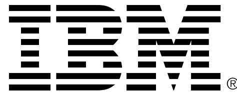
5. **Empower teams to act on KPIs.** It is pointless to implement the necessary enterprise-wide information systems and KPIs if local teams cannot act on them!

6. **If feasible, produce a daily or weekly profit statement** showing prior period comparisons and trend data. Use a medium-term aspirational goal to provide the context for success.

Financial numbers are notoriously poor at providing fast, actionable information. The primary role of traditional measurement systems is to pull "good information" up so that senior managers can make "good decisions" that flow down. However, information is much more relevant and actionable if it is available to operating teams in 'real-time'. This is the role of KPIs. They enable front line teams to regulate their own performance and thus continuously improve. It is a vital component in the accountable and transparent organization. A number of organizations have completely overhauled their management information systems so they know where they are every day, week or month and put themselves in a better position to forecast the short-term future. This combination of fast, relevant information and good short-term visibility is the very essence of control in an unpredictable world.

About the author

Jeremy Hope is a cofounder of the Beyond Budgeting Round Table. He has written four books on performance management including "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 the IBM Cognos Innovation Center for Performance Management

The IBM Cognos Innovation Center is dedicated to transforming routine performance management practices into "next practices" that help cut costs, minimize risk, streamline processes, boost productivity, enable rapid response to opportunity, and increase management visibility. Visit: http://www.cognos.com/innovationcenter

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 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.

© Copyright IBM Corporation 2009

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

Produced in Canada
August 2009
All Rights Reserved.

IBM, the IBM logo and ibm.com are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates.

Any reference in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

Endnotes

1 John A. Byrne *Visionary vs visionary* Business Week, August 28, 2000, p122

2 Ken McGee *Give Me That Real-Time Information* Harvard Business Review April 2004, 26

3 David A. J. Axson *Best Practices in Planning and Management Reporting* John Wiley & Sons, New Jersey, 2003, 59

4 David A. J. Axson *Best Practices in Planning and Management Reporting* John Wiley & Sons, New Jersey, 2003, 64

5 Hackett Book of Numbers 2002, 10-11

6 Quoted in Stephen Swoyer *Why ERP Does Matter* Enterprise Systems August 16, 2005 www.esj.com/Enterprise/article.aspx?EditorialsID=1476

7 Christopher Koch *Integration's New Strategy* CIO Magazine September 15, 2005 www,cio.com/archive/091505/integration.html

8 Tom Hoblitzell *Best Practices in Planning and Budgeting* Answerthink Paper, 2004, 3

9 Tom Hoblitzell *Best Practices in Planning and Budgeting* Answerthink Paper, 2004, 8

IBM Cognos
Innovation Center
for Performance Management

IML14194-CAEN-00