

Taking the Mystery Out of Managing Operational Performance



PERFORMANCE
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Introduction

A mystery: (def) Any truth unknowable except by divine revelation; something that is secret or impossible to understand

Mysteries abound in our daily lives and many are out of our control: natural events, global influences, policy shifts, consumer trends, and even local occurrences such the outbreak of a particular cold virus.

What shouldn't be a mystery today is the performance of a company and the related plot twists along the path of success and profitability. How can we repackage our flagship product line for increased margins? At which plant should we manufacture a certain product given shipping costs on ingredients? How can we predict customer demand? What internal resources are under-utilized?

The answers to these questions can be discovered through the use of operational performance management. How important is to understand the performance of business operations? Look at two leading brands, each at either end of the performance spectrum: Ford Motor Company and FedEx.

In the fall of 2004, Ford Motor Company launched its new model Mustang. By early 2005, the Mustang quickly became recognized as the hottest selling car in the industry, generating a sales increase of 45% from 2004 to 2005, and forcing Ford to increase production by 70%. Unfortunately, the lag time between the decision to increase production and cars rolling off the assembly line was significant. Consumers are still forced to wait months for their highly coveted cars. Could Ford have reacted more quickly to meet demand, ultimately selling more cars?

On the other hand, FedEx, which largely invented the modern air/ground express shipping industry and has become the generic name for overnight shipping (name appropriation), has the largest share of its market. The company's ability to understand and track not only its product (planes and trucks) but also its customers' goods (shipped materials) on an hourly basis has earned it worldwide awards for performance.

Beyond Business Performance Management (BPM)

BPM – also known as corporate performance management (CPM) and enterprise performance management (EPM) – is a methodology to optimize the execution of business strategy that consists of a set of integrated, closed-loop, analytic processes, supported by technology, that address financial as well as operational data. BPM enables a business to define measure and manage its performance against strategic goals. The core financial and operational processes of BPM include planning, consolidation and reporting, analysis and the deployment of linked key performance indicators (KPI's) throughout an organization.

BPM is concept and practice that can facilitate a corporate Balanced Scorecard. With the Balanced Scorecard, objectives in four areas of the enterprise are tracked and measured:

- Financial
- Operational
- Customer-focused
- And Employee

Many organizations have begun performance management of their financials by aligning and streamlining budgeting, planning, forecasting and scenario planning.

Performance Management 2.0™

Operational performance management is now the next horizon in enterprise-wide BPM for these companies, covering the monitoring, analysis, and management of these processes, activities and transactions, including interaction with the supply chain. As the finance department's colleagues glean the success of analytics and performance management, they begin to realize that the strategies and tools used for business performance management are the same systems that can drive operational performance management.

This is often followed by customer performance management (including sales and marketing analysis and dashboards) and workforce performance management, encompassing human resources and even tying individual performance reviews to the performance of specific divisions or units of the organization.

One way to truly understand the performance of your company is to employ operational performance management. This is a natural evolution of business performance management and ultimately supplies the keys for greater business agility – that which can increase your organization’s profits and help to exceed its goals. Additionally, operational performance management can be the business initiative that eliminates silos of information and separate IT systems, to create a single source on which to gauge the current state of the business.

This white paper will lay out the keys for operational performance management –

- The need to perform complex business modeling
- Handling large data sets, both financial and operational
- Real-time or near real-time information on demand,
- And the integration of data from multiple sites.

To reduce the unknowns even more, the paper provides accounts of successful businesses that have solved their mysteries by implementing operational performance management.

Complex Business Modeling

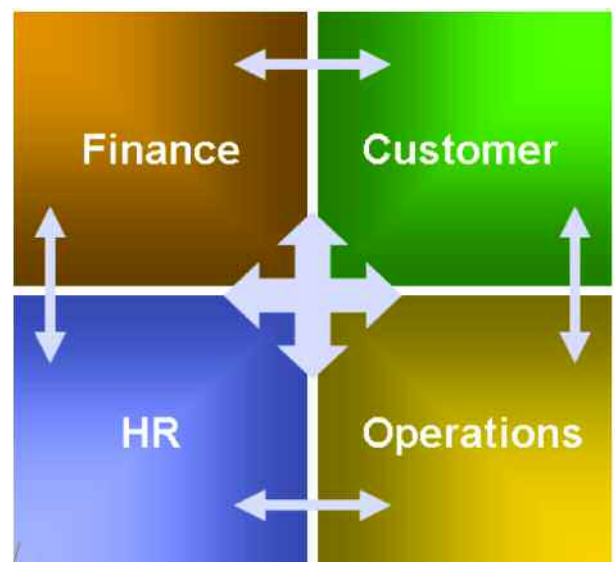
For a solid understanding of operational performance, employees have to analyze myriads of layers of data from processes and procedures, products, resources, policies, and external influences. They need to “model” this information, posing “what-if” scenarios to reflect all complex attributes of the business such as inventory and merchandise planning, supply & demand, customer/product/brand profitability, risk analysis, activity-based costing, compensation planning and so on. Users themselves should be the owners of these models, able to develop, adjust and maintain them readily to meet demands.

Given the evolving nature of commerce, the company must be able to test its model(s) on the spot with different scenarios, validating that the models are competitive, profitable, and sufficiently supported with resources. The modeling capability must also address complexity on a number of levels: volatile data such as channel inventories; large volumes of data such as call detail records information, both financial and non-financial; and scenarios with a large number of variables such as activity base costing.

Modeling brings a number of benefits to the organization:

- A driver-based focus – highly correlated to reality, versus numbers that can hide underlying assumptions;
- Dollarized performance management –expressing corporate goals in financial measures;

- Shared assumptions – corporate strategy is reflected throughout the organization;
- Strategy embedded in line functions – gives increased agility, empowerment and self-optimizing behavior; and
- Leading non-financial indicators – lower latency for performance measurement and corrective action.



The IBM Cognos TM1 solution for PM and BI, enables our customers to continuously manage and monitor the performance of the 4 divisions of the balanced scorecard.

A publishing division of a multi-national media conglomerate needed to manage circulation, staff and costs. The publisher has a particularly sophisticated set of business issues to deal with: fluctuating circulation, complex compensation and bonus structures, and potentially “surprising” commission issues at the end of each quarter. Added to this are the increasingly shrinking margins in publishing and the consolidation of staff. As many publishers have, this publisher has consolidated editorial and advertising sales staff so that many staffers work for multiple magazines. This creates efficiencies and economies of scale, but blurs the lines when it comes to analyzing profitability by magazine title.

As part of its operational performance management solution, the publisher created and defined its business model. Modeling to a highly detailed level has enabled this publisher to document its business logic and

assumptions and deploy applications across the organization. Through complex allocations built into the model, the publisher can now analyze performance by magazine title, by region, by manager and even by employee, regardless of which application – General Ledger, ERP, and the like – owns the relevant data. Additionally, because the system incorporates the business assumptions, the publisher can now anticipate the amount of quarterly and annual commission payouts, again, based on title, region, etc. This brings a much higher level of predictability into the business and creates a window into multiple systems that did not previously interact.

By employing a common business model across the enterprise – through operational performance management – the results of changes in plans and forecasts can be reflected immediately in the business model and across the entire organization.

Getting Started

Performance management projects – be they financial, operational, customer or employee performance management – are not, and need not, be the second coming of the “ERP nightmare.” Whereas ERP implementations in the early 1990s became multi-year, multi-million dollar morasses, performance management is much more manageable, with faster and easier deployments. Here are some tips on getting started:

- **Establish a strategic plan.** Conduct historical analysis, market research, capacity modeling to understand where you want to go.
- **Define goals in terms of KPIs.** These need to be quantifiable, agreed upon at numerous levels of involvement, and reflect the core business drivers.
- **Convert dollarized KPIs into equivalent operational KPIs** Whereas financial performance management is easily quantifiable with hard numbers, operational performance management is not. But by assigning dollar values to those operational KPIs, a much more solid and objective metric is incorporated into the process.
- **Integrate actual results to measure operational performance.** Rather than focus on best case scenarios, use the historical analysis to dictate, say, a best operational day, week, month, year. These are benchmarks for measurement.
- **Feedback loop.** Go back to converting your KPIs to dollarized amounts. Is the relationship between operational “units of measure” and dollars correct?
- **Present the data** in a balanced scorecard or operational dashboard in “right time” or real-time.

Mountains of Data

With the current state of industry, it's easy to see that strategic applications are rapidly improving on the amounts of data they manage and the number of users they support. Companies turn to the operational performance management systems, with real-time online analytics processing and ability to handle massive amounts of both relational and financial data, to help make sense from the data explosion.

When its own subscriber base grew to more than one million, one of the largest mobile phone carriers in the Middle East realized that its statistical analysis system for tracking and responding to customer usage began to run out of steam in terms of the level of detail it could handle in any given timeframe. And speed of response in the contemporary cellular business can mean commercial life-or-death for operators. Mobile service providers must have the ability to analyze customer usage behavior and respond to, or anticipate trends in, the marketplace.

As part of a general overhaul of its IT infrastructure and after an extended period of intense testing of some different proposed solutions, the provider decided to deploy an operational performance management solution. The performance management solution is able to handle massive data sets for millions of concurrent customers in right time¹ by keeping data readily available for analysis in memory and performing complex calculations on demand.

With the highly robust system, the company is able to optimize rate programs, proactively prevent attrition, increase customer satisfaction, check product profitability, analyze customer profitability, dissect average revenue per users, do highly detailed account segmentation, and perform active financial planning, budgeting and forecasting. As one can imagine, the separate data sets for this information were generated by a myriad of applications, and for sophisticated analysis, these needed to be consolidated into one overarching dashboard.

The end result? The company can continuously and proactively offer its customers the most competitive rates and services available in one of the world's most competitive markets.

A credit card management firm is part of a pre-eminent financial services company with a total of customer accounts in the multi-millions in multiple countries. With multiple types of credit cards, this firm needed to be able

to analyze profitability by client. While revenue and overall profitability was fairly easy to calculate, looking at allocations and various corporate activities by account was more complex.

On a macro level, the organization views profitability as revenue minus allocated and direct expenses. However, allocating expenses (operating, marketing/promotions, and corporate) is not as simple as dividing it up between the various clients. Rather, the company had somewhat changing allocations—and realized that automating the allocation process would enable them to develop algorithms that could be applied (and adjusted when needed) to the different clients. The allocations were numerous and consisted of potentially more than 60,000 different data names, including consolidations and elements. They also included operational statistics including the number of hours worked by person and by location, the number of accounts opened and closed and the number and type of customer-service calls received. This data needed to be accumulated, stored and analyzed on a daily and monthly basis in order to allocate the appropriate expenses by client.

By using an operational performance management solution, the credit card firm is now able to organize all this data into multi-dimensional sets which enable the financial analysts, managers and executives to easily access this information.

Additionally, the credit card company is able to incorporate promotions, travel, overhead, and other expenses into the allocation cycle – providing a more complete view into profitability. This ultimately gives the executives the ability to make more strategic decisions, based on accurate and up-to-date information. Perhaps the most significant reporting on profitability is now the “what-if” scenario planning. Using an operational performance management solution, executives and management can drill down to information and the performance of any client account by any number of variables – such as by region, promotion, etc. This information can be done both as historical, i.e., what is the performance?, and as scenario planning, i.e., if the company ran this promotion in this region, what would the impact be? This ability to use do what-if modeling helps the firm make decisions that improve profitability and reduce risk.

Information on Demand

The past will always be in the past, and the era of batch processing, waiting for information, has passed. As the Internet heralded “Internet time,” the world became an on-demand world. Realistically, all levels of the enterprise – IT managers, line-of-business managers, plant and brand managers, financial analysts and most significantly senior executives – demand the answers to their questions to be available as rapidly as they can click on a mouse.

Unfortunately, those in the trenches – most specifically, the IT managers and systems experts – know there are often significant delays in finding the answers to these questions – especially those who have continuously fluctuating answers such as *How much product is in the stores? How much in the warehouses? And how much is currently in production?*

Today, businesses that lead their industries have moved beyond annual, quarterly and even monthly analysis and reporting on the performance of the business, to requiring varying levels of the organization to engage in weekly, daily and even near real-time or real-time scenario planning and reporting.

As such, responses need to be immediate – they essentially function as part of the business forecasting and re-forecasting process. By experimenting with the variables,

managers can quickly see the results of the change – but this activity requires the ability for the performance management system to recalculate in a matter of seconds, not hours.

Sharing this information – whether in the form of Excel spreadsheets, Web browsers or actual reports – is also an important aspect of providing information on demand. Team members are located in different buildings, different sites, different countries and different time zones. And, to add a further requirement, these varying team members often need to participate in the analysis and reporting process – not just viewing and absorbing details, but inputting specifics, changing factors – these people need to write back to the information source.

The need for real-time or right-time data could be near impossible or put a significant strain on the existing IT infrastructure. However, flexible performance management applications rely on ETL tools (extract, transform and load), easily connecting with separate financial, operational (ERP), and HR applications to facilitate on-demand requests.

How can this be accomplished? Learn the details of how one oil and gas company cracked the code.

Who owns operational performance management?

Operational performance management is truly a cross-functional initiative. To begin, one of two scenarios usually emerge:

- Corporate transparency and the desire for a corporate dashboard, results in a top-down dictate, driven by the executive team; or
- The finance department has excelled at financial performance management, bringing transparency, traceability and ‘truth’ into the financials of a company, resulting in a desire to leverage and repeat success on the operations side of the business.

This cross-functionality could present a complex dynamic; in the business examples described throughout this paper there runs a common theme to success – cooperation and collaboration among the IT team, business managers and executives. In many cases, there is a business champion, an executive sponsor and an IT visionary, understanding the reduction in labor-intensive and pressure-sensitive activities and realizing the overall benefit not just to the company, but to the individuals on their teams and the day to day tasks required of these employees.

On Demand: Daily Oil Production Information

The Oil & Gas Division of a major North American petroleum corporation has core operations in the United States, Middle East and Latin America, with more than 1,000 people in the division. This unit is responsible for enhanced oil recovery, explorations and acquisitions – essentially, adding to the commercial oil reserves.

While any natural resource business is subjected to fluctuations in production and availability, perhaps none is more volatile than the oil business. And, unfortunately, the events of 2003, 2004 and 2005 – war in the Middle East and Hurricanes Katrina and Rita – have resulted in wild instability in oil prices and availability.

The Oil & Gas Division turned to a performance management platform that was able to integrate with multiple sources, provide a real time feed of data and perform rapid recalculations. In order to have the on-demand information from oil production sites, the Oil & Gas Division required the system integrate with its in-house production and revenue system, an Oracle General Ledger system, PeopleSoft® Enterprise Resource Planning (ERP) application, and business intelligence tool for reporting on anomaly analysis and reporting.

The performance management platform needed to interoperate with these applications and be able to import and export information to these applications on a continual basis.

After Hurricanes Katrina and Rita hit the US Gulf coast in the late summer of 2005, leaving one of the company's major oil rigs without a crew and thus producing no oil, the company was able determine with its performance management solution the difference between the startup costs and the lost revenue, running hourly updates to determine precisely when the costs of an accelerated startup would be justified. The result was that the company knew exactly when to get a crew out to the rig with minimal impact on the bottom line. Not having such a capability to run all the scenarios in real time could have meant up to a month's delay and even greater cost to the company.

Today, the Oil & Gas division relies on its performance management platform to receive and assimilate daily reports on oil production from multiple sites in its core operations locations. On a daily basis the company can understand its current production capabilities, assess how it is meeting both consumer and governmental demand,

and have a continual “pulse check” on how daily production will impact the bottom line.

Even more strategically, by culling this information in a timely manner, the Oil & Gas Division can perform trend analysis on its production sites, understanding the big picture.

Lastly, because the performance management platform enables rapid calculations, the Oil & Gas Division can analyze its business by including scenario planning. For example, by assessing the impact of a hurricane that demands oil production sites go off-line for several days, the Oil & Gas division can anticipate which other sites need to compensate for less overall production, and how to maintain a steady stream of revenue while resources are being reduced. Ultimately, as a result of its use of operational performance management, this Oil & Gas Division does not need question how worldwide events will impact its business performance – that information is at their fingertips.

For some organizations, spreadsheets are used widely and can be the window for operational performance management.

Other organizations will rely on graphical dashboards and scorecards for both “quick glances” and more sophisticated drill down analysis. Any and all of these approaches need to factor in multiple locations, geographies, existing VPNs and interest/requirements for Web-based applications.

When selecting an operational performance management solution, it is vital to understand the usability requirements of the organization and choose a solution with a wide variety of viewing and working options.

The Dawn of Real-Time Awareness

Although commerce hasn't gone as far as the combat visionaries in seeing smart dust sprinkled out over a battlefield to sense field movement, the business world is monitoring process and workflow from the idea's inception to the warehouse pallet to the customer's delight or rejection. “As radio frequency identification tags show up on zillions of pallets and packages moving through retail and industrial supply chains, even more data will become available to help companies gauge and react to change in customer demand.” From CFO IT, Fall, 2005.

All in One

Finding the answers to any problem is always much easier when the facts are located in one place. Less time is spent gathering information, and more time is spent on assessing that information. Unfortunately, most companies have IT systems that were developed in silos; applications that are owned by one group, designed for one purpose, and not thought of as contributing to executive office decisions. Larger firms have untold numbers of information silos; mid-sized firms, perhaps just a general ledger system and an ERP application.

These silos not only inhibit executive decision-making on a global basis, but also put significant demands on the IT teams – demands for “information now,” and overly large data mining and data warehousing projects that become time and resource sink holes.

Operational performance management can be the driver to create a corporate, ‘single version of the truth.’ Numbers — whether they be sales or transaction numbers, production numbers or staffing numbers — are meaningless if different managers have reports or base decisions that reflect wrong or differing numbers. But achieving the efficiencies and effectiveness of operational performance management requires a single source of information. In turn, this creates more transparency and accuracy in the data used for critical decision making.

Organizations of all sizes, in a wide range of industries, have begun to realize the benefits of deploying a common business model across the organization and relying on performance management tools to manage, maintain, and automate it.

Consider the case that involves a major credit card issuer. Fraud is one of the biggest problems facing financial services firms today; with today’s rampant theft of identities and extensive credit fraud, credit card companies are faced with dissatisfied customers, financial liability and damage to the company’s reputation. All in all, it can be an extremely dire situation for the business. One international credit-card firm has a large, sophisticated fraud-prevention operation that consists of a value-analysis team, which measures and assesses the current fraud threat, and an initiative team, which develops ways to prevent and combat that theft.

With 11.4 million customers and 13.6 million cards in circulation, this credit card company would need an operations performance management system that not only addressed the core requirements, but could also handle massive amounts of transactional data. As part of its proactive approach to preventing fraud, this firm has turned to BPM software that includes business-modeling functionality. Modeling has enabled the firm to start with fraud analysis, looking for “hot spots” in the transactions, while incorporating collaboration and workflow for automated alerting.

The company now relies on a common business model as the basis for easily deploying applications for intercepting fraud in which new postcards sent to customers are intercepted en route. The BPM solution enables the company to analyze where the high-risk postal codes are and then calculate the optimum delivery spend by using different delivery methods for different postal-code areas. The company also uses an application to analyze high-volume transaction data alongside fraud data (i.e., understanding the fraud-to-genuine ratio for certain types of businesses).

By relying on operational performance management, this credit card company has moved from insight based on past events to insight based on current and anticipated events. It translates into less financial risk for the firm, less reputation-damaging fraud, and improved customer

Usability – While there are many requirements for a successful performance management system, perhaps none is more vital than that of usability. The era of painful, costly deployments that, in the end, sit unused because those who need to work with the applications simply can’t, is long gone. In today’s lean times – of efficient and effective IT projects with rapid deployments – usability is the linchpin to success. For financial performance management systems, that linchpin often comes in the form of Excel spreadsheets as the application interface. For operational performance management, flexibility and individual business approaches will drive usability.

experiences. The company also reduced time to receive and review information from a week or more to real-time.

Let's consider now a large beverage retailer with more than 2,000 outlets and 12,500 employees who turned to operational performance management to run a more successful business – the firm is focused on fast response to consumer opportunities and creating and delivering new products and concepts to the market quickly.

The company had been facing a significant challenge in managing the distribution of its products to its stores. Individual and workbooks of spreadsheets had been used to manage stock control and order goods from suppliers. Additional spreadsheets were relied upon for different divisions, creating a nightmare of consolidation in order to get consistent and reliable information for the 'big picture.'

Now, with operational performance management, the company has flexibility and accessibility to vital business information.

A vast amount of data is consolidated into one central information point – and this data is detailed and provided on a real-time basis.

The beverage company's centralized information provides details on variables by product and store, allowing the company to better understand weekly fluctuations.

With the solution merchandise managers have with an in-depth, real-time insight into sales from the company's 2,000 stores, enabling them to make predictions and calculate pre-emptive forward orders from their suppliers.

One of the biggest benefits to a single source of information is that the company now has integrated financial and operational planning in disparate business units. And, even as vital, the company has management reports more quickly, with less effort, and guaranteed accuracy.

Technical Features:

The companies described above rely on IBM Cognos TM1, the business planning, reporting and analytics platform as their solution for operational performance management. More than 2,100 customers worldwide use TM1 for its tight integration with Excel, real-time response, modeling flexibility, fast time to implement and low total cost of ownership. These companies in these examples also use TM1's data management integration capability, Turbo Integrator, to pull information directly from multiple sources into TM1, meeting the requirements of on-demand information; rapid recalculations; a single, consolidated information source; and application of a common business model.

Conclusion

Businesses today must be nimble. If they aren't, they are likely to be consumed by larger entities or forced into extinction from competitive market dynamics. Business agility can come from many different sources – one approach is operational performance management.

If you understand the need for efficient and transparent operations across the entire business, consider examining how an operational performance management system with modeling capabilities, right-time data access, and a

scorecard reporting mechanism can help your business to be agile, flexible and ultra-competitive. As outlined above, operational performance management can take all the mysteries out of running a successful business and deliver a good measure of predictability and appropriate responsiveness.

"Performance management, when properly implemented, can lead to better and more focused decision making. Such improvements in decision making can be tangibly measured through improved bottom-line performance."²

About Cognos, an IBM company

Cognos, an IBM company, is the world leader in business intelligence and performance management solutions. It provides world-class enterprise planning and BI software and services to help companies plan, understand and

manage financial and operational performance. Cognos was acquired by IBM in February 2008. For more information, visit <http://www.cognos.com>.

For more information

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