



Microsoft® Office

Business Scorecard Manager 2005

Operations: Aligning Strategy and Action with Business Activity Monitoring

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Introduction

This white paper examines how a Business Activity Monitoring (BAM) solution and scorecard interface can help overcome the problems associated with aligning operational activities and corporate strategy and conquer the difficulties involved in identifying, monitoring and acting on urgent problems quickly and effectively. Microsoft Office Business Scorecard Manager 2005 is an ideal scorecard solution, supporting BAM scenarios for cross-functional communication of real-time and historical information to improve the visibility, speed and effectiveness of business operations.

To be competitive in today's operating environment, business executives and managers must align strategy and action across the entire organization. Companies have to make sure that operational activities align with strategic goals and that individuals responsible for those operational activities can constantly track performance against objectives.

It's about knowing what's going on and quickly focusing on areas that require attention.

If something abnormal happens to your car, an alarm sounds, or a warning light flashes to alert you immediately to the source and nature of the problem. You don't have to schedule a series of meetings and then wait two weeks for feedback on what's wrong. Why then do so many business processes lack a similar degree of immediacy when it comes to operational abnormalities that threaten to undermine corporate health?

This paper will examine the key challenges and opportunities that operations executives face when identifying, anticipating and responding to problems throughout the supply chain. In responding to these challenges, a Business Activity Monitoring (BAM) solution with a scorecard interface can help overcome the problems associated with aligning operational activities and corporate strategy and conquer the difficulties involved in identifying, monitoring and acting on urgent problems quickly and effectively. By avoiding the barriers to optimization of business activity and by constantly empowering operational staff to track performance against objectives, an enterprise can become more responsive and competitive.

A scorecard solution is a powerful way to collect BAM data, put it into a business context that supports alignment of strategy with action, and empower employees to track and monitor performance against objectives. This document will introduce the scorecarding and dashboarding concepts, illustrating the benefits of sharing cross-functional information as well as early visibility into business drivers, Key Performance Indicators (KPIs), and potential crises relating to all elements of the operational chain. A scorecard implementation can and should be low-risk yet high-impact, with the resulting solution both intuitive and non-disruptive. It serves as a strong unifying force for operations teams via the collective focus it provides to all end-users. It empowers each individual to turn an alert into a response through contextual information, decision support tools, and deep data drill-down, enabling timely process intervention and control. With the contextual insight afforded by a scorecard solution, the COO and other operational leaders will be better equipped to drive the business and monitor performance against objectives.

This document will address the most common questions regarding scorecards and dashboards in an operational environment, providing tangible examples of how they solve specific operational issues. It will also examine the value of scorecard solutions in relation to existing data metric systems, for example. SCM, CRM, ERP, and BPM (Business Process Management).

In conclusion, this paper will show how Microsoft Office Business Scorecard Manager 2005 is an ideal scorecard solution, supporting BAM scenarios for cross-functional communication of real-time and historical information to improve the visibility, speed and effectiveness of business operations.

Background: Business Activity Monitoring

Increasingly, companies are seeking business process applications that go beyond the traditional function of historical data-gathering. Monitoring activities as they happen provides real-time business insight that leads to operational improvements. If you're driving from home to work, you don't rely solely on information from the previous day's journey to get to your destination. Although you may follow the same route, there will inevitably be variances in weather conditions, car performance, traffic patterns, etc., that may require you to take different actions. As you drive, you keep an eye on the dashboard to monitor your speed and check for warning lights in order to achieve the desired outcome, which is to arrive safely, on time and without consuming too much fuel.

While credit-card operations have relied on Business Activity Monitoring for some time to spot transaction fraud and some manufacturers have used BAM to optimize production lines, many more organizations are now seeking BAM technology to monitor and manage much wider operations, going beyond pure analytics by translating data into business context. As more businesses move towards the goal of operating in real-time, BAM has emerged as a new solution that is often described as "Operational Business Intelligence." It is a tactical methodology that adds real-time functionality to the analytical characteristics of a stand-alone Business Intelligence (BI) system and the context of Business Process Management (BPM), thereby increasing the resulting information's relevance and value. The goal of the BAM methodology is to make faster, more informed day-to-day business decisions based on a combination of real-time and historical information in both structured and unstructured forms. Or as information technology author and consultant Ian Hayes points out:

"[BAM] monitors business processes, and it sifts through immense quantities of event data and metrics spawned by those processes to track important trends and detect anomalies. The system applies context to metrics, converting raw data into actionable information [...] BAM then alerts businesspeople in time for them to react, and gives them enough information to determine what action to take. BAM's goal is to provide real-time access to critical business-performance indicators to improve the speed and effectiveness of business operations."¹

¹ BAM Keeps A Finger On The Pulse. Business-activity monitoring provides real-time insight to improve operations. Ian Hayes. Optimize Magazine January 2005, Issue 22

By monitoring key business performance indicators for problems and opportunities, BAM alerts interested parties to relevant and significant operational events. Alerts are sent to users via an integrated messaging system along with enough contextual information to specify their magnitude and implication. A dashboard or console might be an integral part of the system, providing insight into how and when users should respond, using a combination of real-time status, historical information, analytic functions and process controls.

Many existing methodologies, such as SCM (Supply Chain Management), CRM (Customer Relationship Management), ERP (Enterprise Resource Planning) and BPM continue to focus entirely on transactional management. Operations executives increasingly are recognizing that what precedes and what follows these transactions are of equal importance in framing effective, accurate decision making, both in the present and in the future. In addition, these traditional applications generate enormous amounts of data, data that is maintained in separate silos. These multiple sources of data cannot interact and must be accessed, collated and compared manually before a decision can be made.

Translating Real-time BAM Data into Business Context

Balanced Scorecard Methodology (BSM) is an analytical business management tool, developed by Kaplan and Norton in the early nineties. Recognizing some of the weaknesses of previous management approaches, it was designed to provide a clear view of what to measure in order to balance the financial view of an organization. The Gartner Group estimates that at least 40 percent of all Fortune 1000 companies are now using the Balanced Scorecard Methodology as an analytical business management tool.² Scorecard and dashboard solutions leverage the data generated and collected by past management tools as it relates to KPIs, thus helping companies define and articulate strategy. Analysis based on financials alone will simply provide an historical view of performance prior to the moment of assessment. Instead, scorecards build on BSM/BAM by putting information in context and linking corporate strategy to Line of Business (LOB) action, typically reporting on organizational performance in both financial and non-financial terms according to KPIs.

Scorecards are designed to articulate strategy, convert it into specific, measurable goals, and to monitor progress towards the achievement of these goals. This methodology supports the performance-driven loop of insight, strategy, monitoring, collaboration, execution and feedback that leads to successful operations. Figure 1 illustrates performance-driven loop of successful operations supported by scorecards.

² Balanced scorecard methodology SearchCIO.com
http://searchcio.techtarget.com/sDefinition/0,,sid19_gci347160,00.html



Figure 1
The Performance-Driven Loop of Successful Operations

A dashboard, not itself an application, is designed to enhance the scorecard methodology by displaying contextual information directly related to the KPIs and objectives. Dashboards provide a personal data snapshot, tailoring the interface and information to the specific needs and preferences of the individual user, enabling timely, corrective action within his or her LOB. Dashboards provide a highly visual method for data analysis, displaying trends in the form of graphs and signaling important changes or exceptions using graphical traffic light indicators as well as additional contextual information. It should be noted that not all scorecard applications incorporate dashboards to display and communicate information.

Operational Challenges

There are a number of common operational challenges shared across the supply chain arena. While corporate management anxiety may focus on the impact of fluctuating costs, company performance, and perceived shareholder value, operational management may be more preoccupied by the negative effect that upstream decision-making can have on supply chain costs, in addition to concerns about procurement, production, and shipping inefficiencies, which can adversely impact operating margins.

Lack of day-to-day cross-functional communication often results in managerial decisions made in isolation without understanding their impact on other LOB operations. The following are just some of the more common informational challenges faced by operations management across industries:

Keeping operational activities aligned with strategic objectives.

- Data about strategic objectives is hard to capture and communicate to the operations team.
- Detailed data is not viewed frequently enough to show the gaps between operations activity and enterprise level strategic objectives.
- Methods of monitoring and analyzing operational performance against strategic objectives are not consistent across all operational LOBs.
- Communication and collaboration throughout the supply chain is inconsistent, leading to a disconnection between strategic objectives and day-to-day decision-making.

Identifying, prioritizing, and acting on the most urgent operational issues and gauging how actions will impact corporate results.

- There is a lack of visibility into the cause-and-effect relationship between operations and the bottom line.
- It is extremely difficult to analyze the operational team's decisions quickly enough to take corrective action.

In addition, there are a number of common barriers to effective monitoring and optimization of business operations:

Lack of visibility into unpredictable supply chain and production schedules, resulting in excessive inventory buffers.

- It is difficult to identify the most cost-effective inventory level for each production component.
- It is difficult to predict the effect of excess inventory on operating margins.
- Existing tools are limited in managing transactions involved in production, inventory, and shipping processes.

Lack of insight resulting in unexpected increases in production and shipping costs.

- It is difficult to trace a cost problem upstream to its source in the supply chain.

Lack of clarity because operational data is scattered across the organization.

- Information is held in multiple scattered locations, providing a series of unilateral views that cannot be shared across operational disciplines.
- There is a lack of contextual information – historical performance, current performance, analytical tools, policy and process documents – needed to inform effective decisions.
- It is time-consuming and impractical to keep all levels of operational management and other business units up-to-date on changes in supply chain information.

Key Criteria When Choosing a Scorecard Solution

When sourcing a scorecard and dashboard solution, make sure that the application you choose will address all of the following criteria:

Deep Insight and Good Context

A good scorecard and dashboard solution will offer crystal clear visibility. Key players will not only be made aware of a problem or opportunity but, with access to both structured and unstructured data, will also immediately understand its multi-dimensional context and effect on the organization.

Collaborative Business Management and Action

A good scorecard and dashboard solution will provide users with an invaluable place to work together. It will offer a focal point for collaborative data analysis, strategy formulation, and constant KPI monitoring, and will provide insight into timely corrective action.

End User Empowerment

A good scorecard and dashboard solution will give end users the power to generate, monitor, manage and execute against plan, in line with KPIs.

Extensible Solution

A good scorecard and dashboard solution will be flexible enough to allow add-on functionality, developed internally or otherwise, to further personalize and extend the reach of its capabilities.

Microsoft Office Business Scorecard Manager 2005: Aligning BAM and Business Strategy

Microsoft Office Business Scorecard Manager 2005 is a powerful way to translate BAM data into business context, enabling business executives and managers to align strategic goals with operational activities across the entire organization. It also helps ensure that the individuals responsible for those operational activities are clear about their goals, can monitor and react to problems and opportunities that relate to their KPIs, and can constantly track performance against objectives.

In calling attention to critical information, Business Scorecard Manager creates the same degree of urgency and immediacy as a car or house alarm, helping avoid potentially devastating process breakages. By providing real-time information in its historical context via a user-friendly interface, Business Scorecard Manager provides the speed and visibility required for a successful operations infrastructure. Linking operational action to corporate strategy, acting quickly on urgent and important information, and gaining visibility into significant bottlenecks are all vital to driving supply chain performance and other functional areas.

Business Scorecard Manager is designed to help business customers:

Articulate Strategy.

- Provides upstream business units with complete visibility into how design, development, and marketing decisions impact operations and logistics.

Monitor Performance.

- Provides a single interface for viewing operational status, allowing companies to combine the current picture with historical performance data, analytical tools, policies and processes, and overlay all with strategic objectives.
- Helps all team members to track the bottom-line impact of existing and new strategic objectives, as well as tactical adjustments.

Analyze Issues.

- Offers a familiar set of tools to explore the root causes of unexpected cost increases, for example. Additionally users can adjust production, shipping and inventory plans accordingly and immediately present the relevant information to production teams and business units, all via a familiar interface.

Act Decisively.

- Gives transparent view of targets, trends and supporting contextual information that leads to informed and cost-efficient decision-making.
- Facilitates a rapid response to threats (for example, competitive activity, rising gas prices, bad weather, changes in order patterns, customer bankruptcy, and so on) by quickly identifying the costing, inventory and production analysis needed to remain profitable.

BAM Scorecard Example: Electronics Inventory Costs

Maintaining corporate operations is not only complex in itself, but it touches every other area of business activity, from sales to finance. It is not surprising, then, that executing on corporate strategy depends to a large extent on understanding, measuring, and managing the day- to-day activities that drive the business.

Take, for example, the familiar concept of inventory costs. These costs are commonly understood to include storage costs and the capital costs of unsold inventory. However, a more sophisticated analysis of costs, taking into account the interaction of channel sales and distribution, may well reveal unaccounted-for costs that exceed simple warehousing bills. With the right business models and KPIs, a scorecard system could measure these costs and provide the insight into operational activities that would drive down unnecessary costs and boost profits.

Consider a manufacturer of computer peripherals, whose business is built on selling rapidly evolving technology through retail channels. In a highly competitive market, these customers demand price guarantees and a flexible return policy. This is complicated by the fast rate of change: the newest products and components often command high prices initially but quickly decline in value as newer, higher performance components become available. In such an environment, the company cannot afford to support high inventories on electronics items that are, in effect, perishable. Therefore, the company institutes a

scorecard system to measure and track the extended costs of inventory, and provide operations with critical insights into business activity.

- **Price-guarantee costs:** If the company ships 1000 external hard drives to a retailer on Monday and is forced by competitive pressures to drop prices by \$10 a unit on Thursday, they are bound by contract to refund the difference on the unsold hard drives, a cost easily running to thousands of dollars. Therefore, the company creates a price change refund KPI, that combines data from the shipping system and the sales system to tally the costs incurred from a change in price. In this case, the ideal situation of zero costs may be unattainable, so the target is set at 1% of gross revenues for each item, where lower is better.
- **Just-in-time shipping:** To minimize price-guarantee costs, the company might step up its efforts to perfect its just-in-time (JIT) customer supply system, thus minimizing the amount of unsold stock each customer has on hand and the refund required when prices drop. At the same time, the company must match its manufacturing process and production schedule to minimize the depreciation and obsolescence of its stock before it is shipped to retail customers. The company creates schedules and forecasts to optimize its JIT policy, and creates scorecards to track adherence to the JIT schedules, with a target of 100 percent adherence, the higher the better. Employees can set up and view scorecards for shipping by region, product, and shipping supplier. They also have dashboards that show geographically where potential problems are occurring with their shipping efforts.
- **Retooling costs:** In order to minimize inventory costs, manufacturing must be able to switch quickly between products and product components. However, switching between product lines incurs retooling costs, as assembly lines experience downtime. What's more, different products and different components within products change at different rates, and have different inventory costs. Therefore, the company must strike a balance between inventory costs (including such costs as depreciation) and retooling costs, so that overall costs are minimized. The company uses its refined understanding of costs to set targets for production runs, and creates scorecards to monitor the balance between different cost types. Production managers can view scorecards to minimize retooling costs, individual component inventory costs, and overall costs.

Familiar Microsoft Tools Encourage Fast BAM Implementation

Key to the success of any BAM application is its implementation. Business Scorecard Manager extracts maximum value from the BAM scorecard and dashboarding model and leverages existing investments in both platform and tools. Browser-based and driven by familiar Microsoft technology, the product is non-disruptive and easy to use, leveraging the Internet as a universal, immediate and collaborative means of communication. Documents created with other tools like Microsoft® Office Word, Microsoft® Office Excel, Microsoft® Office PowerPoint, Microsoft® MapPoint, or Visio can be associated with specific KPIs and presented on the dashboard to provide deeper contextual insight and user enablement.

Microsoft Office Business Scorecard Manager 2005:

Operations: Microsoft Office Business Scorecard Manager 2005

- **Maps and links operations information to the strategic objectives of the organization creating a strategically focused operation and encouraging the use of information to measure and optimize the supply chain and drive new initiatives.**
- **Provides personalized and timely information to match each LOB role and responsibility within the organization, and enables a customized business view, allowing users to take informed, independent action.**
- **Allows drill-down to the lowest level of supporting detail via the scorecard's cascading functionality as well as other data views within the dashboard such as pivot tables, empowering all users to act appropriately.**
- **Reconnects information with the business processes that create it to help run them more effectively and efficiently.**
- **Promotes a balanced, fully informed decision-making process with both structured and unstructured data.**
- **Permits both manual and automated actions based on the incoming data and defined thresholds or targets.**

In order to achieve the best results, operational activities must be aligned with the organization's strategic objectives, and the total value chain must be continuously monitored and streamlined. Operational leaders and decision makers need clear and comprehensive visibility and insight so that they can anticipate, identify and act upon urgent problems with speed and precision.

Increasingly, companies are seeking business process applications that go beyond the traditional function of historic data gathering. They want applications that monitor activity as it happens in order to provide real-time business insight that will lead to operational improvements. As more businesses move towards the goal of operating in real-time, Business Activity Monitoring has emerged as a new style of application that is often described as "Operational BI." It is a tactical methodology that adds real-time functionality to the analytical capabilities of a BI system and the context of Business Performance Management, thereby increasing the resulting information's relevance to a business operation's staff.

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