Real-time BPM Benefits Operational Execution

Fast, scalable performance management solutions are key to enabling real-time operational responses to actual results.

April 2014

Research Supported by

deFacto | PERFORMANCE MANAGEMENT
THE NEW STANDARD

bpm PARTNERS

Table of Contents

`

Executive Summary

Because today's business environment moves fast and requires rapid, accurate reactions by managers as complex events unfold, companies need to process and analyze information more quickly and accurately in order to make just-in-time decisions.

As BPM / CPM extends beyond the confines of Finance out to line-of-business (LOB) managers and operational decision-makers, it meets face-to-face with the urgency to support more real-time scenario modeling and decision-making. Yet providers of BPM software have traditionally neither defined nor addressed operational decision-making and day-to-day execution in response to insights about ongoing results

One reason this is a challenge: data volumes are much higher than in the recent past. Another reason: real time means different things to a retail distributor, a logistics and shipping firm, and a manufacturer.

Our working definition of real time is "fast enough to help managers make decisions and respond to events in their environment with sufficient speed and accuracy to improve business performance."

As planning, budgeting, forecasting, consolidation and reporting have become fairly mature functions with BPM systems, execution has been revealed as "the missing piece of BPM."

Gartner's Jim Sinur wrote in 2013 that "intelligent business operations will be a significant differentiator for high-performing companies…" [1]

High-performance, enterprise-quality business or corporate performance management (BPM or CPM) is opening the door to more comprehensive and real-time analytics across the enterprise. Newer solutions expand beyond the traditional forecasting, planning, and analytical (FP&A) capabilities within Finance and extends BPM's decision support analytics to LOB operations. This enables more effective 'real-time' synchronization of business operations and better overall performance. It also positions the BPM / CPM system as the hub of an intelligent business infrastructure.

---

[1] www.gartner.com/newsroom/id/2349215 February 26, 2013.

Support for Fast Management Responses "In Flight"

The end goal of business performance management is straightforward. BPM aims to keep managers more informed and give them a better view and control of the foreseeable future, enable better and faster decisions, and allocate resources as effectively as possible.

BPM solutions have evolved through various stages and solved many of the challenges to deliver excellent decision-making information, reports, and forecasts. Many companies using BPM systems can now respond with numerous, accurate course adjustments—as opposed to more expensive, less frequent but bigger corrections. These actions are typically not decided on or tracked within the BPM solution, however. Even for modeling the response scenarios, there is often a disconnect from the reports and analysis which revealed the need for intervention.

Execution is a beneficial next step in the capabilities of business performance management. Effective execution requires responding to actual operational and financial performance and leveraging timely analysis to guide decision-making, within the BPM solution itself. Particularly with today's larger data sets, fast updates and a high performance database are key to real time analysis and just-in-time decision-making.

Adding strong management execution features to a BPM / CPM system, beginning with robust and easy-to-use scenario modeling, enables more intelligent business operations, according to Gartner. [2]

Once these capabilities are incorporated into BPM systems, it becomes apparent that for operational execution, something additional is often necessary: speed.

Why Real Time Matters More in Operational Execution

As software vendors begin to bring decision-making and operational execution support into BPM systems, users notice that timeliness and scalability are important aspects of these new functions.

According to Gartner: "…virtually every business operation has one or more areas where real-time analytic services or active analytics should be applied." [3]

---

[2] www.gartner.com/newsroom/id/2349215 February 26, 2013
[3] Ibid

Chances are, that area will not be solely in the finance group. Finance is deadline-driven, but on a known cycle with a great deal of predictability. To take a contrasting example, fleet management has unpredictable choices and timing.

LOB managers usually have the unknown coming at them, with urgency to make decisions quickly and accurately. Real-time data and near real-time analysis helps managers to optimize "in flight."

In 2013, IDC conducted a survey in collaboration with SAP which focused on—among other IT issues—timeliness of data for business managers. Among the findings: 20% said it takes their business more than two days to move sales data from transactional to analytical databases. Over 40% of those polled said their users cannot use predictive analysis or work with real-time data because of limitations of their current technology. [4]

Respondents to the IDC survey identified the two improvements that would have the most positive impact on their organizations as:

- faster access to information

- faster analysis (second most important)

"The need to ask for and act on data more quickly is due in part to heightened customer and business expectations. With ubiquitous access to data via smartphones and tablets, businesses no longer have an excuse not to make informed decisions in real time," according to Narendra Mulani, managing director of Accenture Analytics. [5]

By 2015, 70 % of the most profitable companies will manage their business processes using real-time predictive analytics or extreme collaboration. "The impact of integrating real-time analytics with business operations is immediately apparent to business people because it changes the way they do their jobs," writes Jim Sinur, research VP for Gartner.[6]

---

[4] IDC, Survey: Key to the Real-time Enterprise, April 2013.
[5] http://www.information-management.com/news/data-velocity-why-decreasing-your-time-to-insight-matters-10024394-1.html
[6] www.gartner.com/newsroom/id/2349215

Real Time Calls for the Ability to Handle Semi-Big Data

Departments and businesses which define real-time in minutes or hours often deal in large volume of data, though usually not in terabyte-sized Big Data volumes. Scalability is important to these users, and processing time becomes a make-or-break viability factor.

Signs that a BPM system is not sufficiently scalable:

- Software performance is slow; in particular, modeling alternative decision scenarios is frustratingly slow.
- Users say that as the number and variety of data sources increased, the system delivered less reliable results.
- End users are essentially forced to log out of the system while processing is under way.

Telecom, advertising and digital marketing, and financial services have a reputation for challenging the performance limits of a poorly-scaling system. The need to process and analyze increasingly high volumes of data quickly is becoming a mainstay requirement for more types of businesses.

We expect this issue to become more acute and pervasive in the next few years. The primary cause: what Cisco calls "the Internet of Everything[7]" is a train coming down the tracks, with its promise of billions of sensors and other linked devices, many of them feeding data into enterprises for analysis. It seems reasonable that even SMEs will be receiving big data volumes to drive their business and decision-making.

Given that real-time modeling can involve running through several intricate scenarios, response times need to be "spreadsheet-fast" – or the end user might not be able to meet the urgency of the situation, the business, and the industry.

Real Time Varies by the Type of Business

Earlier, we gave a practical working definition of real-time [reports, analytics and information availability] as "fast enough to help managers make decisions and respond to events in their environment with sufficient speed and accuracy to improve business performance."

---

[7] internetofeverything.cisco.com/

Another way of looking at it: "fast enough to let managers make good decisions at the pace that is most valuable for their organization." It's worth noting that this improved pace could be drastically faster than the prevailing frequency and speed of decision making in the company.

We have seen a number of situations where the availability of real-time information enables equal or greater depth of analysis, while permitting management to make much faster decisions. Course corrections become more frequent, more numerous, smaller, and less costly.

Real-time Threshold / Definition by Industry

Retail distribution: The time available to decide on a peak-demand time delivery route or a promotional special could be just minutes. Less commonly, it could be hours.

Advertising, media buying, digital marketing: Serving clients who spend large sums per minute, their tolerance could be 10 to 15 minutes, or less.

Services: Minutes, in many customer-facing situations.

Telecom: Often decisions must be reached within hours. Cellular and data service competitors are particularly known for generating and launching new promotions and plans based on fast analysis of sizable volumes of data.

Travel & Hospitality: The timeframe can be minutes. Example: airlines abruptly launch an all-out 12-hour price war to Dallas-Fort Worth. The hotel chain that can most quickly model its profit scenarios and launch a promotion at that destination stands to capture the bonanza of out-of-forecast bookings.

Cross-industry demand for real-time or near real-time operational metrics and modeling are often found in digital marketing, promotions, and distribution departments.

After acquiring real time analytic capability, a company's definition of real-time might become more demanding. Until they are given the opportunity to make rapid decisions based on extremely fresh data with in-depth analysis, advertising managers may not miss what they don't yet have, and a one-day response might seem acceptable. When the analysis can draw on data that is just minutes old, managers can quickly take measures to terminate a money-losing promotional campaign in favor of a more profitable one.

Criteria for Operational Execution

BPM software that encompasses operational execution should support this sequence of managerial / analyst actions:

1. Get data, assess current performance
2. Model future scenarios
3. Compare, decide, take action

A study published in 2013 by Aberdeen Group [8] found that top-performing companies are:

- Able to build new models up to 10x faster than laggard performers

- 49% more likely than laggards to use drill-down capabilities

- 2.5x more likely than laggards to enable users to fully interact with and manipulate data

- 2x as likely as 'followers' to use a single integrated system for all analytics

This doesn't assign cause-and-consequence, only correlation, but common sense tells us that a fast-thinking, fast-responding business can outperform, and the ability to model scenarios quickly can only help.

These findings reinforce the viewpoint of BPM Partners that important characteristics include the ability to:

- perform real-time analysis and planning with extremely fresh source data

- drill down, drill through, and drill back (see below)

- share your ad-hoc analysis and investigations with others

- generate model scenarios quickly with "Fill" or "Spread" functions, and lock results along 1 or more dimensions in a multidimensional model

- let users select the level of detail they prefer, and "work the data" in a spreadsheet environment

- model, forecast, and compare decision outcomes within the same environment

- carry out decision-making in a collaborative, semi-structured manner

---

[8] Aberdeen Group research survey: spotfire.tibco.com/blog/?p=19496

Drill back to find source documents

Exploratory analysis often is aimed at finding the cause of exceptional results, good or bad. To understand the root cause of an unusual result, the decision-maker may want to drill back to see a purchase order or invoice in a transactional system that feeds data to the BPM application.

This capability may depend more on the integration with source systems, ETL efficiency, the availability of document imaging, and characteristics of the enterprise data warehouses, than on the BPM solution itself.

Real Time Performance Management in Action

A major media buyer was hampered by sluggish performance of its core analytics system under an increasingly heavy data load. A unified BPM solution running on a fast multidimensional database, combined with an automated ETL process that provided updates on a near real-time basis (every 10 minutes) from a large media-focused data warehouse. This performance enhancement helped resolve the financial group's time management, allowed faster analysis and better decisions regarding the media budgets and strategies of individual clients.

The multidimensional aspect of the platform underlying this software solution also has allowed the company's media professionals to view accurate real time data across the company using advanced dynamic reporting while at the same time relieving stress from their relational data source system.

A major cell phone service provider uses a real-time BPM solution with fast modeling to run numerous aspects of their business. They conduct analysis and evaluations of calling plans, data/voice volumes, network bandwidth, and the elements that drive costs and revenues at a lower level. Their current fact table includes hundreds of millions of records; this telecommunications firm had tried systems from two major vendors, but neither gave satisfactory turnaround time on analysis.

The two examples above show how real-time BPM can significantly improve operational decision making. There's an additional benefit that stems from the fact these organizations use the same unified BPM solution to manage their corporate financials: they can directly tie operational decisions to financial performance.

Conclusions

Execution is a beneficial next step in the capabilities of business performance management. Effective execution requires responding to actual operational and financial performance and leveraging timely analysis to guide decision-making, within the BPM solution itself. Particularly with today's larger data sets, fast updates and a high performance database are key to real time analysis and just-in-time decision-making.

Scalability is a priority that will only become more important, given the Internet of Everything and the growing number of data sources that will feed into the enterprise. Additionally, collaboration will be important in companies that have a culture which supports group cooperation.

It is striking that businesses which have had the opportunity to work with real-time performance management and apply it to operational execution may adopt it very quickly and make it indispensable in many facets of management. We expect early adopters and early followers to have a competitive advantage, by virtue of being able to react to market events quickly and more accurately.

About BPM Partners

BPM Partners is the leading independent authority on business performance management (BPM) and related business intelligence solutions. The company helps organizations address their budgeting, planning, financial reporting, regulatory compliance, profitability optimization, key performance indicator (KPI) development, and operational performance challenges with vendor-neutral experts who can guide companies through their BPM initiatives from start to finish while both reducing risk and minimizing costs. For further details, go to http://www.bpmpartners.com. Follow BPM Partners on Twitter @BPMTeam.

About deFacto Global

deFacto Global is a US-based Microsoft centric Business or Corporate Performance Management (BPM/CPM) software company. We serve customers throughout the world, ranging from middle market to large global corporations, delivering deFacto Performance Management, an enterprise-quality budgeting, forecasting, consolidation, analysis and reporting product that is priced and packaged for companies of any size. Mid-sized and global companies alike use deFacto to streamline, automate and better manage their financial management processes for the purpose of achieving stellar financial performance. deFacto Performance Management is available as an on-premises or cloud-based offering. It offers the full range of features needed to satisfy even the most demanding users, yet it's easy to learn and use - and it's affordable.

For further details go to www.deFactoGlobal.com. Follow deFacto on Twitter @deFactoCPM.