

TDWI report series

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Best Practices in Business Performance Management: Business and Technical Strategies

By Wayne Eckerson

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Best Practices in Business Performance Management: Business and Technical Strategies

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About the Author



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The TDWI Report Series is designed to educate technical and business professionals about critical issues in data warehousing and business intelligence (DW/BI). TDWI's in-depth reports offer objective, vendor-neutral research consisting of interviews with practitioners and industry experts and a survey of DW/BI professionals worldwide. TDWI in-depth reports are sponsored by vendors who collectively wish to evangelize a DW/BI discipline or emerging technology.

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Executive Summary

Growth Ahead. Despite current confusion about its definition and scope, business performance management (BPM) is gaining adherents in all industries. Today, early adopter companies are deploying BPM initiatives to better communicate and execute business strategy at all levels and gain greater visibility into organizational performance. Their early successes are stoking red-hot interest in BPM by organizations in all industries.

Four-Step Process. Organizations are discovering that BPM is more than just a planning, budgeting, forecasting, consolidation, or scorecarding application—rather it's a common business and technical framework that underlays all these applications. The BPM framework consist of a four-step business process—strategize, plan, monitor, and adjust/act. Each step in the process is enabled by various tools, chief among them data warehouses and business intelligence.

Enterprise BI. Data warehouses integrate data required to deliver key performance indicators, and business intelligence tools display KPIs and alerts and guides users when performance slips below acceptable levels. To succeed with BPM, organizations will need to upgrade their departmental BI deployments to provide pervasive, proactive, and personalized analytics across the organization.

Key Questions

Where to Begin? Organizations embarking on BPM face several challenges. Since many organizations view BPM as an enterprise endeavor, they struggle to figure out where to begin. Do they deploy at the enterprise, division, or department level? To executives, mid-managers, or front-line employees?

How to Create Effective KPIs? Another challenge is defining valid, relevant, and effective key performance indicators (KPIs) tailored to each group in the organization. What is the right number of KPIs? Which really drive strategic value and proactive action? Which conflict with other KPIs or incent employees to work at cross-purposes with key objectives?

How to Architect a BPM Solution? Architecting a BPM solution can also be challenging since it requires pulling together data from a multiplicity of groups each with different business processes and systems to deliver a single version of truth. Even with a BI infrastructure in place, organizations can struggle to figure out how to enhance their existing infrastructure to support BPM.

How to Ensure Usage? Finally, deploying a BPM solution can be half the battle; getting users to use the solution and drive performance in the right direction often requires a cultural transformation that must be initiated by top executives and reinforced with carefully thought out compensation plans and incentives.

This report sheds light on the answers that early adopters and BPM experts have discovered to these and other questions. It also profiles the scope and dimensions of early BPM usage. Hopefully, this snapshot of BPM activity and lessons learned will help establish BPM as a legitimate, high-value business endeavor.

**BPM Is More than
Any One Application**

Best Practices in Business Performance Management

Scope and Methodology

Report Scope. This report is designed for business and technical executives who would like to learn more about business performance management (BPM). The report provides an overview of BPM concepts and components and then examines benefits, challenges, and critical success factors.

Methodology. The research for this report is based on a survey that TDWI conducted in the fall of 2003, as well as interviews with BPM "experts," including end-user organizations, BI consultants, industry analysts, and report sponsors.

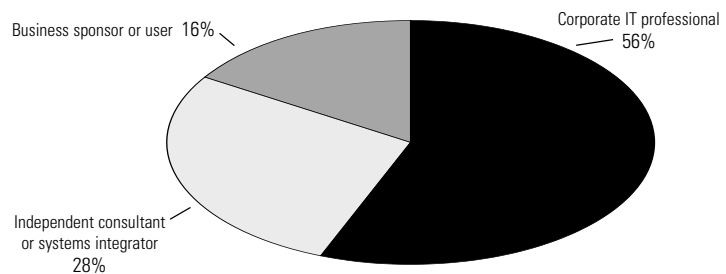
Survey Methodology. TDWI contacted data warehousing and business intelligence (DW/BI) professionals in its database and 101communications' database. (TDWI is a business unit of 101communications.) In total, 897 people responded to the survey, but only 635 were qualified to complete the survey in its entirety. Several groups of respondents were only allowed to answer portions of the survey. These include respondents who said they work at a vendor firm or are a professor or student (105 total) or respondents who said their firms have no plans to deploy a BPM solution (157).

Most of our data was pulled from respondents who said they have already deployed a BPM solution or are in the construction or design phase (360 respondents). The remainder (275 respondents) said they are "exploring" BPM. Multi-choice questions and rounding techniques account for totals that don't equal exactly 100 percent.

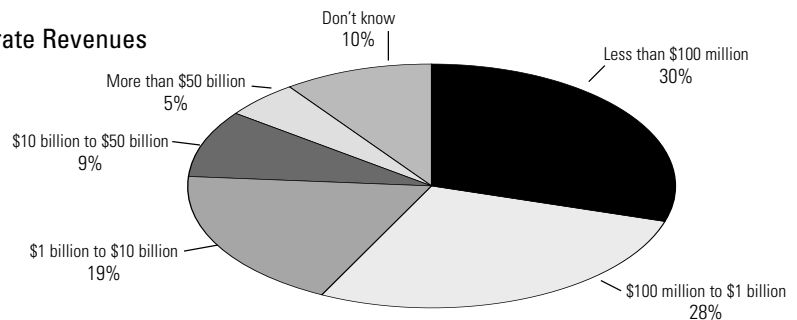
Survey Demographics. A majority of the qualified survey respondents (56 percent) who took the survey are corporate IT professionals. The remainder are independent consultants (28 percent) and business sponsors/users (16 percent). One-third of respondents (33 percent) work at companies that have revenues in excess of \$1 billion, while 58 percent have less than \$1 billion. Most respondents are based in the U.S. and work in a range of industries, the largest of which are the consulting and financial services industries. Consultants were asked to fill out the survey with their most recent BPM client in mind.

Demographics

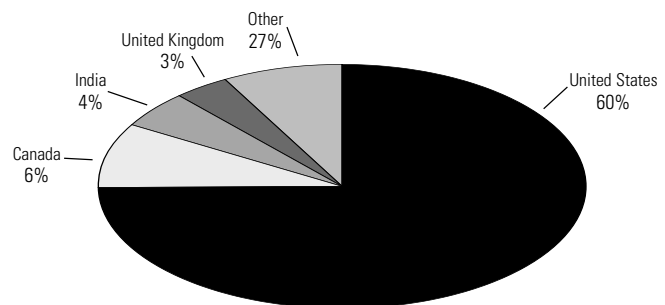
Position



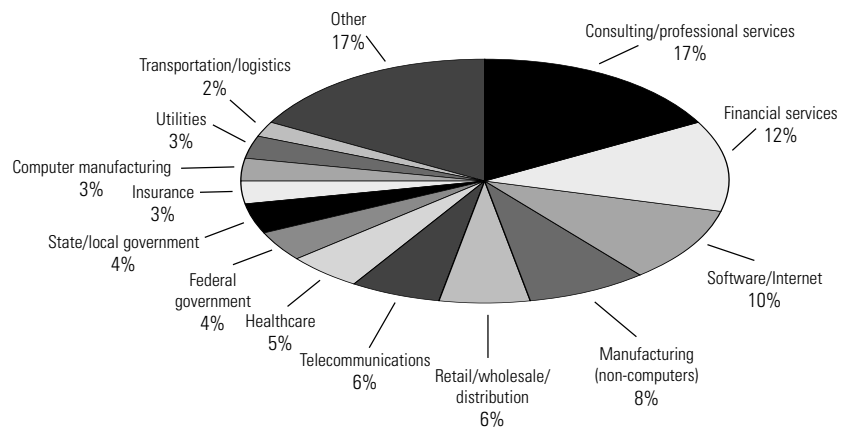
Corporate Revenues



Country



Industry



The BPM Landscape

Sorting Out the Meaning of BPM

Biases and Confusion. When I first heard the term business performance management (BPM) two years ago, I thought, “Oh no, not another acronym.” To me, BPM was just another term to describe business intelligence (BI), which I view as the processes and technologies to turn information into insight and action. I thought the vendor community was up to its old tricks of defining new markets in which to sell existing technologies.

Despite my initial skepticism and intrinsic bias to BI (I’ve been covering data warehousing and business intelligence since 1995), I’ve come to realize that BPM is real, and it’s distinct from BI. The main difference is that BI is enabling technology, whereas BPM is a business process which leverages BI.

Early Adopter Market. Like me, many people today are confused about what BPM is—and is not. Much of the confusion is that BPM is a new category to describe multiple applications that many companies have already implemented, including planning, budgeting, and KPI reports. When introduced to the concept of BPM, many managers rightfully exclaim, “We’ve been doing that for years!”

However, most organizations haven’t pulled these applications together in a cohesive and concerted way—using a common strategic and technical framework to drive all parts of the organization toward a common set of goals and objectives. Today, companies implement individual BPM applications isolated from each other. Each application provides some local benefit, but little global value.

As a strategic and technical framework, BPM is still in an early adopter phase, similar to where data warehousing was in the mid-1990s. The Gartner Group estimates that the percent of enterprises adopting BPM will increase from 10 percent in 2002 to 40 percent in 2005. And IDC estimates the market for financial and BPM applications will grow at an annual compound rate of 10 percent a year from 2002 to 2007, which is faster than most segments of the software industry.¹

Different Acronyms. Confusion also arises because industry experts can’t agree what to call BPM, let alone how to define it. META Group and IDC use the term “business performance management,” Gartner Group prefers “corporate performance management,” and others favor “enterprise performance management.” To add to the confusion, the acronym BPM also stands for business process management, a related but distinct discipline.

BPM Shorthand. When I attended a BPM conference in November 2003, I also discovered that everyone used the term BPM as short-hand for something else. One presentation equated BPM to budgeting, another to financial consolidation, and a third to Sarbanes-Oxley compliance. In addition, I found attendees who thought BPM meant financial reporting, scorecards, or business intelligence (as I first thought).

Definition. In researching this report, I discovered that these presenters and attendees are both right and wrong. Budgeting, scorecarding, and business intelligence are all components of BPM. You can’t do BPM without them. But they aren’t what BPM is about. BPM is much broader and bigger than any of these individual components.

After much research and some soul-searching, I decided to put a stake in the ground and define BPM. My “big picture” definition is this: a series of processes and applications designed to optimize the execution of business strategy.

BPM Is Real and Distinct from BI

BPM, CPM, or EPM?

BPM Optimizes the Execution of Business Strategy

¹ Gartner figures are from “Introducing the CPM Suites Magic Quadrant”, Lee Geishecker, Frank Buytendijk, October 2, 2002. IDC figures are from “Worldwide Total Analytic Applications Software Competitive Analysis, 2003: 2002 Shares and Current Outlook,” Aug 2003 Doc #29886.

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BPM Process. The concepts behind managing a business are straightforward: Executives set strategy, managers develop plans to achieve the strategy, and staff executes the plans. Then, everyone continuously monitors their progress towards meeting goals and objectives using reports and analysis and make course corrections as needed to stay on track.

But defining a good strategy and managing to it are two different things. BPM processes and tools enable good management by making it easier for executives at all levels to identify, communicate, and monitor key drivers of business value.

“It takes a lot of corporate maturity to do business performance management,” says Thomas Legere, enterprise architect for Pfizer Global Research and Development in Groton, CT.

One of the challenges with BPM is that most people think it is simply about improving performance in general, but it’s not. BPM is about improving performance in the right direction. BPM helps organizations focus on the few things that really drive business value instead of many things that generate activity but don’t contribute to the organization’s long-term health. This is why TDWI’s definition of BPM does not contain the word “performance.” Once an organization understands its key value drivers and communicates and calibrates them, it can then execute business strategy by managing performance in the right direction.

BPM Improves Performance in the “Right Direction”

What BPM Is Not

Sometimes it’s easier to define things by describing what they’re not. Business performance management (BPM) by itself is not:

- A technology or software solution
- Business intelligence
- Budgeting or planning
- Financial consolidation and reporting
- Scorecarding or dashboards
- Forecasting and scenario modeling
- Key performance indicators

TDWI defines BPM as a series of business processes and applications that enable the execution of business strategy. BPM fosters good management by making it easier for executives at all levels to understand, communicate, and monitor the key drivers of business value. To deliver a BPM solution, organizations must integrate all of the above components in a seamless fashion. Respondents to TDWI’s BPM survey got it right when they said the above components are critical to a BPM solution.

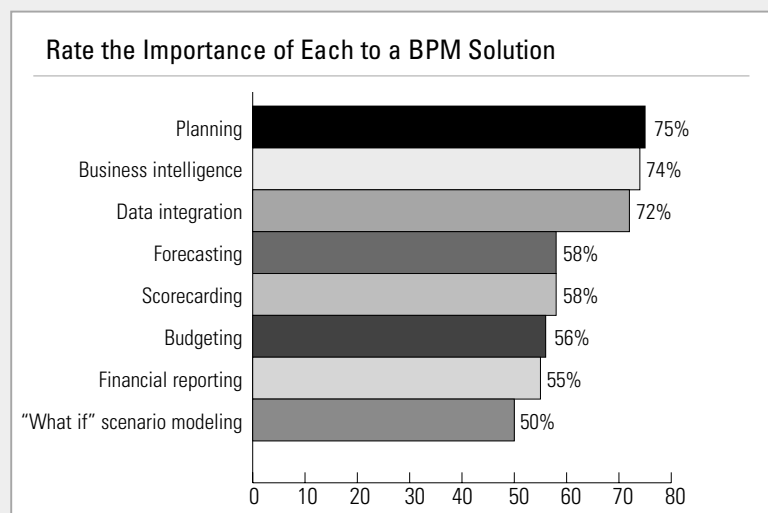


Illustration 1. Percentages based on respondents who rated the importance of the above components as “high.” Based on 792 respondents.

Trends Driving BPM

Bridging the Gap between Strategy and Execution

Poor Execution. The prospects for BPM are bright because the state of business management in most companies is less than ideal.

The main problem is that there is a huge gap between strategy and execution. Executives spend days or weeks devising well-crafted strategies and then throw them “over the wall” to the rest of the company, hoping and praying that their vision will bear fruit. Usually, nothing much happens. The organization is deaf to executives’ guidance and direction. Inertia reigns supreme.

Another problem is that traditional planning and budgeting cycles—based on centuries-old bookkeeping practices—are no longer fast or flexible enough to meet the accelerated pace of business today. Most plans and budgets are simply irrelevant and out of date before they are completed.

BPM Benefits. BPM bridges the gap between strategy and execution. “BPM is about getting everyone going in the same direction,” says Bill Barberg, president of InsightInformation, Inc., a BPM consultancy.

“BPM is not a slogan, cliché, or technology,” says Brenda Moncla, director of data warehousing at ThinkFast Consulting. “It’s the application of fundamentally sound business management practices enhanced by timely and accurate information in order to effectively communicate, comprehend, and control the performance of an organization.

BPM solutions bridge the gap between strategy and execution in several ways:

- **Improves Communication.** BPM provides executives an effective mechanism for communicating strategy and expectations to managers and staff at all levels of the organization via planning models and performance metrics tied to corporate goals and objectives.
- **Improves Collaboration.** BPM also fosters a two-way exchange of ideas and information, both vertically between levels within an organization and horizontally among departments and groups which manage a shared activity.
- **Improves Control.** BPM enables staff to continuously adjust plans and fix or improve operations in a timely manner by providing them with up-to-date information about market conditions and the status of operational processes.
- **Improves Coordination.** BPM improves coordination among business units and functional groups that otherwise might act as independent fiefdoms, hoarding rather than sharing resources and information.

When implemented properly, the benefits of BPM are profuse and diffuse. Organizations are better able to exploit market opportunities as they arise and catch operational problems before they escalate out of control. They become more effective, more competitive, and more interesting places in which to work.

“We wanted to provide a competitive advantage by providing access to timely, actionable information,” says Kathy Niesman, director of financial systems at International Truck and Engine, a manufacturer of mid-range diesel engines, medium and heavy-duty trucks and buses, and service parts based in Warrenville, IL.

In 2001, International Truck deployed an enterprisewide, Web-based “key business indicator” portal to better manage operational performance and accelerate financial reporting. The portal

The State of Business Management Is Less than Ideal

“BPM Gets Everyone Going in the Same Direction”

BPM Increases Organization Effectiveness and Competitiveness

“Timely Access to Actionable Information”

Best Practices in Business Performance Management

provides executives and business group managers a personalized view of key business drivers, enabling them to get at the “root causes of problems in hours or days, not weeks or months,” says Niesman.

Achieve Greater Visibility into the Business

Closing the Books. In many organizations, chief financial officers (CFOs) are driving BPM initiatives to obtain greater visibility into the business. Many are under increased pressure from investors to accelerate the closing of their financial books at the end of each month and quarter. In addition, recent corporate financial scandals are putting corporations under greater pressure to increase the accuracy and timeliness of their forecasts and financial reports.

For example, the CFO at International Truck kicked off the firm’s BPM solution to shorten the time to close its books from weeks to days. To improve financial reporting, International Truck revamped its entire reporting structure to align financial and operational metrics and provide more detailed information behind a few key high-level metrics.

Benefits of BPM. Like International Truck, almost two-thirds of organizations (65 percent) said they have adopted BPM to gain “greater visibility into the business,” according to TDWI research. (See illustration 2.) An even greater percentage of respondents (73 percent) who are still exploring BPM cited the same reason, suggesting that pressures to accelerate financial and performance reporting are increasing.

BPM Accelerates Financial Closings

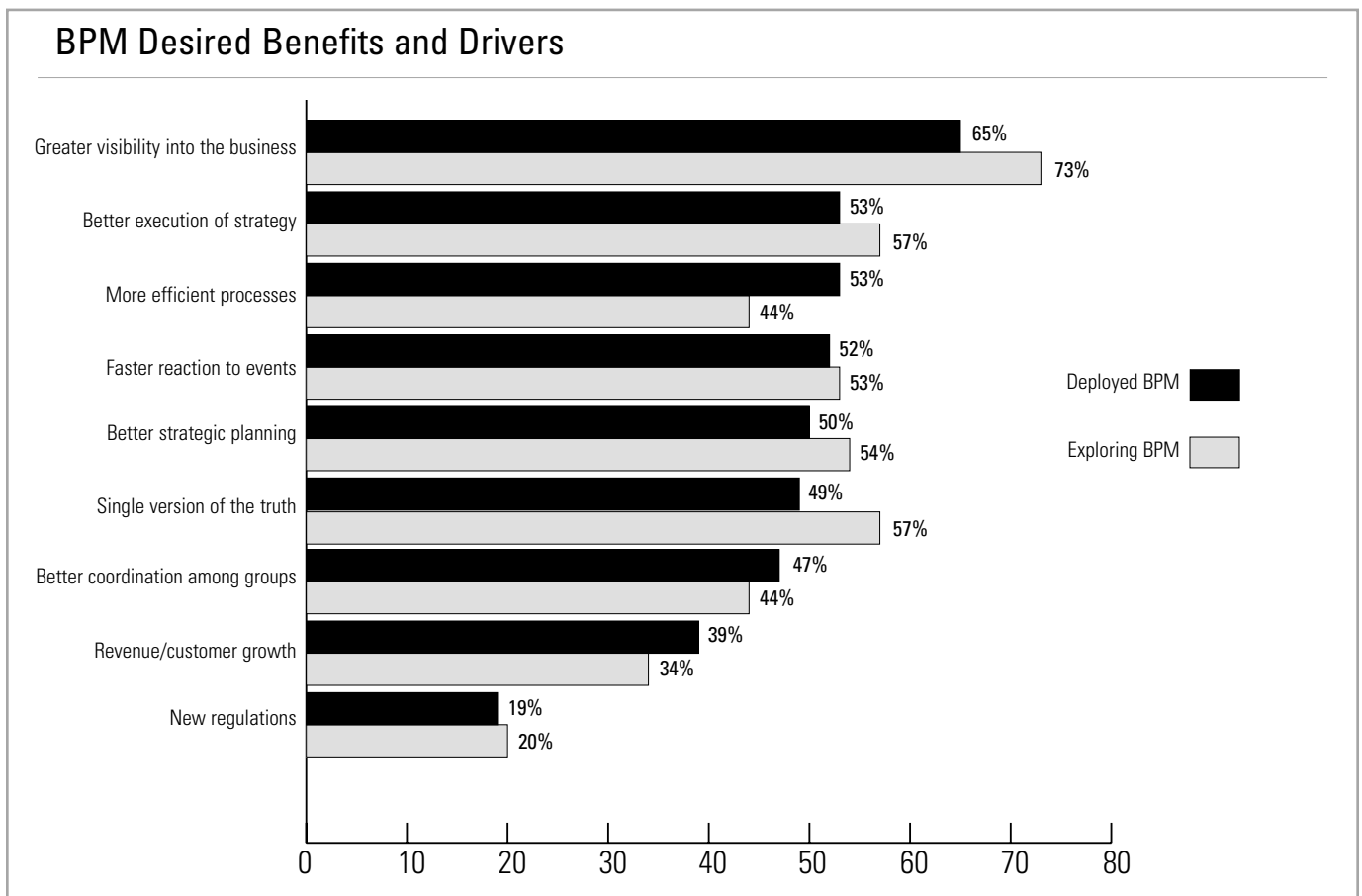


Illustration 2. The top reason that organizations are deploying BPM is to gain greater visibility into the business. Based on 635 respondents.

Sarbanes-Oxley Act. Many experts claim that the Sarbanes-Oxley Act regulating corporate governance will soon begin fueling BPM, especially section 409 which requires organizations to provide real-time disclosure of material events that may affect performance. However, section 409 has not yet gone into effect, which is perhaps why only 19 percent of survey respondents cited “new regulations” as a BPM driver.

Once the federal government clarifies the application of section 409 rules, experts believe that Sarbanes-Oxley will drive BPM initiatives in reverse—organizations will implement BPM as much to minimize business risk as maximize business value. The twin drivers of performance monitoring in 2004 will be a “carrot” (optimize the execution of strategy) and a “stick” (minimize risk of non-compliance). (See illustration 3.)

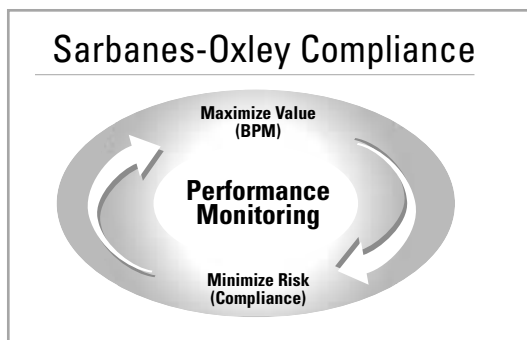


Illustration 3. BPM drives businesses to maximize business value while Sarbanes-Oxley motivates them to minimize risk.

Evolution of Software Automation

From a technology perspective, business management is merely the latest—and perhaps last—business function that corporations are “automating” with software and information technology. Unlike industrial automation, software automation doesn’t eliminate human input and insight; it simply provides business users with the right information at the right time to help them better manage the processes for which they are responsible on a daily basis.

The Last Big Market for Software?

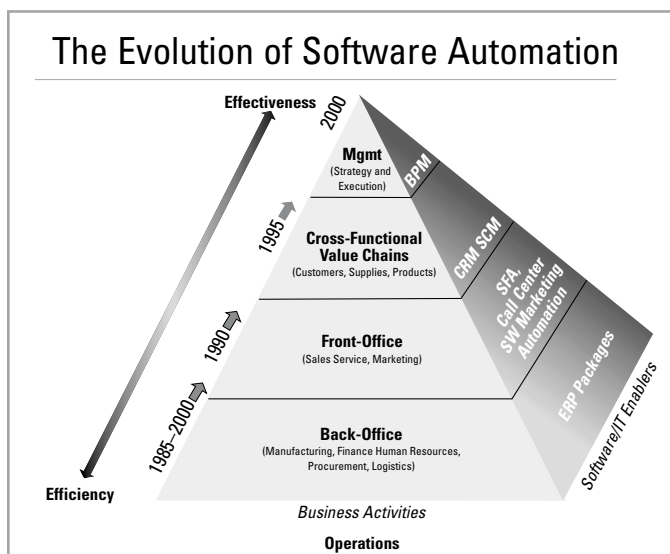


Illustration 4. In the past 20 years, companies have employed software to automate higher level business processes.

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In the past two decades, organizations have deployed software to automate back-office operations (manufacturing, finance, human resources), followed by front office activities (i.e., sales, service, and marketing), and finally cross-functional value chains (i.e., customer relationship management, supply chain management.) As the diagram below shows, the last untapped market for software automation is now business management. This is the domain of BPM.

BPM Delivers High but Intangible ROI

With each step up the pyramid, organizations automate higher value processes and activities. Organizations evolve from automating operational tasks that enable the business to run more efficiently to automating strategic activities that make the business run more effectively. The higher levels of the pyramid control the processes in lower levels. Thus, applying software automation to higher level business processes delivers the greatest overall return on investment, although the benefits may not be readily visible or quantifiable.

BI for BPM

As stated earlier in this report, BPM is not BI. However, BPM places tremendous demands on BI and data warehouses to deliver the right information to the right people at the right time. In essence, BPM solutions require a turbo-charged enterprisewide analytical platform. This is a far cry from the departmental BI solutions that most organizations have implemented to date.

“BPM takes BI to the next level,” says John O’Rourke, senior director of product marketing at Hyperion Solutions.

Here is a quick comparison of the way organizations have traditionally implemented BI (“Traditional BI”) versus the way they need to implement BI to support a full-fledged BPM initiative (“BI for BPM”):

	Traditional BI	BI for BPM
Scale	Departmental	Enterprisewide
Focus	Historical	Timely
Decisions	Strategic and Tactical	Strategic, Tactical, and Operational
Users	Analysts	Everyone
Orientation	Reactive	Proactive
Output	Strategic Analysis	Strategic Action
Process	Open-ended	Closed Loop
Measures	Metrics	Key Performance Indicators
Views	Generic	Personalized
Visuals	Tables/Charts	Dashboards/Scorecards
Collaboration	Informal	Built-in
Interaction	Pull (ad hoc query)	Push (alerts)
Analysis	Trends	Exceptions
Data	Numeric only	Numeric, Text, etc.

A Framework for BPM: Four-Step Process

If BPM automates the execution of business strategy and optimizes business management, what is the process by which it works? What are its components? What are the technologies required to support it?

BPM Is a Closed-Loop Process

Four-Step Process. BPM is a four-step, closed-loop process that turns business strategy into action, as shown in the following diagram. The steps are:

(1) Strategize, (2) Plan, (3) Monitor, and (4) Act & Adjust. The last step adjusts the strategy

and plans to better conform to the demands and shape of the market or customer base. This closes the loop between strategy and execution.

The first two steps in the top half of the circular process—strategize and plan—constitute the “strategy.” The last two steps in the bottom half of the circular process—Monitor and Act & Adjust—define how to “execute” the strategy. Within each step, organizations or groups use enabling techniques or technologies (i.e., BPM products or solutions) to drive the process. For example, the planning step uses budgeting applications and incentives to drive key strategies.

When all steps in the BPM process are executed in a concerted manner, they enhance communication, collaboration, control, and coordination among staff and groups in the organization. In many ways, BPM greases all the parts of the organizational engine to keep it moving in the right direction.

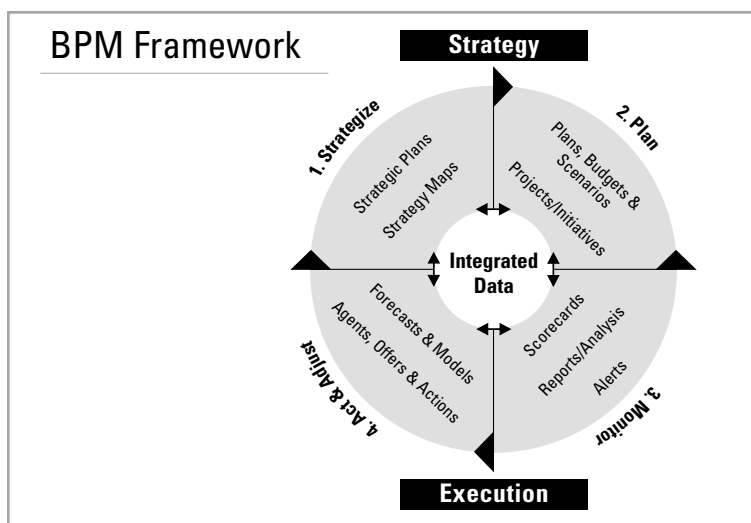


Illustration 5. BPM is a four-step process split between strategy and execution phases. Each step is enabled by various techniques or technologies, depicted on the inner quadrants of the circle.

Booz Allen Hamilton has recently implemented a comprehensive BPM solution that enables it to drive strategic objectives through planning and scorecarding applications. “We are moving from a planning process that was completely manual and disconnected from strategy to a portal-based BPM application that enables us to tie together strategy, plans, and performance measures into a coherent whole,” says John Monczewski, manager of balanced scorecards at Booz Allen Hamilton.

The following section describes the four major steps in the BPM process in more detail.

Step 1: Strategize

Here, executives define key *drivers* of business value and ways to *measure* them. “World class companies focus on value drivers to improve financial performance. They set targets and measures for each driver,” says Lawrence Serven, principal at The Buttonwood Group, a management consulting firm in Stamford, CT.

Examples of drivers might be “high customer satisfaction” or “excellent product quality.” Measures for these drivers might be “customer satisfaction index” and “number of defects per thousand,” respectively. The strategizing process also defines or reaffirms the mission for the organization and sets the goals and objectives to accomplish the mission.

Identify and Measure Business Drivers

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Top executives are not the only ones who can define strategy. Any team of executives or managers in charge of a business unit or group can develop strategies and plans. However, these executives must be careful to tie their drivers, measures, and goals to those of the organization at large.

KPIs Reflect the Future

Enablers. Measures of business drivers are called *key performance indicators* or KPIs. These are unique types of metrics because they are intended to reflect future performance. In other words, they are leading, not lagging, indicators of performance. KPIs should drive individuals and groups to take action that leads to positive outcomes. As we shall see later, it is not easy to create effective KPIs.

Organizations define drivers, goals, and objectives in strategic planning sessions, which can last several days, weeks, or months. One technique for defining business drivers is “strategy mapping” which emanates from a BPM methodology known as Balanced Scorecard. Strategy mapping helps executives define business drivers as well as map their cause-effect relationships at various levels of an organization.

Step 2: Plan

Next, groups within the organization meet to develop plans and allocate resources to carry out the business strategy. The plans may entail new initiatives and projects or reaffirm existing ones.

Enablers. The primary planning tool is the budget or plan, which allocates resources—both people and money—to carry out the organization’s and/or group’s goals. The planning process involves breaking down high-level corporate objectives (i.e., increase market share by 10 percent) into discrete targets and operating models—or scenarios—for different parts of the organization which then create projects and initiatives to meet those targets.

Experts agree that planning should be a collaborative process that ties together people across the organization rather than a spreadsheet-driven corporate ritual that imparts little value. “BPM brings planning to the people, it gives them context, not spreadsheets, to understand causal relationships in the metrics they are seeing,” says Patrick Morrissey, World Wide Director, EPM Marketing.

The Budgeting Process Is Broken in Most Companies

Unfortunately, the budgeting process is broken in most organizations. It projects last year’s activities onto the coming year and once approved is rarely adjusted as circumstances change. “Planning is tied to top-level goals and strategies, while budgeting tends to be driven by requirements of cost-center managers,” says John O’Rourke, senior director of product marketing at Hyperion Solutions.

Part of the problem is that most organizations use custom spreadsheets to disseminate and collect data, a process that is cumbersome, error prone, and time consuming. Another pitfall is that many companies don’t have a standardized planning process across the organization. For example, each division may have a separate planning system, which makes it impossible to deliver a consistent high-level corporate view and associated detail for analysis, says ThinkFast Consulting’s Phelps.

Firms Are Moving Toward Rolling Forecasts and Plans

New Web-based planning solutions promise to transform budgeting from a backward-looking, static, labor-intensive process to one that is dynamic, forward-looking and tied to strategic drivers and objectives. “The biggest trend in the marketplace is that companies are moving away from grueling, bottom-up budgeting to continuous planning with rolling forecasts based on actual performance,” says Hyperion’s O’Rourke.

Incentives are another key tool—bonuses, time-off, awards—which help reinforce key drivers and KPIs defined in the strategy step above. Many experts believe that BPM cannot be implemented effectively unless the organization ties performance to compensation. More on this later.

Step 3: Monitor

It's one thing to devise strategies and plans, it's another to execute them. The newest and most powerful element of the BPM process is technology that monitors and analyzes performance in a timely manner. This step continuously monitors performance against the measures defined in the strategic planning process so that individuals and groups always know where they stand in relation to goals and objectives. If performance drops below expectations, they can take action or allocate additional resources to improve performance.

Enablers. The key technologies to monitor business performance are data warehouses and business intelligence (BI) tools. Data warehouses and data marts bring together data from multiple systems inside and outside the organization to monitor KPIs. Data warehouses provide access to both summary data (i.e., “sales by region”) and individual transactions if users want to “drill” into detail to investigate the causes of poor performance.

BI tools, on the other hand, enable users to access, analyze, and act on the data in the data warehouse or data mart. The most common methods for viewing performance data using BI tools are *dashboards* or *scorecards*. In common parlance, these terms are often used synonymously to refer to a graphical user interface that personalizes the display of KPIs using various visual metaphors (i.e., stoplights, gauges, dials, etc.) Technically, however, dashboards and scorecards have different meanings.²

The best BPM systems proactively monitor performance. That is, instead of requiring users to continually look at dashboards or scorecards to see how they are doing, the systems notify or alert all relevant users when something is awry. BI tools enable users to define alerts for KPIs they want to track. The system sends the alert via their preferred channel (i.e., e-mail, Web, pager, phone) along with a hyperlink so users can view relevant reports.

“Alerts embed analysis into an action-oriented process—they operationalize BI,” says David Menninger, vice president of marketing at Applix. For example, if sales are below forecast for the month, a BI system might automatically alert sales, marketing, and finance managers to check their sales, pipeline, and cash flow reports respectively, Menninger says.

Step 4: Act & Adjust

The last part of the BPM process is the most critical. It's the action component. To execute strategy, workers must take action to fix broken processes before they spiral out of control or exploit new opportunities before they disappear.

For instance, International Truck provides several KPIs that enable finance and plant managers to quickly identify and fix quality issues on the assembly line. “We now get to root causes of problems almost immediately, preventing millions of dollars of runaway issues at the plant,” says Jim Rappé, group leader of enterprise data warehousing at the firm.

Data Warehouses and BI Tools Are Key Enablers

Proactive Intervention

²A dashboard is a simple visual interface that enables users to track a business activity, usually in near real time. It's like an automobile dashboard that lets drivers quickly check their fuel level and speed. A scorecard, on the other hand, is a type of dashboard that measures an activity against predefined targets or thresholds to see if performance is within acceptable ranges. Unlike a dashboard, a scorecard is always tied to business strategy and is often associated with a formal methodology like Norton and Kaplan's Balanced Scorecard. A scorecard also doesn't always require near-real-time data and lets users or administrators customize the views and groupings of KPIs.

The bottom line is that a dashboard informs users what they are doing, while a scorecard tells them how well they are doing. The automobile equivalent of a scorecard might be a speedometer that beeps or blinks every time the driver exceeds the speed limit.

Links to Detailed Data

Enablers. BI tools also play a key part in the Act & Adjust phase because they not only alert users to the problem, but provide additional detail and guidance to help users figure out what to do. For example, International Truck links its KPIs to detailed reports to give users additional information. “It’s not enough to provide metrics,” says Rappé. “If the metrics show something is wrong, the first thing users want is more information.”

Guided Analysis Steps Users through Reports and Decisions

Guided Analysis. Direct Energy-Essential Home Services, an Ontario-based energy company that sells and services furnaces, air conditioners, and other home energy equipment, goes one step further. It provides guided analytics that steer users to examine the appropriate reports.

“If district managers see that their closing ratio is low, we provide them with a decision tree that shows them three additional reports they might want to look at to find out what’s going on and what to do about it,” says Ripley Maddock, manager of performance reporting at the firm.

Agents Automate Well-Known Processes

Agents. For well-known processes, organizations are also implementing agents which can automatically recommend or take action in response to predefined events. For example, one travel-related e-business firm wishing to remain anonymous alerts managers to expand the inventory of airline seats and hotel rooms in response to customer purchasing trends.

Continuous Planning. Finally, organizations need to adjust plans based on the operational activity they are monitoring. With centralized, Web-based planning systems, staff can more easily adjust the forecasts and models that they’ve built into their budgets. Forward-thinking organizations are using these tools to move to a continuous planning environment.

Planning at “Warp Speed”

“Lucent Technologies now has the ability to greatly reduce cycle times and realize other efficiencies in their planning and forecasting arena,” says Daniel Bearison, former group manager at Lucent Technologies, who is now director at e-Business Solutions, a BPM consultancy in Farmington, CT. Bearison helped to implement Lucent’s continuous planning system.

Lucent now forecasts sales up to eight times a quarter and financials once a quarter since implementing a new planning solution. Lucent now closes its plans up to 90 percent faster using half the staff it formerly took to create and manage its budget plans, Bearison says.

Profiling BPM Deployments

Status. Despite the widespread publicity about BPM, few organizations have fully deployed BPM yet, although activity is ramping up.

According to TDWI research, only 13 percent of respondents have implemented a BPM solution. However, another third (33 percent) are under construction or in the planning/design phase, and another third are exploring whether to implement a BPM solution. Only 14 percent have no plans. (See illustration 6.)

Only 13 Percent have Deployed a BPM Solution

Among the 13 percent of organizations that have deployed BPM, less than one-third (21 percent) have had a solution in place for more than two years. Thus, BPM is still taking root in most organizations.

Scope. Most organizations (72 percent) are deploying BPM on an enterprisewide basis. This is a surprisingly high percentage compared to those organizations that are contemplating BPM. Only 25 percent of the latter group envision deploying BPM on an enterprisewide level, while 24 percent envision departmental deployments initially. (See illustration 7.)

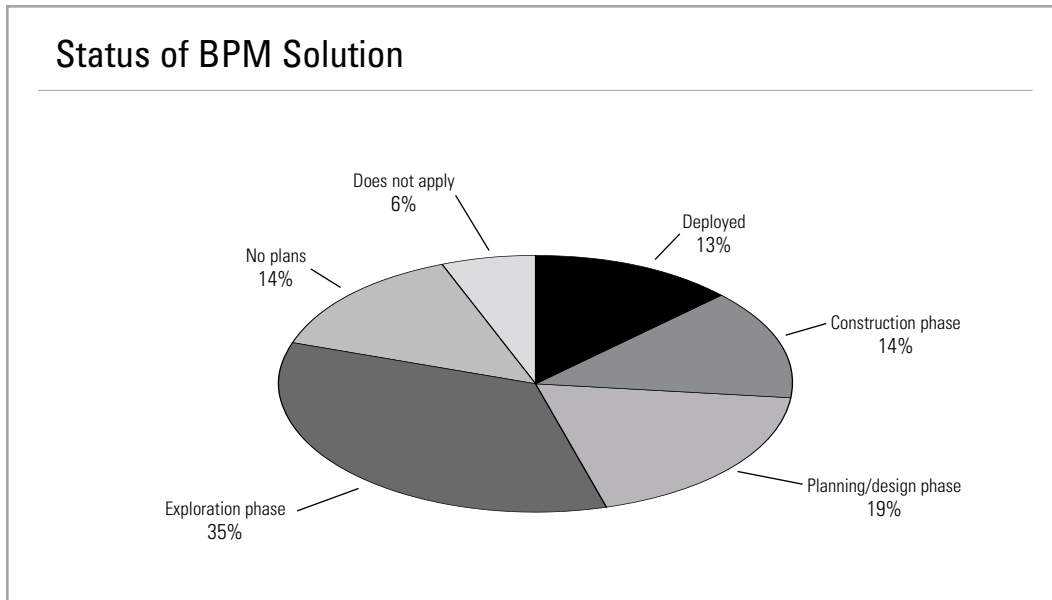


Illustration 6. Almost half of respondents (46 percent) have deployed or will soon deploy a BPM solution (i.e., in “construction” or “planning/design” phases). Based on 796 respondents.

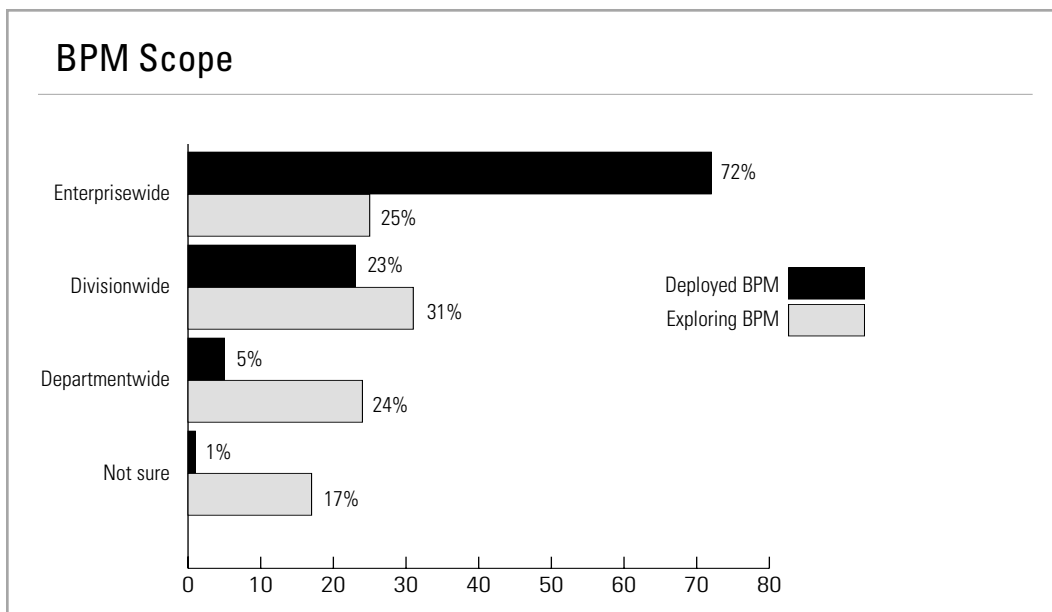


Illustration 7. Most existing BPM deployments are enterprisewide in scope, although organizations “exploring” BPM envision smaller implementations. Based on 635 respondents.

The reason for this discrepancy may be that the BPM components that organizations tend to implement first—budgeting and scorecarding—are by nature enterprisewide in scope. Plus, BPM solutions expand at lightning speed. An organization that initially deploys BPM at a division level may find itself supporting the entire enterprise within a year or two.

Hewlett-Packard Services (HPS), for example, deployed a balanced scorecard in early 2002 to measure customer service in its European region. The initial solution contained nine metrics and was rolled out in seven weeks to 800 users. Within 18 months, the system grew to support more than 120 metrics in all functional areas of HPS and 5,500 registered users in all

Rapid Growth at HPS

Best Practices in Business Performance Management

regions of HPS worldwide. “Through more accident than design, the vice presidents of other worldwide regions wanted [the same solution],” said Martin Summerhayes, program manager at HPS.

Number of Users. TDWI research reinforces that many organizations will experience the same type of explosive growth as HPS. The average number of BPM users is expected to jump by almost 100 percent in organizations with BPM solutions, from 404 users today to 777 users in 18 months. (See illustration 8.)

However, the median number of users tell a slightly different story. Here, half of organizations will start with fewer than 50 users and expand to support 175 users in 18 months. While the growth rate exceeds 100 percent, the numbers suggest that many BPM solutions start small even if the metrics or planning models reflect enterprisewide interests.

Half of Organizations Support Fewer than 50 Users

Number of Users		
	Average	Median
Today –	404	50
In 18 months –	777	175

Illustration 8. Half of all BPM deployments today support less than 50 users, but there are a number of very large BPM deployments as well. Based on 635 respondents.

Type of Users. In addition, most BPM deployments support a balanced mix of users: executives (25 percent), mid-level managers (27 percent), business analysts (27 percent), and operations personnel (29 percent combined), according to TDWI research. Only 5 percent said they allow customers and suppliers to participate in a BPM solution. (See illustration 9.)

HPS initially geared its balanced scorecard solution to senior executives who wanted a global view of key metrics, but it quickly modified its solution to support managers at all levels in the

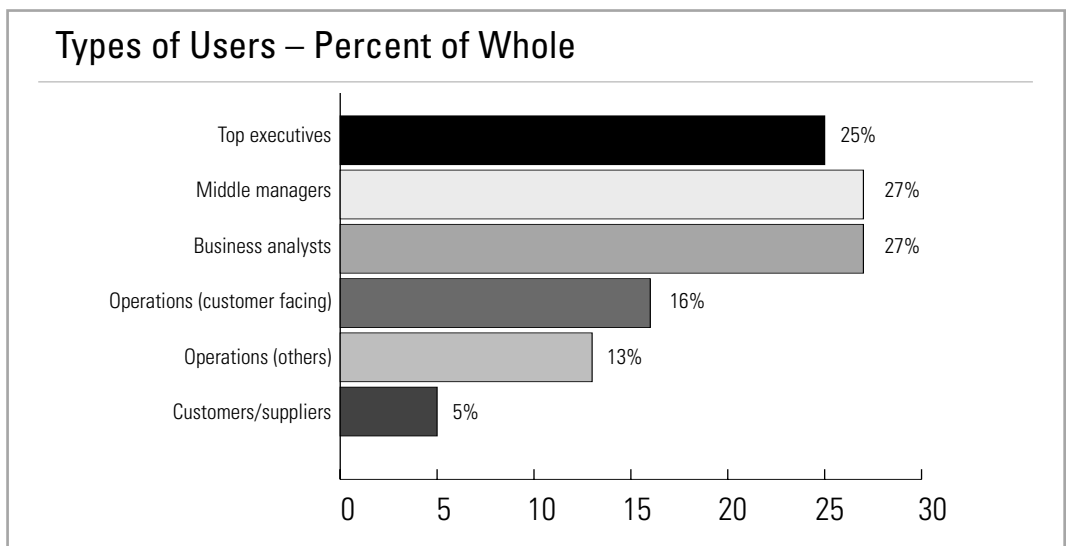


Illustration 9. Most BPM solutions support an equal percentage of different user types, except customers and suppliers. Based on 360 respondents.

organization. Some metrics, such as customer satisfaction, are shared worldwide and the numbers roll up within the hierarchy. Other metrics are specific to an organizational unit and not shared.

Functional Areas. The most common place for BPM to originate is in the finance department. (See illustration 10.) This is because the finance group manages budgeting and financial reporting processes and is familiar with using metrics to measure performance.

Not surprisingly, operations is the next most likely department to implement BPM. That’s because finance and operations must work hand in hand to implement BPM. For example, the BPM solution at International Truck improved communication and coordination between the financial and operations departments. “Our financial folks have become more interested in viewing operational metrics and operational folks in viewing financial metrics,” says Rappé.

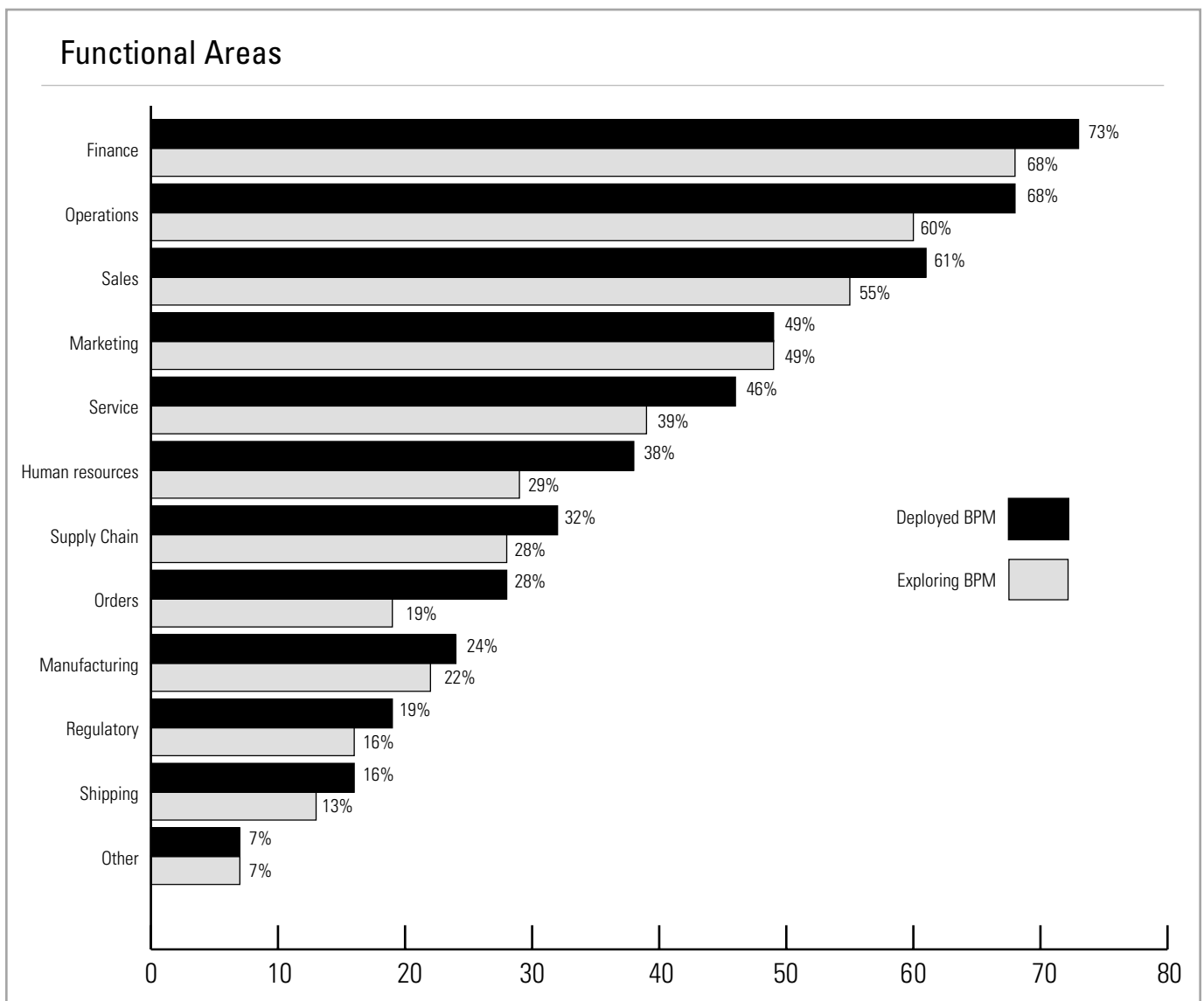


Illustration 10. BPM will most often support the finance area in organizations, followed by operations, sales, marketing, service, and human resources.

Organizations Deploy Many BPM Components

BPM Components. Most organizations surveyed by TDWI say that their BPM solutions include reporting/analysis, scorecards/dashboards, planning, budgeting, and forecasting components. (See illustration 11.) Since the survey was distributed to data warehousing and business intelligence professionals, it's no surprise that the most prevalent BPM component cited is "reporting/analysis."

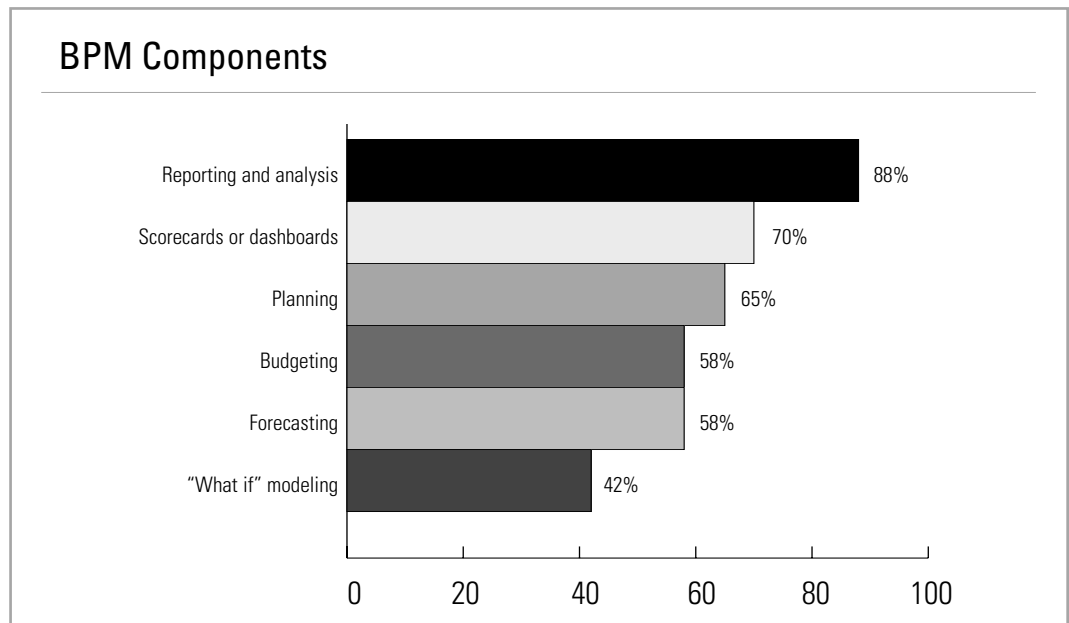


Illustration 11. More than half of respondents have deployed BPM solutions that consist (or will consist) of multiple components with reporting/analysis topping the list. Based on 360 respondents who have deployed BPM solutions (including those in planning or construction phases).

Business Executives Drive BPM Initiatives

Business Drivers. Given the strategic nature of BPM and its imperative to improve business management, it's not surprising that top executives are the predominant drivers of BPM solutions. Almost half of all solutions (47 percent) have been spearheaded by c-level executives (CEO, CFO, COO), followed by business unit executives (39 percent). Top technical executives (CIO/director of IT) led the initiative in one-third (30 percent) of the cases. (See illustration 12.)

Most projects also have more than one executive driver, especially when c-level executives are leading the charge. Typically, c-level executives sponsor the project and evangelize its importance to the company, but use the divisional executive or CIO/IT manager to drive the project, especially if it's initially implemented in a single division or functional area.

Strategic Value and Satisfaction. When asked how strategic the BPM project is to executives, most respondents said either "very strategic" or "fairly strategic" (86 percent total). An almost equal percentage (81 percent) said the executives were either "very satisfied" or "fairly satisfied" with the BPM solution. More than half (57 percent) said their estimated ROI was "high" or "medium." (See illustration 13.)

Thus, it appears that while BPM offers substantial benefits to many organizations, it has not been wildly successful in all instances, at least not yet. Since most organizations have less than two years of experience with BPM, they may not have had enough time to fully evaluate its effectiveness. Time will tell how much value the early BPM initiatives will ultimately deliver.

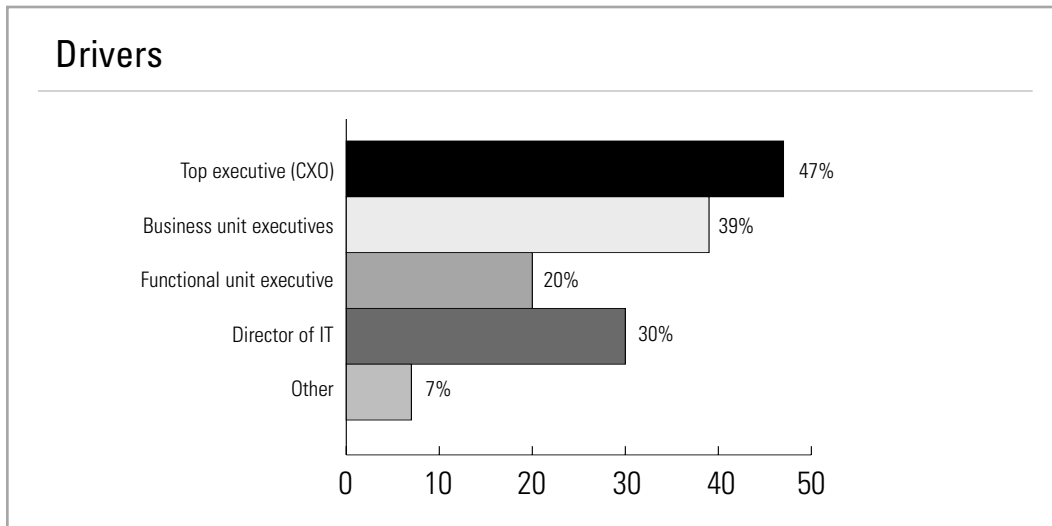


Illustration 12. A top executive is the most likely driver of a BPM solution. Percentages don't equal 100 percent because users could select more than one answer. Based on 360 respondents.

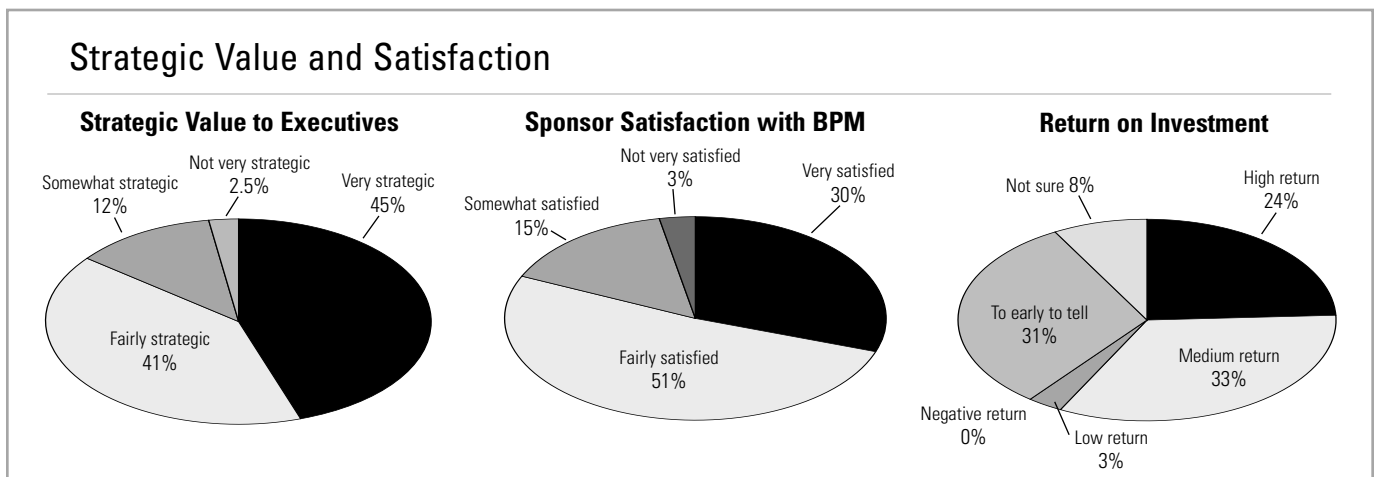


Illustration 13. Based on 360 respondents.

Getting Started with BPM

One of the biggest challenges with BPM is knowing where to start. Meg Dussault, director of product marketing at Cognos, says organizations initially deploy BPM in one of three ways:

- **“Big Bang” Enterprise Approach.** Here, the executive team implements strategic change throughout the enterprise in a top-down manner enabled by BPM and other software.
- **Cross-Functional Approach.** These projects are driven by enlightened financial and operational executives who want to optimize critical business processes that cut across functional areas, such as CRM initiatives that involve coordinating multiple “front office” and “back office” processes.
- **Functional Approach.** Here, a functional leader in human resources, administration, or another area implements BPM to enhance management control and improve performance rather than implement new strategies or initiatives.

“Each of the above approaches has very different requirements and objectives. The key is to get in play and make linkages between the initiatives as they evolve,” says Dussault.

In terms of specific applications, most organizations begin by implementing either a planning or dashboard application. “Budgeting is still the number one pain but dashboards appeal to executives who want greater value from reporting,” says Craig Schiff, president and CEO of BPM Partners.

Start Small. Whatever the approach or initial application, most BPM practitioners recommend starting small, with a focused project that can be implemented quickly yet deliver substantial benefits.

“Companies are impatient and the tendency is to try to do everything at once,” says Phelps of ThinkFast Consulting. “We suggest that you develop a long-term plan, determine what is in place today, and what processes or components are missing or in need of repair. Start with the area that provides the greatest impact, with a goal of delivering short-term, incremental results.”

**Think Global,
Act Local**

Think Global. However, delivering BPM from the bottom up puts organizations at risk when creating performance silos. To avoid this problem, Phelps advises clients to start any BPM process by creating a high-level roadmap, tied to corporate objectives, which defines the organization’s priorities and what it wants to measure.”

Incremental Deployment. Lucent Technologies, for example, rolled out its packaged planning application in several increments over the course of a few months. “The planning application is so intuitive that we’ve been able to expand quickly,” says Bearison.

**“We Delivered Some
Functionality to Every
Group Every 3-4 Months”**

Prioritize by Source. To deliver an enterprise scorecard in manageable increments, International Truck took the unusual approach of prioritizing development by source system. “If we had focused on meeting the needs of one group or division, we would have had to touch every source system to create their KPIs and we would have gotten bogged down,” says Rappé. His team decided to develop KPIs one source system at a time which enabled it to deliver some functionality to every group every three to four months.

In addition, International Truck leveraged an existing data warehouse to expedite the acquisition of source data. “Our first two releases [of the BPM solution] sourced data entirely from our enterprise data warehouse,” says Rappé. “Since then, we have added new subject area content to the data warehouse to support [the BPM solution] and we’ve been able to turn off some independent scorecard data marts that were pulling data directly from operational systems.”

Identifying the Right Metrics

One of the biggest challenges in deploying a BPM solution is selecting the metrics to serve as key performance indicators. “It is a huge undertaking for organizations to determine what KPIs are important, who owns them, and how to define threshold settings that trigger whether a [stoplight] metric will display as red, yellow, or green,” says Cognos’ Dussault.

Dussault says that these skills take time to learn, and the process often involves considerable trial and error. Organizations shouldn’t worry about launching the “perfect” solution because it will evolve over time. Another key, she says, is to ensure that people closest to the business have input into the process. “Employees can’t feel that BPM is done to them, that it’s another ‘flavor of the month.’ BPM requires widespread input, feedback, and communication to succeed.”

Gathering Requirements

The first step towards identifying the right metrics and building consensus and “buy-in” to BPM is to gather business requirements. Organizations use many techniques to identify key drivers of business value and the metrics that encapsulate them.

For instance, International Truck first issued a survey to 27 financial managers across all divisions in the company which contained several open-ended questions. The survey generated 133 KPIs, many of which were common across multiple divisions. “The survey was a great way to help financial managers brainstorm all the KPIs they might need. If we had done 30 minute one-on-one interviews, we may not have gotten all the KPIs that we did. The survey gave them time to think about the issues and reference their existing reports,” Says Rappé.

Focus on Metric Owners. The scorecard team at HPS took a slightly different tack. It met with senior executives to help them identify and describe metrics in business terms. The descriptions defined the metrics purpose, scope, perspective (customer, financial, internal, learning/innovation), business owners, targets/thresholds, and other information. Once the metrics were described in business terms, the technical team defined technical specifications, including display name, data sources, regional nuances, user functions, security levels, relationships to other metrics, and so on.

Like International Truck and HPS, most organizations use a range of techniques for identifying and refining KPIs. The most common techniques are to analyze corporate objectives (65 percent) and review existing reports/KPIs (62 percent). These are followed by individual interviews (57.5 percent), business process mapping (54 percent), KPI definition sessions (52 percent), and group interviews (50 percent). (See illustration 14.)

Although the process for gathering requirements may be relatively straightforward, many BPM teams may still struggle to define appropriate KPIs. Part of the problem is that they lose focus on the key value drivers and never assign ownership for individual KPIs.

KPI versus API. “Most organizations struggle with BPM because they don’t have a well-defined set of owners and processes to differentiate business drivers and strategic measures from secondary influence measures. As a result, most organizations can’t sort out a KPI from an API—all performance indicator. A lot of activity happens, BPM projects appear across the business, many metrics are tracked and reported on, but the impact to the bottom line is limited,” says Morrissey.

Surveys Followed by Interviews

Sort Out Business and Technical Specifications

Assign Owners to KPIs

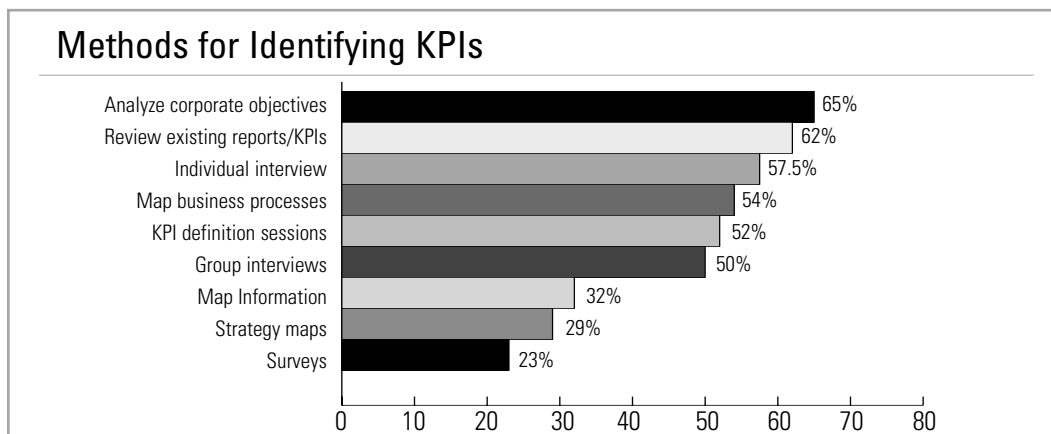


Illustration 14. Organizations use a variety of methods to identify KPIs. Based on 360 respondents who have deployed a BPM solution.

According to BPM experts, good KPIs exhibit the following characteristics:

1. KPIs have Standard Measures

Many organizations struggle to define KPIs across groups that have dissimilar business processes and ways of measuring operational and financial performance. Usually, the only method available for gaining consensus is to put executives together in the same room so they can hash out differences.

Executives Need to Hash Out Standard Definitions and Rules for Metrics

“We have two distinct businesses, commercial and government, and the measurements each uses are very different, which makes it very challenging to develop corporatewide standards,” says Monczewski at Booz Hamilton Allen. “We’ve had strong backing from our CEO to make this work and we’ve made a lot of progress. But even with that, it takes a lot of time. Our partners have decided to postpone trying to resolve some issues until a later time.”

HPS faced a similar situation. “We wanted a worldwide metric for cost reduction and we discovered that the operation and finance people had 16 measures combined for that measure. We made them sit down and talk and now we have five measures,” says Summerhayes.

Planning applications also need to establish standards or rules to facilitate budgeting and forecasting processes. For example, organizations might establish standards for converting currencies, benefit rates, salary allocations, and so on. They can then build these assumptions into the planning application so everyone in the entire organization works against the same rules. This greatly accelerates the planning process and ensures consistent, accurate results.

2. KPIs Contain Valid Data

Source Data. The most well-defined KPIs are irrelevant if there is no data to support them. Executives frequently assume the data warehouse or some other system contains all the data necessary to support any particular metric.

Make Sure there Is Data to Support the KPI

“Data integration is critically important to BPM but it’s often overlooked, especially by the business side of the house,” says Business Objects’ Morrissey. “They don’t know there is a problem until IT reports back that it can’t get all the relevant KPIs into one place. The larger the organization, the bigger the data integration challenge.”

To avoid this problem, executives need a systems analyst to scout out potential source data for KPIs. If no data exists, or its condition is dubious, executives need to decide whether to build a system to collect the data or revise the KPI within the constraints of data that already exists.

Trustworthy Data. Once deployed, KPIs must be perceived as an accurate reflection of reality if users are going to invest time and energy using the system. International Truck spent several months reconciling the numbers in its BPM solution with data in operational reports to prove the trustworthiness of the system. “It took time, but we finally convinced the business that the numbers in the [BPM solution] were correct.”

Delivering “trustworthy data” is the top challenge facing organizations implementing BPM, according to 53 percent of respondents in TDWI’s survey. Not surprising, the next biggest challenge is “selecting KPIs” (39 percent) followed by “cross-department coordination” (35 percent), and “resistance to data sharing” (33 percent). (See illustration 15.)

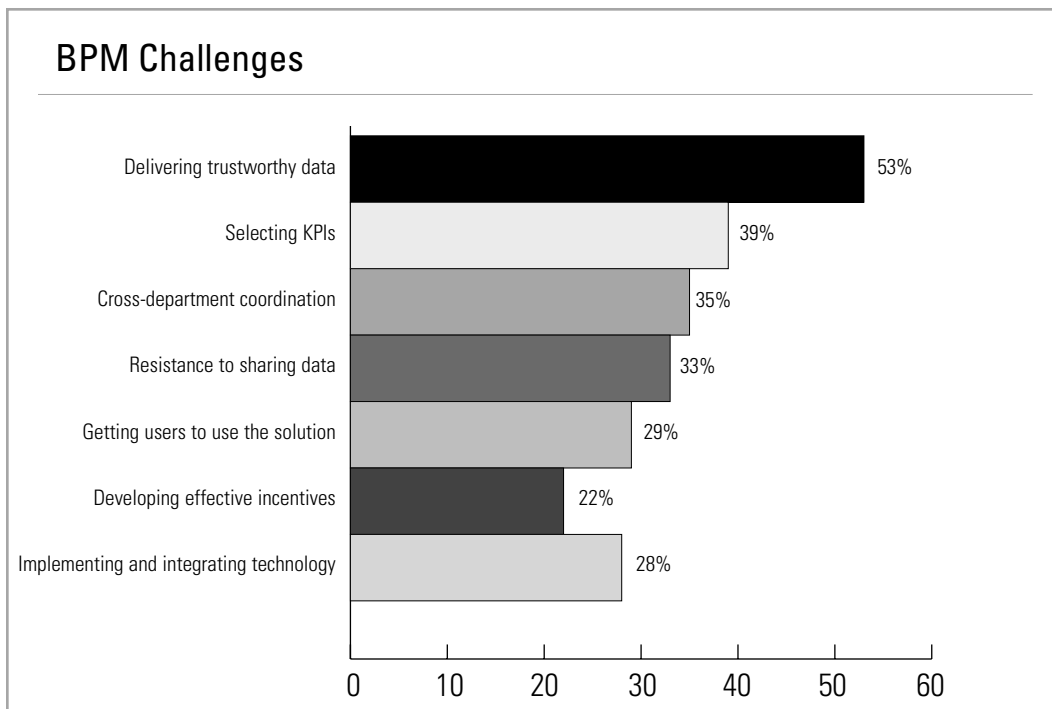


Illustration 15. Based on 360 respondents who gave the challenge a “high” rating.

3. KPIs Are Easy to Comprehend

Training Required. If business users can’t remember the KPIs or understand what they mean, the KPIs won’t be effective. In fact, KPIs can do more harm than good, especially if compensation is tied to the metrics.

“Our repeat call metric is complex. Therefore, we hold forums where we show field technicians how the metric works and how it might impact them. We then have the best lead technicians meet with others to discuss strategy and techniques that they can use to positively influence the metric,” says Direct Energy’s Maddock.

Less Is More. To avoid confusion and focus workers on critical areas of value and growth, organizations should limit the number of KPIs they publish to a handful of measures. “There is always a temptation to add more metrics as time goes on,” says Maddock. “When people have too many metrics to track, the messages get blurred.”

According to TDWI’s BPM survey, most organizations adhere to the “less is more” rule regarding KPIs. The median number of KPIs that organizations deploy in total is 20, and they only publish an average of seven KPIs (median) per user. (See illustration 16.)

Make Sure Workers Understand What the Metrics Mean

Focus on a Few KPIs Only

Number of KPIs		
	Average	Median
Total number of KPIs	64	20
Average number of KPIs per user	16	7

Illustration 16. Half of organizations deploy less than seven KPIs per user. Based on 360 respondents.

4. KPIs Provide Context

By definition, KPIs provide context. They show users or groups what is an acceptable level of performance. KPIs embed organizational expectations. This can be done in several ways:

- **Thresholds.** Thresholds define an upper and lower range of acceptable performance.
- **Targets.** Targets define a desired end-state at a particular point in time. For example, a target might be a 10 percent growth in net profits by year end. These targets may come from the plan or budget. An integrated BPM solution can synchronize these targets in both planning and scorecard modules.
- **Benchmarks.** Benchmarks compare performance to external standards, such as an industry benchmark, a statistical measure (Six Sigma accuracy levels), or results from a direct competitor.

However, not every metric in a BPM solution needs to be a KPI. Hewlett-Packard Services (HPS), for example, includes both KPIs and a few general metrics in its scorecard solution. The general metrics do not have targets or goals attached to them.

5. KPIs Lead to Positive Action

The most important characteristic of a KPI is that it leads to positive outcomes. This is easier said than done. A KPI alone won't change behavior or improve performance. It's merely a tool to communicate what workers need to do to help the company achieve its strategic objectives, and in the process, improve their position in the company.

"Measures without meetings are useless," says Maddock. "Unless managers hold regular sit-down meetings with their staff to review performance, nothing will change. Managers need to ask, 'What are you doing about this number? How will we avoid this happening next time?'"

Organizations as a whole appear to be struggling to find KPIs that impact employee performance, according to TDWI research. Only 13 percent said their KPIs are "very effective" at changing employee performance and 34 percent said they were "fairly effective." Meanwhile, 23 percent said their KPIs were only "somewhat effective" and 19 percent weren't sure. (See illustration 17.)

One problem is that users often try to circumvent established KPIs out of laziness or personal gain. "Users always look for loopholes in your metrics," says Direct Energy's Maddock. At HPS, to prevent users from "fudging" customer satisfaction numbers, the company hires a market research firm to audit customer surveys.

In other cases, KPIs may unintentionally undermine each another. For instance, a logistics group that is trying to streamline inventory costs may decide to reduce inventory which makes

"Measures without Meetings Are Useless"

"Users Always Look for Loopholes in the Metrics"

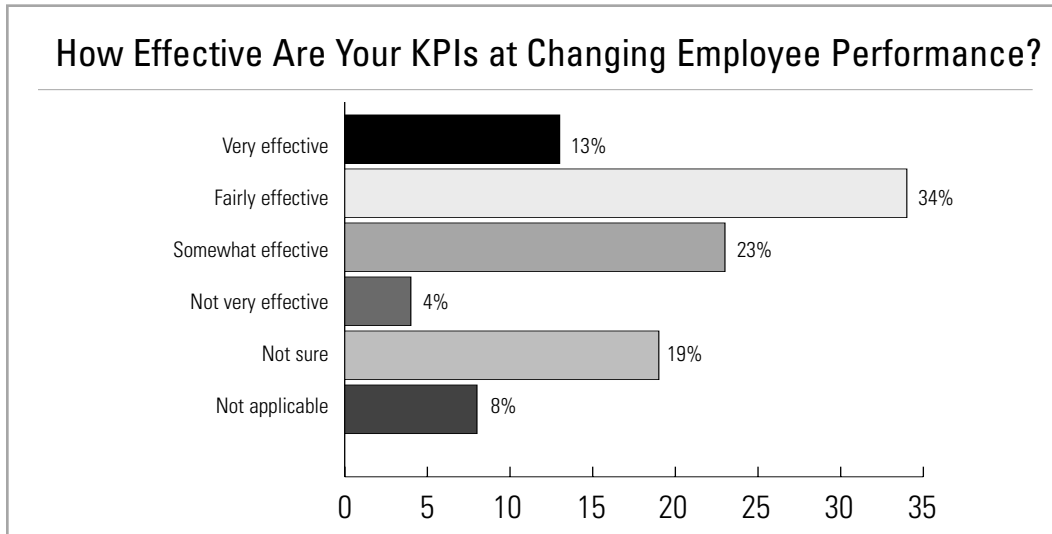


Illustration 17. Based on 360 respondents who have deployed a BPM solution.

it difficult for a retail store to prevent stock-outs of fast-moving items—a key performance measure for them. “We’ve seen our staff take unexpected action to boost a metric that turned out to undermine other measures,” Maddock says.

6. KPIs Empower Users

There is no sense monitoring performance if organizations don’t empower users to take action and incent them to fix problems. TDWI’s research shows that more than one-third of organizations (37 percent) with BPM solutions have restructured incentive systems to reinforce KPIs. In addition, almost two-thirds (65 percent) have redesigned business processes either before or after deploying a BPM solution to reinforce desired outcomes. (See illustrations 18 and 19.)

Most practitioners don’t recommend tying incentives to new KPIs. The KPIs need to be tested to ensure that the metrics won’t produce an unexpected backlash or unintended consequences. “We don’t want people to say, ‘I don’t believe in that goal or target,’” says HPS’ Summerhayes. “Only when we believe a metric is institutionalized enough at all levels of the organization will we begin working with human resources to tie compensation to it.”

Restructure Incentives and Processes to Empower the User

Wait before Tying Compensation to KPIs

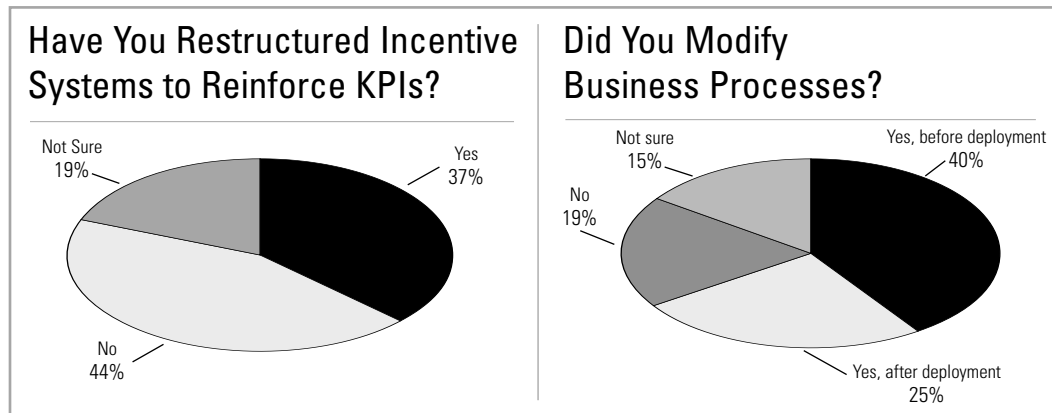


Illustration 18. Based on 360 respondents.

Illustration 19. Based on 360 respondents.

BPM experts emphasize, however, that it's critical to tie compensation to KPIs. "Ultimately, money drives performance," says Morrissey. "BPM projects don't gain real traction unless they are tied to compensation."

7. KPIs Maintain Their Relevance

Usage Monitoring. Once KPIs are deployed, organizations must continually evaluate their effectiveness. Some KPIs don't pan out as expected and others become irrelevant because of changing business requirements. HPS holds quarterly meetings to review KPI usage, which it tracks at a detailed systems level. "If a metric isn't being accessed, we go back to the owners and see whether they still want it. If not, we remove the metric."

The TDWI BPM survey shows that a majority of organizations modify KPIs on a quarterly or annual basis. Only 15 percent of organizations "rarely" or "never" modify KPIs. The most common reason for modifying KPIs is to adapt to changes in business strategy (77 percent) followed by the need to make KPIs "more relevant." (See illustrations 20 and 21.)

In addition, some people have discovered that metrics lose their organizational impact after awhile. "We usually see tremendous upswing in performance when we first implement a scorecard application," says HPS' Summerhayes. "But after awhile, we often see performance trail off again. In the end you can't control people, so you have to continually reeducate them on the importance of the processes that the metrics are measuring or you have to change the processes."

**KPIs Must be Audited
On a Regular Basis**

**KPI Effectiveness
Wanes over Time**

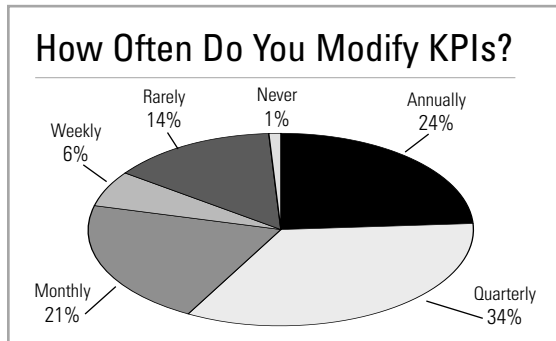


Illustration 20. Based on 360 respondents.

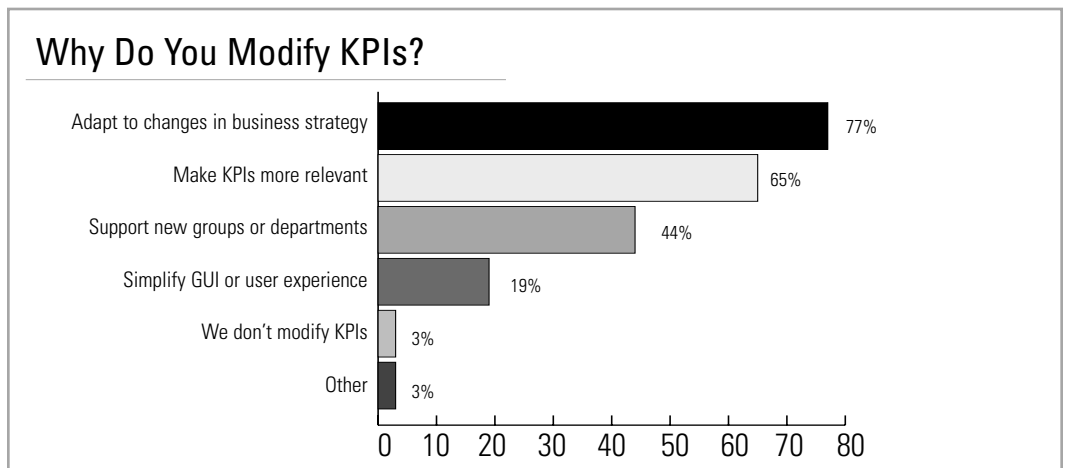


Illustration 21. Based on 360 respondents.

Architecting a BPM Solution

Build or Buy a BPM Solution?

Once the business defines valid and relevant metrics, IT professionals need to embed them into an application.

As interest in BPM increases, so do the numbers of BPM products offered by vendors. To date, most vendors have issued point products, such as budgeting or scorecard applications. In the past year, however, several vendors, including most of the sponsors of this report, have shipped comprehensive BPM solutions that contain most BPM components: budgeting, planning, forecasting, business intelligence, and scenario modeling.

The existence of such packaged solutions as well as the availability of individual components begs the question of whether organizations should build or buy a BPM solution. TDWI's research indicates that a majority of organizations that have deployed a BPM solution (59 percent) have built it, while less than a third (31 percent) who are contemplating implementing BPM will do the same. (See illustration 22.)

**Most Organizations
Build BPM
Solutions Today**

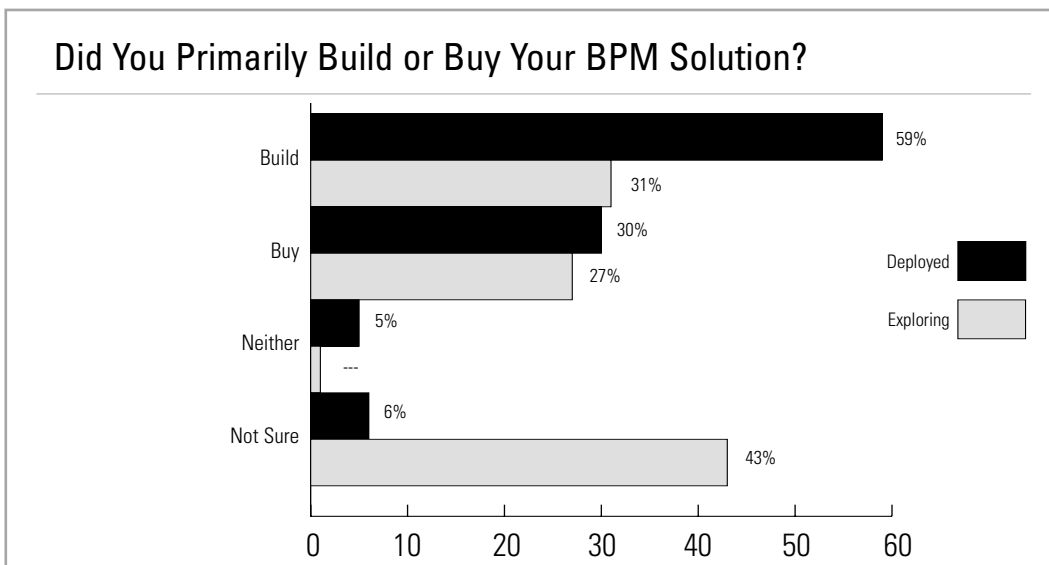


Illustration 22. Based on 360 respondents who have deployed a BPM solution.

Given the lack of BPM packaged solutions until recently and the strategic nature of BPM which encourages custom development, we are not surprised by these numbers. This data squares with previous TDWI research regarding analytic applications where the build-to-buy ratio was 62-to-34 percent.

However, it is likely that as more BPM products become available, a larger percentage of future BPM customers will purchase BPM applications rather than build them. This will be especially true with planning and budgeting applications, which automate and extend processes that already exist in most organizations. It may be less true with scorecarding applications, which many organizations view as extremely strategic.

It's also unclear how many organizations will purchase end-to-end BPM suites, especially if they already have one or more BPM applications up and running. The suites offer compelling value in terms of tightly integrating various BPM processes and data, but installing suites within existing environments can create architectural and integration challenges. It will be interesting to track the uptake of BPM suites over the next several years.

Data Architectures

The danger with BPM systems, especially packaged solutions that come with predefined data models, is that they can become silos of information, fracturing a consolidated view of corporation performance.

It appears that most organizations have avoided this dilemma by pulling data directly or indirectly from a central data warehouse, according to TDWI's survey. Half (50 percent) use a data warehouse as the underlying data source for the BPM solution, while 21 percent use a dependent data mart, which leverages data from a central data warehouse. Only one-quarter (25 percent) build the BPM solution as an independent data mart, which pulls directly from operational systems. Another 14 percent build BPM on top of an operational system. (See illustration 23.)

However, some teams are tempted to cut corners on the BPM architecture when they are under pressure to deliver tangible results quickly. "There is a tendency to hand-feed data into scorecards initially if the data warehouse doesn't have all the data," says Phelps of ThinkFast Consulting. "This is a challenge—it is difficult to balance short-term deliverables with the proper data architecture to support long-term growth and provide meaningful information."

Some Hand-Feed Data into a Dashboard

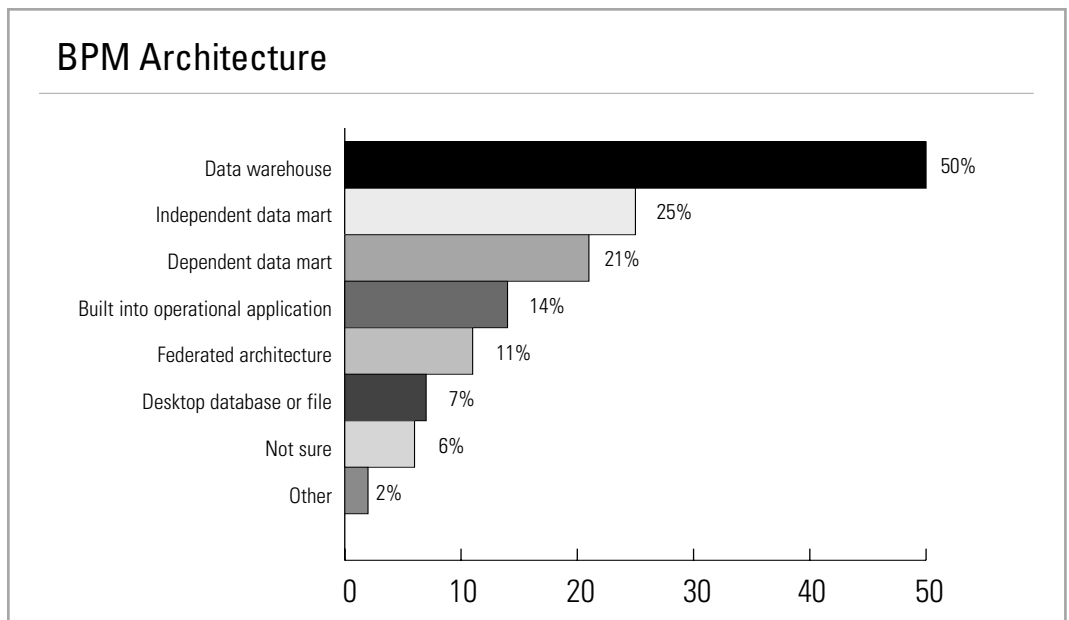


Illustration 23. Based on 360 respondents.

Data Warehouses Feed BPM Marts

Database Architecture. In terms of database architecture, most organizations deploy BPM solutions on OLAP databases linked to a relational data warehouse. International Truck, for example, runs its BPM solution on an OLAP platform which extracts data directly from its Informix data warehouse. The data warehouse pulls data from 32 source systems.

TDWI research reinforces this tiered approach to architecting BPM solutions. Three-quarters of respondents (75 percent) said that they were using a relational database and slightly more than half (54 percent) said they were focusing on an OLAP cube. (See illustration 24.) Since respondents could select more than one answer, this suggests that most organizations are using both relational and OLAP technologies to build their scorecarding applications.

Source Systems. When asked which source systems the BPM solution pulls data from, two-thirds selected “data warehouse or data mart” (67 percent), followed by legacy applications (63 percent). (See illustration 25.) Thus, the data warehouse sits at the center of most BPM applications, preserving a single version of the truth.

Ensuring Users will Use the System

Business Sponsors. Like many IT-supported initiatives, BPM requires high-level executive sponsorship. But since BPM automates the execution of strategy, executives need to be more than just sponsors or drivers; they need to be active participants in the process.

“Getting sponsorship and buy-in at the senior levels of the organization is the key. They take the numbers and say, ‘What’s going on?’ Their involvement activates the chain and gets people to use the metrics,” says Direct Energy’s Maddock.

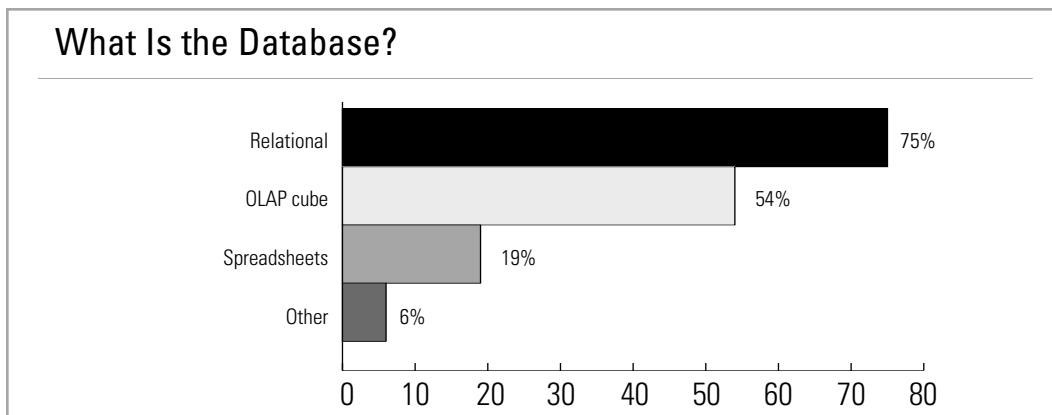


Illustration 24. Most organizations use both relational and OLAP technology to support BPM solutions. In most cases, organizations run scorecarding applications on OLAP databases which draw data from relational data warehouses. Based on 360 respondents.

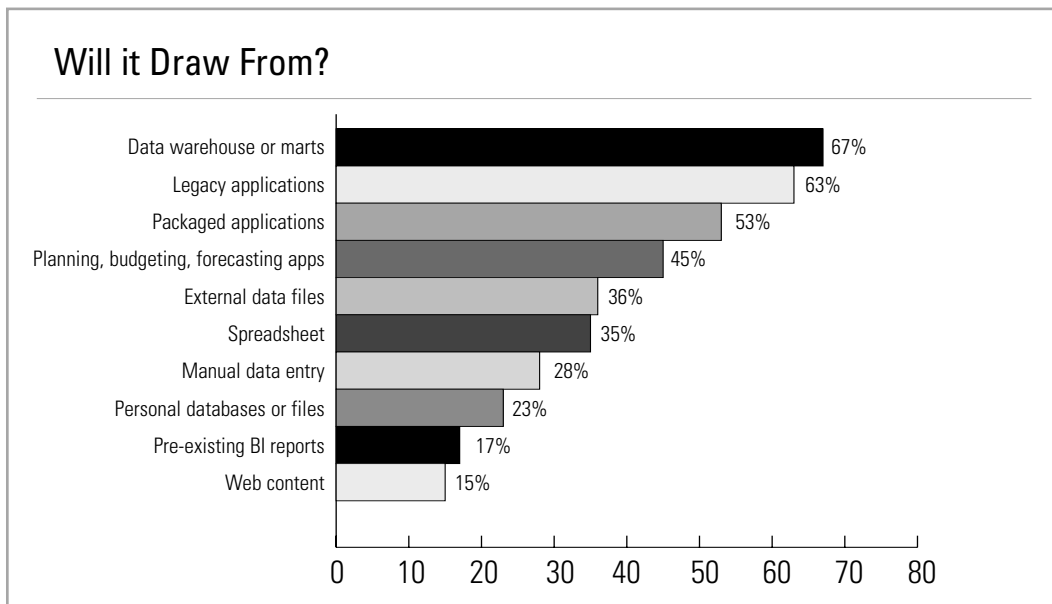


Illustration 25. Data warehouses and legacy applications are the most common sources of data for BPM applications. Based on 360 Respondents.

“BPM Exposes Hidden Data, and Forces Users to Share Data”

Senior executives also are the only ones who can change corporate culture that has rewarded information hoarding rather than information sharing. “The BPM puts data in the open that used to be hidden and this is not easy for many people,” says Farrah Foroushani, project lead at New United Motor Manufacturing. “Senior executives need to play an active role to change the way people are thinking.”

Delivery Formats. Delivering KPIs in a form that users can easily consume is also important. Most users respond positively to graphical dashboards or scorecards embedded in corporate portals and require little if any training in how to use them. But not all users can access the Web and some prefer other formats.

For example, field technicians at Direct Energy receive their scorecards in a paper format when they meet with managers every week. Officers at Toyota Motor Sales also prefer to receive scorecards in a paper format. “Some officers have been around for 20 or 30 years and that’s what they’re comfortable with. Some divisional officers are more apt to go online to receive their reports,” says Mike Elsesser, national technology manager, at Toyota Motor Sales.

Drill to Detail. It is also critical to provide users with enough information to take action. The most common BPM analytical techniques are links to detailed reports and interactive charts (that also presumably link to detailed reports). More than half of BPM users today offer these capabilities and more than 90 percent plan to offer these within 18 months. Other critical functionality are alerts, continuous planning and budgeting, and links to individual transactions. (See illustration 26.)

Business Processes. Another key to driving usage is to ensure that BPM solutions support existing business processes and facilitate communication among users. Planning applications need to give users the opportunity to revise forecasts in response to market activity and reallocate resources to meet objectives. Scorecarding solutions need to give users the opportunity to comment on KPI values.

“We let users attach comments to any metric at any level so they can raise any issues they feel are important. We really want to engender communication around metrics,” says HPS’ Summerhayes.

Occasionally, organizations find it necessary to get rid of old reports and information sources before users are willing to adopt the BPM solution. “Most of our KPIs are widely adopted but some are competing with existing reports,” says Foroushani. To address a similar problem, HPS shut down 16 various reporting systems, saving \$3.6 million in the process.

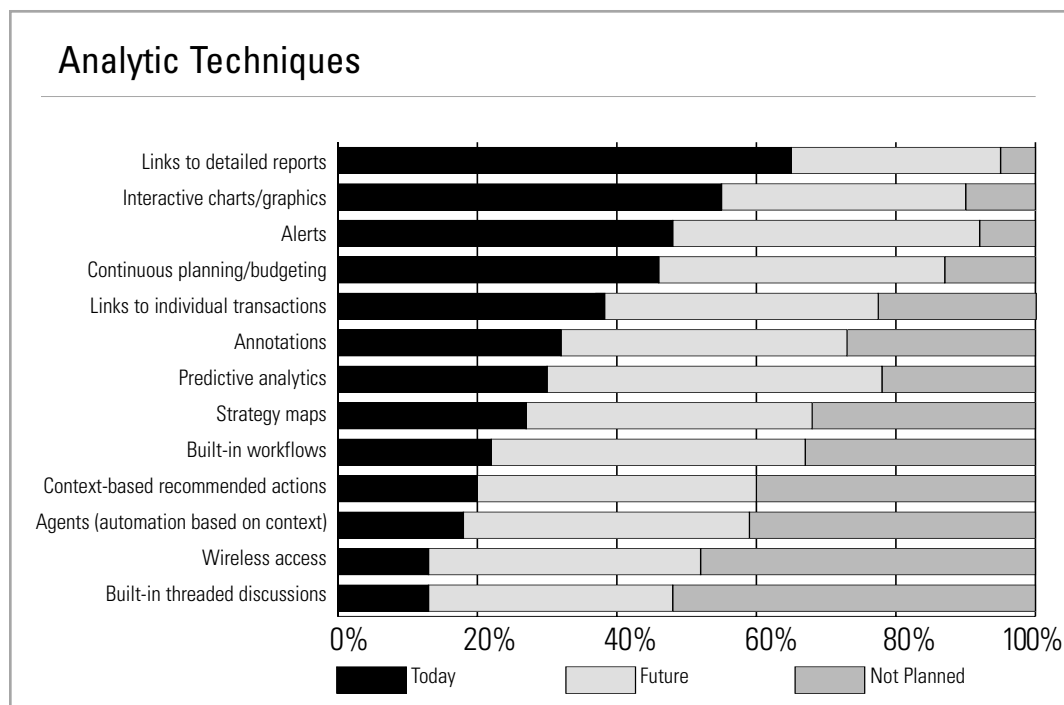


Illustration 26. The chart shows that BPM solutions support a range of analytic techniques. Based on 350 Respondents.

Conclusion

BPM Delivers Competitive Advantage. Given the current economic climate, increased financial pressures, and the evolution of information technology, it's no surprise that BPM is gaining traction now. It provides organizations with a new competitive edge, helping them cement their new found efficiencies with greater organizational effectiveness.

BPM will succeed because it automates strategy execution and enables good management. Without strong management, organizations ultimately fail. BPM raises the bar for good management by applying information technology to the execution of business strategy. This will serve to separate leaders and laggards in every industry at an accelerated pace. The advent of new regulations, such as the Sarbanes-Oxley Act, will also hasten the implementation of BPM.

BPM as a Communications Vehicle. The most compelling element of BPM is that it provides executives at all levels a mechanism to communicate strategy, allocate resources, and proactively monitor their groups' progress towards meeting goals and objectives that they've set forth. BPM puts the corporate strategy in front of every worker on a daily basis in the form of performance metrics that are geared to the tasks, processes, projects, and resources for which they're responsible. Because the metrics are tied to operational data, workers and executives can take action to catch problems before they escalate out of control. BPM finally puts teeth into strategy.

Like any new information technology, challenges abound with BPM. But organizations that have tackled other information-based initiatives have already learned many of the lessons needed to succeed with BPM. The key is to gain top-level commitment and ensure that the business drives the initiative from start to finish. Without the business in control, the BPM initiative won't deliver the organizational and cultural changes needed for success.

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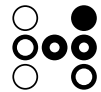


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