

# FINDING YOUR LEVEL OF BI AND PERFORMANCE MANAGEMENT MATURITY: BI and Planning for Midsize Companies – Introducing IBM Cognos Express



FEATURING RESEARCH FROM GARTNER



## INSIDE THIS ISSUE

Introduction . . . . . 1

Maturity Model Overview  
for Business Intelligence and  
Performance Management . . . . 7

## INTRODUCTION

A tough economy challenges your business. But it also offers unique opportunities to innovate and gain ground on your competitors. Seizing those opportunities requires insights and internal processes that make your organization leaner, faster and more resilient than competitors.

Business intelligence (BI) and performance management (PM) applications can be the key to unlocking those insights and driving those internal processes. And they support the informed decision-making that senior executives and managers need to choose the right opportunities.

IBM has introduced a new integrated BI and Planning solution purpose-built for midsize companies to compete more effectively in today's harsh economic environment. IBM Cognos Express delivers integrated reporting, analysis, planning, budgeting and forecasting capabilities pre-configured for simple deployment and management, and priced to let companies start small and add users or capabilities as business conditions demand.

Gartner has created a five-level maturity model to help IT leaders in charge of business intelligence and performance management initiatives “assess the maturity of their organizations’ efforts, and how mature these need to become to reach the business goals.”

In the Gartner research report, *Maturity Model Overview for Business Intelligence and Performance Management*, the authors found that BI and PM are now “becoming required investments.” It is not a question of “if” BI is a wise investment, but more a question of where to make the incremental investments. While any area of a business could benefit from having the very latest in BI applications, prudence dictates investing in those departments or business units that promise the highest ROI.

The authors recommend that companies apply the model to engage with stakeholders and open the discussion about the business value of moving to the next level of maturity. The maturity level of any given company will vary by department, and the BI needs of different departments will vary as well. Gartner advises that the overall approach should be enterprise-wide, but they also recommend focusing on “specific projects to move from one level to another.”





Below are some of the key characteristics that distinguish organizations at each of the five levels. We'll examine those, and then introduce the IBM Cognos Express solution specifically designed for midsize companies and look at how this can help you at every stage of the maturity model. (Gartner stresses the equal importance of governance, organization, processes training and metrics. Here we are concentrating on the technology aspects of the maturity model.)

#### **LEVEL 1: UNAWARE**

At this level no real BI capability is in place, with the exception of ad hoc projects to satisfy individual requests for data. This level is described as “information anarchy,” because data is inconsistent across departments, metrics are not effectively identified, defined or used, and the value of formalizing and managing metrics is not well understood. Data must often be modified to meet individual or departmental needs and this inconsistent data can often mislead or be misinterpreted.

The primary challenges at this level are identifying business drivers and understanding the current information management structure — including data sources, data quality, architecture and systems.

#### **LEVEL 2: TACTICAL**

Companies at this level have invested in BI for a limited number of managers or executives who need data to drive tactical decisions. Employees and managers use their own metrics to run specific parts of the business, but most tools, applications and data are in “silos.”

At this level, organizations still have major infrastructure issues to address, stemming from disparate systems (data sources, tools and applications) that create doubt about the relevance and consistency of data and analysis. Executives lack confidence in the quality and reliability of the data, leading to arguments over “whose data is right.”

#### **LEVEL 3: FOCUSED**

At the “focused” level, Gartner finds a stronger commitment to BI and PM among senior executives. Metrics are formally defined to enable management to analyze departmental performance and there is rising demand for management dashboards. As BI deployments expand, many organizations create teams of business and IT professionals to improve the strategic value and tactical roll-out of BI. Functioning as “business intelligence competency centers” (BICCs), these teams help share best practices and develop consistent, reliable processes to support the strategic use of BI.

At this level, the company has realized business value from its BI and PM efforts and achieved some solid successes. But there is no formal linkage to broad enterprise objectives, resulting in inconsistent goals and metrics among departments. The challenge is to extend the successes more widely across systems and architecture, and expand the scope of the application and user base.



#### **LEVEL 4: STRATEGIC**

Companies at this level are driving their BI and PM strategy according to overall strategic objectives. They integrate BI and PM into critical business processes, making information available to executives and managers across the company, including those in finance, sales, marketing, customer support, HR, IT, operations and product functions.

At the strategic level, metrics link financial goals and other strategic objectives to departmental, functional or operational metrics. Data quality is defined and monitored for consistency, and as a result, strategic data is trusted and acted upon at the executive level. The main challenge for these organizations is developing a balanced organizational structure, consistent with the company's business objectives and strategy.

#### **LEVEL 5: PERVASIVE**

At the pervasive level, BI and PM systems are integrated into business processes and agility is built into the systems, so people can quickly adjust to changes in the business and in the delivery of information. Users at multiple levels in the organization have access to information that allows them to do analysis to help manage, innovate and make decisions to drive performance. Metrics are linked to individual performance goals and employees at all levels can make real-time business decisions. Metrics are also shared with customers and suppliers to strengthen business relationships.

The challenge at this level is in continuing to be a best practices leader when the inevitable business changes occur, such as mergers, acquisitions, executive reorganization or other major disruptions.

#### **PUTTING THE MATURITY MODEL INTO ACTION AT MIDSIZE COMPANIES— INTRODUCING IBM COGNOS EXPRESS**

In the analysis that accompanies their maturity model, Gartner says that “recognizing where you are in the model can help you understand the incremental changes that are needed to raise your level of maturity and increase the value to the business of your BI efforts.” In today's economy, affordable “incremental changes” are exactly what many organizations are looking for.

For midsize companies, IBM has introduced IBM Cognos Express, an integrated BI and Planning solution that provides simple deployment and management of essential reporting, analysis, planning, budgeting and forecasting capabilities. It is packaged and priced to allow companies to start small, enabling project rollout and business needs to match resource capacity and budget, realize immediate business value, and grow over time.

IBM Cognos Express provides a low-cost, low-risk entry into cutting-edge BI and Planning, even for organizations that are just starting out on a BI strategy (at the “unaware” level of Gartner's model). And it includes everything needed to begin a BI deployment “out of the box” without requiring additional software infrastructure investments or placing an additional burden on the IT staff.



At the heart of IBM Cognos Express is a powerful in-memory analytics server that allows organizations to centrally manage data, hierarchies, business rules, and calculations. It ensures that data is accurate and consistent across the organization and can be viewed in a context that business users will readily understand. As a result, managers can spend their time analyzing the data, instead of arguing over whose data is right.

IBM Cognos Express contains three modules. Companies can purchase the full product or start with the specific module or modules they need. All modules share the same common architectural foundation, making it easy to add new capabilities as required.

The three modules are:

#### **IBM COGNOS EXPRESS REPORTER**

For business users who need to access information and create reports in a timely fashion, IBM Cognos Express Reporter delivers complete self-service reporting and ad hoc query capabilities. It empowers the business user to be self-sufficient to access, modify or author reports quickly and easily. IBM Cognos Express Reporter offers:

- Simple, intuitive, drag-and-drop authoring capabilities for self-service reporting by any user from novice to expert
- A common metadata model that presents information to users in business terms that they understand
- Access to all corporate data in any combination, including relational, analytical OLAP or even desktop files
- Broad report coverage including financial, production, operational, transactional, dashboards, managed or ad hoc reports
- Flexible report delivery via the Web, PDF files, Excel spreadsheets, email messages and the IBM Cognos Express Web portal

#### **IBM COGNOS EXPRESS ADVISOR**

For analysts and business users who need to communicate and share business insights with others, IBM Cognos Express Advisor makes it easy to go from raw data to high-impact analysis, and present the results with high-impact graphics and reports. IBM Cognos Express Advisor offers:

- Self-service analytics through an intuitive Web-based interface that enables simple publishing to a common portal
- High-impact visualizations, including bar, line, area, pie, radar, bubble, scatter and range charts and graphs, plus geo maps and heat/performance maps
- Powerful in-memory analytics for real-time calculations, drill-up and drill-down capabilities, and slicing and dicing of data by swapping, stacking and switching dimensions in any combination



- Lay the right data foundation by provide consistent and shared access to any data source
- Begin with a few key reports
- Overcome the risks and limitation of spreadsheets by transforming Excel
- Build a managed self-service environment to empower business users
- Share access to all reports through a corporate portal
- Perform deeper multi-dimensional analysis and visualization
- Share high impact dashboards that are actionable
- Rollout analytic applications
  - e.g. expense and capital planning; profitability
- Automate the planning, budgeting and forecasting processes
- Look to the IBM Cognos Innovation Center for best practices and blueprints to jumpstart your BICC

– Source IBM

- Freeform analysis of any combination of data, which eliminates reliance on overstretched IT resources.
- Write-back capabilities that link analysis and planning processes for effective business optimization

### **IBM COGNOS EXPRESS XCELERATOR**

For financial analysts or controllers, business or operations analysts, and product managers who want to continue using Excel but need to gain more insight through multidimensional analysis, IBM Cognos Express Xcelerator transforms common spreadsheets for real-time business analysis and optimization. The solution overcomes the risks and limitations of spreadsheet-only analysis and business processes. IBM Cognos Express Xcelerator offers:

- Centrally managed data, business hierarchies, rules and calculations to eliminate data silos and inconsistencies
- Streamlined and continuous planning, aggregation and analysis to effectively operate and grow a business
- A Web-based interface that allows non-finance users to easily contribute plan data and view current plans, analysis and reports
- Role-based security, structured workflows and clear audit trails to improve accountability and accuracy
- Write-back capabilities that link “what-if” modeling results with specific actions that lead to better business outcomes

### **IBM COGNOS EXPRESS DELIVERS ACROSS THE MATURITY MODEL**

The five-level Gartner maturity model provides a sound guide to what you should do to improve the BI and PM capabilities of your organization. And IBM Cognos Express gives you the tools to make incremental improvement in a measured, cost-effective way.

Here are a few brief examples of how this solution can help your organization on its BI and PM journey.

- If your business is at a stage where it needs only a few key reports, IBM Cognos Express Reporter gives you an affordable way to begin. It provides business users with simple, intuitive authoring capabilities and doesn’t burden a small IT staff. For in-depth analysis, there’s no need to abandon spreadsheets. Instead, their capabilities can be extended with IBM Cognos Express Xcelerator.
- At the tactical level, companies can use IBM Cognos Express to build out their infrastructure into a managed self-service environment where users can work on their own, but with role-based access and centrally managed models and data security. In addition, reports can be easily shared by all via the integrated Web portal.





- As your organization's needs grow, IBM Cognos Express Advisor enables you to perform deeper multidimensional analysis and communicate the results of your analysis visually, with high-impact reports.
- When your business is ready for more strategic analytic applications for tasks such as expense and capital planning and profitability analysis, IBM Cognos Express Xcelerator gives you the power to build and test business scenarios with powerful "what if" modeling. Write-back capabilities link these modeling results with a company's planning process.
- Finally, when your business is at the point where it can take full advantage of "pervasive" BI and performance management, IBM provides not only the tools, but broader support in the form of best practices and Performance Blueprints developed by the IBM Cognos Innovation Center for Performance Management. The Innovation Center can offer guidance in starting a business intelligence competency center (BICC), and Performance Blueprints help you speed your deployments and gain a faster return on your investment.

Today's harsh economy has seen some prominent companies fall from their leadership positions. But new leaders will emerge. And IBM Cognos Express solutions can help your company be among them.

Source: IBM



Featuring research from  
**Gartner**

## **MATURITY MODEL OVERVIEW FOR BUSINESS INTELLIGENCE AND PERFORMANCE MANAGEMENT**

IT leaders in charge of business intelligence (BI) and performance management (PM) initiatives need to assess the maturity of their organizations' efforts, and how mature these need to become to reach the business goals. Gartner has developed a maturity model to help.

### **KEY FINDINGS**

- Gartner's BI and PM maturity model defines five levels of maturity: unaware, tactical, focused, strategic and pervasive.
- For any organization, improvement in BI and PM maturity will be a multiyear journey. The goal is to determine the business benefits of BI and PM, and to deploy a framework for the organization while continuing to develop the organizational competencies and technical capabilities.
- BI and PM are becoming required investments.
- Over the years, many organizations have implemented BI and PM in a departmental or siloed approach. However, the approach to these initiatives needs to be enterprisewide and business-driven, and it should focus on governance, organization, processes and metrics, as well as on technologies.

### **RECOMMENDATIONS**

- Apply Gartner's maturity model to assess the organization's BI and PM maturity, and compare this to best practices.
- Use this maturity model to engage with business stakeholders, and discuss the business value of moving to the next level of maturity.
- Focus on specific projects to move from one level to another. For example, to help reach the "focused" level of maturity, create a BI competency center (BICC) for "focused." Deploy an enterprise metrics framework to reach "strategic," inserting analytics into the business process to reach "pervasive."

### **WHAT YOU NEED TO KNOW**

To maximize the value of BI and PM, you need to understand how mature your organization is and how mature it needs to be to support your business goals. Gartner has devised a five-level maturity model to help. Some companies just need to support the lower levels of maturity, while others may need to make BI and PM strategic and pervasive across the organization. To move up the maturity curve, you need to know the challenges that you must overcome to move to the next level. In many cases, the maturity levels will vary by process or department, but most major process areas will have their own maturity levels.



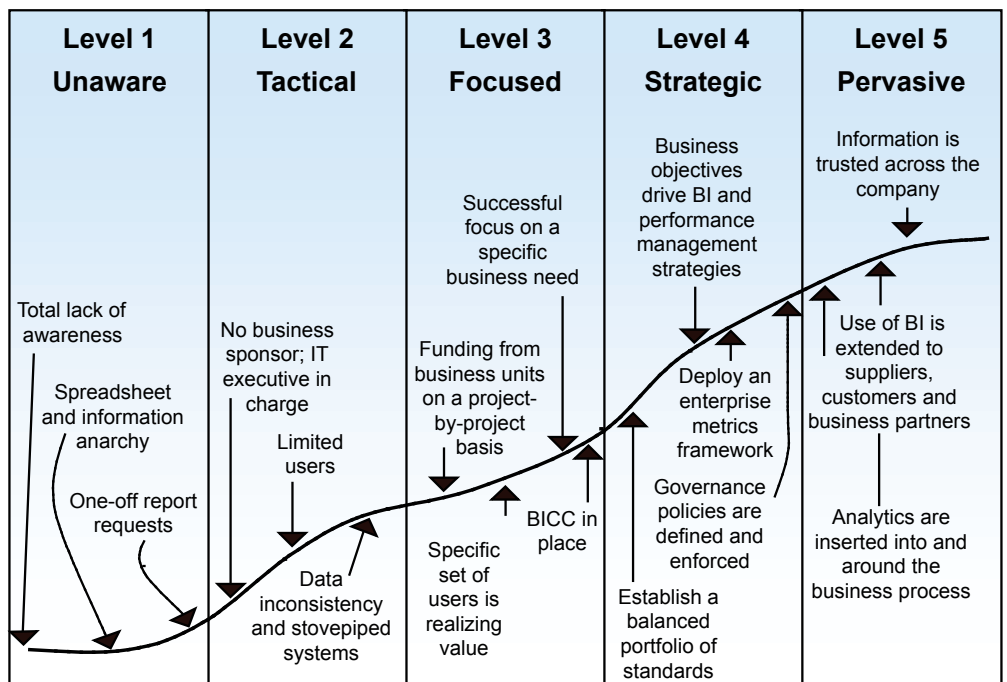
Consider having people who support different business processes across your organization evaluate your maturity to understand the gaps between perceptions and goals. Consider using these assessments to quantify the business impact of the gaps, priorities and overlaps of BI and PM initiatives, and the skills in your organization.

**ANALYSIS**

For some organizations, BI has become an integral part of their corporate strategy; it provides information and analysis for a broad range of users to better manage performance and improve decision making. These organizations focus on more than just technology. BI becomes a broader initiative in which people and business objectives drive technology investments. Many organizations struggle with the transition to a more strategic and pervasive BI implementation, where the focus moves from BI technology to a comprehensive BI and PM initiative.

To help organizations understand where they are and how they can improve, we have developed a five-level BI and PM maturity model (see Figure 1).

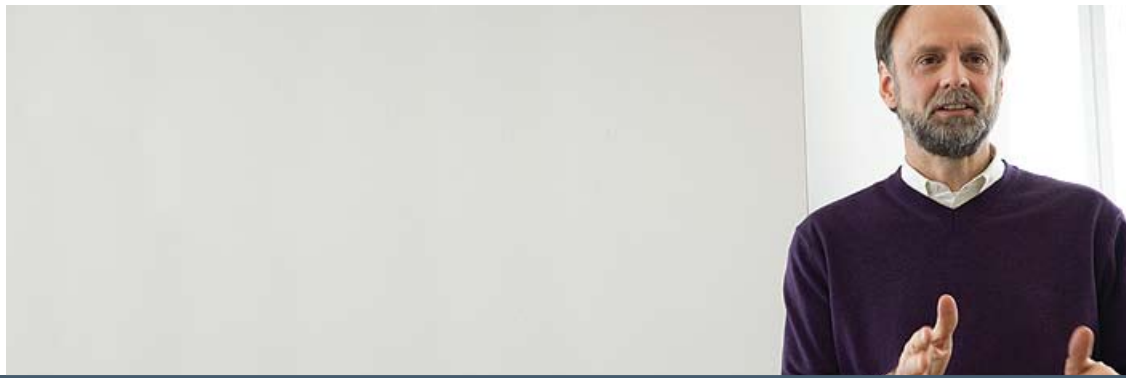
Figure 1. BI and PM Maturity



BI = business intelligence  
 BICC = BI competency center

Source: Gartner (December 2008)





Recognizing where you are in the model can help you understand the incremental changes that are needed to raise your level of maturity and increase the value to the business of your BI efforts. We also encourage clients to evaluate their overall business maturity, and to use this model to assess the maturity of diverse departments or lines of business. Many may find that different parts of their business are at different levels of maturity, and this model can help identify these gaps and spur discussions among departments.

#### **LEVEL 1: UNAWARE**

Companies at this level have not identified their vision, investment and commitment to BI, nor have they identified the use of information and analysis to help drive their business. We call this level “unaware,” because no real BI initiative is in place, only one-off projects to satisfy individual requests for data. This level of maturity is also often viewed as “information anarchy,” because, in most cases, there is a lack of internal control — resulting in inconsistent data across departments, which is often misinterpreted or has to be constantly modified to meet individual and departmental needs. There is heavy use of spreadsheets for analyses, and limited use of reporting tools. At this level, metrics are not effectively identified, defined or used. The business value of formalizing metrics and managing performance metrics is not understood. The IT-centric reporting team supports the administration of BI and information management initiatives without an identified sponsor. Funding comes from the IT budget and is charged to a cost center.

The primary challenges at this level are to identify the business drivers and needs for supporting BI, getting commitment and resources to move forward, and understanding the current information management structure — including data sources, data quality, architecture and systems.

#### **LEVEL 2: TACTICAL**

Companies at this level have started to invest in BI efforts. Users are generally a subset of managers and/or executives who mainly rely on data to drive tactical decisions, with the drivers generally being process efficiency or cost reduction. Although a subset of users may provide input into the requirements definition, generally, these users don’t work directly with the team that is leading BI initiatives. There isn’t a true sponsor for BI efforts, but senior IT executives, such as CIOs, that need information and/or provide information are the focal point for management and decision-making activities. In most cases, employees and managers use their own metrics to run their parts of the business or perform their job. These metrics are shared within a department, and may be used in management meetings to explain departmental performances, but they are not formally shared. Also, where departments may use similar or even common metrics, these are calculated and defined inconsistently.

At this level, the need for a data inventory may be recognized and may be in process, but there is still often data inconsistency. Some systems are in place that enable a small number of users to receive standard reports and data online, but most tools, applications and data are in “silos,” with insufficient formal skills training for users. Often, at this level, companies are using off-the-



shelf software, with few or no modifications. Senior executives frequently lack confidence in the quality and consistency of the data, leading to many arguments over “whose data is right” in management meetings. This often results in insufficient funding and support for BI initiatives.

A major challenge that often faces organizations at this level is the lack of organizational structure and processes that provide business input, and the absence of a methodology for ensuring that the business remains involved throughout the entire evolutionary cycle of their initiatives. In addition, many organizations have huge infrastructure issues, stemming from having many disparate systems (data sources, tools and applications), which create concerns about the relevance and consistency of data and analysis.

Organizations also often find themselves continuously in response mode. Each time a new manager wants a new report, IT scrambles to develop one, which is generally not leveraged across the organization and/or driving business transformation.

### **LEVEL 3: FOCUSED**

At the “focused” level, we start to see a stronger focus by senior executives on commitment to BI and PM. But the primary focus is on driving specific business initiatives, such as improving business effectiveness, aiding in marketing decisions and supporting financial reporting. The sponsor for these efforts may be a senior IT executive, such as the CIO, but it is more likely to be a business executive, such as the CFO or head of sales. At this level of maturity, metrics are formally defined to analyze specific departmental or functional performances. The IT department is tasked with creating a repository of metrics to enable senior management to analyze departmental performance, without relying on business managers. This most commonly occurs when demands arise for a management dashboard. The goal is to optimize departmental performance, but there is no formal linkage to broad enterprise objectives, which often results in inconsistent goals and metrics among departments.

Although the sponsor has a defined initiative for each specific department objective, the scope of the BI initiative still extends across multiple departments. Users are trained on the basics of the systems to access data. Often, funding will come from one or more business units or is charged back to other business units. At this level, we often begin to see the organizations forming a BICC that comprises business and IT professionals. However, BICCs are generally focused on specific applications or the use of information.

The most common scenarios at this level include those companies that have invested in financial consolidation and reporting systems, but that have not made equivalent investments in nonfinancial data, such as sales and product data. However, this data is not integrated and resides in “stovepiped” applications. These efforts are largely supported by specific analytic applications, such as corporate PM suites, marketing analytics and product PM that are implemented independently of each other.



At this level, the company has achieved some solid success, and has realized business value from its BI and PM efforts. But these successes are generally focused on very specific parts of the business. They may support cross-functional decisions, but, again, are highly specific.

The challenge is to extend this success more broadly, rather than it remaining one part of an organization's strategy. This, in turn, means evolving a BI and PM initiative across systems and architecture, and expanding the scope of the application and user base.

#### **LEVEL 4: STRATEGIC**

Companies at this level have a clearly defined business strategy with senior executive sponsors. They are driving their BI and PM strategy according to these overall strategic objectives. Often, at this level, companies focus on integrating BI and PM into critical business processes that support analytic applications. Information is made available to employees across the company, including senior financial planners, marketing executives, supply chain managers, HR managers, brand and product managers, promotion specialists, advertising and marketing communication managers, and marketing operations directors, based on their impact on overall strategic objectives. Often, the scope starts to expand outward to include suppliers, business partners and customers.

The sponsor is a senior business executive, such as the CFO, COO, the chief strategy officer (CSO) and, in rare cases, the CEO. These executives have the ability and the vision to directly influence overall business objectives. The CIO may also be the sponsor for a strategic BI and PM initiative, as long as the CIO is recognized and is able to directly influence the overall business objectives. The organization has formed a BICC, comprising business and IT professionals that work as a team, and has sufficient resources and funding to accomplish its goals.

At the strategic level, an enterprise framework of metrics has been deployed or developed that links financial goals and other strategic objectives to departmental, functional or operational metrics. This is where a cause and effect linkage model may be used. These metrics are consistently defined across the enterprise and allow various PM applications to be linked together through the metrics framework.

The BI initiative encompasses business applications, IT operations tools, desktop applications and has been expanded to encompass a wider range of PM applications. Data governance policies have been defined and are being managed. Data quality metrics are defined and data quality is monitored for consistency. Strategic data is trusted and acted on at the executive level to drive strategic change. Processes are in place to continue to evolve data quality as new and more data becomes integrated into BI and PM applications. Users are trained to access data and to apply it effectively when making strategic and tactical decisions.

The main challenge at this level is to execute and develop a balanced organizational structure, given the company's evolving business objectives and strategy. Many organizations also face challenges in building agility into BI and PM systems so that they remain effective as business needs change.



#### **LEVEL 5: PERVASIVE**

At this level, BI and PM are pervasive across the business and across part of the entire corporate culture. Users at multiple levels within the company have access to the information and analysis needed to help drive business value and impact. Information architecture and application portfolios are implemented and managed, and BI and PM systems are integrated into business processes. Agility is also built into BI systems, so that they can adjust with changes to the business and in the delivery of information.

As with the strategy level, the sponsor for BI efforts is a senior business executive, such as the CFO, COO, CSO or CEO, who is linked directly to and drives overall business objectives. The organization has also formed a proactive and dynamic BICC, comprising business and IT professionals. Not only is data governance in place, but information is trusted and acted on at multiple levels. Users are trained and measured on their ability to support data quality and data governance policies.

At this level of maturity, unlike the strategic and focused levels, users at multiple levels of an organization have access to information and analysis that enables them to lead, discover, manage, innovate and decide to impact business performance. As a result, metrics are linked directly to individual performance goals/objectives. Closed-loop systems allow employees at all levels to make real-time business decisions, based on their potential impact on strategic goals. The scope of BI initiatives extends outside the organization to include suppliers, business partners and customers. Metrics are also shared in real time with customers and suppliers to strengthen business relationships.

The challenge at this level is in continuing to be a best practices leader despite constant changes, such as merger and acquisition activity, executive reorganization or other major business disruptions. Companies may also face challenges in keeping their strategy up-to-date with evolving user needs and emerging technology.

Organizations that are at or moving toward this maturity level need to evaluate and understand the costs and support the impact of their BI applications, tools and infrastructure becoming mission-critical. For example, the additional costs of supporting highly available systems, and the availability of support services and resources to respond to diverse user needs.

Gartner RAS Core Research Note G164094, Nigel Rayner, Kurt Schlegel, 18 December 2008



## **ABOUT IBM COGNOS BI AND PERFORMANCE MANAGEMENT**

IBM Cognos business intelligence (BI) and performance management solutions deliver world-leading enterprise planning, consolidation and BI software, support and services to help companies plan, understand and manage financial and operational performance. IBM Cognos solutions bring together technology, analytical applications, best practices, and a broad network of partners to give customers an open, adaptive and complete performance solution. Over 23,000 customers in more than 135 countries around the world choose IBM Cognos solutions

For further information or to reach a representative, visit [www.ibm.com/cognos](http://www.ibm.com/cognos)

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