

## The IBM Cognos Statement of Direction

The next wave of IBM Cognos innovation



This document describes the IBM Cognos product and portfolio roadmap and strategy over the next several years. This document is a representation of forward-looking events, based on business conditions as we currently know them. IBM reserves the right at its sole discretion to change or adjust strategies based on business needs as they arise<sup>1</sup>.

## ***The IBM promise***

Your journey towards performance management may have been driven by the need to increase shareholder value, react more quickly to dynamic market conditions, establish risk management processes or perhaps comply with regulations and governance requirements. It may have started with technology investments such as business intelligence, planning, or analytic applications.

Like most companies, you've likely faced challenges along the way through increasing system complexity, information, or resource management challenges, and internal processes and reaction times that can't keep pace.

This statement of direction was written for IBM Cognos® customers and for anyone contemplating an investment in performance management solutions. It outlines the priorities, direction, investments, and vision that will guide our technology and solutions and help our customers on their performance management journey.





## ***Unlocking the value of information***

A decade ago, IT investments were largely focused on back-office applications such as ERP, supply chain management, and CRM systems. The key objective: business process re-engineering to achieve cost-cutting and faster transaction processing.

More recently, companies have begun to shift their priorities toward business optimization—with a goal of increasing competitive advantage by improving management processes. As a result, investments in this area have more than doubled, with performance management applications leading the charge.

This means that instead of just leveraging ERP and financial applications, you can provide increased financial risk insight for better business decisions. Instead of just supply chain management, you can enable more dynamic demand planning. And instead

of just managing your call center and customer relationships, you can gain increased insight to improve service and drive greater profitability from your customers.

More than ever, this level of optimization depends on having an information agenda in place. With the right information, tools and insight, organizations can connect people to their organizational goals, dramatically reduce risks, and improve business outcomes at every level.

IBM offers end-to-end solutions to meet these requirements. The IBM Information on Demand (IOD) strategy focuses on four key capabilities:

- The ability to manage data and content over its lifecycle to reduce the costs associated with managing information, provide controlled

accessibility, and address retention and compliance requirements.

- The ability to use data and content for individual business processes and applications across the enterprise to optimize the performance of applications, reduce operational risks, and improve decision-making.

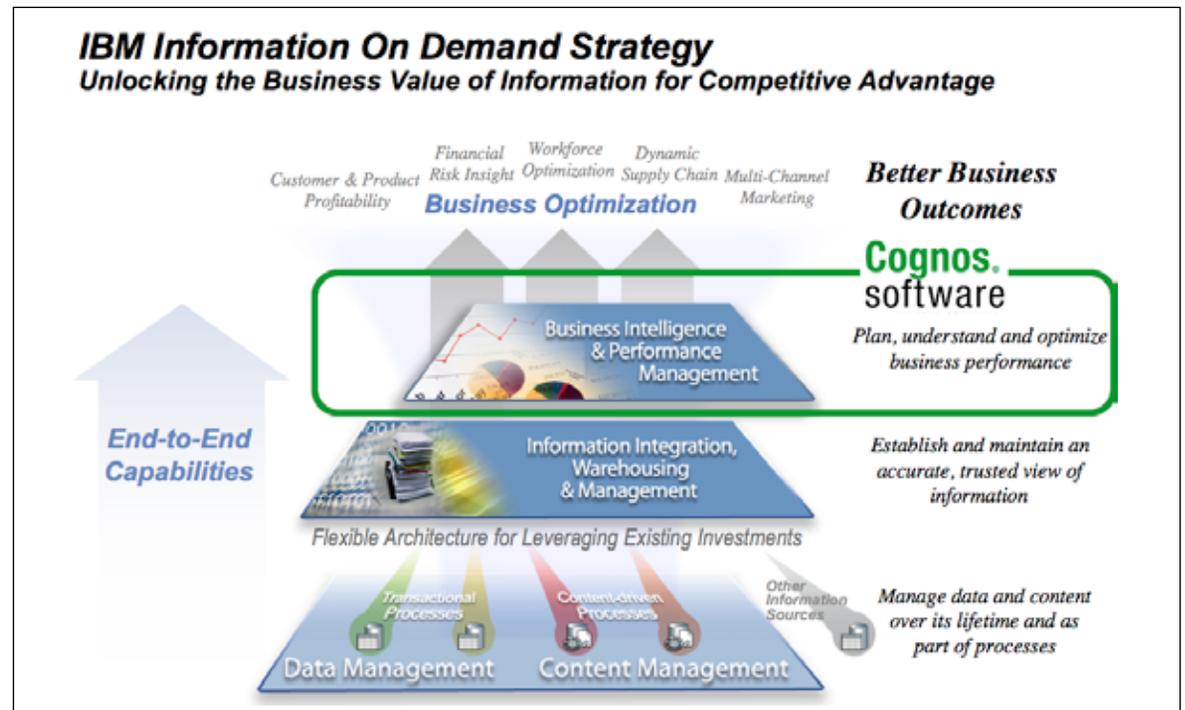
- The ability to establish an accurate, trusted view of information across these different processes and applications to drive more consistent information throughout the enterprise, support analytic and other requirements, and deliver a single view of customers, products, and revenue.

- The ability to leverage this trusted information to build operational and financial plans, understand how the business is performing, and focus on

reducing risks and optimizing performance across the enterprise.

IBM Cognos BI and performance management focus on the plan, understand, and optimize business performance piece of this strategy. New synergies with

IBM technologies and research areas will also help to accelerate our ability to achieve our performance management vision. For more information about IBM's IOD strategy, see <http://www.ibm.com/software/data/information-on-demand/>.



# ***Business-driven performance management: Welcome to the future***

From discussions with advisory boards, customers, analysts, and more, there is a consensus that organizations are becoming more mature in their use of performance management. In the future, performance management will simply be a part of organizational culture—which means enabling everyone.

To accomplish this, companies are evolving toward specific information needs:

- **Barrier-free information.** Remove the barriers to finding and interacting with information to enable user communities to leverage information their way.
- **Role and task-driven.** Increase relevance and focus to get the right content to the right people faster. Information, content, functionality, and processes should reflect user roles, preferences, needs, and the task at hand.
- **Support for free-flow communities and management processes.** The Net Generation<sup>2</sup> has set a new standard for free-flow of information. Search engines and other Web tools have always existed for them. They now text message, engage in social networks, and multi-task. They form groups quickly for a purpose, and then disband when done. And they are looking to leverage the same tools they use at home while in the office.
- **Independence from data capture.** Users don't want to be limited by how information is captured (ERP type, version, internal versus external, documents versus data).
- **Confidence in the information.** Data must be accurate, reliable, and trusted.

To meet these requirements, a performance management system must provide certain characteristics:

- **More than just data.** The system needs to understand data, people, their interactions, networks, and more. This will drive increased relevance.
- **Corporate memory.** Organizations must capture decisions and the context around the decisions to preserve corporate memory. They have to address a more mobile workforce (within and between organizations), enabling faster time to productivity. The system needs to be accountability-based (with scorecards, dashboards, financial controls in consolidation and planning, records management, and reporting) to meet increasing regulations and compliance requirements. These requirements,

often referred to as GRC – Governance, Risk and Compliance – stem from government controls, to legislative influences (HIPPA, SEC financial filings, BASEL II), to industry regulations, to requests for being Green.

- **Part of everyday life.** The system should flow into users' everyday activities without requiring a break in action or having to use separate interfaces.
- **Rapid results and response to change.** Because of the pace of change, the system should be up and running quickly and adaptable to new requirements or direction.
- **Scalable, flexible, and adaptable.** Users need to have confidence that the system is always on, available, and reliable.



We are on the journey already. IBM has built the foundation with our existing IBM Cognos performance management platform and capabilities:

- A modern Web services-based SOA architecture that provides the right foundation for value now and future expansion. It offers one platform for all performance management capabilities, unsurpassed scalability, reliability, openness, and broad conformance across heterogeneous environments.
- Unparalleled breadth of capabilities with reporting and analysis, dashboards and scorecarding, planning, budgeting, and forecasting.
- A simple, seamless experience for users – one appropriate to their role and job requirements. By making it both easy to use and customizable,

we help companies weave performance management into their ongoing activities, rather than have it as a separate task.

- Performance management on the platforms and at the places users need it most, while simplifying the user experience. Demonstrating this commitment are innovations such as IBM Cognos Go! consumer modes that deliver applications and content to mobile devices, allow enterprise search, and publish to Microsoft® Office environments.

To achieve the next wave in terms of our future vision, we are now leveraging this foundation and investing in four key areas:

- **Content and context.** Enable a relevance-driven experience by understanding more than just data.

- **Transform the user experience.** Work with innovative technologies to enhance user activities and seamlessly integrate with the tools they are familiar with.

- **Accelerate with best practices.** Reduce the time to results by building in more best practices and domain expertise.

- **Deployment agility.** Provide efficient and seamless deployment, management, upgrades, and scale. The following sections explore these four areas of investment for IBM and their impact on our customers, our products, and performance management as a whole.

## ***Investment Area 1: Content and context***

As our development has evolved, we have continued to expand on what information sources are captured. It began with relational and OLAP data; we have since added planning information and have fine-tuned our ability to retrieve content from across the enterprise (dashboards, reports, analyses, alerts, metrics, and scorecards) with search.

The next wave will see further expansion, including on- and off-premise data, more granular content (such as a specific grid in a plan, charts, or tables within a dashboard), and unstructured data (such as personal or desktop content).

With expanded data comes a corresponding expansion of contextual information – metadata and relationships that give the raw data meaning and consistency. Beyond metadata for source information, content, and user security, the next investments in

this area will include metadata and understanding of people, decisions and usage.

This more holistic system context will improve understanding of users and their relationships, preferences, and interactions with the system. At this stage, context drives increased relevance and provides users with more personalized results so they can focus quickly on the content and capabilities they need.

### ***Current value***

We have built a strong foundation to enable these future investments:

- A modern SOA architecture with shared metadata, hooks into third-party metadata for lineage and increased awareness of relationships, open data access for mixed environments, and a strategy for coordinating dimensions.



- IBM Cognos 8 Go! Search provides indexing data and content, search-based ranking, and relevance, as well as integration with enterprise search.
- Expansion to integrate unstructured information with our partners.

#### *Extensions*

Our investments will focus on extensions to our existing functionality and offerings:

- **Expand the information reach.** Continue to expand data sources, address convergence of data and documents (such as e-mails, comments, and blogs), enable text analytics, combine on- and off-premise data, and integrate local or personal data with corporate data.

- **Expanded metadata to deliver more personalized results.** Provide users with a more holistic response to their requirements: passive context (what is there – people, data, content), usage context (what has been viewed, interacted with, ranked, tagged), and active context (what is happening now, what else is being viewed – key phrases, correlation with other phrases, event context).

- **More relevant and faster search results.** The system will become relevance-driven, enabled by a greater importance and use of search to enable larger numbers of users.

#### *Innovations*

We are targeting investment in innovations to improve incremental value and functionality:

- **Business integration.** The system will learn from usage and model itself based on relationships and relevance for different users. This adds more context, increasing relevance of the end results and making users more productive.
- **Context-driven system.** System context should permeate the entire platform so that all performance management activity is relevance-driven.

#### *Investment impact*

IBM Cognos solutions enable barrier-free information and situational enablement. Seeing beyond just data, users gain a more complete picture without having to consciously add their own context. The system does what the user expects, so they can be highly focused on their role and tasks.

## ***Investment Area 2: Transform the user experience***

Search is a primary tool for the everyday user. However with additional context and more granular insight into content, search criteria can enable additional results – over and above just a list of links:

- **Search to query** would allow the system to match metadata to the search criteria and create content that did not exist before.
- **Search to explore** would take users to a cube for analysis.
- **Search for documents** would tie into enterprise search engines and content management systems to find relevant, associated documents such as Adobe® PDFs.

- **Search to plan** would go directly to a specific location within a plan or include any plan entry screens.
- **Search to assemble** would find relevant planning grids, graphs, and tables to quickly assemble a dashboard based on search and system context.

These capabilities will enable the system to drop the user precisely where they need to be. Users will then have more flexibility to create new content by combining existing content objects like graphs and tables.

Performance management activities need to be a seamless part of a users' everyday activity, imposing no requirement that they stop what they are doing to shift gears and start performance management activities.

### *Current value*

We have built a strong foundation to enable these future investments:

- An intuitive, focused interface for self-service consumption, personalization, and authoring. This includes a single portal entry point to all performance management capabilities, purpose-built interface experiences such as Planning Contributor, the Express authoring mode in Report Studio, IBM Cognos 8 BI Analysis for Microsoft Excel®, IBM Cognos 8 Go! Mobile, and IBM Cognos Now!
- A single source of information that hides data complexity – one common metadata model insulates users from the complexity of the back-end and enables cross-source leverage.

- A services approach to applications and content including object libraries in IBM Cognos Now!
- Integration with everyday tools such as Microsoft Office.
- Business performance management vendor integration and planning workflow—focusing on management processes versus transaction-oriented processes.

### *Extensions*

Our investments will focus on extensions to our existing functionality and offerings:

- **Content on demand.** Make content more granular by using widgets and wrapping them with metadata. This enables content to be found by a search, combined programmatically, and

actionable. For example, you could merge two widgets together to form new content because they recognize common metadata.

- **Personalized user experience.** In the same way, make UI components more granular so they could be combined in custom or personalized ways—effectively turning them into services. This enables task-specific or role-specific UI creation. It also enables integration with other applications to help integrate performance management seamlessly into the everyday user experience. For example, a user would be able to see relevant information assets or initiate a search right from a meeting notification, to prepare for a meeting with a customer.

### *Innovations*

We are targeting investment in innovations to improve incremental value and functionality:

- **Community on demand.** Apply the concepts of social networking and collaboration to business performance management as well as compliance and risk management. Empower people to create networks based on common interests, goals, or objectives to address an issue or opportunity. Users would be able to band together to take action and dissolve the group when completed.
- **Close the loop.** Provide the ability to hook into other enterprise systems to initiate processes such as escalating to management, notifying sales teams of customer issues, or assigning tasks. Closing the loop could also involve things

like updating a sales plan through action-driven planning, which allows multiple users to contribute to the company plan through forms rather than grids. These forms could enable plan managers to easily see the recorded decisions that affect changes in the plan. The forms and associated, recorded decisions would automatically become part of the planning approval workflows and processes.

- **GRC (Governance, Risk and Compliance) on demand.** Enable content (plan, dashboard, report, scorecard, etc.) or a decision, often the result of a collaboration, to be declared as a record with all the associated content and discussion. Potentially as part of your enterprise content management processes or governance, risk and compliance strategy.

#### *Investment impact*

With performance management on demand, organizations will gain barrier-free information and free-flow of communities and processes. Refinement will be simple; no complex coding will be required. And information will be in context to accelerate decision-making.

Communities form, adapt, and dissolve based on performance tasks, and the results and impact are recorded in the system. This will allow organizations to maintain and build corporate memory even as people come and go.



## ***Investment Area 3: Accelerate with best practices***

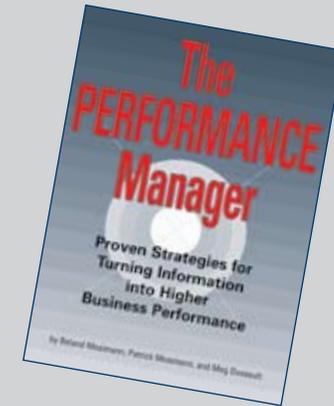
Statistical and predictive analytics are critical to gaining customer knowledge and understanding the market. But traditionally, this area has been consigned to power users and analysts. To increase value, it is time to put analytics in the hands of the everyday user.

We have had multiple requests from customers to share best practices in this area. With that in mind, we've created the Performance Management Framework to identify an interconnected set of common sweet spots across the organization. Working with our partners, we have integrated these best practices into IBM Cognos Performance Blueprints and packaged analytic applications.

We are planning further investments in this area to continue to provide tangible domain expertise and best practices to accelerate value for our customers.

### **The Performance Manager book**

The IBM Cognos business book, *The Performance Manager, Proven Strategies for Turning Information into Higher Business Performance*, is strategic to this area of investment as it helps users find their own key decision areas, known as information "sweet spots". It can help them turn the growing information intensity of today's jobs from a challenge to a competitive advantage.



*The Performance Manager* strengthens the partnership between decision-makers and the people who provide the information that drives better decisions. It suggests 42 information sweet spots, to help you understand your data, plan, and monitor your performance.

Decision areas are organized by eight major company functions (such as finance, marketing, sales, HR, and IT), plus an over-arching section for executive management.

Start on your path towards better performance with *The Performance Manager*. Order it free at

**<http://www.ibm.com/software/data/cognos/solutions/department/>**

### *Current value*

We have built a strong foundation to enable these future investments:

- An end-to-end solution approach that combines knowledge, technology, and resources to simplify our customer deployments.
- A strong stable of IBM Cognos Performance Blueprints and analytic applications by department and industry,
- An Adaptive Application Framework that enables model-drive configuration and reduces customization and development effort. The framework approach allows organizations to adapt the application over time as needs and users evolve.
- Accessible expertise, methodology, and proven practices.

- Guardian Services for flexible implementation and risk avoidance.
- A modern SOA and open application programming interface.

### *Extensions*

Our investments will focus on extensions to our existing functionality and offerings:

- **Expand our portfolio** of analytic applications and IBM Cognos Performance Blueprints across departments and industries
- **Accelerate the solution lifecycle.** Build more performance management capabilities into our applications and offer further guidance on the prescriptive use of content and technology.
- Continue to build an ecosystem around **our partner solutions.**

- Provide **more than skilled resources.**
- **Certified partner solutions.** Extend our analytic application offerings through programs such as Powered by IBM Cognos software.
- **Add certified partner extensions** to our platform such as augmented administration and migration.

### *Innovations*

We are targeting investment in innovations to improve incremental value and functionality:

#### *Adaptive applications:*

- Focus on the adaptive nature of our applications by building out our Adaptive Applications Framework.
- Foster company uniqueness and advantage versus conforming to the status quo.

- Provide model-driven application configuration and management; lower skills equals faster results.
- Support company-specific content in the adaptive warehouse; automatically generate role and user-specific content from the warehouse.
- Provide support for fast and simplified generation, fine-tuning, and iteration.

- Allow easy extension and adaptation to meet new requirements.
- Predictive analytics for everyone. Incorporate statistical and predictive analytics by leveraging existing investments in models or enabling organizations to create and train their own models; exposing them for all users to gain value from them in an intuitive manner.

#### *Investment impact*

With information sweet spots, IBM Cognos Performance Blueprints, and adaptive applications, organizations gain rapid results from built-in best practices. The result is faster time to value and higher user productivity.



## ***Investment Area 4: Deployment agility***

We are making investments to reduce IT efforts to ensure that your solution is reliable and available, provides fast performance, and is scalable and adaptable. This ensures that your solution will meet your needs today and tomorrow, and that users can have confidence in the system.

Specifically, we are investing in federated architecture and administration to further simplify your IT efforts and leverage your environment. This means using new technology trends and breakthroughs that will enhance the overall solution.

- **Autonomic computing** will make the system more self-aware and able to monitor itself to fix problems and optimize performance.
- **Tuning wizards** will provide configuration recommendations to improve performance,

enable what-if exploration to understand the impact of changes, and even automatically adjust configurations throughout the day (actions based on metric monitoring).

- **Scalability** will address evolving deployment strategies (virtualization, grid computing, appliances, cloud computing) and manage content and user growth through a distributed and federated content store.
- **Provisioning** will enable the review, acceptance, and deployment of updates to servers. We will also enhance change management by managing the data, content, and metadata journey through the system – from application management achieved by automating administrative workflows and the management of the dependency network (lineage for users, system impact analysis for IT) to

capturing the state of content, data and metadata along the journey. (For example, at each point of change or adjustment that is made when closing the books at the end of a fiscal period, or as a formal document storage for reports that leverage existing formal content management systems and processes to approve, register, access and destroy documents.)

- **Continued support for mixed environments** – operating systems, hardware, application servers, data sources, security, portals, and more. We will continue to invest in an open strategy to leverage our customer environments. Additionally, with our access and insights into IBM, we will likely see more optimizations in this area.
- **Extensible UI and granular content evolving effectively into services** will enable an



ecosystem of users, partners, and developers who can build industry, role, and task-specific content and interfaces. It also opens up more IBM Cognos content and UI environments to be leveraged by development environments such as Eclipse or Microsoft Visual Studio®.

#### *Current value*

We have built a strong foundation to enable these future investments:

- Our modern SOA architecture provides a strong foundation for current applications. For example, scalable Web services can be spread out across multiple servers and loosely-coupled for maximum flexibility.
- Our open platform reduces the time to bring on board new innovations. Fast integration of

our SOA-based acquisitions and brand new capabilities are just two examples.

- Our reliable and open architecture is proven over many years.
- The IBM Cognos 8 platform already provides broad conformance across heterogeneous environments.
- Deployment options for an extensible environment provide support for server installs and appliances such as IBM Cognos Now!, virtualization, Software as a Service, hosted environments, and OEMs.
- Broad system application management. With IBM Cognos 8 BI version 8.3, we introduced several system enhancements including task-oriented, centralized system monitoring, system metrics, and upgrade management.

### *Extensions*

Our investments will focus on extensions to our existing functionality and offerings:

- **Ongoing support for heterogeneous environments.**
- **Extending deployment strategies.**
- **Performance tuning wizards.**
- **Expanding the ecosystem** to enable users, partners, and developers.
- **Expanding content management and change management** through impact analysis across the dependency network.

### *Innovations*

We are targeting investment in innovations to improve incremental value and functionality:

- Leveraging the latest concepts and techniques to deliver federated architecture and administration.
- Provide support for autonomic computing (self-installing, self-optimizing, self-monitoring, and self-healing), cloud computing, automated virtualization management, and provisioning to simplify upgrades and deployment.

### *Investment impact*

With enhanced performance management software, users will have confidence in the system. The system itself will be even simpler for IT to deploy, manage, upgrade, and scale – with reduced resource requirements. The organization gains increased reliability, predictability, and availability while reducing costs and time to results.

## Summary

A performance management system aligns, focuses, and connects people across the enterprise; balancing performance with business risk and governance constraints. It is the information-driven link between strategy and action.

At IBM, our investment strategy will help customers see the benefits of a performance management system faster and at a lower cost. Performance management unlocks the business value of information to connect people and their organizational goals. Ultimately, companies gain the tools and insight they need to dramatically improve business outcomes at every level.

Within this broad vision, we have identified the following big technology bets which line up with our investment areas and will guide prioritization going forward.

- **Content and context:** Search, unstructured data

- **User experience transformation:** Social networking, mash-ups

- **Best practices:** Industry, high-value applications

- **Deployment agility:** Virtualization

Cognos, acquired by IBM in 2008, has more than 30 years corporate experience deploying performance management technologies. With solid products, services, solutions, and a strong roadmap for the future we will help our customers continue to lead their industries in high performance.

Now, as part of IBM, there are a lot of existing technologies and research areas which have direct synergy with our stated investment areas, and which may help us accelerate our ability to achieve this vision.





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February 2009  
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#### Endnotes

- 1 See IBM Cognos Safe Harbor statement above.
- 2 [http://en.wikipedia.org/wiki/Net\\_Generation](http://en.wikipedia.org/wiki/Net_Generation)