Building a Business Intelligence Competency Center

ESTABLISHING A CULTURE OF BEST PRACTICE

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Information at business speed

Business intelligence (BI) has become increasingly more strategic in organizations. IT departments are looking for ways to manage and support deployments across divisions, regions, and functions through the standardization of technology. A Business Intelligence Competency Center (BICC) can provide the centralized knowledge and best practices to help make these broader BI initiatives possible.

This white paper will help you strengthen your understanding, planning and communication of the value of a BICC and its usage in your own organization. In addition, this document may help act as a catalyst to assisting you in establishing an initial plan to define your BICC charter.

Business Intelligence Competency Centers: An Overview

What is a BICC?

As BI becomes increasingly more strategic, many organizations are responding by creating working teams of IT and BI users, now commonly known as BI Competency Centers (BICC). A BICC is an organizational structure that groups people with interrelated disciplines, domains of knowledge, experiences and skills, for the purpose of promoting expertise throughout an organization. Also known as a Center of Excellence (COE), Competency Center, or Center of Knowledge, a BICC can help:

- Promote and provide delivery enablement through a consistent set of BI skills, standards, and best practices.

- Enable repeatable successful BI deployment through the development and focus of people, technology and process—in ways that makes sense to an entire organization or division, rather than just a 'single project'.

Why do you need a BICC?

If BI is to extend beyond tactical deployments to become a broader-based solution, a managed, predictable approach is needed. A BICC defines the knowledge, standards, and resources needed to make this happen. A BICC is essential to the strategic deployment of BI because it:

- Maximizes the efficiency, use and quality of your BI across all lines of business.

- Leads to BI deployments that have higher success and deliver more value, at less cost, in less time;

- Drives end user adoption to ensure its success (simply providing BI to an increasing number of information consumers doesn't guarantee more people will use it).

- Eliminates the gap between Business and IT;

- Enables business agility and improved technology management which will help to drive business efficiency.

A BICC enables repeatable, successful BI deployments through the development of people, technology and process—in ways that makes sense to an entire organization or division, rather than just a single project. Processes and procedures are often the most overlooked aspect of BI deployment. These are critical components to sustaining success due to the critical importance of governing how data is accessed, developed and disseminated. This has become an even more important topic over the past few years due to compliance and regulation. Processes and procedures help eliminate duplication of effort, inconsistent results and delays in dissemination.

Driving Value through a BICC

The BICC can also provide tremendous value (tangible and intangible) to IT and Business throughout the entire organization:

- BICC's can help drive a lower total cost of ownership of your Business Intelligence and technology solutions with reduced implementation costs or deployment risk through:

    - The consolidation of best practice functions and services, allowing rapid, repeatable successes from other deployments.

    - The centralization of competency and operational efficiency which maximizes the use of technology resources and assets.

    - The ability to provide strategic BI deployment planning—accelerating rollout success.

    - The management of healthy tension of project prioritization.

- Higher and faster adoption of the complete BI lifecycle and 'single version of the truth' across the entire enterprise which improves user satisfaction and self service.

- The ability to enforce a BI standard through registration and guidance and the ability to identify new opportunities to leverage BI. This results in an alignment of technology to strategic goals (competitive differentiation / regulatory requirements) and a clarity of vision for future coordinated BI.

The BICC also serves to educate key stakeholders about the advantages of employing BI. It further helps to build the lines of communication between regions and

departments to prevent a silo-driven approach to implementation. In doing so, the BI solution will clearly demonstrate its value through the breadth, depth, completeness, accuracy, timelines of information available throughout the enterprise.

Customer Success: U.S. Coast Guard

The U.S. Coast Guard was recently recognized for the successful implementation of its Aviation Logistics Management Information System (ALMIS) initiative, which makes use of Cognos BI. The U.S. Coast Guard's win marks the third consecutive year that a Cognos customer has received a Technology ROI award.

The ALMIS project was designed to consolidate disparate flight operations data—including flight itineraries, aircraft status, maintenance, logistics and supplier information—into a single system, thereby eliminating duplicate data entry, reducing system downtime, and facilitating information access.

By leveraging Cognos business intelligence, the Coast Guard is able to improve visibility into its supply chain; enable transparent data access and facilitate report generation for its air station personnel; and significantly reduce the costs of its aircraft parts requisition process.

According to Nucleus Research, this has translated into:

- $5.2 million in annual savings from reduced system downtime.

- A one-time savings of $3.5 million through streamlined warehouse inventory controls.

- $500,000 in annual savings from the prevention of requisition reorders.

- $2.4 million in annual savings from improved parts forecasting and availability.[1]

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[1] *Source*: Cognos press release, Aug. 2, 2005: Nucleus Research and CIO Decisions Magazine Recognize U.S. Coast Guard With Technology Award for Outstanding ROI Results: http://www.cognos.com/news/releases/2005/ 0802.html

Approaches to Building a BICC

Learning from Success: What are other organizations doing?

The most successful BICCs are formed through a pragmatic development effort that matures over time. Based on our experiences in assisting other customers, we recommend that you

- Start small
- Think strategically
- Systematically accelerate

Because there is cultural impact to the organization, small simple steps will yield greater return as users adopt the BI standard and successes of the BICC and the projects it services drive subsequent success.

What are some objectives in forming a BICC?

- Deliver performance management/decision support capabilities.
- Maintain cost-efficient application and data staging support.
  - Eliminate IT bottlenecks from backlogged projects.
  - Manage the Cognos technical infrastructure.
- Maintain and enhance BI standards, leading practices, methodologies and practice aids.
  - Promote standardized platform.
  - Accelerate BI knowledge and familiarity across the organization.
  - Leverage more critical/advanced Cognos skill sets.
- Provide single point of contact for Cognos relationship.

Tactical Business Intelligence	Strategic BI with Early BICC	Strategic BI with a Maturing BICC
Business driven, specific project focused	Business driven, IT starting to establish standards across projects, promote project registration	Business & IT driven, shared vision for overall solution & methodologies, standardization & registry
Decentralized knowledge experts, departmental metrics	BICC initiated, standards & simple first step focused on best practices	Maturing BICC, full adoption of standards and best practices, established subscription or centralized services
Typically funding per project	Funding still at the project level BICC funded as an overhead budget line item	Project level funding with a consolidated BI roadmap, BICC budgetary line item
"Good enough product" for this project	Best product for multiple projects. Working toward lower overall TCO, vendor relationship enhanced	Best product & services for multiple projects, lowest TCO via process efficiencies & resource utilization, vendor partnerships

What is the scope of the BICC?

Our findings in researching the market and working with our customers throughout the world indicate that the BICC's design will be influenced by business culture, historical deployment activity, specific business pain and measures of success. You may start servicing the business based on the tactical technical aspects of a BICC, such as support and consulting or project start up assistance. Over time, you will mature the BICC model and expand the scope by having the BICC play a far greater strategic and proactive role in your organization. It is important to note that no one size BICC fits all. The BICC scope is based on your organizational needs and the dynamic considerations of human capital, managed process, culture and infrastructure (hardware and software). The graphic below illustrates the elements to address when building a solid foundation for your BICC.

EXECUTIVE SPONSORSHIP / BI STEERING COMMITTEE

PROCESSES & FORMS, BICC FUNDING, ORGANIZATIONAL PLACEMENT

| IT | Business |

VENDOR RELATIONS &

Human Capital

Advise & Consulting

BI Services

Technology / Infrastructure

Best Practice Knowledge Repository

Data Governance & Availability

COGNOS
BICC Program Office

Support

License Management

Managed Process

Infrastructure

Training

Business Analytics

Promotion

Culture

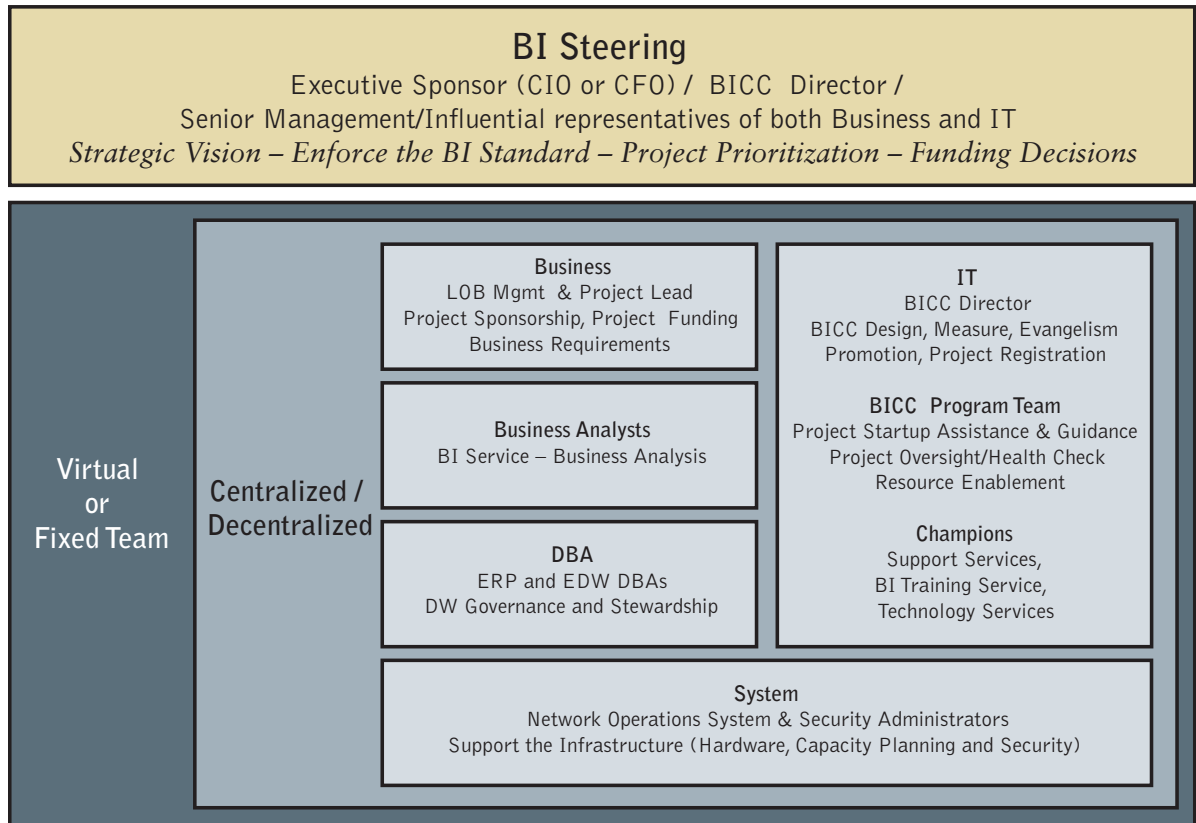## What roles and personnel are involved in the BICC?

Once you have defined the scope of your BICC, you should have a solid appreciation of the skills required to support your endeavor. The right selection of people and appropriate skills are paramount to the success of your BICC. The most successful BICCs maintain a mix of skills where individuals either in of themselves or the as the sum of all parts manage the balance between technical and business acumen. The mandate of your BICC will determine which skills, roles and staffing requirements are needed. As your BICC matures and the scope of its function diversifies, additions and changes to the roles and skills will be required to meet the service and capacity needs of your organization.

As an absolute minimum, the BICC will be comprised of the following basic roles:

- BICC Director/Manager
- Business Analyst
- Technical consultant

The diagram demonstrates some of the roles that are commonly found in mature BICC implementations.

BI Steering
Executive Sponsor (CIO or CFO) / BICC Director /
Senior Management/Influential representatives of both Business and IT
Strategic Vision – Enforce the BI Standard – Project Prioritization – Funding Decisions

Virtual or Fixed Team

Centralized / Decentralized

Business
LOB Mgmt & Project Lead
Project Sponsorship, Project Funding
Business Requirements

Business Analysts
BI Service – Business Analysis

DBA
ERP and EDW DBAs
DW Governance and Stewardship

IT
BICC Director
BICC Design, Measure, Evangelism
Promotion, Project Registration

BICC Program Team
Project Startup Assistance & Guidance
Project Oversight/Health Check
Resource Enablement

Champions
Support Services,
BI Training Service,
Technology Services

System
Network Operations System & Security Administrators
Support the Infrastructure (Hardware, Capacity Planning and Security)

Realize that the personnel you appoint as participants in the BICC (fixed or virtual) may require additional education and certifications to obtain the competency required to service the functions of the BICC. It is important that you clearly define the responsibilities of these roles, including the functions of the Steering Committee, leadership qualities for the BICC Director/Manager, and core roles and traditional responsibilities of the BICC team personnel.

Maturity of a BICC

As the BICC matures, the needs, responsibilities and personnel may change. The diagram below demonstrates the common path that a BICC may follow as it moves through maturity levels:

BICC Lite

1. Assessment of current environments
2. BICC program initiated — advisory team created, long term charter established
3. Communication strategy established (Promote Proclaimed Standard)
4. Common "technical vision" established
5. Standard "technical" installation established
6. Certification program established
7. Escalation point for BI activities and requests for guidance
8. Sponsorship socialized adn/or is put in place

BICC Shared Service

1. BI Solution build best practice established
2. BI Solution deployment best practice established
3. BI Solution support best practice best practice
4. BI shared services introduced based on established practice
5. Data Governance and Stewardship introduced
6. BICC sponsored events
7. Funding & Sponsorship formalized

BICC Central Service

1. Consolidated BI roadmap established
2. Data Governance and Stewardship introduced
3. Data Warehouse / Mart best practice established
4. Product showcase established
5. Centralized services introduced
6. Funding & Sponsoship formalized

The BICC model varies depending on the need of the organization as well as its level of maturity. It may be an IT-only initiative, designed to consolidate the system knowledge necessary to ensure a consistent enterprise strategy for BI. Others are hybrids that include key members of functional business areas and executive sponsors, working closely with the IT teams. Some BICCs centralize at a corporate head office while others are loose networks of regional and divisional IT and business stakeholders.
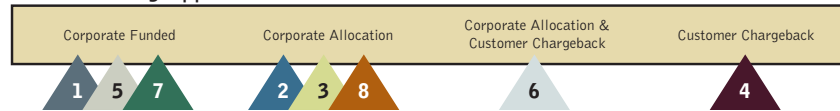
Whatever the configuration, the goal is to create a centralized, consistent approach to implement, support, and manage BI. This can ensure a successful deployment and broader usage across the enterprise so that BI is predictable, repeatable and consistent.
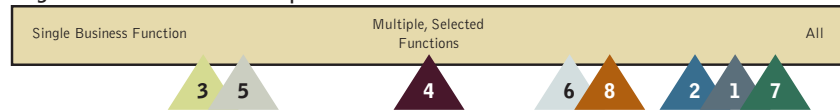
Lessons Learned: BICC Survey Findings

Value the lessons learned and design of other peers and organizations throughout the world. The following small sampling of our surveys conducted around the world will help you appreciate the type of scope and function decisions that customers with mature BICC are making. The triangles represent the organization's BICC characteristics, with each set of triangles with the same number corresponding to an organization (i.e., the triangles marked with "1" in each row represent the characteristics of that organization's BICC).
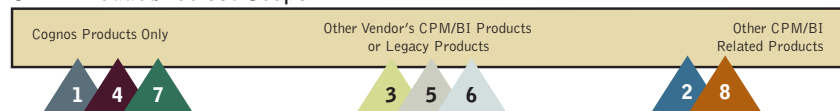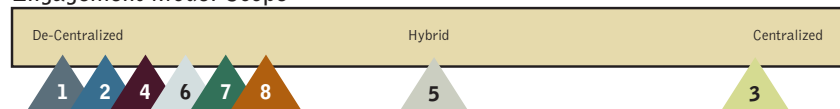
BICC Funding Approach

Corporate Funded	Corporate Allocation	Corporate Allocation & Customer Chargeback	Customer Chargeback
1 5 7	2 3 8	6	4

Organization/Function Scope

Single Business Function	Multiple, Selected Functions		All
3 5	4	6 8	2 1 7

Geographic Scope

US	North America	Global
	4 8	1 2 3 5 6 7

CPM Product/Toolset Scope

Cognos Products Only	Other Vendor's CPM/BI Products or Legacy Products	Other CPM/BI Related Products
1 4 7	3 5 6	2 8

Engagement Model Scope

De-Centralized	Hybrid	Centralized
1 2 4 6 7 8	5	3

Production Support vs. Development Split

100% Product Support	50% / 50%		100% Development
3	4 5 8	1 2 6	7
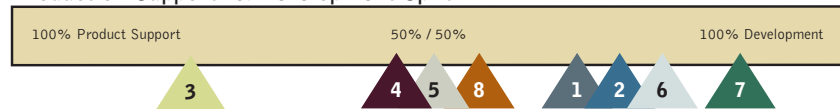
"Functional" Production Support Scope

End-User Self-Service Help Desk Escalation – Functional Cognos Support Relationship	Communications & Training CPM/BI Administration		CPM Process Support CPM Process Performance Monitoring Benefits Realization
1 2 4 6 7	3	8	5
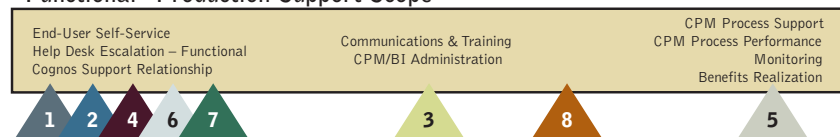
"Technical" Production Support Scope

Application Support Help Desk Escalation – Technical	Data Staging Support	Maintain all IT
1 2 3 6 7	4 8	
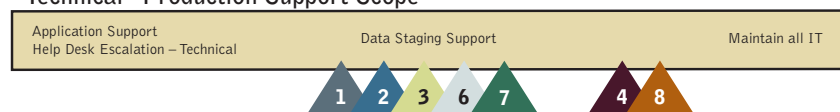
Development Activity Scope

"Consulting" Self-Service Support/Reference CPM Project Team Training`	"Seed" Resources to Projects	Project Ownership of Projects	Minor Enhancements
2 4	1 8	6 7	3 5

Implementing a BICC

The BICC Implementation Journey

BICCs take many forms, depending on the needs, size and objectives of your organization. The setup and alignment of people will be influenced by many factors and becomes easier and clearer as you take the initial steps forward.

In its own right, establishing a successful BICC depends on the right planning and implementation. Organizations that take a measured, well-managed approach are more likely to succeed. Those that do will gain wider support, contribute significant cost savings to the corporate balance sheet, and help take BI to the next strategic level.

An important first step is to review your organization's perception of the BICC and the maturity level of the effort (which may already be in partial progress without it being called out as a BICC).
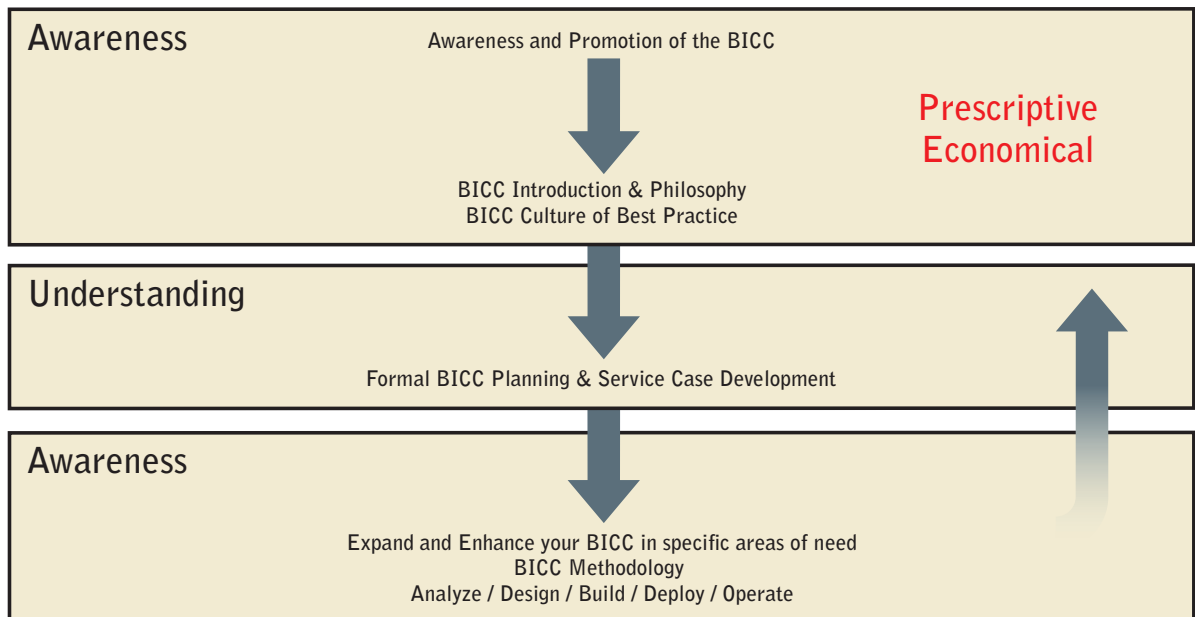
- Is a BICC a new concept to your organization?
- Do you already have a BICC in place and want to improve it?
- Is your BICC effective but you want to expand the offering?

Based on the answers to these questions, you should be able to identify the maturity level of your BICC. Moving through these three phases will help you drive toward enterprise success with your BICC. Are you pushing awareness of the BICC concept and philosophy through your organization? Or have you moved on to formalizing your BICC plan and service case? Or are you ready to or already started the process of implementing your BICC?

Formulating your BICC vision and strategy starts by clearly understanding the BICC concept and determining where and how it could be implemented in the organization as well as understanding its primary goals, objectives and measures of success.

- What is the role you intend of the BICC?
- Have you considered who would be involved with the BICC?
- Have you thought about its structure and form (centralized/decentralized)?
- Have you considered funding and are you aware of the options?
- Is your culture attuned to a competency center philosophy?

Driving Enterprise Success

Awareness

Awareness and Promotion of the BICC

BICC Introduction & Philosophy
BICC Culture of Best Practice

**Prescriptive
Economical**

Understanding

Formal BICC Planning & Service Case Development

Awareness

Expand and Enhance your BICC in specific areas of need
BICC Methodology
Analyze / Design / Build / Deploy / Operate

While a BICC can provide tremendous value, the challenge is how to implement it successfully. With this mind, the following sections discuss an implementation methodology that you can use to help you design and establish your BICC. This is based on the specific maturity level of the organization as well as the design/scope of the BICC. This methodology has been designed to share an approach that you can use today to implement your BICC.

The Cognos Solutions Implementation Methodology

A BICC needs its own level of guidance and management, measures, milestones, etc—the BICC deployment being very strategic, the IBM Cognos 8 BI installation and deployment being more tactical.

Cognos has developed a methodology that can assist its customers in implementing Cognos solutions, including their BICC. This methodology, called the Cognos Solutions Implementation Methodology (SIM) follows the standard implementation phases—Analyze, Design, Build, Deploy, and Operate—and is supported by a project management layer. Delivered through a software tool, the Cognos SIM is your step-by-step guide to conducting a complete Cognos implementation. It contains structured steps, proven practices, tools, role definitions, and tip and techniques.

For use by Cognos consultants, customer and partners, the Cognos SIM helps ensure successful Cognos deployments. The Cognos SIM helps mitigate risk and scales from departmental to enterprise-wide implementations.

COGNOS SOLUTIONS IMPLEMENTATION METHODOLOGY

Analyze Design Build Deploy Operate

Project Management

Customer Value
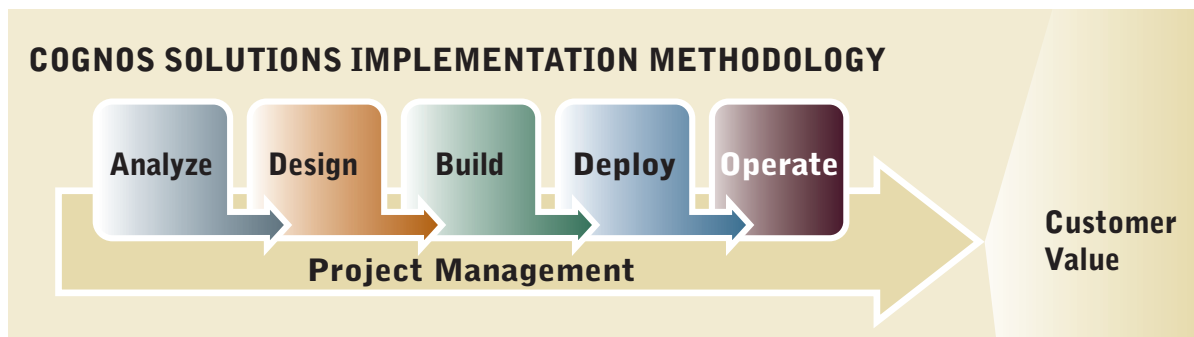
Because configuration and deployment procedures vary according to product line, particularly in the design and build phases, Cognos has developed different implementation roadmaps. The implementation roadmaps guide you through procedures to address the varying tasks, activities, and user needs. There is an implementation roadmap for BI, as well as a BICC Implementation Roadmap.

Cognos BICC Implementation Roadmap

Analyze

In the first phase of development, the organization defines the BICC mission and vision. What are the objectives, guiding principles, assumptions, and cultural considerations?

IT must also gain a clear understanding of the current state of its BI infrastructure. This includes conducting an inventory to establish the cost of multiple BI systems — such as help desk support, administration, and training. They should also address where the biggest business gains and cost savings can be achieved. Ensure that you validate the scope of your BICC based on your existing IT and Business structure, corporate strategies, people competencies and recognize that the BICC will integrate with numerous part of your business.

Following a survey of user needs, the next step is to match potential gains with the business requirements users want to address. The team should further enlist the support of an executive sponsor and know what task the BICC will need to tackle first.

Design

Following an inventory of technology and user needs, IT can begin to define the scope of the BICC and identify service gaps and areas of duplication. These areas serve as the foundation for the BICC business case.

The team plans BI priorities, and identifies the people, technologies, standards, and skills needed. This includes defining what success looks like with measurable goals and predicted outcomes.

Build

Building the BICC team is an important step. Ideally, it represents different areas of the organization. This helps ensure broader sharing of information. A cross-functional team that includes business and IT representatives helps sustain two-way communication between these areas. The team may further benefit from BI experts, who can share their advanced analytics skills with a wider audience.

In terms of building the BICC, a completely new process is not required. The team need only adopt an approach that is already proven within the organization—such as a balanced scorecard, six sigma, or value-based management. Using an existing methodology can accelerate the BICC process and ensure predictable results.

Deploy

The organization should proceed with BI deployment through a series of small steps. Such manageable deployments allow the wider user community to adjust over time. Gaining an early, high-value win for the BICC is also vital to its continued success. It helps motivate BICC staff and builds positive momentum throughout the organization.

However, success on its own is insufficient to secure the existence of the BICC. The team will need to promote this early success back to the organization to support further BI deployment.

Operate

Once in operation, the BICC should demonstrate how it's helping the organization meet established BI metrics. Many organizations conduct a rigorous ROI and TCO analysis of BI initiatives to determine their payback, and to formalize the process improvements enabled by the BICC.

Through updates and communication of BICC success stories, the team continues to ensure the community is aware of what it's doing and the wins it is generating for the business. Success breeds success!

Coupled with enterprise BI deployment, the BICC will want to begin a decommissioning schedule for those legacy BI applications that don't meet the standards it has established. BICC leaders should also continue to stay on top of issues and changing business requirements through ongoing surveys with key stakeholders.

Cognos Professional Services

Cognos offers services that can help you in establishing a Business Intelligence Competency Center in your organization. These services can assist you in the development or your BICC vision and strategy through to offering services that can help you establish a culture of best practices and an operating BICC providing a solid foundation for your BICC.

This proposed initiative can take that process one step further by providing services to help deploy IBM Cognos 8 BI in your production environment and facilitate the needs of your current project(s) to ensure they get started on the right track from both an infrastructure and administration perspective.

- For more information on the services available from Cognos, please Cognos Professional Services at **BICC@Cognos.com** or visit **http://support.cognos.com/bicc**

- For presentations and literature on BICCs, visit the Cognos Innovation Center (free registration) at **http://www.cognos.com/innovationcenter/**

- Subscribe to the Cognos BICC User Group. Contact **BICC@Cognos.com**

Summary

As BI becomes increasingly more strategic, IT departments are looking for ways to manage and support deployments across divisions, regions, and functions. A BI competency center can provide the centralized knowledge and best practices to help make this broader BI initiative possible

n its own right, establishing a successful BICC depends on the right planning. Organizations that take a measured, well-managed approach are more likely to succeed. Those that do will gain wider support, contribute significant cost savings to the corporate balance sheet, and help take business intelligence to the next, strategic level.

About Cognos, an IBM company

Cognos, an IBM company, is the world leader in business intelligence and performance management solutions. It provides world-class enterprise planning and BI software and services to help companies plan, understand and

manage financial and operational performance. Cognos was acquired by IBM in February 2008. For more information, visit http://www.cognos.com.

For more information

Visit the Cognos Web site at www.cognos.com

Request a call

To request a call or ask a question, go to www.cognos.com/contactme. A Cognos representative will respond to your enquiry within two business days.

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