

BI Competency Centers for pharmaceutical companies

Best practices from the real world

Introduction

Lower margins, an increasingly competitive market, and regulatory compliance are driving pharmaceutical companies to find greater efficiencies and reduce costs. To optimize performance, they need insight into all aspects of the business—to see what’s working, what’s not, and improve results.

By leveraging corporate data systems and providing timely information, business intelligence can significantly improve decision-making and performance. As such, BI is becoming strategic to a growing number of pharmaceutical organizations.

But tactical BI deployments aren’t sufficient. Companies need enterprise-wide BI to gain a common baseline for managing the business—from clinical R&D to sales and marketing and everything in between. A BI Competency Center (BICC) can provide the centralized knowledge and best practices to help make this broader initiative possible.

Some of the world’s most successful pharmaceutical companies already recognize the value of BICCs. For them, it has proven to be the best way to deploy and manage enterprise BI across the business.

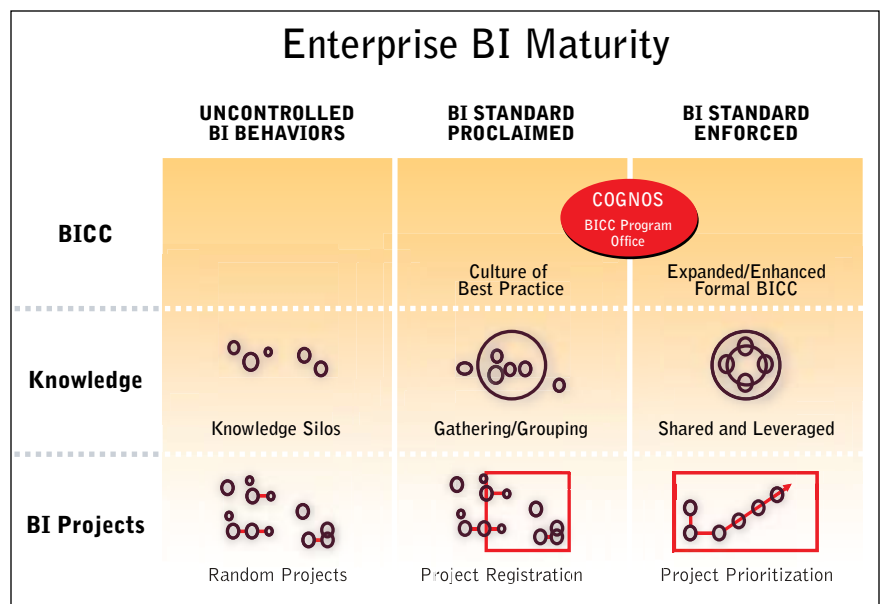
Recognizing the importance of BICCs, the IBM Cognos® Innovation Center for Performance Management recently conducted a study of four major pharmaceutical firms. The goal was to understand and document the real-world challenges of designing, establishing, and maturing a BICC—from their unique perspectives. This white paper focuses on the results of that study.

BI Competency Centers: Why do we need them?

By leveraging corporate data and providing timely information, BI can significantly improve business decision-making. But in reality, BI often falls short of its potential. Studies show that up to

70 percent of organizations today are in what is characterized as “uncontrolled BI behavior” mode—they typically make purchases and decisions based on project-specific requirements.

This results in stovepipe implementations. Instead of a common BI platform, IT departments face a proliferation of BI tools and processes that are costly to manage and yield inconsistent information across the business. And BI is typically confined to a small group of technical users, so a broad segment of the organization misses out on critical business data.



Most organizations today still make silo-driven project and purchasing decisions, resulting in uncontrolled BI behaviors.

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Participants in the pharmaceutical study shared a common starting point: a decentralized, heterogeneous BI environment and tool proliferation—some with more than five different BI tools and multiple independent projects. One respondent cited cost containment in

terms of IT purchases and maintenance as a top business challenge.

Additional challenges shared by participants:

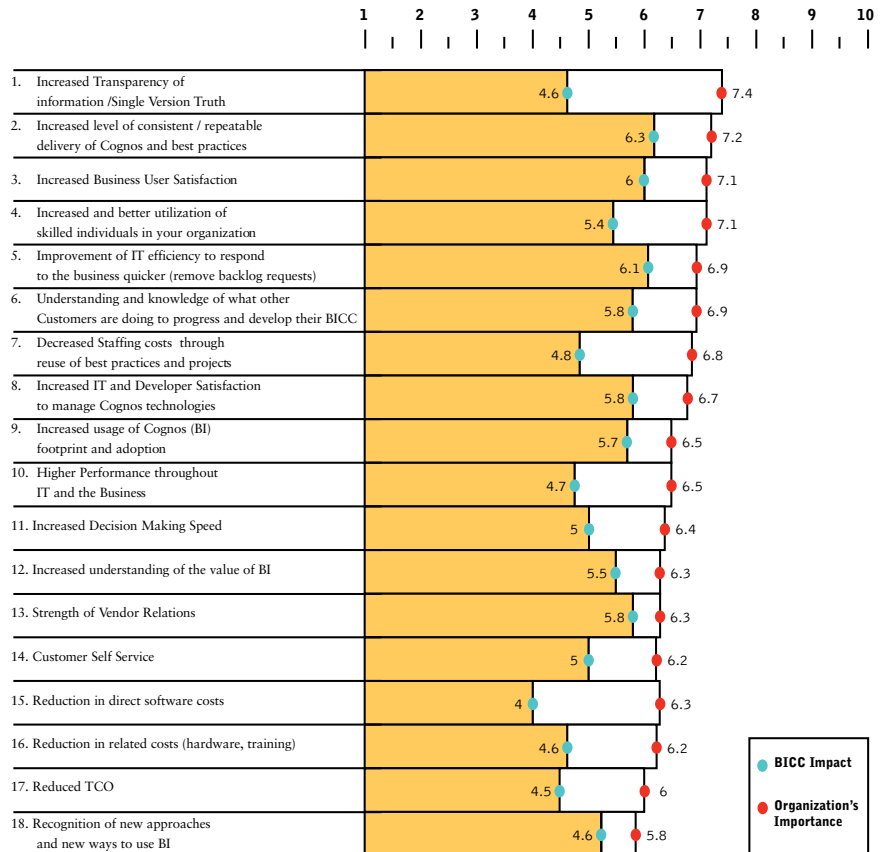
- T bottlenecks and backlogged projects.

- Tool suite complexity.
- Training costs.
- The need for a common reporting environment, scalability, and adaptability to changing business needs.

Business challenges			
	Significant business challenges	What changes, actions, or programs are you taking to address these challenges?	Key business metrics
Pharma A	<p>Effective management of numerous product launches to be competitive while keeping the lights on and maintained for existing projects and customers.</p> <p>Focus on company growth (in both Consumer and Genetics)</p> <p>Meet compliance and regulatory requirements</p>	<p>S&M reporting (analytics)</p> <p>Aggregate Spend Project to manage costs by using IBM Cognos tools</p> <p>Continued BICC focus to better serve the business and organization</p>	Information not provided
Pharma B	<p>Meeting the increasing demands of the reporting complexities driven by the business needs</p> <p>Cost containment from a purchase and maintenance perspective . . . evolving to a smaller number of tool that “do it all” rather than supporting many tools</p> <p>Having the business understand and constantly co-promote the approved/standard tool suite</p>	<p>Working with IBM closely (development partnership) to develop a much stronger tool suite</p> <p>Developing strategies to deliver more focus on those tools that provide more business value and lessen focus on tools that provide the least value</p> <p>Delivering significantly more training for both business and IT</p>	<p>ROI</p> <p>On-time delivery of projects (has to be faster than before)</p> <p>Quality of project deliverables to the business (i.e. < 5% rework)</p>
Pharma C	Information not provided	Information not provided	Information not provided
Pharma D	<p>Supporting company’s global growth</p> <p>Effective clinical trial execution</p> <p>Sales force responding quickly to market changes</p>	<p>Building global, scalable, COMMON reporting environment – A single place to go (URL) for all reporting regardless of where (geographically) the data lives</p> <p>New tools to predict trial enrollment; new CPM initiative to drive performance</p> <p>Cost-effective reporting and analysis for the sales force and brand managers</p>	<p>We are not that advanced yet as to how our BI initiatives support specific metrics</p> <p>This is something the competency center is working to improve</p>

Most study participants ranked BI standardization as their second or third most important strategic priority. All have selected IBM Cognos solutions as their BI standard.

These drivers are consistent with other BICC studies conducted by the IBM Cognos Innovation Center and IBM Cognos BICC thought leaders, and show commonalities with other organizations worldwide.



Common issues that drive organizations toward standardized BI implementations

Instead of maintaining the status quo, however, the four organizations in this study saw their stovepipe IT environment as a barrier to success. This was a key factor in the implementation of their BICCs and the drive toward a common, enterprise BI platform.

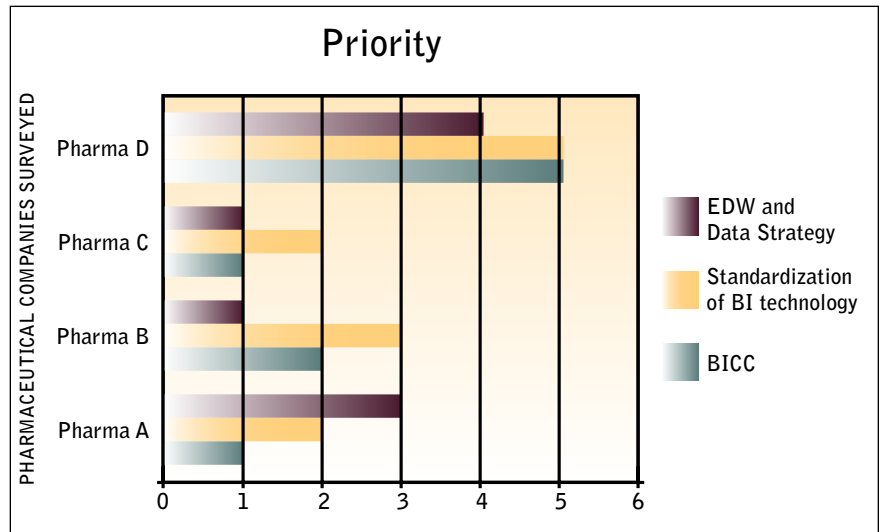
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Standardization: From many to one

How do you go from costly, tactical BI to a broad-based, consistent source of business information? The answer is BI standardization—reducing many tools to one. Standardizing on a single, enterprise BI solution provides benefits that include:

- Reduced total cost of ownership.
- Increased transparency and consistency of information.
- A foundation for managing performance across the organization.

Standardization reduces system complexity by addressing the problems of a multiple-tool, multiple-project BI environment. And more organizations are seeing its value. Most study participants ranked BI standardization as their second or third most important strategic priority. All have selected IBM Cognos solutions as their BI standard.



Priorities of strategic value

More than technology, standardization is also about dealing with people and processes. The IBM Cognos Innovation Center thought leaders suggest that companies consider these organizational dynamics. As such, mature organizations are starting to enforce standards in terms of the way BI is deployed and adopted

enterprise-wide. This approach helps ensure more people will value and embrace the technology. In many of the leading organizations around the world, standardization strategies are aligned with enterprise BI, enterprise architecture, and enterprise data warehouse strategies to form a complete long-term vision.

Factors to consider when standardizing BI				
People	Process	Promotion	Performance	Product
Knowledge reuse	Knowledge share	Technology Showcase	Delivery Enablement	Definition of BI
Capabilities	Methodology	Communication	Functions	BI usage profile and footprint
Collaboration	Guidelines	Corporate goal alignment	Geographic	Tools and technology
Community	Procedures		Data governance	Usage scope
Stewardship	IT governance			
Competence				

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BI Competency Centers: Enabling standardization

The main function of a BICC is to enable standardization. First, it promotes and delivers a consistent set of BI skills, standards, and best practices. Second, it enables repeatable, successful BI deployments through the development and focus of people, technology, and processes—taking BI from a single-project mentality to a division or whole-organization view.

The naming of a BICC is also based on each organization's cultural environment and, in some cases, the level of maturity of the function. In the study, each company used a different naming convention. These range from "BICC" to "Shared Services for BI" to "Enterprise Reporting Services." In some cases, the BICC is not called out at all. It is already an implied function in terms of the way IT and business operate, as a result of strong historical IT governance.

As IBM acknowledges, no one size BICC fits all. The scope and design are driven by organizational needs and considerations of human capital, processes, culture, and infrastructure. But whatever the configuration, the goal is to create a consistent approach to implement, support, and manage enterprise BI—to the greater benefit of the business.

The four organizations in the study achieved results by maintaining their goal, taking a step-by-step approach, and building on success. And by breaking down traditional barriers associated with tactical BI usage, each has gained a number of benefits:

- An expanded opportunity to deliver performance management capabilities to the organization.
- Cost-efficient application and data staging to eliminate IT bottlenecks from backlogged projects and proactive management of the BI technical infrastructure.
- Use of BI standards, leading practices, and methodologies to accelerate BI knowledge and familiarity across the organization and leverage critical IBM Cognos skill sets.
- Enterprise BI deployment and usage to drive efficiency and competitive differentiation.

One organization studied outlined their mission as follows: 'To provide leadership and ongoing support for shared business intelligence activities to enable the implementation of cost-effective, innovative, flexible, and scalable business solutions.'

Drivers of the BICC	Pharma A	Pharma B	Pharma C	Pharma D
Deliver performance management (BI) decision-support capabilities	1	2	6	7
Leverage more critical/advanced IBM Cognos skills		8	5	2
Eliminate IT bottlenecks form backlogged projects		9	8	
Maintain cost-efficient application and data staging support		1	4	5
Maintain and enhance BI best practice and standards	3	3		3
Manage the IBM Cognos technical infrastructure	2	6	1	4
Accelerate BI knowledge and familiarity across the organization	4	4	7	6
Promote standardized platform of BI technology	5	5	3	
Provide single point of contact for IBM Cognos relationship	6	7	2	1

Startup and maturity of a BICC

Mission statement or vision

How did the organizations in the study get started? Most began the process of building a BICC with a mission statement or vision, and formalized their strategy plan or charter from there.

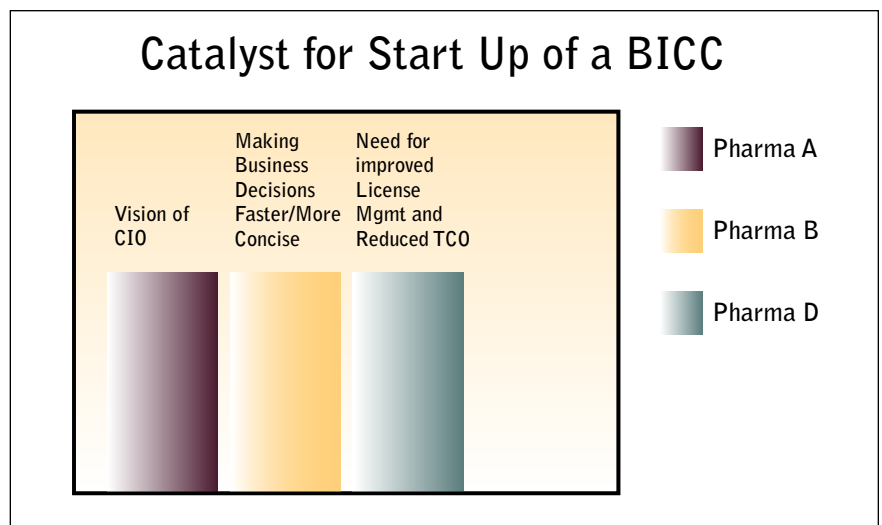
One organization studied outlined their mission as follows: “To provide leadership and ongoing support for shared business intelligence activities to enable the implementation of cost-effective, innovative, flexible, and scalable business solutions.”

Another characterized their mandate in this way: “We are the ‘Center of Excellence’ for data warehousing and business intelligence. Beyond building the framework to enable and enhance BI, our role entails providing project and

technical support to other IT and business project teams, maintaining the integrity of the overall solution, and expanding the existing user BI skills across an increasing number of applications.”

The strategy plan or charter continues to inform participants’ BICCs as they

mature and evolve. And they project out from one to five years. One respondent said the BICC director updates the strategy plan yearly to align with the project approval cycle. It is also a critical tool for communicating a consistent vision and goals to executives and peer management.



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Building the competency center: Analysis and design

Once the strategy is defined through a charter or set of goals, the BICC development team takes the next step: analysis and design. The team first enlists a leader to drive the initiative. The leader provides knowledge and expertise to help the team plan BI priorities and identify issues like funding, people, technologies, standards, and skills needed.

In its white paper, *Building a Business Intelligence Competency Center*, IBM recommends that organizations also enlist the support of a BI steering committee and/or executive sponsor. In the study, the CIO or IT VP typically served as executive sponsor. And most respondents had a steering committee in place. In one case, the committee included an IT management team, IT steering committee, VP of Shared Services and Enterprise Architecture, and business liaison.

The BICC team also depended on experienced staff and leaders within and sometimes outside the organization to help define concepts and support development. But opinion was divided on whether it should be a top-down or

bottom-up initiative. The split between approaches is consistent with other IBM Cognos studies, including the roundtable proceedings document *Building Your BI Competency Center*. (For a copy, visit: <http://www.cognos.com/innovationcenter/>)

“The Functional Lead resides in business but wears both hats, and plays a key central role in communication and interpretation.”

Participant in IBM study of effective BICC strategies

	PROS	CONS
Top-Down	<ul style="list-style-type: none"> Political support makes change happen “Instant” internal customer buy-in; their options for data are curtailed Implementation is on a schedule driven by the top 	<ul style="list-style-type: none"> You will be the agent of “Knocking down” existing systems – making waves with future customers Executive sponsors, customers, many have different opinions of what should be the priority and Lost flexibility to listen & act on good ideas that happen in a process
Bottom Up	<ul style="list-style-type: none"> Fosters the internal champions useful to see an idea & maintain momentum once sold Opportunity to make mistakes, learn from them & listen to users Owning the schedule gives you greater flexibility 	<ul style="list-style-type: none"> Even with internal support, tricky to secure executive buy-in Resources scarce & hard to secure You compete with the rest of the organization for priority.

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Implementation

Based on other BICC studies, the IBM Cognos Innovation Center recommends that organizations proceed with deployment through a series of small steps. This allows the user community to adjust over time. And gaining an early, high-value win is vital for the success of the BICC. It helps motivate team staff and build positive momentum.

One respondent said they started with two key showcase projects, which “blazed the technical path” by hooking onto something that was valued by the business. “It has been an effective means of letting the BICC evangelize and drive growth by promotion of the project successes,” he noted.

But as another participant cautioned, the process has to be carefully managed: “It is a difficult balance to encourage adoption of your services while managing the increased workload. It is very possible to become a victim of your own marketing.”

Communicating progress and value to the user community is also important. One team developed a content-rich portal and conducts semi-annual operational reviews to showcase results. It also depends on the organization’s IS Functional Lead as a source for feedback to and from the business community.

“The Functional Lead resides in business but wears both hats, and plays a key central role in communication and interpretation.”

Maturity

Most participants described the development process as pragmatic and sometimes slow, taking several years to establish their BICCs. This is to be expected, given the strategic and tactical nature of the initiative—particularly in terms of the cultural impact and the small steps required to achieve results. The BICCs in the study are now at a stage where they’ve been operational for one or more years. In all cases, they focus on both IT and business initiatives.

When mature, one BICC in the study assumed a much more central role in the business. “We are a mature service enablement organization. Before, our engagement in projects was limited to supporting the primary developers. Now we will be the primary developers for the enterprise’s most strategic and high-risk projects.”

What value have the BI Competency Centers brought to their organizations?

While a number of benefits were cited, the most common were as follows:

- Increased business user satisfaction
- Increased decision-making speed

- Decreased staffing costs through reuse of best practices and projects
- Reduced TCO
- Higher performance throughout IT and the business
- Predictable, repeatable, consistent, and dependable deployment and use of BI
- Alignment of technology to strategic goals

One participant outlined a number of value propositions for their BICC including greater productivity, economies of scale, data security, business agility, and efficiency. In the latter case, “we enable customers to focus on their core business purpose, rather than BI activities, therefore using their resources more efficiently.” He added that efficient use of resources is critical as the company deals with an increasing workload (e.g., more research, clinical trials).

Functions of a BICC

Once they are in operation, what functions and services do BICCs provide? In terms of the study, they strike a balance between business support and technology management—the common elements being training, issues resolution, project consulting, tool support, data stewardship, and migration management.

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“We strive to provide a common, global, secure Web-based reporting environment for the company to satisfy all users’ business intelligence needs,” said one respondent. The BICC team manages and administers a central infrastructure and serves as a BI knowledge repository. It offers technical education (training and seminars), tool evaluation, how-to advice, and development assistance on strategic projects.

Another BICC provides a global platform for the sharing and reuse of common BI capabilities and services. The idea is to “aggressively move away” from departmental project silos through a central governance model. “Rather than trying to force the business to standardize, we have provided the course of most return so they can simply bolt on and utilize the technology, infrastructure, and deeply skilled people.”

Another competency center offers “expertise to hire” and primarily focuses on connecting technology and business needs to drive value. At present, it supports the organization’s commercial pharma business units but plans to expand. It too let’s each business unit “bolt on” to a central BI infrastructure to take advantage of technology and best practices.

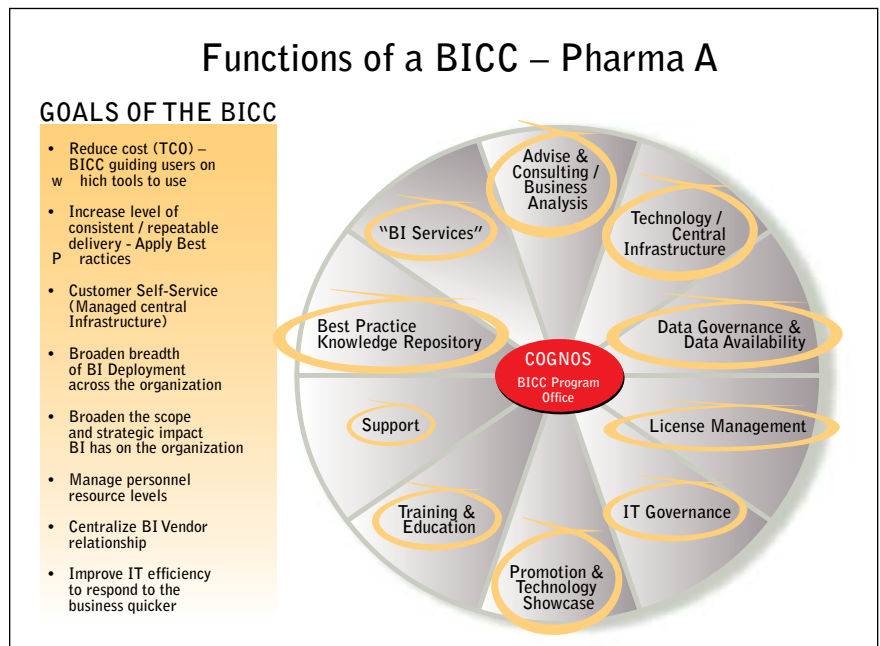
Engaging the business

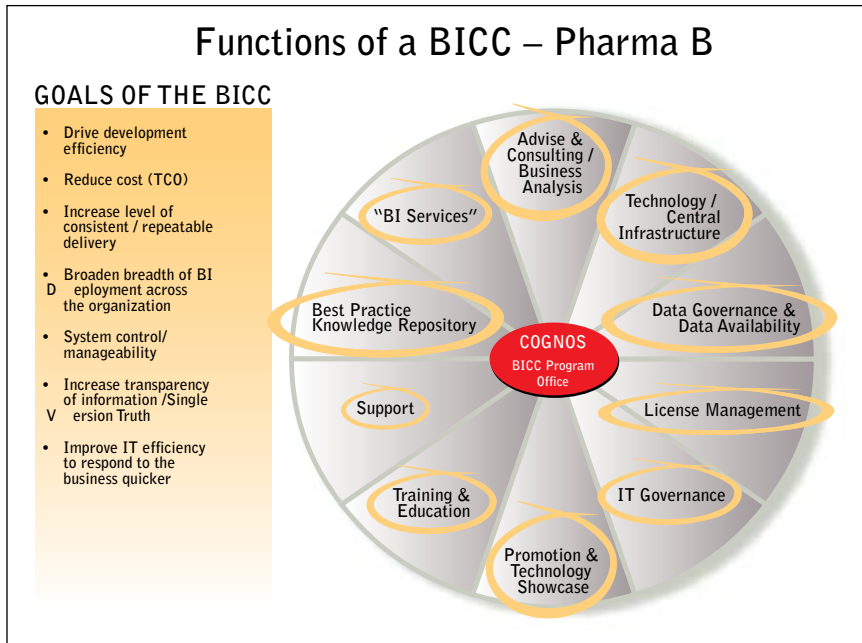
One BICC engages with users in two ways. First, business units can research their own solutions. In this case, if a project goes to RFP and products are proposed, the BI shared service ensures the organization looks beyond features and functionality to consider “the bigger picture and ROI/TCO.”

Alternatively, business users can outline their requirements and the BI shared service teams will then evaluate and propose the best fit. “The process starts by asking the business to tell the BI shared services team what they

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Participant in IBM study of effective BICC strategies





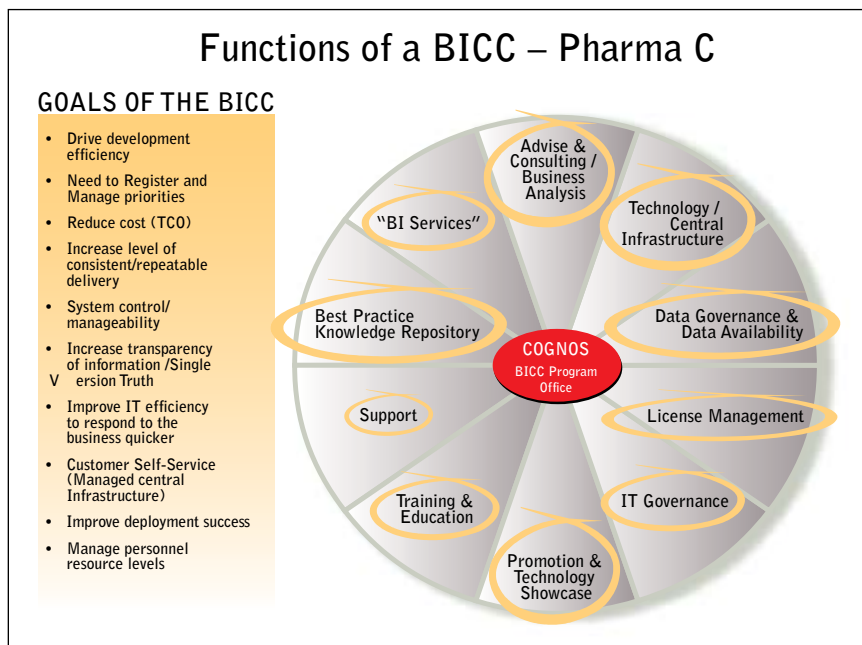
require. The team is then able to deduce the right technology fit and make recommendations regarding the design and use of technology. Shared Services is aware and aligned with corporate strategies to know where and how this could contribute.”

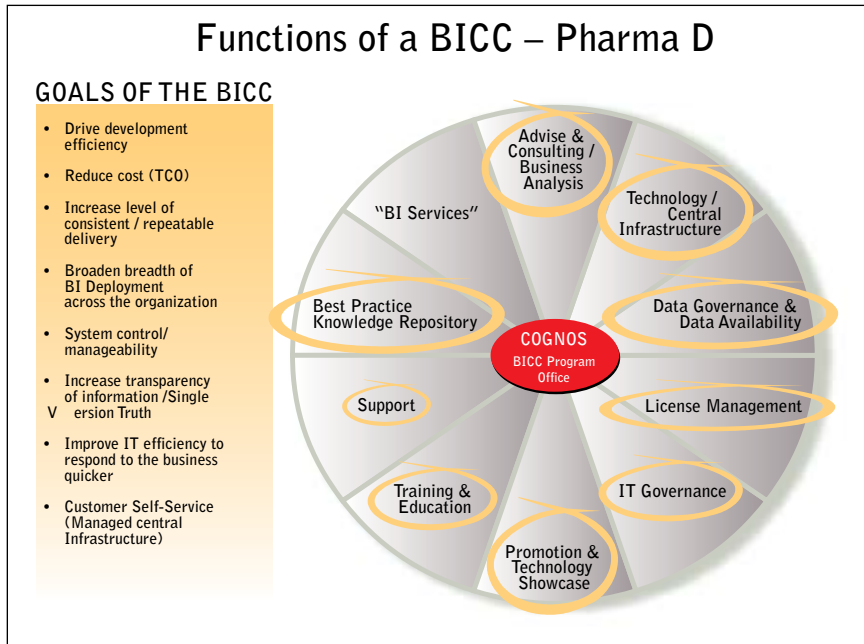
To make this latter process work, the team depends on a client services liaison who resides on the business side as a functional area lead. This individual qualifies the requirements and project need, and helps align the project initiative to corporate strategy.

Vendor and license management

The BICCs in the study all provide a central point of contact for software vendor and license management. In fact, the need for improved license management was a key driver in building one competency center.

For another BICC, the ability to centralize vendor negotiations, relationship management, product procurement, installation, and release management creates real value for the company. It reduces redundancies, streamlines efficiencies, and lowers costs.





management. He added that a virtual shared service organization can better serve the user community: “We have a concept of a virtual service management organization, whereby we have resources that sometimes work across services to deliver a solution rather than having our customers use these services independently.”

Another noted the value of leveraging other competency centers and services internally: “We have an enterprise data warehousing and integration competency center that sits in the same organization. They are critical when you encounter a project that requires data warehousing, which constitutes about 10 percent of our projects.”

“The process starts by asking the business to tell the BI shared services team what they require. The team is then able to deduce the right technology fit and make recommendations regarding the design and use of technology.”

Participant in IBM study of effective BICC strategies

Central or shared services

The study shows that BICCs offer a host of BI services, either through a shared services model or central model. A shared services model provides a common technical environment with associated services to support that technology. A centralized structure takes this one step further by providing additional services to support, manage, and maintain the project cycle as a core function. In the study, most BICCs are shared services or a hybrid of both.

One group has made a conscious effort to develop a shared service model across multiple projects. The BICC links with other service groups such as ETL, quality assurance and testing, solutions architecture, and document

Staffing and structure

The right selection of people and skills contributes to the success of the BICC. The mandate determines which skills, roles, and staffing requirements are needed, but the most successful teams manage a balance between technical and business acumen.

At minimum, mature implementations commonly include a director or manager, business liaison, and technical consultant. But while they serve business users, the BICCs in the study reported ultimately to CIOs and were part of the IT organization. In one case, the BICC also reported to a shared services operations VP.

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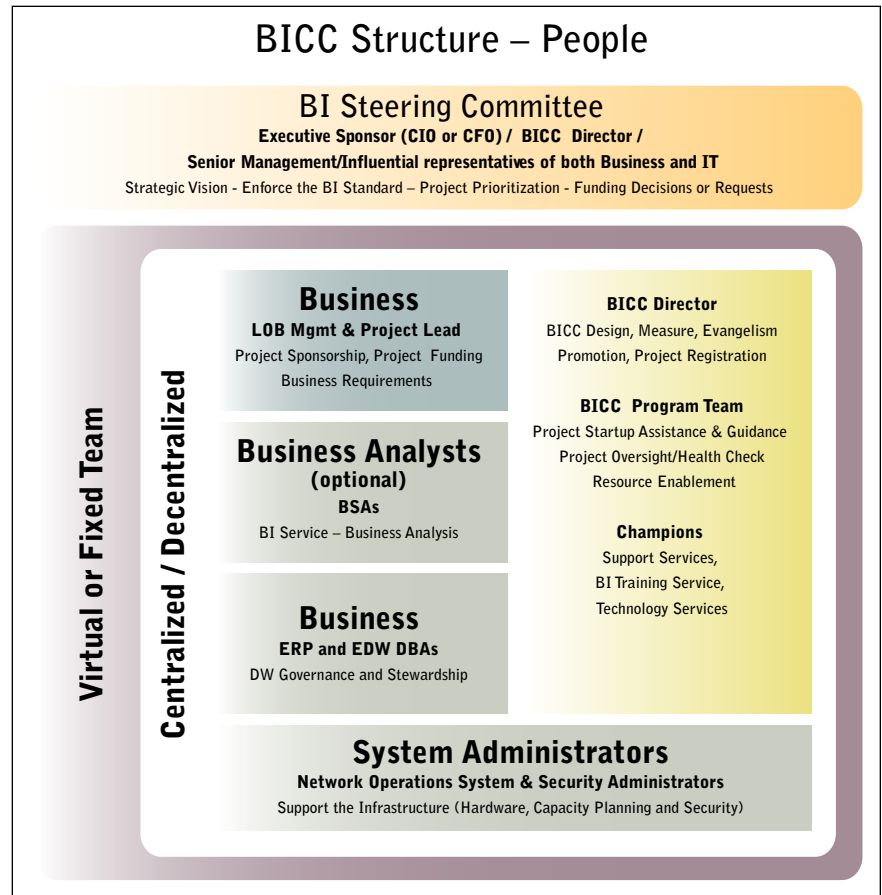
Another aspect of staffing is whether the competency center assembles when needed or is a permanent fixture. Most straddle both—a smaller fixed team that can grow (usually through contractor headcount) depending on project and capacity demands.

“We started with two people and one Cognos professional services person. We have added one full-time employee each year since,” said one respondent. Another team ranges in size from four to eight people, depending on project need. When fully staffed, it consists of three full-time employees, two permanent and two semi-permanent contractors, and a co-op student.

Culture

Organizations with successful BICCs agree that culture has a major bearing on both the design and function of the competency center as well as adoption of BI throughout the organization.

It appears that study participants have managed to integrate their BICCs within the corporate culture, with a minimum of resistance. This may be due in part to their managed rollout approach and valued service offerings as well as showcasing of successes and business value—which yields greater support throughout the organization.



BICCs are comprised of people with a wide range of skills and experience.

One BICC in the study was easily accepted after a few projects had been proven. “If you deliver what they need, they’ll come back.” And as another participant suggested: “By having available services and offerings that can more effectively service the business rather than having them do it all themselves, the promotion of the BICC easily occurs.”

If anything, the challenge is getting the word out to more users in the organization. One BICC uses a monthly shared services newsletter, quarterly “tech talk” sessions, and presentations to showcase progress. But the team admits it could use more project promotion. Others also plan to step up their communications to further promote success.

One respondent did note some issues around offering centralized services: “Many divisional IS departments and others were used to handling their overall projects. Because of it, they have not learned to define their demands very well. This issue had been masked in the past by a lot of rework but still getting the project completed.”

Funding

Funding is an important part of the BICC equation, both at the startup stage and when the initiative is operational. IBM notes the importance of funding to support the functions of the BICC as well as personnel. There are intangible expenses associated with the formation of a competency center too, so funds are also needed to manage housekeeping and setup costs.

Organizations tend to use one or more common funding models:

- **Central budget.** This is where the initiative is part of the IT budget or an overhead item, a popular approach in the early stages of development.
- **Subscription-based.** In this case, cost is shared across the organization. This model often appears with mature BICCs.

- **Billing queries.** In this case, a fee is charged for each activity.
- **Services-based.** This requires understanding of usage in the organization.

One participant said they had a cost center budget for their BICC. This evolved after transitioning from a free service to a billable service over time. Another noted that venture capital and project money was needed to get up and running. After a few initial wins, funding was formalized through an IT budget, but the team still needed project money to cover the shortfall.

Some competency centers don't charge for BI project estimates or solution architecture proposals. They see such activities as an opportunity to inform new users about the potential of BI and budget requirements, and further the standardization agenda.

One respondent said the team charges for proof-of-concepts and pilots, projects, and ongoing work. And the engagement model drives the actual cost of each project: “Are we just providing dial tone on existing BI projects or are we architecting the data structures and reporting?”

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As another example, one participant broke down funding in this way:

- Licensing and hardware is a sunk cost (no charge back in most cases).
- If a business unit or project has the capabilities and skills (i.e., developed a solution), they can bolt their project onto the central infrastructure (no charge).
- If the business unit requires assistance from the BICC team (any role including BI services), they are charged based on a blended rate for services provided (the flat blended rate is applied across all shared services).
- Services are charged for upfront exploration and estimates of projects. The charges incurred are applied back to the project if it goes ahead.

Summary

For pharmaceutical companies, market dynamics are calling for more efficient and effective ways of operating—and IT solutions such as business intelligence play a critical role in this new reality.

By leveraging corporate data systems and providing timely information, enterprise BI can provide valuable insight into all aspects of the business. Deeper insight leads to informed decision-making, better performance, and competitive advantage.

A BICC defines the knowledge, standards, and resources to help take BI to this next strategic level. The people staffing these centers and their supporters are both enablers and missionaries—showing the value of information-based decisions and helping make it happen.

As seen in this pharmaceutical study, when it comes to building and operating a BICC, no one size fits all. But there are common steps organizations can take to ensure success:

- Developing an integration plan and strategy
- Setting realistic goals and timelines
- Establishing executive sponsorship and funding
- Balancing resource capacity with demand
- Recruiting the right mix of business and technology skills
- Choosing the right delivery model and structure
- Driving awareness of BICC value through promotion and success

And regardless of their size and scope, BICCs provide many key benefits including consistent BI deployment, better data security, reduced TCO, and greater productivity—all helping pharmaceutical companies to gain

The engagement model drives the actual cost of each project: 'Are we just providing dial tone on existing BI projects or are we architecting the data structures and reporting?'

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greater business efficiency with less effort.

The true value of BI is in making decisions easier and consistent for everyone across the business. BICCs can help companies on their journey toward enterprise BI—which ultimately brings more reliable and consistent business information to the greatest numbers of people.

IBM Cognos BICC Services

“We have found the best way to bridge technology with business issues and support BI throughout our company is to form a BICC. Cognos has given us a lot of support in this area already, and we look forward to the new content and knowledge-sharing opportunities through its enhanced focus on building enterprise-wide competency.”

*Ton Van Den Dungen, Manager,
Business Intelligence and Control, Eneco Energie*

Establishing a successful BICC depends on the right planning and implementation. The IBM Cognos BICC Service provides a roadmap and services to help customers design, deploy, and operate their own BICCs based on their unique business needs.

Based on the proven IBM Cognos Solutions Implementation Methodology, the initiative includes a full spectrum of services, proven practices, and expertise to make it easier to maximize BI value, improve enterprise performance, and drive user adoption.

IBM consultants work directly with customers to either build a BICC from scratch or optimize an existing practice. The service helps organizations formulate a BICC vision and strategy, build awareness, set program objectives and measures, establish an effective framework, and become self-sufficient through best practice knowledge transfer.

To learn more, please visit <http://support.cognos.com/en/consulting/index.html>

About the IBM Cognos Innovation Center for Performance Management

The IBM Cognos Innovation Center was established in June 2004 to advance the understanding of proven performance management best practices and enabling technologies. Staffed by experts in planning, management processes, and technology, the Innovation Center partners with more than 500 IBM Cognos customers, academics, industry leaders, and others who want to accelerate adoption, reduce risk, and maximize the impact of technology-enabled performance management practices.

Depending on their area of interest, members focus on advancing performance management practices or business intelligence competency, gaining insights from experts and peers who have experienced similar challenges and paths to success. To learn more, visit <http://www.cognos.com/innovationcenter/businessintelligencecompetency/>.

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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.

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Endnotes

- 1 *Cognos Expands Innovation Center Mandate to Include Business Intelligence Competency*. Cognos News Release. June 26, 2006.