Business Intelligence Competency Center

Creating a successful business intelligence strategy with SAS
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Introduction

Business intelligence is reaching more and more constituents inside and outside of your organization. Information demands, data volumes and audience populations are growing and will continue to grow exponentially. As the demand increases so does the imperative for a sound strategy that meets your short term needs and provides the foundation to meet your long-term vision.

Current spending is changing focus from products that help control costs to those that can help grow the business. A recent Gartner survey of 1,300 CIOs in more than 30 countries around the world reveals that CIOs plan to increase spending on BI by an average of six percent in 2005. According to the survey, CIOs believe that over the next few years as companies move away from cost-cutting initiatives, the strategic use of business intelligence combined with a focus on improving business processes will be a significant factor in IT’s contribution to business growth.

“The pressure from cost cutting and compliance has put a greater focus on BI, but businesses are still using it very tactically,” says Frank Buytendijk, Research Vice President at Gartner. “Successful organisations realize that having a real vision for BI is the key to business performance and they use information as a resource implemented in their business culture. BI applications require a clear and intimate understanding of the business itself and it is only by working on business and IT issues in tandem that the real value of BI is realized.”

In order to overcome these common issues, more and more organizations are forming a Business Intelligence Competency Center. This more holistic approach to business intelligence encompasses more than just the technology – it is part of an overall information strategy.

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¹ Gartner Press Release, ‘Gartner Identifies the ‘Fatal Flaws’ of Business Intelligence and Advises Organisations on How to Avoid Them” Feb. 3, 2005
The case for a Business Intelligence Competency Center (BICC)

A Business Intelligence Competency Center (BICC) is a permanent formal organizational structure, which includes representatives from the business and IT, to advance and promote the effective use of business intelligence to support the organization's business strategy. Based on a recent survey performed by BetterManagement.com, organizations with a BI Competency Center see the following benefits:

- Increased usage of business intelligence (74 percent).
- Increased business user satisfaction (48 percent).
- Better understanding of the value of BI (45 percent).
- Increased decision-making speed (45 percent).
- Decreased staff costs (26 percent).
- Decreased software costs (24 percent).

A BICC provides a central location for driving and supporting your organization’s overall information strategy. It enables your organization to coordinate and complement existing efforts, while reducing redundancy and increasing effectiveness. The centralization of these efforts ensures that information and best practices are communicated and shared through the entire organization so that everyone can benefit from successes and lessons learned.

The BICC is instrumental in enabling knowledge transfer and enhancing analytic skills. The BICC can coach and train end users to empower them with new skills that drive innovation and discovery. It also is instrumental in turning analysis into action and ensuring greater information consumption and higher levels of ROI.

Operating a BI Competency Center enables your organization to:

- Preserve and exploit the full value of technology investments.
- Standardize business and analytic intelligence processes and initiatives.
- React faster to business changes.
- Reduce overall risk of implementation projects and project realization.
- Support end users in fully understanding data and acting properly on analyses.
- Ensure that BI knowledge is shared throughout the enterprise.
Most organizations are tasked with doing more with fewer resources. A BICC provides an optimal solution for meeting the increasing demands of end users with fewer support staff and provides a forum for repeatable results, best practices and collaboration across your organization. This ensures that your successes can be documented, measured and monitored for optimal performance. By streamlining operations, organizations can reduce overhead and information silos while increasing effectiveness.

**Beyond BI**

There are many different opinions on what makes the intelligent enterprise as companies apply different ways of using and processing information. For-profit organizations use information to achieve a set of common goals – more customers, increased revenues and reduced expenses. Staying competitive and meeting the pressure of regulatory compliance requirements requires that information sources and business and analytic intelligence be accessed and used by a growing number of information consumers across the enterprise for making critical business decisions, on all organizational levels and in various business functions. Therefore, investing in information infrastructure and software solutions is certainly an important part of the intelligent enterprise.

John Mahoney, chief of research and IT management for Gartner in Europe, said in a *Computerworld* interview, “IT leaders have to be shifting their focus away from simply managing technology, and to look to managing business information, processes and relationships” (*Computerworld*, Dec. 16, 2004).

Increasingly, organizations are realizing that there is more to BI than simply employing technology. There is a need for a comprehensive, strategic approach to BI that addresses technology as well as people, processes and organizational culture. A lack of strategy will result in inconsistent BI deployments, difficulties in managing, implementing and supporting BI initiatives that span multiple departments, and a lack of standardization of methodologies, definitions, processes, tools and technologies as well as insufficient BI skills.

Establishing and driving a BI strategy should be a cross-enterprise endeavor with a central unit being “in charge of BI.” Otherwise, BI initiatives run the risk of producing ever-new silos of information. This “central unit,” often referred to as Business Intelligence Competency Center (BICC), should be staffed with BI individuals from both IT and the business.

Common questions to consider when implementing a BI strategy include:

- Who knows where to find the information? Where is it hidden? Is it in several places?
- Who helps to interpret it? What was done last time? How effective was the action? Are there other recommendations?
- Who ensures that each business decision taken is backed up by the correct information?
- Who analyzes information needs, and who produces and executes a BI strategy to fulfill them?
• Who prioritizes, conducts and monitors business intelligence projects?

• Who develops and maintains BI standards regarding methodologies, definitions, processes, tools and technologies that are observed by the entire organization?

More and more organizations are deciding to task a Business Intelligence Competency Center with planning and prioritizing BI initiatives, as well as with defining what is required to support the interpretation and strategic use of information for improved decision making and maximized results. This coordination and communication are essential to driving efficiency and increasing effectiveness.

The Business Intelligence Competency Center (BICC)

A Business Intelligence Competency Center is a cross-functional team with a permanent, formal organizational structure. It is owned and staffed by the client with defined tasks, roles, responsibilities and processes for supporting and promoting the effective use of business intelligence across the organization. Some functions and service areas of a BICC that might be considered include:

Business Intelligence Program

The Business Intelligence Program function represents the cornerstone of the Business Intelligence Competency Center. It oversees and coordinates all of the activities of the Center and is the interface to the business units. Specifically, the Business Intelligence Program function looks after defining the BI strategy and objectives and tracks the success of that strategy over time. It ensures that the BI strategy is supporting the company strategy. Business users can get advice on how to use BI analyses and interpret the results. The BI Program function also acts as the Program Office for all BI-related projects. It keeps the organization abreast of new BI trends and technologies and how the company could benefit from them. Furthermore, it is responsible for sharing BI knowledge throughout the enterprise.

Technical Support

The Technical Support function acts as the second-level technical support for BI problems (first-level support would be handled by the general Service Desk in the organization). It clarifies the problem messages, analyzes the problem in detail and gets back to the user with the solution. If the problem cannot be solved in-house, it will be tracked to the software vendor.

Training

The Training function takes care of training end users in BI concepts and company-specific BI applications and provides in-depth coaching for BI questions. It also takes care of any BI product specific trainings and certifications.
Data Stewardship

The Data Stewardship function takes care of administering technical metadata and ensures its alignment with business metadata. It is responsible for data standards, data quality and data governance.

Advanced Analytics

The Advanced Analytics function specializes in statistical modeling and data mining. It handles complex analytical requests coming from the business units. In addition, it conducts research and experiments with models to explore correlations, inter-dependencies, etc.

Vendor Contracts Management

The Vendor Contracts Management function handles all the license and contract-related questions, such as user licenses, software distribution, service level agreements with BI vendors and product evaluations. It also acts as an interface to the organization’s purchase and legal departments.

Data Acquisition

The Data Acquisition function handles the back-end related BI activities. It takes care of ETL and data store development, testing and maintenance, as well as the overall warehouse design and integration projects.

BI Delivery

The BI Delivery function takes care of any BI front-end BI Delivery, its testing, preparation for production and its maintenance. It also develops applications that directly interface with the data warehouse.

Organizational implications of the Business Intelligence Competency Center

The mandate for a cross-functional team is clear. It must have representatives from both IT and the business. It must have executive sponsorship to be successful. Its size, organizational structure and funding will all be dependent on your organization and situation.

There are various ways of organizing a BICC. A BICC can function as a separate company providing IT and business services, or as a division of a corporate holding company, or even as a “virtual” BICC consisting of staff from departments of several corporate units and/or companies.

Many companies wrestle with the question “Do we want a BICC that is permanent with a physical team, or is it better to have a virtual team that includes employees in several business units and IT organizations?”
The advantages of a virtual BICC are obvious: no new organizational infrastructure, no new staff members and no larger budget. Considering these advantages, it is clear that organizations might prefer a “virtual” to a fully-staffed BICC. A move to a functional unit would mean an internal reorganization and shifting of budgets.

The main disadvantage of a virtual BICC is that there might not be (real) communication or alignment between the members of the Center and it can be difficult to share experiences with the different functional teams. Also, as always in ‘virtual’ teams, each member is first and foremost committed to the priorities, goals and objectives of their direct management and there could be conflict between the objectives of the BICC and the functional department to which an individual belongs.

There is no “right” solution because with both there are advantages and disadvantages. SAS recommends a “real” BICC in the first few years because it is much easier for members to form a constructive team and to develop a functional BICC.

Regardless of the structure of the organization, the BICC should have executive sponsorship, reporting to the C-level, i.e. the CIO or COO. The aim must be the alignment of business intelligence goals across various functional areas, in support of the company strategy.

**Funding the BICC**

In many cases the BICC can support its own funding through the cost savings realized by eliminating redundant tools or reducing the overhead of expensive support and maintenance contracts. As the BICC becomes more strategic, it becomes more difficult to quantify its intrinsic value. How can you measure better decision making? Many Centers demonstrate tangible and intangible benefits and continue to deliver greater value from BI investments.

Other funding alternatives include:

- Listing costs as overheads, then all departments can use the BI services. The disadvantage of this approach is that showing the economic value of the BICC runs the risk of having an under-appreciated Center.

- An internal billing system where the users are charged for help given on each project and analysis. This model is a “fair” share of costs because heavy users pay more than light users. This is easier to quantify but can limit the growth and use of the BICC, and ultimately its success, if users are inhibited by this model.

- A subscription-based billing model can reduce the barriers for users. It assigns costs across each user group based on projected usage of the BICC. The downside to this approach is getting agreement up front.

SAS can help you build a funding model that best fits your organization’s needs and will contribute to your BICC success.
Establishing a Business Intelligence Competency Center

The first step in implementing a BI Competency Center is to understand your organization’s needs and how those can be optimally supported within your organization. Consequently, no two BI Competency Centers may ever be exactly the same.

**Initialization**

Develop BICC vision and business case. Present the value proposition. Agree on BICC strategy.

**Definition of BICC plan**


**Establishment of BICC**

Assign roles to people. Conduct organizational change management (OCM) activities. Train BICC staff. Prepare work environment.

**BICC in Operation**

Do kick off. Run first project. Review project and BICC functions. Sell BICC for new projects. If required adjust BICC scope and area of responsibility.

*Figure 1: Steps for establishing a BI Competency Center*

**Initialization**

The first step is to determine what the vision would be for creating a BICC for your organization. What is the primary goal? How should the BICC support your organization? What, on a high level, would it be tasked with? Based on that information, a business case for the creation of a BICC should be built. If the result of the business case is positive, the functions of the BICC can be planned in more detail.

**Definition of the BICC Plan**

Based on the assessment of the current situation, a plan needs to be established to understand the scope of the Center and the required staffing. The support and service portfolio of a BI Competency Center should be targeted towards creating the highest possible value from BI, based on your situation, usage and expectations. There are numerous different constellations of business strategies, company structures, and software and information usage patterns that influence that decision. Here are some examples:
• If you use BI strategically to build and empower your BI and analytic intelligence capabilities, using a BI Competency Center as a business or analytical “coaching center” might make the competitive difference. Decision makers will need content and conceptual support to make the best use of software and understand context and best practices. It is also very likely that a mature organization in terms of their usage of information for business processes would build its own specialized applications, counting on the BI Competency Centers to support and manage the project from the requirements, design and development stages up to the ongoing maintenance.

• Global or regional players with a decentralized IT landscape will benefit from a centralized BI support. For example, rolling BI out to new sites in the organization cost effectively would be supported by a central pool of experienced BI engineers and a consistent approach to training and documentation through a BI Competency Center.

• A BI Competency Center would be ideal to leverage your investment in a centralized infrastructure and help build a culture of information usage that is aligned with the overall company IT strategy.

To that end, an assessment of how information is currently used in the organization and how it is supposed to be used in the future should be made. How the gap between the current and desired state should be bridged also needs to become part of a BI roadmap. This roadmap outlines the strategy that the BICC is supposed to drive and support. All current and future BI projects should fit with this strategy.

Approval from the sponsor for the BI strategy is vital. Without a strong sponsorship in the organization, the BI efforts might not get very far. If possible, sponsorship should be at the C-level and include buy-in from the business as well as IT.

The BI strategic roadmap will also lay out the functional areas the BICC is supposed to have. How those functions will be staffed and where the BICC reports within the organization should be defined.

Establishment of the BICC

Staffing your Competency Center draws from the profile of the functional Center as laid out in the planning step. Naturally, there are a number of technical competencies that will be required as part of your overall IT infrastructure. Managing the Competency Center requires strong business management and communication skills to establish and run the Center as a beneficial and recognized structure for your entire organization. For all BI Competency Center staff, a strong service attitude and orientation with regard to the Center’s internal customers is required.

Further required skills profiles depend on the specific functional portfolio of your Competency Center, e.g. whether training and analytical coaching of your end users is required, or whether you want to use the Center for internal projects or to manage internal user communities and events. SAS offers various methodologies and services to identify the current and required skill levels of your projected BI Competency Center staff and to empower them for their roles in the BI Competency Center.
The BI Competency Center operates as a support and service center for your functional departments, potentially spanning multiple divisions and geographical boundaries. A clear definition and agreement of the kinds of services offered and the levels of services is a vital component for managing the expectations against the Center and keeps it efficiently working given various service requests and support queries. This should be supported by an infrastructure that helps the Center manage and prioritize the workload while keeping the work transparent and predictable for internal customers of the Center. Also, the success of the BICC should be continuously evaluated against the identified objectives.

If the BICC constitutes its own organizational unit, this will result in people changing roles and responsibilities, as well as management implications. Implementing these changes smoothly will require a well-planned, organizational change management approach.

Another change for the organization will be the increased focus of business intelligence. In order for this effort to be successful, users must be educated about the value of BI, including the data that is available to them for analysis, and they should receive training or coaching on how to interpret the information. This is an important task for the BICC – the success of BI in the organization stands and falls with whether the “operationalization” of business intelligence works.

When you position and announce the operational BI Competency Center to your organization there are a number of important points to remember to give the Center a head start and ensure its recognition and sustainability in the eyes of the business lines. For example:

- Manage the expectations of the Center and clearly communicate its goals and objectives. Sharing a common understanding of the focus and charter of the Center is crucial to ensure that everyone is aligned on the stated priorities and deliverables.

- Ensure the Competency Center projects are focused enough to show manageable, incremental benefits. This is especially important for the first project that is run by the BICC. This project will receive a lot of attention and will determine the reputation of the BICC in the organization.

- Ensure that the business is able to associate the benefit they are receiving with the services delivered from the Center, e.g. through a defined and transparent performance assessment process, visible company communications channels and a performance-based incentive system.

**BI Competency Center in operation**

Beginning with the first project, reviewing and evaluating the concrete benefits of the Center are a must. Criteria to measure the success of the Competency Center should be established early in the planning phase and implemented as part of the Competency Center. Only when the Center can prove its benefits will it be seen as an integral part of the intelligent enterprise and recognized for its achievements. The ongoing review will also determine whether the responsibilities and scope of the BI Competency Center should be adjusted.
Ideally, the first project for the BICC should be one that has high visibility in the company but also is very well-defined and not too broad scope. This will ensure that the first project can achieve results relatively quickly, and it will make it easier for the BICC to get a head start. A highly visible project will ensure that large parts of the organization will learn about the existence and the successful work of the BICC.

Future directions

While a BICC is an excellent forum for addressing many tactical issues efficiently and effectively, it is imperative not to lose sight of the strategic value of a BICC. It is easy to be tactical. The results are easily quantifiable and there is a never-ending list of problems to be solved and issues to tackle. Too often, however, organizations get focused on the details and can quickly lose sight of their vision.

The most valuable BICC implementations, by design, balance both the tactical needs of today with a strategy and vision for the future. The importance of a strategy is clear – without one there is no way of understanding where your organization is headed. How will your information needs change? How can you optimize performance? However, the rigor in which a BI strategy is articulated and supported is often a crucial missing element. This BI strategy is the underpinning and foundation for the BICC – it provides the vision that you are building towards and the filter for solving today’s issues with an eye towards tomorrow.

The BICC will be tasked with defining your BI strategy. This will require a flexible and robust strategy that reflects the vision of your organization. It will affect such areas as managing assets, products, processes and people. Focusing on strategy instead of solely on performance will help an organization understand the long-term value and importance of the decisions being made today. It will require a long-term vision and understanding of both the business and technical implications of the decisions.

As with any strategy, your BI will continue to evolve and change over time. As part of their charter, the BICC will continue to evaluate and make any necessary adjustments to ensure they are meeting their goals and objectivities. The BICC will also have a unique vantage point to make recommendations and offer new insights for consideration. It may also be a sounding board for innovative ventures where it is easy to mitigate risk and learn from experience.

Bridging the gap

Technology is only one piece of the puzzle. In order to have a successful BI implementation it is also important to understand how your organization uses information. The BICC can be an excellent vehicle for articulating and executing your information goals and objectives.
As the leader in business intelligence, SAS has developed an Information Evolution Model to aid companies in assessing how they use information to drive business. The model outlines how information is managed and utilized as a corporate asset and enables organizations to objectively evaluate their use of information and accurately lay out a roadmap for improvements that optimize business returns. For more information, please refer to the SAS White Paper, *Five Steps to Evolving into an Intelligent, High-Performance Enterprise*, downloadable from www.sas.com/software/iem/.

In order to reap the benefits of information evolution, companies must gain insight to better align strategies and identify critical relationships and gaps along four key company dimensions—human capital, knowledge processes, culture and infrastructure. The BICC provides an ideal framework to navigate and align all of these critical dimensions to ensure optimal results.

The Information Evolution Model provides a framework for companies to evaluate themselves relative to these dimensions. It also offers action plans that can be tailored to each company’s unique characteristics. By understanding and improving alignment within these critical dimensions, companies can maximize the value and impact of information as a strategic corporate asset to gain competitive advantage.

By understanding your current information delivery environment and processes, you can establish a vision for using information more effectively by understanding your desired information delivery strategy, goals and requirements.

The end result is an effective, efficient and structured path toward optimum alignment of information delivery capabilities to strategic business needs, taking advantage of the best in business intelligence technologies. It provides the strategic roadmap for the BICC, outlining the BI approach it is to drive and support. SAS uses the Information Evolution Model as a basis for helping you define this strategic roadmap.

**Case study**

This case study concerns one of the leading insurance companies in southern Africa. It provides personalized insurance service to the personal, commercial and corporate markets. They operate in the marketplace through professional and highly experienced brokers who are able to offer clients personal service and advice when purchasing policies, and practical assistance in the event of a claim. They have about 2,000 employees.

The insurance company decided to implement an enterprise wide management information solution and to create a framework for the implementation of analytical solutions. They also realized that, in order to make their strategic BI program operational in the company, they would need a structure that would provide a sustainable environment for driving the use of business intelligence.

In order to address those problems, the insurance company decided to go end-to-end with SAS to address their business intelligence needs. They expect to service 700 individuals in their organization with BI information. Those individuals include technical as well as non-technical users. For the first time, the information is transparent through all levels of the organization.
The Business Intelligence Program is considered to be a very strategic program for them. The sponsor and owner is at Executive Level. A Project Management Board meets every month to monitor the implementation of the business intelligence strategy. The board members are all individuals from the General Management from various parts of the organization, to ensure enterprise-wide focus. The insurance company decided to create a new department, a Business Intelligence department (equivalent to a Business Intelligence Competency Center), to ensure that the BI investment and skills stay aligned with the corporate strategy. Currently, this department comprises 20 members of staff.

The BI department is taking care of internal training and user support and includes advanced analytics, data acquisition and BI Delivery functions. Data Stewardship is not part of the BI department itself, but linked into it.

It is the responsibility of the Business Intelligence department to monitor all BI projects within the insurance company. The aim is to drive the use of business intelligence to different levels of the organization and to optimize the use of Business Intelligence skills in the organization.

SAS was instrumental in helping the insurance company to define their BI strategy and set up the BI department. A Management Consulting firm was also involved to address the organizational change management aspects that went along with the creation of a Business Intelligence department.

### How SAS can help ensure a successful BI strategy

For almost three decades, SAS has been helping customers drive business strategies that evolve information from operational knowledge to creative intelligence for innovative decision making. Within our project engagements we have amassed a great deal of information on the issues organizations face with information delivery and how they have solved those issues within their organization.

Therefore, SAS offers the best resources for assessing and recommending the strategies and directions for your BI Competency Center. Our hands-on experience – drawn from more than 1,500 professional consultants worldwide – provides your organization with a proven path to success. This expertise ensures that every engagement follows proven best practices, uses time-tested methodologies, delivers tangible results and provides useful, actionable business intelligence to turn your strategies into a true competitive advantage.

The following section describes some of the services and support that SAS could bring to bear in support of establishing your center.
Technical Support

Free, unlimited technical support is available by phone to all sites licensing software from SAS. SAS Technical Support is available 24 hours a day, seven days a week on the Web and via e-mail. Our Web resources include full access to our knowledge bases, downloadable hot fixes and online problem reporting. SAS has won numerous awards from software publications for the quality and responsiveness of our technical support. A recent survey found that more than 83 percent of our users rated SAS’ technical support as “better” or “much better” than other software support.

SAS Publishing

SAS Publishing offers a variety of products and services for SAS users, including online and hardcopy documentation geared to all levels of SAS users.

- Web Bookstore – browse descriptions, view table of contents and sample code, and place orders using the shopping cart feature. The bookstore is updated daily to provide you with the most current information about our books.
- Books by Users Press (BBU) – provides a library of books written by SAS users, for SAS users. BBU books offer a real-world perspective to using SAS.
- SAS Learning Edition— is a personal learning version of the world’s leading business intelligence and analytical software. It combines a powerful version of SAS with instruction paced for the beginner.
- SAS OnlineDoc – gives you quick online access to SAS reference documentation. Available free upon registration via the Web or for purchase on CD.
- Self-paced e-Learning — provides you with the opportunity to practice in the SAS environment wherever you are and whenever you want.
SAS Management Advisors

The SAS Management Advisors are industry professionals with several years of experience in specific industry domains. They use a consultative approach derived from practical field experience and SAS solution, concept and method knowledge to provide management advice and assistance. The consultative approach is based on workshops, interviews and collaborations to identify your specific business needs, challenges and critical success factors to recommend a set of alternative options. As a further step, the SAS Management Advisors are able to collaborate with your business units and financial managers to produce business cases to identify the cost benefit return on investment or payback periods. SAS Management Advisors support you in determining the need, scope and benefits you might receive from a BI Competency Center.

SAS Consulting

We are committed to helping you transform raw data into vital enterprise intelligence by delivering the technical solutions and services you need. We blend award-winning software with flexible business and technical consulting services to turn your business strategies into a real competitive advantage.

We've been partnering with our customers to solve their business problems for more than a quarter-century. Our consultants take the time to listen and learn about your business challenges and enterprise goals to establish a foundation for strategic advancement. This enables us to deliver the right SAS technology and tailored services to solve your unique business requirements.

Throughout your service engagement, our expert consultants share their vast knowledge and real world experience with your staff so they can manage the results of the project independently. Specific implementation services that could support you in establishing or operating your BI Competency Center include:

- Implementing service level agreement and IT invoice management solutions.
- Implementing enterprise warehouse and business intelligence solutions.
- Expert advisory services.

SAS Training

Superior quality training is an integral part of SAS' commitment to its software customers. We realize that an investment in training is designed to do one thing – increase your organization's productivity. And we're committed to helping your organization realize the full value of its investment. We deliver on that promise with:

- More than 50 courses that deliver up-to-date content of the highest quality.
- Accredited SAS instructors that often stand as thought leaders in their fields.
- Training Needs Analysis that ensures the training objectives and content are aligned with your project and business goals.
• Multiple delivery methods designed to meet your time, budget and education needs, including public and on-site training, as well as interactive Live Web classes and self-paced e-learning products that deliver on-demand training at your convenience.

When you invest in SAS Education, our technical training specialists work closely with SAS software developers to facilitate your learning experience and to develop a course and a learning path that suits the needs of the individuals using the software application. But we don't stop there. If you have a special need, SAS Education account representatives will provide a training assessment and will work with you to customize solutions to help you, your work group or your department to achieve the results you envision.

**SAS Certified Professional Program**

Throughout the business world, companies recognize that certification is the way to stay abreast of the latest technology and serves as a benchmark for hiring, promoting and planning employee career paths. As the world leader in software and services that drive the intelligent enterprise, SAS is committed to providing your company with the competitive advantage that certification brings. Designed to recognize users who exhibit an advanced understanding of SAS software, the SAS Certified Professional Program makes it easy to identify experts who have the skills and knowledge to optimize the power of SAS.

Professional certification from SAS also provides organizations a reliable measure of employee knowledge by differentiating the most qualified technical professionals, increasing individual and group productivity levels, and improving the organization's overall competency using SAS software.

SAS offers five globally recognized certification tracks in SAS programming, data warehousing and BI Delivery. Credentials are awarded through the successful completion of one or more SAS Certified Professional exams. Currently, the program has more than 5,700 SAS Certified Professionals in more than 40 different countries.

As the worldwide demand for professionals with a high level of SAS software expertise continues to grow, certification from SAS can give you the edge you need to stay a step ahead of your competition. The SAS Certified Professional Program also provides an excellent means of keeping your BICC staff up-to-date in the latest SAS technology.

**User Groups**

SAS encourages users to become active in user group activities, and SAS helps to establish and nurture such groups. Various user groups offer excellent user conferences around the world or they can be as close as your own organization or location. User groups provide an excellent forum for a BICC to demonstrate their expertise and leadership by conducting activities that promote best practices.

Whether you're a seasoned SAS software user with experiences to share or a newcomer who'd like to interact with other users, a user group is an excellent way to help you get the most value from your investment. User groups offer a unique opportunity to:

• Enhance your understanding of SAS software and services.
Business Intelligence Competency Center

- Exchange ideas about using your software and hardware most productively.
- Learn about new products, solutions and services as soon as they become available.
- Exert more influence over the direction of SAS software and services.
- Improve managerial and leadership skills by serving as a user group officer, coordinating and participating in annual and regional SAS user group conferences or organizing a new user group.

Conclusion

According to a 2005 survey from BetterManagement, 60 percent of the respondents say they never, rarely or only sometimes get the information they need to make effective business decisions. Those with intelligent enterprises want to make sure that everyone throughout the organization is making fact-based decisions to mitigate risk and maximize performance.

Evolving the intelligent enterprise is a complex task that requires promoting and supporting the use of information for decision making at all corporate levels. A central structure for defining, executing and supporting the BI strategy ensures the robustness and reliability of the information infrastructure and, at the same time, enables heterogeneous groups of information consumers to use information in a coordinated way to achieve company goals.

Information is one of the most valuable assets of your organization. Capitalize on your investment in your infrastructure, people and processes by developing and operating a highly-effective BI support organization for your entire enterprise.

BetterManagement Survey, “How do you plan for Business Intelligence?” February/March 2005
About SAS

SAS is the market leader in providing a new generation of business intelligence software and services that create true enterprise intelligence. SAS solutions are used at more than 40,000 sites, including 96 of the top 100 companies on the FORTUNE Global 500®, to develop more profitable relationships with customers and suppliers; to enable better, more accurate and informed decisions; and to drive organizations forward. SAS is the only vendor that completely integrates leading data warehousing, analytics and traditional BI applications to create intelligence from massive amounts of data. For nearly three decades, SAS has been giving customers around the world *The Power to Know®*.

Contact

Please contact your local SAS office for more information regarding a Business Intelligence Competency Center: [http://www.sas.com/offices](http://www.sas.com/offices)