books24x7
a SkillSoft Company

Exec**Blueprints**™

in partnership with Aspatore Books

Action Points

I. How Are the Authors' Companies Currently Using Business Intelligence?
Business intelligence (BI) can be applied in many areas, but is especially valuable for functions that require the efficient assembly, integration, and analysis of information from multiple sources, thereby saving time while increasing the number of perspectives and insights that can be gained from the data.

II. The Bottom Line
Accurate business intelligence, such as that delivered by a robust enterprise planning and budgeting system, can allow you to see precisely which areas of your business are doing well – and which are not. Further, it can provide you with vital real-time (or near-time) information about markets upon which to base pricing and negotiating strategies.

III. Must-Have Considerations for Developing BI Systems and Processes
It's the IT department's job to build the systems and ensure that they run well (i.e., that they're available, reliable, responsive, and secure) and do not become obsolete. This process cannot occur in a vacuum, but rather must be informed by the organization's needs with regard to data content, quality, and accessibility.

IV. The Golden Rules for Working with Users of Business Intelligence
The first rule is to form partnerships. The purpose of BI is to provide the organization with critical information for moving ahead, most of which will not be technology-related. Learn about the challenges the business units face, offer trainings in technical areas, and allow people to share problems and suggestions.

V. Essential Take-Aways
While not all business intelligence needs to – or should – be disseminated in real time, real-time BI can help organizations gain a competitive edge because it allows them to react to troubling situations before they become problems as well as spot trends and receive answers to "what if" questions more quickly.

Contents

The CIOs/CTOs from BlueCross BlueShield of Tennessee, Geisinger Health System, and Eclipsys on:

Staying Competitive Through Real-Time Business Intelligence

Chris Levan
VP, Information Systems and Chief Information Officer
BlueCross BlueShield of Tennessee

Frank Richards
CIO, Geisinger Health System

John Gomez
Executive Vice President/Chief Technology and Strategy Officer
Eclipsys

The information management technology that enables the collection and dissemination of business intelligence (BI) is growing by leaps and bounds, and can now deliver more data in real time than ever before. As the authors of this ExecBlueprint describe, the applications are manifold. Business intelligence enables companies to give their customers tools to make informed purchasing decisions (such as for health insurance). Companies can mine their own data in much more precise ways, enabling them to clearly distinguish between profitable and unprofitable areas. They can access pertinent patient information easily when an important treatment decision needs to be made. They can develop "what-if" scenarios when planning future strategies. And they can spot potential problems before they reach crisis proportions. Most of the decisions that BI can inform, however, do not begin with technology. Along with discussing the various applications for BI, this ExecBlueprint emphasizes that all effective BI systems and processes begin with a partnership between IT and the business. ■

About the Authors

Chris Levan
VP, Information Systems and Chief Information Officer, BlueCross BlueShield of Tennessee

Chris Levan has more than 30 years of experience in IT, 20 of those as senior IT executive at BlueCross BlueShield of Tennessee (BCBST), the state's leader in health care financing, with over 4.8 million customers. From a technology perspective, he has overseen the transition from mainframes, to client-server, to Web-enabled capabilities. The current BCBST technical environment consists of four diverse integrated platforms. Mr. Levan's responsibilities encompass all aspects of technology, including the data center, all computing platforms, application development and maintenance for all systems (from legacy to Internet), voice and data communications, data warehouse, end user computing, helpdesk and corporate call center, and e-commerce.

During his tenure, BCBST has received recognition for a variety of technological innovations. One recent initiative was being the first managed care organization to process business for over 1,000,000 members on a client/server system. All commercial business is processed through the same system. In addition, BCBST's computer telephony integration implementation has been cited as one of the top 10 nationwide customer relationship management implementations for 2002. Also in 2002, BCBST was the winner of a national award recognizing its storage management program for the combination of scope, complexity, and payback.

Mr. Levan's management philosophy centers on the belief that the business users are his customers, and he works collaboratively with his peers and associates to manage through effective relationship-building.

☛ *Read Chris' insights on Page 3*

Frank Richards
CIO, Geisinger Health System

Frank Richards has over 25 years experience in the field of health care and health care IT. He is currently the chief information officer for the Geisinger Health System, a $1.8 billion integrated delivery system consisting of four hospitals, over 40 clinics, 650 staff physicians, and a health insurance company.

Responsible for all facets of IT strategy and operations, Mr. Richards was instrumental in the implementation of Geisinger's electronic health record, and is one of the principal editors of the book *Implementing an Electronic Health Record System* (Springer–Health Informatics Series).

Mr. Richards is also currently the principal investigator for inter-hospital collaboration efforts that seek to exchange health care information among three hospitals in central Pennsylvania. He is a member of the Health care Information and Management Systems Society and the College of Health care Information Management Executives, and was named one of the top 100 IT leaders in 2003 by *Computerworld* magazine.

☛ *Read Frank's insights on Page 6*

John Gomez
Executive Vice President/Chief Technology and Strategy Officer, Eclipsys

As CTO and strategy officer at Eclipsys, John Gomez helps the company successfully optimize the use of technology and architecture to support its strategic plan and the needs of its clients. He is charged with providing the technical vision to complement the company's business vision, and develops the strategic technology plan by identifying, tracking, and evaluating new technologies.

A highly respected executive in the health care information technology industry, Mr. Gomez brings a broad scope of experience in technology strategy, e-commerce, development, and architecture. He worked on the pre-releases of .NET and currently is a featured lecturer and author on .NET and advanced technology.

His most recent position was senior vice president and CTO of WebMD, where he was responsible for all technology-related aspects of the company's consumer and physician portals.

Among Mr. Gomez's other previous positions is CTO/senior vice president of strategic business development at Brill Media Holdings in New York; managing consultant at Microsoft Corporation (where he served as the lead program manager and architect for the MicroWarehouse e-Commerce System); chief architect for HRBlock Advanced Technology; and president/CEO and CTO of KYMA Technologies, Inc.

☛ *Read John's insights on Page 9*

Chris Levan

VP, Information Systems and Chief Information Officer, BlueCross BlueShield of Tennessee

Our Business Intelligence

Business intelligence has been an area in which we have invested tens of millions of dollars over the past decade. What we do goes beyond paying claims timely and accurately. To configure the best products to sell to our customers, we have to be able to analyze regional data for the state of Tennessee, as well as national data.

Most of our customers want us to be their purchasing agent for health care services. In order to procure the best deals for them, we need to exercise appropriate health care services utilization management. Giving consumers the data they need to analyze information and determine the most efficient and cost-effective ways to get things accomplished has given us a competitive edge.

Real-Time Intelligence

Not being a supplier of goods, we don't have a real-time order entry system. As payers, we focus on more of a retail audience. Historically, we have sold on a wholesale basis to employer groups that bought insurance for their employees, with the employer picking up most of the cost. With health insurance costs rising, however, most employers are shifting more of the expense to their employees. This might mean a bigger share of the health care premium, higher deductibles, or higher co-pays. Consequently, we are seeing a lot of

trends driven by this health care "consumerism." In the past, whenever whole dollar coverage was available from employers, people didn't care what services cost. Now that consumers have to pay more of the total health care tab, we have had to do a lot under the consumerism umbrella.

Whenever someone gets diagnosed with an illness, it is incumbent upon them to find out what is wrong, what the alternatives are, and what everything is going to cost. If you had a broken bone, you could get a simple x-ray for $100 versus an MRI for $750. When consumers are paying more of the health care tab, they are going to be interested in going with a lower-cost technology, if it is adequate.

Information we provide on our Web site educates people on illnesses, treatments, and alternatives, including which alternatives have the best outcomes or the lowest cost. We also have tools designed for consumers and providers to help people make real-time decisions. If someone is going to have his appendix taken out, we can tell him what it is going to cost in different areas around the state, region, or nation.

We implemented an enterprise planning and budgeting system in 2006 that greatly reduced the amount of time it takes the company to complete its annual budgeting process. Now that the enterprise's

Chris Levan
VP, Information Systems
and Chief Information Officer
BlueCross BlueShield of Tennessee

"Developing sufficiently rigorous standards so that we can feel good about the numbers is something that we have made substantial investments in. We like the dividends that we have seen."

- Has more than 30 years of IT experience
- Has been with the organization for more than 20 years
- Chairman of the IT board for Chattanooga State Technical Community College
- Bachelor's degree and M.B.A., University of Tennessee at Chattanooga

Mr. Levan can be e-mailed at chris.levan@execblueprints.com

budgeting and planning data is stored in one centralized place, the feedback loop between executive decision-makers and cost center managers is nearly instantaneous.

Business Intelligence Applications

We have recently implemented a new business intelligence application called Financial Performance Management that ties directly into

Being able to determine how to most optimally price and configure our products is one of the biggest benefits of business intelligence.

Chris Levan

VP, Information Systems
and Chief Information Officer
BlueCross BlueShield of Tennessee

the data entered into the new enterprise budgeting and planning system, as well as performance measures from the general ledger. We can now look at our business through new and different dimensions at several levels of detail in order to hone in on better profitability.

We used to lump the performance from many products together into one big bucket. However, we had difficulty discerning which ones were doing well and which ones weren't. This application's ability to give us many different views will enable us to better run our business.

Developing Strategic Initiatives

We have real-time access to data. As we evaluate changes to our health care provider contracts and networks, we use that data to get a handle on the situation. If a hospital asks for something in particular, our tools allow us to know what they want.

We can go into our network and contractual negotiations with our eyes open. While we make our data analysis available to the people doing the negotiations, we can also initiate real-time queries to get answers to questions on the spot.

Some future information management technologies we are researching include:

- Text analytics — the ability to derive meaning and new business insight from large volumes of free-form text in order to improve business processes and customer service and identify new marketing opportunities

Our business intelligence efforts have been recognized in each of the last three years by leading analysts (Gartner, IDC), IT industry publications (*ComputerWorld, InformationWeek*), and software vendors (IBM, Cognos) in some of the following ways:

- **October 2007:** Received the IBM Innovation Award for "Best Information Integration Project of the Year" for visionary use of IBM software.
- **September 2007:** *ComputerWorld* named BCBST a finalist for its Agile BI Infrastructure Award.
- **May 2007:** BCBST was one of 10 companies worldwide – among Cognos' 23,000 customers in 135 countries – to receive an award from Cognos for its business intelligence excellence and innovation.
- **October 2005:** IBM recognized BCBST as one of seven customers worldwide to receive its *Excellence in Information Integration* award for its work in developing BCBST's data warehouse environment, which supports the company's diverse reporting and performance management requirements.

Over the last two years, the Information Management area of BCBST has been highlighted in several information technology publications, interviewed for case studies by Gartner, IBM, and IDC, and delivered technical presentations at annual conferences such as *Information Week*'s CIO Conference and CIO 100 Symposium, IBM's Information on Demand Conference, and Cognos Forum, the business intelligence company's annual user group meeting. The IM area also delivered worldwide Webinars on the IM activities at BCBST that were co-sponsored by Cognos and IBM in 2006, and by IBM in 2007.

- Predictive analytics — the ability to exploit patterns found in historical and transactional data to identify risks and opportunities
- Operational performance management — development of metrics scorecards to monitor and improve operational performance

Areas for Improvement

The way that health care is delivered is changing. The consumer is picking up a higher percentage of the tab. Going forward, health care payers, health care providers, and consumers are all going to collaborate to ensure that the most appropriate and highest quality outcomes are achieved. The more information we can put at

consumers' fingertips, the better off we will all be.

Best Practices

There is a saying, "Garbage in, garbage out." If you are going to do data analysis, you need to have quality data. We have instituted a data quality scorecard and have done many other things over the years to try to improve our overall data quality as much as possible. We have also done many things from a testing and rigor standpoint to make sure our analysis is producing accurate results.

It is easier and more cost-effective to support business intelligence capabilities that are going to be used repeatedly than to do things on an ad hoc basis. In today's litigious society, we have to follow very strict retention policies

for our data. With any business intelligence effort, in fact, high-quality data is going to lead to better results. As a company, we spend a much higher share of IT resources on information management and business intelligence than any other area and, in doing so, we have solved a lot of our core systems issues over the past decade. We are not out building new claim systems or payroll systems; our projects are increasingly focused on information management or business intelligence.

Training

Given the breadth of our work, our employees are trained on using the tools and understanding the data and the business. Users of business intelligence have to understand our business. They also need to have a command of our technology. We have experts in IT and we offer many classes for analytic people in the business community.

Top Benefits

Our business intelligence is the end result of our aim to discover how we can deliver a good value for the health care insurance dollar. We use business intelligence to figure out how to price products and to fine tune the products we offer. If a product that we designed is not being utilized as expected and is costing us a lot of money, we try to move away from it.
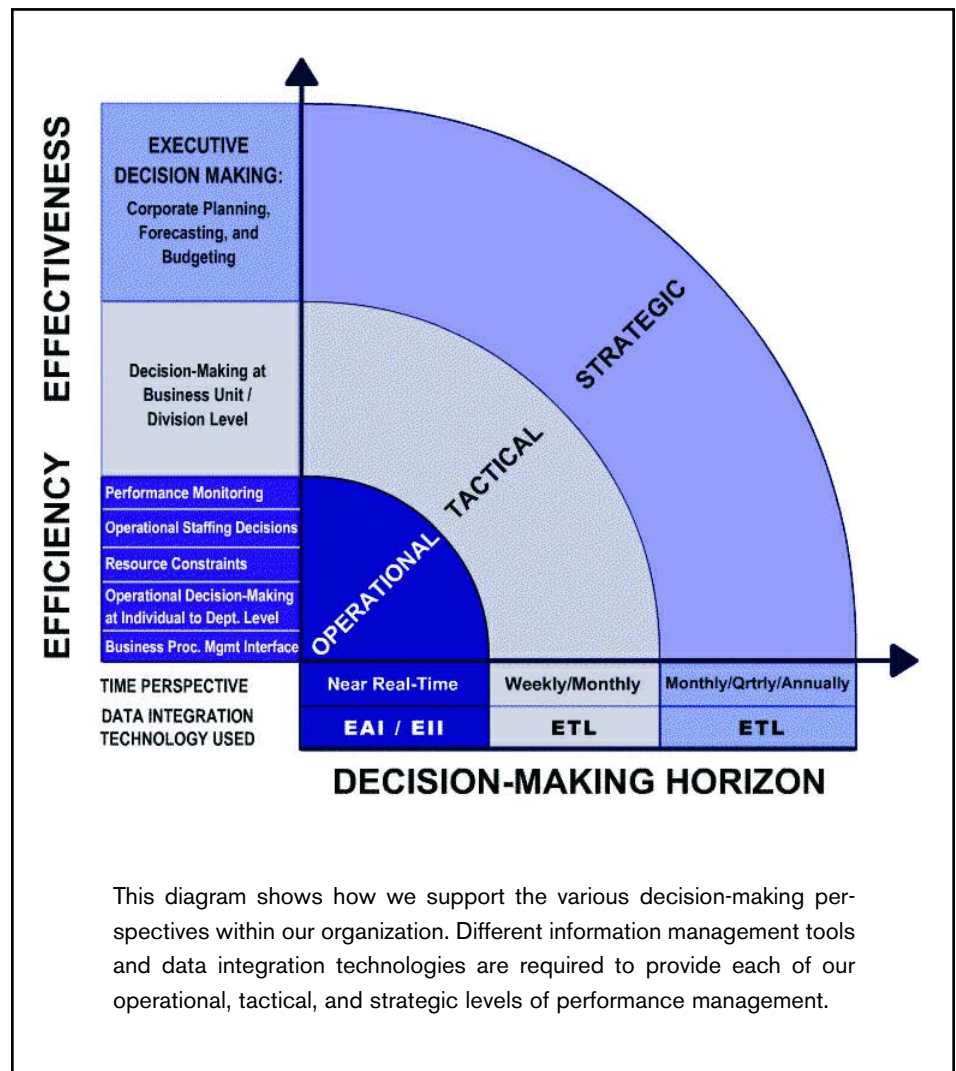
Being able to determine how to most optimally price and configure our products is one of the biggest benefits of business intelligence. Doctors and hospitals gain access to our systems to find out where the loopholes are so they can make more money. We use our analytics to close the gap and negotiate our

contractual arrangements and networks more effectively.

Over the past three years, the benefits of business intelligence have increased. We just finished the second phase of our Financial Performance Management project. Because we can now view our business in so many more dimensions, we are able to focus on some of the areas where we weren't performing as well as we could have been. This has helped us fine tune our products and has given us a significant return in the past year.

Information Overload

People are good at coming up with what they want to see. In conjunction with IT, they can create new views and functionality through business intelligence. We try to keep an ongoing inventory of what is already available so we don't have people re-creating the wheel. We also have review procedures in place to make sure processes are retired whenever new and better processes replace them. The challenge is that it is tough to take solutions away from people once they have grown comfortable with using them. ■
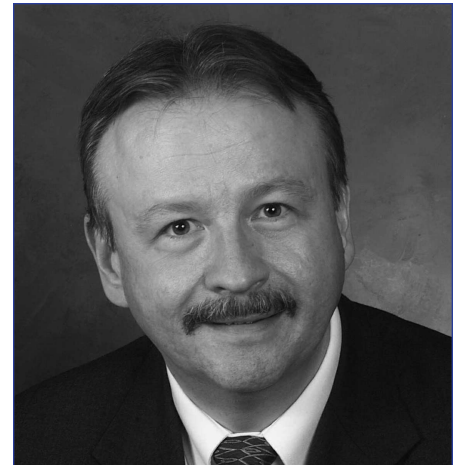

This diagram shows how we support the various decision-making perspectives within our organization. Different information management tools and data integration technologies are required to provide each of our operational, tactical, and strategic levels of performance management.

Frank Richards

CIO, Geisinger Health System

We're taking inpatient and outpatient information such as diagnoses, allergies, procedures, problems, discharge summaries, and notes from our electronic health records, and looking for patterns in terms of what works best for a given condition.

Frank Richards
CIO
Geisinger Health System

Frank Richards
CIO
Geisinger Health System

"We're using business intelligence to look at how we deliver care and what the outcomes are. We want to take variation out of the process, much like manufacturing has done."

- *Has over 25 years of health care/ IT experience*
- *As CIO, responsible for all IT strategy and operations at $1.8 billion company*
- *Co-editor,* Implementing an Electronic Health Record System
- *One of* Computerworld's *"Top 100 IT Leaders in 2003"*

Mr. Richards can be e-mailed at frank.richards@execblueprints.com

Business Intelligence to Us

To our company, business intelligence means mostly clinical decision support. We are currently developing the basis for a clinical decision support infrastructure, which has a data warehouse that contains both clinical and financial information on patients. We want to use the data to measure clinical outcomes and patient satisfaction.

For example, in our diabetic population, we want to track hemoglobin A1C and blood glucose levels, kidney functions, and make sure people get regular eye and foot exams. Our actions are all about keeping people with chronic illness from having acute episodes that land them in the emergency room or hospital.

We're taking inpatient and outpatient information such as diagnoses, allergies, procedures, problems, discharge summaries, and notes from our electronic health records, and looking for patterns in terms of what works best for a given condition. We are also looking at how our patients are doing in terms of scorecards for various diseases.

We have something that we call "proven care." We basically guarantee that if complications arise from procedures like coronary artery bypasses and we have not done everything that we should have done, we'll absorb the costs of any complications.

Business Intelligence Activities

We're doing a joint venture with IBM to build a data warehouse, which will be at the heart of the clinical decision support system. Initially, it will have retrospective queries on the data that's out there. Eventually, we want to be able to merge it into the transaction systems that physicians use in order to inform clinical decision support. Today, if a patient has an allergy to penicillin and the doctor orders penicillin, he or she will be alerted to the allergy. In the future, the alerts and reminders will be much more sophisticated and take into account other patients who have been treated for the same illness, as well as the patient's personal preferences.

As we get information, we can build more sophisticated rules to tailor individual care to each patient. Eventually, we want to be able to pass new information about the patient to the clinical data warehouse in real time. If there's pertinent information, we will also be able to give it to the physician in real time.

Responsibility

The technical management of business intelligence resides within IT. The corporate owners are in the process improvement area. They look at how we're delivering care today and try to think of better ways to deliver higher-quality and lower-cost care in the future.

We want to try to drive the proven care concept to include more procedures, and use evidence-based medicine to improve the care we deliver to our patients. We can't do that unless we are able to

see what's worked in the past for our patient population, and also what others have found.

Best Practices

We drive real-time business intelligence through individual business units. We look at the literature and depend on leaders in various clinical areas to bring forward the best practices for their areas. However, we do make sure we have the information and the queries that will support what's best for us. Everything is driven from the bottom up.

The Role of Employees

We (IT) mainly do technical support. We do the database work and the front-end client (software) setup and implementation. We also build the systems so that we do not have to run the queries. The performance improvement group will be able to answer any queries that are presented. Our job is to make sure the system runs well (i.e., high availability, proper security, adequate response time, and good management) and that we get the data that's needed for the kinds of questions that are being asked.

System Access

We have three or four levels of employees, and they all have a different level of access. The total number of users, however, is relatively small; in an organization of 13,000 people, only 50-100 have access to the system. The information that most people get is de-identified and lacks patient identifiers. However, a particular class of users needs to look at the data specifically to communicate with patients. These

people need to know who the patients are, so they receive a different level of training.

While you can always encounter security challenges when you use information for research, right now access to the system is relatively confined. Consequently, we don't face the problems we would if it were open to the Internet. Anytime you aggregate data, you have to be concerned about who has access.

Motivation

Our motivation right now is to innovate in clinical areas to drive value and find better ways to deliver care with higher quality and lower cost. We're pushing every part of the organization to do that. The clinical service lines, including

cardiology, pediatrics, and orthopedics, have to look at their operations to decide how they can improve their business model as well as the quality and value of what they deliver.

Top Benefits

Our outcomes on the BI side have been ad hoc as we try to build the data warehouse. We've been doing this sort of thing for the last year or so. We have scorecards for chronic diseases, review of medications used to treat specific problems, and, in the case of proven care, an end-to-end review of specific procedures and treatments in order to redesign the entire process of delivering care. In the case of coronary artery bypass, for example, we have seen

Top 3 Clinical Advantages of an Integrated Care Delivery System

1. Host large cross-site clinical trial studies on drugs and their effect on patients in the real world

2. Identify systemic problems with certain treatments by looking for patterns among a larger sample of patients than is generally used in clinical trials

3. Enable providers to discover adverse or positive effects of new drugs, including possible off-brand uses

Over the next year, we're going to be adding data elements to the business intelligence system from existing transactions systems. We will also be collecting more information directly from patients. We will eventually add genetic markers and genetic testing information as well.

Frank Richards
CIO
Geisinger Health System

lower rates of readmission. We've also seen lower mortality rates even though our rates were good to begin with.

Our diabetic population has had similar results. We track the nine parameters that every diabetic should have done, including eye exams, foot exams, and hemoglobin A1C in range. We've been able to convince more and more of our diabetics to get every parameter checked every time. The early indications of our actions are that we have less acute episodes and fewer visits to the ER. We will continue to track this over time, as we need to repeat the experience with larger numbers of patients.

Benchmarking

To date, we're benchmarking mainly with ourselves. We want to look for process performance improvement. As more and more companies acquire our kind of integrated delivery system, there will be an opportunity to perform some comparisons. These systems provide a huge potential to host clinical trial studies on drugs and their effect on patients in the real world.

They also have a huge potential to catch problems. Merck was alerted to the fact that some patients were at increased risk of heart attacks when taking Vioxx largely because providers saw the correlation in the patients they were treating. Catching that kind of issue by looking for patterns among patients is very valuable. Patients in clinical trials are usually selected based on very specific criteria; the general populous can be very different.

Moreover, business intelligence systems can potentially enable providers to move much more quickly on new drugs and discover their adverse or positive effects.

They also might be able to locate an off-brand potential, meaning a new use for a drug that was meant to do something else.

General Scrutiny

Scrutiny of clinical care delivery is long overdue. While many of the larger organizations are adopting higher levels of scrutiny, this needs to happen across the board.

We haven't done a good job of scrutinizing in the past because we never had the data we needed. Now we need to look at the care we give, the practices we use, the variations we encounter, what works, and what doesn't. This scrutiny bodes well for better care and keeping costs down at the same time. ∎

John Gomez

Executive Vice President/Chief Technology and Strategy Officer, Eclipsys

Different Types of Business Intelligence

Our use of business intelligence depends on whom we're trying to serve. If I'm trying to serve the CFO or the financial organization, business intelligence means how the business is doing from a financial snapshot, including payables, receivables, cash flow, and other things of that nature.

For the development organization, business intelligence is about how many bugs they have, their capitalization of software, and how they are doing in terms of retention and hiring. For the service organization, business intelligence is about time, materials, and third-party revenue.

It's a matter of what each constituent needs to run their business. For us, this means defining business intelligence in a focused manner for each organization.

Real-Time Business Intelligence

Most IT organizations define real-time business intelligence as knowing about something as soon as it happens. We try to look for an appropriate time as defined by the business owners. People tell us what critical information needs to be passed on immediately versus what doesn't.

Real-time also has cost implications. If we took a blanket approach to defining real-time, it would drive costs in our organization. We try to be smart about what we're doing and apply the right systems and technologies to the right definitions. In most cases, near-time is good enough, while in others, real-time is critical.

Recent Activities

We're beginning to roll out dashboards. We are implementing a variety of different financial programs and supporting systems. We have standardized project management and are focusing on a variety of projects to allow the intelligence within the business to be accessed by managers and business leaders throughout the company.

We're just starting our implementation of business intelligence. In the past three years, there has been a lot of discussion about business intelligence. We've had changes in the IT organization and are now finally moving toward embracing business intelligence tools.

Responsibility

Managing business intelligence activities requires a partnership. From a technology standpoint, the IT organization ensures that the systems perform, that they scale, and that they're reliable and secure.

John Gomez
Executive Vice President/
Chief Technology and Strategy Officer
Eclipsys

"We've changed from a world where information was recorded on spreadsheets and PowerPoint databases to true systems that allow us to do analytics, create alerts, and set objectives."

- Responsible for developing company's strategic technology plan
- Featured lecturer and author on .NET
- Previously SVP and CTO, WebMD
- Former role as CTO/SVP, strategic business development (Brill Media Holdings)

Mr. Gomez can be e-mailed at john.gomez@execblueprints.com

As far as what is contained in the system, different individuals in the business units are responsible, depending on the area of business intelligence we're discussing. However, at the end of the day, it is a partnership. The IT organization can't be the only department dictating how everything is going to get done.

Best Practices

Our department's best practices for conducting real-time business intelligence include forming

---

Our department's best practices for conducting real-time business intelligence include forming partnerships that don't begin with the technology, but rather with the business units.

John Gomez
Executive Vice President/Chief Technology and Strategy Officer
Eclipsys

partnerships that don't begin with the technology, but rather with the business units. The business units have fundamental problems that have to be solved. Those problems don't go away because there is a business intelligence solution. If I didn't have a data warehouse, it wouldn't mean that the financial group doesn't need to know where we are against sales week to week.

Solving a problem starts with understanding the challenges of each business unit and applying the right technology. It is important to form partnerships to ensure that the IT organization and the business units have strong communication. Whatever we do has to support the objectives of the company.

Top Benefits

Business intelligence benefits a company by providing a singular view of the company's health across all divisions. It lets people know how they need to react to the positive and negative. Before, it was interpretation; today, it's the reality.

The fact that everybody can understand how they're impacted

How is Business Intelligence Used? Depends on the Department

Financial organization → How the business is doing from a financial snapshot:
- Payables
- Receivables
- Cash flow, etc.

Development organization →
- How many bugs they have
- Capitalization of software
- Retention and hiring statistics

Service organization →
- Time
- Materials
- Third-party revenue

by the data flowing through a system has made things much faster for us. We're able to understand the results of our decisions much more quickly. We have the ability to model better, which is important for us to innovate. We have the ability to ask a lot of "what if" questions,

We motivate people to innovate in business intelligence areas by reducing the amount of rules. We continually remind people that we're all stakeholders in the objectives of the company, and if something is not right, they should speak up. We're very big on open communication.

We also have a strong policy against crucifying people for delivering bad news. If someone has bad news, we want them to speak out about it. Nobody is going to get fired for making a mistake. Our policies help create innovation; people aren't scared to share what's on their mind.

John Gomez
Executive Vice President/Chief Technology and Strategy Officer
Eclipsys

and we have good grounding in how the answers may evolve.

Real-time business intelligence adds extra value. Technology sometimes highlights problems or makes them bigger. For us, real-time intelligence allows us to react to what's wrong faster and to spot trends a little bit more quickly.

Most people want to spot the positive trends. We want to know what's going wrong as soon as possible so we can take corrective action and avert the issue before it becomes a crisis. Real-time intelligence is about trying to spot what's going wrong before it goes wrong. ■

Ideas to Build Upon & Action Points

I. How Are the Authors' Companies Currently Using Business Intelligence?

Business intelligence (BI) basically enables consumers and business people to make more informed decisions on everything from which health insurance to buy to what tomorrow's business strategy should look like. In a real-time scenario, the information can be accessed as soon as it is generated or collected. Examples of specific content that BI can generate (sometimes in real time) for various departments and job functions are:

- Operational records, such as problems, capitalization of software, retention, and hiring rates

- Budgets that enable real-time feedback between executives and cost center managers

- Costs and treatment options by provider for health care procedures

- Integrated patient records that contain up-to-the-minute medical and financial information

- Scorecards for chronic diseases that include reviews of medications, check-up schedules, and specific treatment procedures

II. The Bottom Line

Delivering business intelligence in real time can be expensive, but in some cases, it's critical. In others, near-time data will serve just as well. The key is to understand the true cost/benefit ratio that can be gained from receiving business intelligence in various time horizons, and choose your methods accordingly. Key ways that BI — and, sometimes, real-time BI — can drive your company's profits include:

- Scrutinizing your operation and uncovering more efficient ways to drive value and lower costs

- Identifying profitable (and not so profitable) areas by analyzing the business in several dimensions and levels of detail

- Using real-time access to data to gain greater insight on key issues before entering into contractual negotiations

- Making pricing and configuration decisions that are in tune with real-time developments in the markets

III. Must-Have Considerations for Developing BI Systems and Processes

Because the way you use business intelligence will naturally depend on how it will serve your organization, you will want to design your systems and processes from the bottom up, after consulting with users and stakeholders. In order to develop and support optimal business intelligence capabilities for your organization, essential queries to address include:

- In what areas should your data quality be improved?

- Do your systems run well? Do they have high availability, proper security, and adequate response times?

- What testing procedures can you institute to ensure that your analyses are producing accurate results?

- How can you share information about views and functionality so that people are not recreating work that's already been accomplished?

- Can the BI you produce be accessed by managers and business leaders throughout the company?

- Have acceptable safeguards been established to restrict data access to authorized personnel?

- What is the scalability of your current systems?

- What review procedures do you have to ensure that processes are retired after new and better ones have been deployed?

IV. The Golden Rules for Working with Users of Business Intelligence

The dilemmas and needs that business intelligence addresses do not begin with technology, but rather with the business units. Consequently, IT can't be the only department dictating what BI means to your organization. IT's best practice when developing BI systems, therefore, is to form partnerships with end users and adopt some of the following strategies:

- Incorporate input from business leaders across the organization regarding best practices as well as common challenges in BI designs

- Differentiate offerings depending on specific needs of each business unit

- Offer classes in BI technologies for analytic people in your business community

- Stimulate innovation in the BI gathering process by reducing rules and encouraging open communication, including about problem areas

V. Essential Take-Aways

Most IT organizations define "real-time business intelligence" as knowing about something as soon as it happens. Not all BI solutions, however, need to occur in real time, and IT should rely on the business owners to set priorities for their organization. Real-time or not, BI systems are becoming more sophisticated. Accurate and timely BI capabilities that can now (or will soon) help your company gain an edge are:

- Text analytics that can derive meaning and new business insight from large volumes of free-form text

- Predictive analytics that exploit patterns found in historical and transactional data to identify risks and opportunities

- Metrics scorecards to monitor and improve operational performance

- Clinical decision support systems to tailor individual care by enabling providers to access all pertinent information in real time ∎

?
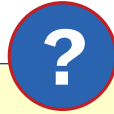
10 Key Questions and Discussion Points

1 What does "business intelligence" (BI) mean for your IT department? How does this meaning differ (or how is it the same) as your company's definition? How has this definition changed in the past three years? What does "real-time business intelligence" mean to your IT department?

2 What types of BI activities has your department recently engaged in? What subject areas do they focus on? What is the nature of direction that IT has received from company leaders for conducting BI activities? How could this direction be improved? Who is generally responsible for managing business intelligence activities?

3 What role does real-time business intelligence currently play in the development of your company's strategic planning initiatives? In what other ways is this information used? In what ways could your company take better advantage of the knowledge gained from real-time BI activities?

4 What are your department's best practices for conducting real-time business intelligence? How do these relate to the best practices generally used in your industry? What steps led to the evolution of these practices – both in your industry and at your company?

5 What role do your employees play in the performance of BI activities? What training and knowledge base are necessary? In what ways do the qualifications differ for conducting real-time BI? On what basis do you hire or select the appropriate personnel to perform this work? How do you motivate people to innovate in BI areas?

6 What are the top five ways that BI benefits your company? How has this list changed in the past three years? In what ways does real-time BI add extra value? How is the potential problem of information overload addressed at your company?

7 In the next 12 months, how does your company plan to use business intelligence to grow market share? How will you forecast trends and changing customer demands? Do you plan any changes in your current business intelligence-gathering methods to meet this objective?

8 What is the CTO/CIO's role in providing leadership over BI activities in the department? How do you communicate your performance expectations? What challenges are you likely to encounter? What additional challenges does real-time BI introduce?

9 What percentage of your current IT human and technology resources is presently devoted to BI activities? How is this typical or atypical for companies in your industry?

10 In the next 12 months, how do you plan to expand your real-time business intelligence-gathering capabilities? What new systems do you plan to deploy to generate real-time BI data? What new BI initiatives will be launched as a result of expanded real-time capability?