

EMC PERSPECTIVE



**Overcoming the Barriers to
Business Intelligence Success**

EMC Consulting

Table of Contents

Despite challenges, BI viewed as increasingly important	3
Why previous BI efforts failed	3
Enterprise-wide BI is now a necessity	4
Involve end users early and often	4
Leverage executive sponsorship and outside expertise	5
The result? Ultimately, a more effective organization	5
BI must adapt to changing requirements	5

Despite challenges, BI viewed as increasingly important

More than ever, companies are faced with the need to make faster, timelier, and better-informed business decisions in order to react to changes in the marketplace and remain competitive. Many organizations have invested significantly in business intelligence (BI) tools to help them wade through the ever-deepening sea of information and make solid business decisions, but have had only limited success in getting their business users to adopt them.

Many BI initiatives have failed because the tools weren't accessible enough to end users so the BI capabilities were never really applied. Users often simply used the BI system to pull data from the data warehouse and import it into Excel, bypassing the system's analytic capabilities that, to them, seemed overly complex or not very useful.

Fortunately, as BI evolves from nicety to necessity, new technologies are blurring the lines between desktop applications like Microsoft Office and the back-office systems that hold the data. This is allowing end users to access BI information as part of their day-to-day application and desktop environment, in a context that makes sense to them, which removes the most significant barrier to BI success. Organizations can use the lessons learned from past efforts to uncover the guidelines and best practices that help ensure success in future BI initiatives.

Why previous BI efforts failed

BI technologies were a response to the unique and constantly evolving information needs of companies. These needs were rarely fully met by the front- and back-office applications used by employees in day-to-day operations. Reporting was usually an afterthought for most of these systems.

BI was supposed to solve that by making objective information widely and easily available throughout the organization. So what happened? Most often it was a classic case of technology for technology's sake. Most failed BI initiatives were simply a result of not meeting the end users' needs effectively.

For example, end users were often not fully included in the development of the data warehouse, which is typically the foundation of the BI system's capabilities. The standard reports that were pulled from the data in the data warehouse were not necessarily useful and end users often found the reporting interface of the BI system that was used to create ad hoc reports to be counter-intuitive.

Not having been involved up front in the definition of the reporting capabilities left users feeling that there just wasn't enough value to justify the BI system's use. Besides, the tools they already had on their desktop seemed to serve them just fine. After all was said and done, the perception was the BI system provided reporting capabilities that weren't much more useful than what users had before.

Enterprise-wide BI is now a necessity

So, users turned to spreadsheets like Excel to give them the information they needed. The problem is that getting the data to enter into the spreadsheets is an inefficient and error-prone process. Users must typically gather information from multiple systems, often with duplicated information fields and some with more current information than others.

This produces numerous potentially conflicting analyses that are also not easily shared. Objective business decisions based on these spreadsheet analyses become difficult. The most politically savvy employee with the most persuasive arguments—and not necessarily the employee with the most accurate information or most insightful analysis—is deemed the holder of the spreadsheet of “truth.”

It is clear that spreadsheet-based BI is not only insufficient, it is potentially damaging to an organization. Line executives confidently, but mistakenly, make business decisions based on the information from spreadsheet analyses that can lead separate functions in diametrically opposed operational directions. With companies creating more data of all types, and changing that data more frequently, it is a bigger challenge than ever to organize and make sense of this data. An enterprise-wide BI system that fosters consistency and alignment of the decisions across functions is a mandate going forward. The viability of the organization depends directly on the information these systems provide.

Thankfully, BI vendors like Microsoft have responded with products like SQL Server 2005, 2007 Office System, Office PerformancePoint Server 2007, and Office SharePoint Server 2007 that help unify databases, application environments, and desktop tools—and system integrators like EMC can provide the expertise to fully integrate the storage infrastructure with the database, application, and desktop environments. Now developers, administrators, and end users are able to create complete BI solutions that make high-quality information available widely and consistently.

Involve end users early and often

Organizations that focused on infrastructure issues while trying to make BI work were not wrong to do so. The data warehouse is the foundation of any business intelligence initiative. Get this wrong, and the effort is sure to fail.

Today, the data warehouse is no less important. Data warehouses are large, all-encompassing repositories that must bring together many different types of data, including structured transaction data and unstructured documents, which can be active or archived. The data warehouses must be able to fulfill a high volume of read requests for very large data sets with good performance. So database structure and storage layout are critical. Expertise in data warehouse technology and information management is important to the success of the project. Organizations should take advantage of the best practices that have been developed from past efforts.

But the end users don't use the data warehouse directly. They use applications and tools that are based on the software on their desktops including Excel and other Office applications. So, it is important that any reporting capabilities that are part of the business intelligence system and draw from the data warehouse must be integrated with the users' desktop environments. The success of the BI program depends greatly on not just how well information and the data warehouse are managed, but also how easy it is for end users to take advantage of that information and how intuitive they find the tools.

The end-user perspective must be an integral part of the effort from the very beginning. By allowing the end users to shape the solution, the true business requirements are met more effectively. This results in a higher adoption rate and subsequent broader use of the tools.

Leverage executive sponsorship and outside expertise

In addition, most business intelligence initiatives by definition touch a broad cross section of the organization. A sponsoring executive with enough political strength to effectively mediate all the potential cross-functional conflicts that inevitably result is a critical component to success.

Outside experts can provide an objective influence that helps to de-politicize the process. They can also provide a disciplined, business-first approach and a proven methodology that is built upon external standards and best practices. Organizations should always look to eliminate risk wherever possible, and a proven methodology increases the chances for success. By combining qualified technologists, proven solutions, disciplined processes, and established tools there is a higher chance of avoiding past failures and achieving the desired outcomes.

Companies should look for a mix of expertise that includes database structure, Extract, Transform, and Load (ETL) design, end-user tools, and security. A proven ETL process will ensure timeliness and accuracy of the data while the use of web- and Windows-based tools that are already in place will help drive user adoption. Expertise in integrating server and desktop environments like SQL Server, SharePoint, and the Microsoft Office System will ultimately help accelerate any enterprise reporting initiative.

The result? Ultimately, a more effective organization

Organizations that build a BI system with greater end-user involvement will find much broader use of the capabilities. Once decision-makers begin getting reports that answer their questions, it is a natural progression to ask more questions to probe the business further. Many organizations that have been persistent with their BI efforts and are beginning to better serve users' needs quickly see a significant increase in the number of BI project requests as word gets out.

Having access to better information allows end users to make better business decisions because the information is more consistent, current, and comprehensive. Employees also see productivity improvements because less time is spent searching, collating, and assembling the information needed. As a result, they have more time for higher value analysis activities.

Regardless, whether the improved information helps employees identify operational bottlenecks, re-engineer business processes more effectively, or determine root-cause analysis—e.g., why did sales drop in the Midwest?—the bottom line is the bottom line. The result of better decisions is likely to be improved financial performance and profitability through cost reduction, cost avoidance, or increased sales.

BI must adapt to changing requirements

It is important to note that a BI initiative never really ends. Instead, it should continue to evolve as the information needs of the organization change over time. So flexibility of the BI system is important.

Having the visibility of high-level executive sponsorship and end users involved in the definition and ongoing management of the system will ensure that the BI capabilities serve the needs of the business and not that end users serve the needs of the infrastructure.

Objective outside resources, with a proven track record dealing with all aspects of a BI system from the infrastructure issues of the data warehouse to integration with user desktop environments, will improve the probability of success.



EMC Corporation
Hopkinton
Massachusetts
01748-9103
1-508-435-1000
In North America 1-866-464-7381
www.EMC.com