

Winning hearts and minds

Ignoring the company culture can lead to hard times for data warehousing projects.

BY DAVID STODDER

“**M**ay you live in interesting times” is a saying that comes to mind often in these days of economic turmoil. This proverb could be applied to business intelligence (BI) and data warehousing—perhaps especially so, given how important they are to organizations seeking to weather the storm and come out stronger once it passes.

The evolution of BI and data warehousing has brought professionals who develop and manage these systems into an era of “interesting times” that goes beyond technology challenges. While IT still plays a key role, such implementations are less and less dominated by IT management. Instead, corporate executives, line-of-business managers and end users are prominent stakeholders. Increasingly, these stakeholders are in control of funding, which gives them a significant role in shaping the direction of these systems. In addition, most enterprise-class applications—such as enterprise resource planning (ERP), customer relationship management (CRM) and performance management—work with embedded or integrated BI tools and use data warehouses and integration software. As a result, these business-critical systems depend on the data they process to meet daily operational and transactional requirements.

Very important people

To keep projects on a successful trajectory, professionals who develop and manage



Photography by Veer

data systems need to focus on “soft” issues as much as, if not more than, the technology. How do you grapple with all of the competing information and organizational, ownership and political issues that arise as various stakeholders try to steer development and optimization to accomplish their objectives? Amid economic distractions, how do you keep BI and data warehouse projects top of mind so that implementations are focused on truly game-changing objectives rather than the same-old, same-old? And what should be done to improve the alignment of business and IT behind shared goals—including making sure those goals match up with corporate strategy?

The hard truth is that if BI and data warehouse professionals do not pay attention to the people and cultural issues, organizations risk having key projects flounder and sponsors drift

Even amid economic uncertainty, there’s never been a better time to design, develop and implement BI and data warehouse systems.

away. Healthy discussion and give-and-take between business and IT can spiral into uncontrolled conflicts if communication and governance are not addressed proactively.

Some of the most

exciting developments in this area require professionals to take a broader view of their roles and the steps necessary for projects to be successful. Fortunately, best practices exist for dealing with the soft issues that crop up as BI and data warehousing expand in scope and importance.

Know (and respect) the culture

To start projects on the right foot, take stock of the organization’s culture, the sponsors and, in particular, the users who are the focus of the implementation. Too often, BI is deployed to users simply as “tools,” without an adequate understanding of what the users will be doing with these tools or the data. The unfortunate result can be “shelfware”: Users ignore the tools or don’t use them to their fullest potential.

Remember that in most organizations, people have been using something—spreadsheets, canned reports, documents or just communication—to support strategic and operational decisions. Be careful not to ignore or dismiss existing behavior too quickly. You need to know what users have been doing to effectively sell them on why BI and data warehousing will be an improvement.

BI is about bringing data insights to bear on decisions, analysis and actions. Is the organization ready to have “gut feel” decision

making challenged by fact-based analysis? If not, architects and developers must see to it that users understand the role of BI and the organization’s objectives in deploying it. Do the target users tend to make decisions within their group or collaboratively with colleagues in other business functions, departments or regions? The answers could indicate that data ownership and governance will be priorities.

One best practice is to discuss with users and sponsors what role they envision BI playing in how decisions are made; that is, what users plan to do with the data and with whom they need to share it. Knowledge of the culture will give architects a better sense of the technical and information management requirements as well as a preview of culture clashes that may lie ahead as projects roll out.

Deliver incremental benefits

In most cases, organizations have become less tolerant of long project development cycles that do not deliver benefits in the near term. Especially in the current economy, potential sponsors fear signing up for big, expensive projects that might not be finished in time to deliver the business impact sought. Research has shown that users frequently complain about deployment delays. Thus, one of the best approaches is to deliver incremental benefits so that users see some functionality in the near term while architects and developers work on other aspects that take longer to finish.

Start by understanding the organization’s BI priorities. For example, Ventana Research found in its benchmark research study on operational BI trends that for the majority of organizations, improving efficiency is the most important goal of expanding BI to operational users. This generally means that companies want to analyze data to find ways to reduce costs. Could simply delivering existing reports through the new BI system save the organization time and money? You could have a quick win by making that happen first. Are there information sources that are difficult or impossible for operational managers and users to access that could be critical to improving efficiency? Focus your initial data warehouse and integration efforts on providing timely access to those sources. The bottom line is to deliver business value starting now, not next year.

Plan BI projects around corporate strategy

Corporate strategy should be the guiding star for data warehouse and BI efforts. If projects relate directly to strategic initiatives in operations and corporate management, stakeholders are more likely to stay focused on their success and protect funding. Corporate strategies are almost always cross-functional, which can increase the number of users and the diversity of BI needs. This means that BI architects and developers will need to work closely with all stakeholders to correctly balance performance requirements. On that point, they must evaluate tools and methods for

analyzing workloads and identifying which users are submitting problematic queries so that they may be remedied.

Strategic initiatives often implement key performance indicators and other metrics associated with management methodologies such as Balanced Scorecard. Make sure developers understand performance management requirements and how they affect deliverables such as dashboards.

Some metrics might need very frequent data refreshes while others do not. Information often needs to be actionable. For example, some metrics might be tied to price optimization strategies that trigger the running of particular queries when thresholds are crossed. Thus, understanding the decision processes involved in implementing corporate strategies helps you plan BI systems to support those strategies.

BI and performance management systems are the linchpin of corporate strategy. Focus on building well-designed dashboards supported by carefully managed data warehouses so that users have information with which to execute strategy.

Get business and IT in sync

More than most applications, BI and data warehousing projects require a collaborative effort involving business and IT leadership. On the business side, users are naturally focused on the role of information in enabling them to achieve success. IT management has to balance talent and technology resources with service level agreements; meet governance, regulatory and security requirements; and manage data as a corporate asset. Whereas business users often want to control or own their data and avoid IT involvement, IT would like to centralize data management to lower costs, protect the data and make it available to more users.

The best way to get business and IT in sync is to create an institution that explicitly defines shared leadership and responsibility. Many organizations have successfully established competency centers or centers of excellence that provide leadership regarding technology purchasing, design and architecture, project management, governance for data access and sharing, and other matters. The center can also serve as a communication hub, where business and IT iron out differences and publicize successful projects to the rest of the organization.

To determine return on investment (ROI), some look at BI projects as a portfolio, about which investment decisions need to be made and performance tracked. This step can help in developing metrics that can be communicated to the organization about the value of BI projects.

Seal the deal with trusted, high-value information

Once they get rolling, BI and data warehousing systems can deliver impressive amounts of data to users' dashboards, alerts, analytic applications and mobile devices. However, if the data is of poor quality or confuses users, BI's cure can be worse than the

disease. Once business users lose confidence in what they receive, they will return to their spreadsheets and data silos and resist IT's entreaties to support enterprise BI and information management.

Many political battles arise because business users say they can't trust IT with their data—and IT says that's because the business side isn't taking responsibility for how that data gets into systems in the first place. Business and IT should work together to map out the information "supply chain" to understand the full life cycle of data, from when

it comes into the systems to when it is used, shared and finally archived. This will help organizations gain a better understanding of the quality and value of what is in their data warehouse.

If BI and data warehouse professionals do not pay attention to the people and cultural issues, organizations risk having key projects flounder and sponsors drift away.

There's really no stronger selling point for BI and data warehousing investments than the ability to give business users quality information that they could not get before. Make data quality a priority, but understand that not all data-quality requirements are the same. Some users or applications do not need the highest level, while others do. Quality can also be measured in a variety of ways, including timeliness, completeness, "dirtiness" and level of redundancy. Meet with users to find out what's important, and evaluate tools that address your needs.

Interesting times equal exciting times

Even amid economic uncertainty, there's never been a better time to design, develop and implement BI and data warehouse systems. Most organizations know they need information intelligence. The technology already can handle lots of data, many users and intense analytic needs. And there's more innovation to come. However, the technology's current and future prowess is not enough to guarantee success. You have to overcome cultural and political challenges as well.

When the technical and human challenges are met, many BI and data warehouse users and managers forget to do something very important: communicate about it! Nothing builds momentum better than the delivery of real-world business value. And that's exactly what BI and data warehousing are focused on achieving. **T**

David Stodder is principal analyst and writer with Perceptive Information Strategies. He also serves as research fellow with Ventana Research.