WHAT A BUSINESS USER NEEDS TO KNOW TO SUCCESSFULLY PARTNER WITH THE IT DEPARTMENT ON A BI PROJECT

Premise

In any successful BI solution, critical business rules must be imbedded in both the technical application and the business process. Business users and IT must work to ensure that these business rules work together as one system to produce a sustainable competitive advantage for the organization. Anything less may not only cause failure but may encourage decisions to be made on incorrect information.

Business users tend to shy away when a project has a lot of technical overtones, but they can be successful with such a project if they have a roadmap to help anticipate and avoid the possible pitfalls. This paper is meant to help the business user manage and control the project in order to accomplish the desired solution on time and within budget.

Although each company has employees that have more or less business and technical experience, this paper assumes that the technical staff have modest business experience and the business users' modest technical experience.

Introduction

Business Information or Business intelligence projects can rapidly get out of hand and costs can accumulate far beyond what was budgeted. Many times the cause is simply a lack of communication on important issues that both parties assume are being handled by the other. This paper focuses on the critical topics that must be communicated, discussed and resolved by both IT and the business sponsor. Business users may not totally understand the implications of all the technical issues listed below, but they must ensure that they are raised at the table for discussion so that everyone is aware and can contribute to the solving of the problems to the best of their capabilities.

1. Don't Assume that Information Technology department drives the BI solution

The business user usually owns the budget and therefore owns the BI solution. IT may be the lead developer, supporter and sometimes a leading champion of a BI effort, but (other than technical issues) the ultimate responsibility for the success of BI lies with the business user. Unfortunately, there are always some business users who assume that once they have provided the requirements to IT their participation is over until the solution is delivered (aside from answering a few questions). Business users who let IT alone drive the effort run a high risk of not getting the solution they expect, which may be an unworkable solution for them. It is imperative that business users demonstrate ownership and leadership throughout the entire project.

2. Recognize that BI success and maturity comes in stages

A common cause of initial BI project failure is to plan for the ultimate solution, or the "Big bang" theory, rather than recognizing that experience and maturity will come in stages through solving one or two major business critical issues at a time. Learning as you go will result in spending less money and a better solution in the long term. The lessons learned will accumulate and pay major dividends as more and more solutions are added to the BI family. Shoot for quick wins, and confidence, success and maturity will follow.

However, there is a price to pay. Projects cannot be completely budgeted on their own merit. There must be an allowance, or "tax" that will contribute to building the proper infrastructure. IT and the budget owner must work together to ensure that the project is properly funded for current and future efforts.

3. Help IT understand BI efforts must be aligned with specific business goals

When mentioning BI, it is easy to be intrigued by the prospect of colorful graphs and charts that will point out new opportunities to provide a competitive advantage– a new horizon that is just waiting to be exploited. It's an exciting adventure for everyone, including IT.

IT professionals want to build solutions of which they can be proud. However, IT people usually don't have the experience business users possess. All too often, they may fall into the "build it and they will come" trap. It is up to the business user to help them avoid that approach.

If the BI goals are not properly presented to IT, they may believe that if they provide the all possible information to the users, along with the necessary tools to analyze the information, then IT has done its job and it is now up to the users to find the information that will give the company a competitive advantage. This "if we build it they will come" mentality is not a successful approach. Business users are not looking for "discovery" tools, but rather timely information on which they can take action.

The business user must carefully outline the business goals in detail. Not only what information is to be provided, but how they will use the information. Once IT understands how the information is to be used they will be able better prepared to create a much better solution. IT should also understand that the Business users are not trying to invent a brand new process, but rather are seeking to improve a business process that is being done today - one that can be improved to gain a sustainable competitive advantage. If a process is not being done today it's probably not business critical.

4. The Business users must do more than buy in

It may seem obvious to say that Business users must "buy in" to the BI effort from the very beginning. However, Business users generally seriously underestimate the amount of effort required for their participation. They must understand the commitment they should make in managing the project through to success.

Business users will be required to spend more time than expected:
- Explaining the existing business critical process that must be improved
- Identifying the specific information needed
- Identifying how the information is to be rolled up
- Indemnifying what business rules must be built into the solution
- Identifying the source information that makes up the solution
- Identifying the formats required
- Identifying the timing of required information
- Identifying trades off between resources and results
- Identifying the levels of information access (security)
- Identifying that the sources of data are correct
- Testing the final solution (lots of effort)

5. Business users must participate in the selection of BI tools

It's easy for IT to focus on technical issues rather than business issues, which can easily put the focus of the BI effort on the wrong issues. Some common misconceptions are:

- We should choose a BI tool first
- Believing that "cubes" solve all the users problems
- Assuming dashboards are a generic solution
      Assuming that BI can be a generic solution

Although IT views its role as the expert in technology, Business users must be allowed to participate in the selection of the BI tools. IT should have the final say so on technology, but business users should also agree on the tools they will be using. Forcing business users to accept a specific tool may drive them back to using the old solutions.

An important technical goal is to strive to deliver the information in the most cost effective and timely manner that most closely integrates with the current business user environment. For example, many business users prefer spread sheets. Leveraging existing Microsoft tools may not only be cost effective, but can reduce the amount of resistance to the solution for the Business users.

6. Don't underestimate the importance of providing proper supporting detail

Too often, BI developers spend a disproportionate amount of time on the presentation of the BI information (which is the enjoyable part), and less on providing a path to the supporting information (which is the difficult part). Once business users spot a problem or an opportunity they must be able to "drill down" analyze and act on the supporting information. It is up to the Business users to help IT understand the business processes so the proper supporting detail is available and balances across the detail provided from the appropriate sub-systems; i.e., finance, operations, sales, etc.

Everyone must be aware that drilling to the detail, in many cases, is not simply a matter of providing source detail. Many management reports are modified with "off line adjustments," using spreadsheets and ad hoc database tools. Getting back to that information that may or may not exist may not be so easy. Those processes must be built into the BI solution and be available when drilling to detail and proving or analyzing the information. Business users must help IT identify who knows how the process works (which may exist only as "tribal knowledge") and map the manual processes that manipulate the data and identify:

- Custom software routines
- Excel spreadsheets
- Manual adjustments
- Temporary tables that disappear

If that information is missing or difficult to get to, the users will immediately lose confidence in the BI system and revert back to using their old, comfortable systems. Recovering from this is difficult and sometimes impossible. Developers must understand the business processes and business rules so they can anticipate how the users will want to drill to the supporting information.

Inconsistent data is even worse. If detailed information is missing, users may be patient enough to explain what they need and give developers time to provide it. But, if information is inconsistent, users will lose all confidence and more often than not, the BI project is doomed to failure.

Another problem is providing too much data. Many times developers will provide as much information as possible and assume the users will figure out what they need. Users are not trained IT personnel who understand the implications of manipulating large data sets and the use of appropriate tools. Users do not have the time to experiment and learn while managing their own jobs and responsibilities. They will become overwhelmed and frustrated and revert back to the old tools and systems.

Providing the ability to drill to detailed, supporting information creates a sustainable business advantage by providing "actionable" information to the business users. IT must recognize that knowledge and being able to act on that knowledge are two different things.

When planning to provide the proper supporting detail:
- Help IT understand the business process so the right data is provided to support and prove the BI information
- Discuss the how the solution will provide actionable information
- Remember missing information will cause a loss in confidence
- Avoid inconsistent information that will lead to failure
- Keep in mind that too much data leads to confusion and frustration

7. Know that timing issues are more than processing issues

Getting information to the Business users in a timely manner is very important as they are already struggling to get their normal jobs completed in a limited amount of time, and IT developers should be sensitive to this issue when providing BI solutions. IT developers will usually understand this and take into account with system and network processing limitations.

But, there is another timing issue that is often overlooked, and that is providing the users with the information they need to understand the timing of the information that is being presented to them. A user may look at a report and dismiss it because they know that information that is in the system is not in the report. The answer may simply be that the BI report was processed before the information was entered into the transaction system or before the BI systems were updated. This can be prevented by simply providing the user with a clear "as of date" on the presented information. It is important to ensure business users have an easy way to understand the timing or cutoff of the information.

Business users must also help IT understand timing issues related to business processes. That is, if information is provided from two separate sub-systems that are not in synch, IT might assume they are providing the latest information out of the database, but the information will appear faulty to the Business users. For example, revenue may be posted to sales accounts which have not been updated to ledger accounts and a report containing both pieces of information will be immediately dismissed as wrong when the issue is one of timing.

Allowing the user to be in the dark as to the timing of BI information will certainly lead to confusion and the assumption that the BI system is faulty.

8. ETL development will consume most of the project budget

ETL (Extraction, Transformation and Loading) is a process that is mostly invisible to the business users but is a key element to the success of the BI project. It is the most difficult part of any BI project, and the effort is usually under-estimated and under-budgeted. Business users should know that the ETL will take at least 70% of the entire BI effort and many times even more. BI projects that are not budgeted for this effort will require going back to the well for more funding and more time.

On the other hand, IT may assume that providing BI information is accomplished by simply extracting existing information from source systems and "rolling it up" to summary indicators. Business users know that they spend hours making off line adjustments by manipulating and revising source data using spread sheets or MS Access before it is passed up the chain of command. Those "off line" business rules must be built into the BI solution, not only to provide the data, but to be available when drilling to detail to prove or analyze the information. This takes a great deal of time and is usually not accounted for when estimating BI projects.

Other issues that can cause "scope creep" if they are not budgeted may be:
- Data quality issues
- Data dependencies
- Complex data relationships
- Duplicate data from disparate, multiple systems

9. Develop a plan for a master data approach to avoid mixing information

Data must be carefully filtered and labeled to prevent confusion. Developers should pay particular attention to data from multiple source systems as the coding used for information will probably not match; i.e., sales categories, country codes, etc. The business users must help IT understand the coding they have established to ensure proper consolidation and reporting.

10. Ensure purging and archiving policies are in place

Business users may assume that the information they are provided with will be there indefinitely. For example, business users may want to perform 5 or even 10 year analysis on information. Yet, IT may be planning systems that require purging and/or off line storage after only a few years. Both parties need to communicate their expectations and focus on a solution that meets both technological and business needs.