

Indispensable analysis

Seven attributes of an effective business intelligence analyst. *by Sid Adelman*



In many organizations, a business intelligence (BI) analyst writes reports and creates queries when a business manager requests analytical information. But once the results are produced and delivered, few analysts follow up with the requesters to determine whether the results were appropriate, useful or satisfactory. Nor do many analysts delve for additional information, either by writing another query or by consulting with the requester to determine what other aspects of the data would be relevant, for example.

The potential contribution and value of a BI analyst go far beyond what most achieve. The following are areas where

you, as a true BI analyst, can develop your career by making yourself indispensable in your organization.

#1: Do your research

Organizations need more than the typical, report-generating BI analyst. As a true BI analyst, you support the user community (especially the casual users) in your organization. Consulting with and training the users are important components of your job, as is ongoing user support. You must be aware of the users' level of system knowledge, as well as their needs and problems. When a software issue arises, for instance, you must monitor the problem and communicate with the vendor until the issue is resolved and the user is satisfied.

It is also essential that you network with other organizations to keep current with the best uses of BI tools. With this knowledge, you will be able to identify which tools

are most appropriate for each class of business user based on the tool's functionalities, capabilities, limitations and ease of use.

#2: Understand what drives the business

You must be familiar with your company's industry. More importantly, as a BI analyst, you should know the strategic goals, vision and mission of your organization. In-depth knowledge of where the power lies in the organization and the underlying culture, including what is and is not acceptable, is of the utmost value.

For example, you should be aware of what drives C-level managers and on what they base their decisions—what is considered hot today is likely to change tomorrow. C-level managers may care about sales, customer attrition, average revenue per unit, subscriber acquisition cost and customer satisfaction. Each of these is measured against the competition.

Where you report in the organization

As a business intelligence (BI) analyst, does it matter whether you report to business or IT? You can be successful regardless of where you report, but here are some advantages to consider for each structure:

- > Reporting to business usually means you are more of a subject matter expert with better access to the

organization's decision makers, an in-depth knowledge of your department and a deeper understanding of the importance of a request.

- > Reporting to IT should give you more immediate access to tools and new capabilities, and it might give you a broader audience of requesters.

—S.A.

To understand the magnitude of these measurements, it's important to ask the requester how the results will be used within the organization.

#3: Build and nurture relationships

The relationship between you and IT is critical: IT provides the data, deals with vendor software issues, and does its best to ensure reasonable performance and acceptable availability. Service level agreements (SLAs) should help IT prioritize its efforts and help deliver satisfactory performance and availability. A successful BI analyst needs appropriate resources and timely responses to requests and problems.

It is a wise social gesture to give IT employees the credit they deserve and to let them know they are appreciated and

Spread the wealth

Some business analysts have found IT to be most responsive and attentive when doughnuts were provided at weekly meetings.

supported. After all, they are an integral component of the organization's success. BI analysts should thank IT employees—verbally and in writing—for their work.

#4: Take responsibility for data quality

A successful BI analyst must have quality data. If the data is wrong, your results will be wrong, your organization could be misrepresented, or an inaccurate report could go to your regulators or stockholders. It is essential to validate the quality of the data *before* running a query, as well as validating the *results* of your query or report.

Data profiling tools and techniques can evaluate the data and identify problems. (The exception is accuracy, which is more difficult to identify.) Data quality is measured by:

Weekly status report

A one- to two-page weekly status report for your boss, with a possible subset to your prime requesters, should contain the following information:

- > Number of requests received and fulfilled, from which department and from which requesters
- > Turnaround time from when each request is made to when it is fulfilled
- > Feedback from requesters about the value of your efforts

- > List of contributors who worked with you (DBAs, DAs, people responsible for the data source)
- > Opportunities that have been identified, and suggestions for seizing them

Rather than interject criticism of people or departments into your report, verbally share with your boss your observations of areas that could use improvements.

—S.A.

- > Accuracy
- > Completeness (no missing data)
- > Conformance to valid values
- > Conformance to business rules
- > Absence of anomalies or outliers that would distort the results
- > Timeliness

While it may be someone else's job to validate the data, you have the responsibility to know that the validation has been done and that the data you are working with is of reasonable quality. This is where your relationship with IT becomes important. If IT employees are profiling the data and taking appropriate action when the data is substandard, they can provide you with the profile results so that you have a good understanding of whether the data you are accessing is sufficiently clean for your analysis.

#5: Always communicate

When users submit requests, collaborate with them on the type of analysis they will receive and the projected delivery date. You might deliver what is achievable within a reasonable amount of time, but if the requester expected your analysis much sooner and had anticipated a result that proved to be unattainable (because of unavailable data), then your work will be considered a failure or, at best, substandard.

There may be data that is not available in a timely manner, problems with the source data or data quality concerns. The results you get may appear invalid. A system problem may cause delays. Keep the requester informed about any set-backs (without providing excessive detail) along with an estimate of when the problem will be solved and when the results can be expected.

If you are unable to deliver a complete analysis on time, it is imperative to inform the users that a portion of the request cannot be fulfilled because the data does not exist and to give the requester a practical schedule for completion. Communicating with the requester should not be delayed; otherwise, it will appear as an excuse for failure rather than a cooperative setting of expectations.

Share the glory

While your analysis and interpretation of the results may reap certain benefits, give credit where credit is due. Identify for your employers each user, application or query that contributed to the organization's success in achieving its objectives.

After you deliver your analysis, be sure the requester understands the results. If you feel the results require an explanation, schedule a time to meet and present them. Avoid corresponding by e-mail; instead, call

Remain invaluable

Work with your boss and requesters to keep your plate filled with important and challenging work rather than spending your time on less meaningful tasks.

or, preferably, meet in person and ask the following questions:

- > Was the information received useful/valuable?
- > Was the form and presentation of information acceptable? Would any other form or means of delivery be preferred?
- > What information was missing?
- > Did the results prompt any action? What action?
- > Were any tangible or intangible benefits derived from the action?
- > Is any follow-up needed?

This is a good time to collaborate with your requesters and partner with upper management. Sit down with the end users and go the extra mile to share ideas, recommendations and suggestions. With your knowledge of the system and management's inquiries, you could uncover an exciting level of analysis previously unforeseen.

#6: Measure your effectiveness

How well you understand a user's request and how quickly you deliver the results in the expected format will help determine your effectiveness as a BI analyst. You will also be measured on whether you deliver the results as requested by the user, the intuitiveness of the analysis, and your ability

to explain the outcome. But your resourcefulness should not stop there.

A truly effective BI analyst will take the user's request to a higher level by generating the next question that will provide more and better information. Oftentimes, the user does not ask questions because they are uncovered only through your analysis.

Not everything you do will result in benefits—either tangible or intangible—but some will, and as those benefits are identified, take the opportunity to capture them.

For example, let's say you are a BI analyst at an insurance company. It is known that 2% of insurance claims filed in the company are fraudulent, and each fraudulent claim results in a \$1,000 loss. After your analysis, your organization changes its claim procedures, fraud is reduced to 1.5%, and the company's losses are dramatically decreased. Your tangible benefits are the number of claims times 0.5% times \$1,000.

Expand your knowledge

Behind the scenes, true BI analysts build and maintain the query and report library. Use your BI analyst skills to disseminate information about the library and relay current functions, tips and best practices to the users.

#7: Be proactive

A true BI analyst provides information that will help drive your organization to success. This means going beyond taking in requests, running reports and delivering the results.

To be truly effective, you must understand the focus and goals of the company. You must ensure the quality of the data and offer an interpretation of the data that will answer questions not yet asked by the requester. You must follow up with the requesters to ensure that their needs are being met.

In short, your role as a true BI analyst will help propel your organization past its competitors. **T**

Sid Adelman is a principal in Sid Adelman & Associates, an organization specializing in planning and implementing data warehouses. He consults on data warehouse topics including assessments, determining requirements, project planning, and organizational and cultural issues.

What to do when you are overworked

Once you are successful at delivering valuable information to the business requesters, you are almost inevitably labeled as the one to go to. This will most likely result in waves of requests, usually with exaggerated importance and impossible deadlines. Accepting all requests is not the answer. When it is politically incorrect to say no, these approaches can help alleviate the problem:

- > Build and maintain a list of requests. Include when they were requested, from whom the requests came, and some indication of the value of the request. (This is not exactly a cost/benefit analysis but is a qualitative estimate.)
- > Ask your boss to prioritize and possibly reassign some requests.
- > Put in reasonable hours to perform your work. Be careful not to accept more projects than you can handle.
- > Build a set of pre-defined queries and reports to satisfy the more common requests. Teach the requesters how to run these queries and reports.

—S.A.