DM Review Online

Business Intelligence: Key Performance Indicators

Measuring BI

- **Dorothy Miller**

- **DM Review Online, September 21, 2007**

DM Review would like to welcome Dorothy Miller as our newest online columnist. In her book, ***Measuring Business Intelligence Success****, she has created the TBIA Business Intelligence Capability Maturity Model which defines a comprehensive BI audit program. She has identified and defined key performance indicators (KPIs) to use as measurement factors in the audit program. These KPIs highlight specific aspects of BI. They are primary drivers, and the extent of their presence as part of the BI assets are key to success. In these columns, all the KPIs which have been established as part of the TBIA Business Intelligence Capability Maturity Model will be identified and described.*

In this first series of columns, I will discuss the measurement factors which are used in a business intelligent (BI) audit. This column identifies all the key performance indicators (KPIs) that exist within the TBIA BI Capability Maturity Model and how they are used. Then I'll describe in greater detail, the first KPI, Management Support**,** as it applies to the auditing of BI assets. The second column will address the Requirements and Goals for successful creation and management of BI.

The TBIA Business Intelligence Capability Maturity Model

The TBIA Business Intelligence Capability Maturity Model defined in the book, *Measuring Business Intelligence Success*, is primarily a tool for auditing of BI assets. The objectives of the book and the model are to provide a blueprint for the BI audit. The specific objectives are to identify and describe the following (see Figure 1):

Figure 1

1. **What is to be audited**? The BI asset base. In order to review and assess the BI assets, it is necessary first to define those assets. It is necessary to understand the exact nature of the spider web of data, infrastructures, constructs and software called BI.

2**. Measurement factors**. KPIs. Business drivers and integral aspects of the assets have been identified which are used to rate the BI assets.

3. **A scale, i.e., ruler, to be used for measurement**. Industry guidelines and best practices have been identified and grouped into categories as a scale against which an organization may be measured.

4. **An audit methodology**. Each of the steps or processes in the audit, along with audit guidelines and available tools are defined.

5. How to **use the results.** The audit methodology in the TBIA Business Intelligence Capability Maturity Model includes a well-defined program for using the results of the BI audit. This is an action response program directed at improving the BI asset base for the organization.

KPIs for BI

KPIs have been identified for BI (see Figure 2). These are key business and technical drivers which are necessary for successful creation and management of BI assets. These KPIs have been developed for the TBIA Business Intelligence Capability Maturity Model in order to provide measurement factors which can be used in the assessment of the BI assets. These KPIs are applied to each BI component as well as the whole of the BI asset base. These are used in a manner similar to which we might use *height* as a measurement factor for an object or person. (Thus, feet and inches would be the scale/ruler for measurement.) These KPIs may have to be redefined or refined for specific organization requirements.

Figure 2

Management Support

Whether applied to the overall process of creating and managing BI assets, or to assessing the lowest level target for the BI audit, management support is perhaps the key factor for success. Management must, first of all, understand just what BI is and what it means to the organization. What are the products, the principles, risks and realities? What are the benefits and costs? Then management needs to make a conscious decision to accept the realities of today's business environment and to take the actions necessary to create, manage and use the organization BI assets effectively. This is a decision which must come from the highest levels of the organization management. Since BI activities and assets cross all the internal boundaries and impact the whole of the organization, the results of any parochial, or local management, decision(s) will not be effective or successful. Integration of data, infrastructures and architectures demand that all the organization resources must act as a single unit.

Developing a BI asset base requires a lot of time, money and human resources, and sending out the word to "do it" without the necessary allocation of resources is just not going to make it happen. Demanding a ROI for each individual project may be a good rule of thumb, since it makes those involved carefully evaluate their plans and determine whether there is real value in the proposed BI application development project. However, expecting a *tangible and definitive* **,** documented ROI for the total dollars spent on BI is not a reasonable expectation. Resources spent on BI must be evaluated in terms of both costs as well as value returned. Those returns should be evaluated based, not just on short-term, tangible factors, but on numerous other impacts to the organization. For example, returns might be in the form of

the medium-to-long term value of better decisions made possible with the new BI. Hard to measure! Managers who understand the value of BI, spend the resources knowing that if the BI projects are well planned and effective, the money is well spent.

Management support also means the willingness to accommodate changes to operations and internal management guidelines where necessary to leverage the BI. This means that sometimes organization success in using BI assets requires the realignment of the business to the BI requirements.

Management support means spending resources for training, communications and such initiatives as those for data quality, master data and meta data to ensure that the BI products are of the highest quality.

Management support means auditing of the BI assets for the organization in order to provide for better understanding of BI, a baseline for continual management monitoring, and a follow-up action response program for improvement of BI within the organization.

Dorothy Miller is a consultant, writer and trainer specializing in management decision support, data warehousing and business intelligence. She is the author of Measuring Business Intelligence Success and Improving Business Intelligence: The Six Sigma Way. You can contact her at dmiller@sixsigmaBI.com