Data Analysis

When people think of data analysis, they normally think of two things. One is a person working day and night staring at spreadsheets, and the other is a fast talker who refers to unjustifiable figures to prove a point and normally wins the debate because you cannot refute their proof because you cannot understand their data. How do you know if their data is good, relevant, and up-to-date? With terabytes upon terabytes of information at your disposal, are you making better decisions?

How do you know what metrics to track, and how do you use these metrics to better your company? There are no secret answers, just methods to help out. Methods come with experience gained through training classes, seasoned veterans or by building partnerships with other companies.

With all this data at your fingertips, you could be drowning in spread sheets and graphs but what can you do? The key to Data Analysis is knowing that something is better than nothing, and you can build on to that method. You need to keep your company goals in mind and know what your limitations are. A popular objective in companies today is "to continually improve." I guess it can be said that if you do nothing, you are doing something wrong.

No matter what size company you are, it is a bad idea to have your reports coming off your production servers. This can increase the potential of many problems, like slowdown due to data access and dead lock errors that at a minimum will cause errors and at maximum could corrupt databases. There is also the risk that everyone thinks they are wizards with a computer and can write macros or use stored procedures, and most people do not consider the side effects. The biggest programming mishaps I see commonly are connections that are opened over and over and never closed. You may be more familiar with the symptoms — after a computer\server has been running for a few months, you needed to do a re-boot "Maintenance" on it. Rebooting is not normal maintenance, even though it is a common practice.

Bridging that gap between your company objective and reality is a tough, time-consuming undertaking. You need to determine what your objective really means and what metrics, if tracked, can help you. To do this, you need to determine where you currently stand and what metrics will help you move toward your goals.

Clean It Up

The concept of clean data refers to framing data so that there is a clear and decisive path to your analysis conclusions. It is thought that, given any data, you can get the results you want. For example, if I tell you that sales are down 32% after RJ left the company and that his sales averaged 32%, and this is why the company is down in sales, this shows data and analysis. Well, this could only be in a really bad company. If someone leaves, then others take over some, if not all, of those accounts. There should be plans in place to prevent this, and I would say that if there is not a plan in place like a non-compete clause, then it is not a problem with the employee leaving; rather, the problem is due to not having the proper plans in place. What data should you be looking at? You need relevant data that, if an outside auditor came in and looked at the same data, they would have come up with the same conclusion you did. A lot of people know their industry and make decisions based off of that earned knowledge. Then, later down the road when the industry expert is not with the company, people do not know why decisions were made. Industry knowledge is great for understanding what data mining needs to be done, but data documentation and analysis need to be recorded, if for nothing else but historical purposes. Smart sound analysis is essential to your company's success. ■

The ABCs of Analysis

AMASS all your data into a separate secured but accessible and retrievable location.

BRIDGE that gap from objective to reality.

CLEAN your data so that you are unprejudiced.