

4 Steps To Better Decision Making with Data

“It is a capital mistake to theorize before one has data.”

- Sir Arthur Conan Doyle

Here’s the situation: you’ve gathered and analyzed all the data. Management meetings have slogged on until the wee hours of the morning. After an intense month of planning and preparing, you’re now ready to act: two service offerings will get cut and another will get substantial investment. Long-time staffers will be reassigned or let go based on this reorganization as well as their performance.

Ready...aim...WAIT. There’s only one problem.

The data is inaccurate.

It’s been said that management is the science of making decisions with insufficient data. Couple sentiments like this with historical failures to gather and employ accurate and helpful data, and many companies, while they want facts and analysis, rely too heavily on intuition and guesswork to make decisions.

Yet data and computing power are becoming more important to managers. As the leadership team at McKinsey points out in the July-August 2009 issue of the *Harvard Business Review*, “Data, computing power, and mathematical models have been transforming many realms of management from art to science.” They go on to say:

Companies will, rightly, continue to seek ways to exploit the increasing amounts of data and computing power. As they do so, decision makers in every industry must take responsibility for looking inside the black boxes that advanced quantitative tools often represent and their functioning, assumptions, and limitations.

At Omnios, we have the great fortune of having seen both successes and failures of companies that attempt to make the right data and information available to support decision making. Whether you’re looking to employ advanced quantitative analysis or you simply need accurate information captured and delivered in a way that helps you run your business, we suggest you employ the four following steps:

1. Identify the decisions you make on a regular basis and determine the information that is important to your organization.

Perhaps this point is obvious, but far too many data and technology initiatives start and fail because managers don’t ask this critical question. They should. First asking the question, and then gaining agreement across the organization on the answers, is critical for success.

Projects often die due to lack of urgency. If you gain agreement from company stakeholders on the types of information you need, it’s unlikely your initiative will fall off the radar screen.

Asking the question also forces managers in the organization to get on the same page as to what decisions are most critical to underpin *with decision support data*.

In order to get managers on the same page, start by asking strategy questions:

- How do we know when we need to hire or terminate employees?
- How do we retain, reward, and enhance the performance of our top employees?
- Should we enter a new market or exit a current market?
- Should we invest in new product or service offerings?
- Should we retain a particular customer relationship, focus on enhancing it, or move to terminate it?

Once you know what questions you need to answer, you can start to flesh out what information you'll need to support your decisions. For example, for several of the questions above, you might decide you need the following data:

Questions we need to answer	Data needed
How do we know when we need to hire or terminate employees?	<ul style="list-style-type: none"> • Employee productivity per individual, as a whole, by division, by product or service area • Employee performance against goals • Performance assessments • Capacity modeling • Short and long-term forecasting
How do we retain, reward, and enhance the performance of our top employees?	<ul style="list-style-type: none"> • Employee performance against goals • Performance-based compensation modeling • Current and pro-forma P&L models • High potential employee tracking
Should we invest in new product or service offerings?	<ul style="list-style-type: none"> • Profitability by product and service area in general, by customer segment • Market data for markets outside of current targets • Competitor data • Industry trend and market research data
Should we retain a particular customer relationship, focus on enhancing it, or move to terminate it?	<ul style="list-style-type: none"> • Revenue and profitability data by customer, customer type, market, and so on • Profitability by product and service area in general, by customer segment • Customer lifecycle trend data • Customer growth potential assessment by sales force and delivery staff

As with any management challenge, once you know your objective and identify what you need in place to accomplish it, you can then lay out the path to get there.

2. Identify your data collection processes and look for improvements.

Once you know what data you need to support your decisions, you'll be in one of three boats:

1. You have the data and it's complete and accurate.
2. You don't have the data and you need to get it.
3. You have some data, but you don't know if it's complete or accurate.

If you're in boat #1 your path is fairly obvious: keep doing what you're doing. Most managers find themselves in boats #2 and #3. In our experience, most every company in this situation has at least once moved to solve the problem by saying something like, "OK, well, let's tell the people on the team to start capturing the data and in a few months we'll have everything we need." End of plan.

Two months go by and...nothing. Or worse than nothing, some people gathered the data and some didn't. The data has gaps. And there's no way to know that it's accurate. Until they've felt the pain of data capture failure, managers tend to underestimate just how challenging it is to capture data, verify its accuracy, and control its quality programmatically.

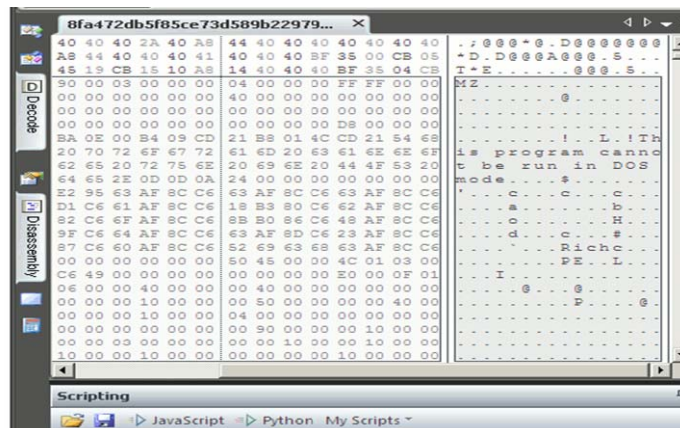
Like our first step in this article, tackling the data collection challenge also begins with questions. Ask yourself:

- Are my processes for collecting data timely and effective?
- Do my data collection processes assure the accuracy and validity of the data I collect?
- Am I collecting the right data to help drive my decisions?

If you find you're not satisfied with your answers, you can do something about them. Once you do, any data that you need (step 1) can be captured and quality controlled (step 2) so you can then use the data to make decisions.

3. Define the formats, models and views of the data required to support your decision making efforts

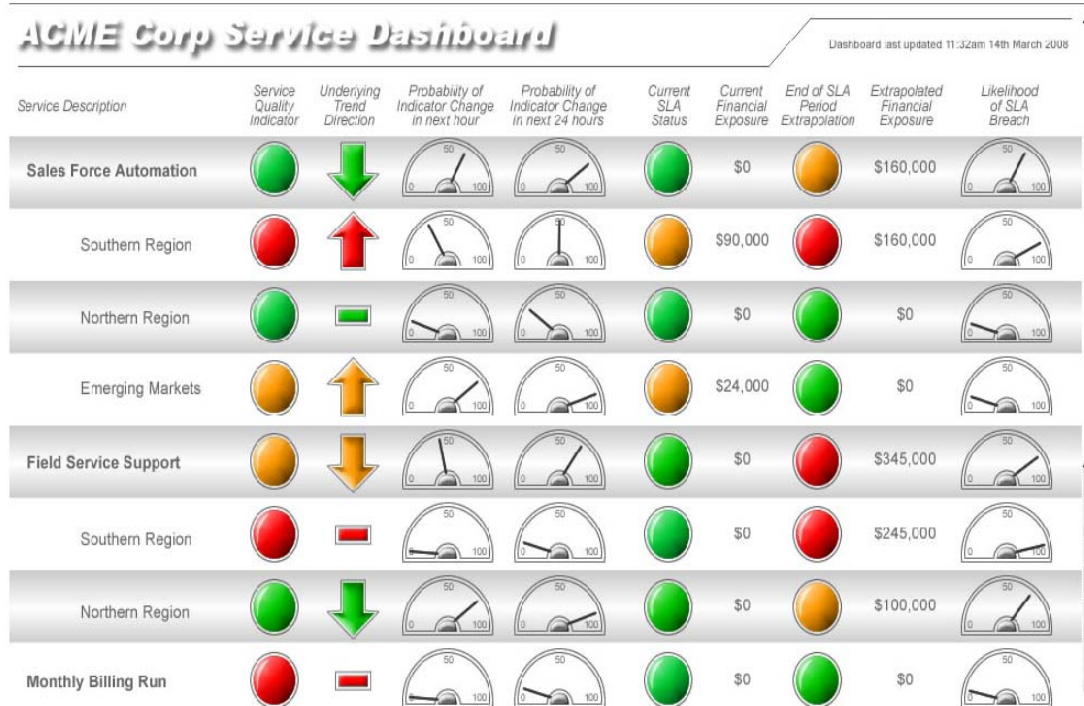
Imagine you're about to head to a management summit at your home office so you can make some important decisions. You've asked the IT people to prepare reports for you that will give you a sense of how the important data (that you've identified in step #1) has been coming in. They show you something like this:



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The challenge with data presentation is that, while data might be presented *accurately* in a particular format, it's not helpful if it doesn't allow us to derive *meaning* from the information.

Let's assume now that the same data is presented in a different format, one that looks like this:



Imagine having a dashboard of the data important to your decision making processes, and having underlying reports and drill down data available at your fingertips, so you can gain an in-depth understanding about what's really going on at your company.

Assuming you know the data you need (step 1) and have it in your database (step 2), it's not heavy lifting for modern technology systems to be able to produce reports. But management must define what they need and how they need it to be delivered so that they can analyze, understand, and act. To do this, the best managers ask themselves:

- How should I best interpret the data I need for decision making?
- How should I present the data to decision makers in my organization that will provide the most value to them?
- What is the easiest and most effective way to look at the data I require?

Before you dive in and start producing new reports, classify and validate your existing reports. You may find much of the work has been done already, and you'll need to do relatively little to round out the reporting structure. You need to know:

- Do current reports reflect the information we need to drive decisions?
- Has the data that underpins these reports been verified as accurate?
- Where does the data identified and required exist in your current systems?

Armed with the answers to these questions, managers put themselves on very solid footing for confident decision making.

4. Incorporate Business Analytics

Many businesses stop at step #3 and call their data-driven management initiatives a success. On some level, they're right, but they've just scratched the surface. If they simply have data and reports that can help them make decisions, and they're not employing business analytics to push their competitiveness that much further, then they're leaving success on the table.

It would be a challenge, indeed (and fairly boring reading), to outline all of the statistical and quantitative analysis techniques, predictive modeling, online analytical processing (OLAP), and so on, available to managers.

Instead, imagine that your technology systems can help you think and act, performing tasks such as: identifying when you need to reorder inventory; identifying and alerting you when a certain product or service area is experiencing spikes (or troughs) in sales; and letting you know when certain people are significantly beating (or significantly underperforming against) their goals.

Imagine that you could perform analysis and show the impact of various changes in your business. For example, what might happen if customers paid their bills sooner? What might happen if we raised our prices and customers kept buying? What might happen if sales dropped 20% in a month; how should we react?

The questions you could ask are infinite, but the point is this: if you can ask the question, modern technology and business analytics can help you find the answer.

To put it all to work for you, start by identifying the decisions you need to make to run your business (step 1), getting your data collection and verification process locked down (step 2) and building reports and views into the data (step 3) so that you can deepen your understanding of what is going on in your business and help you make decisions to improve.

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