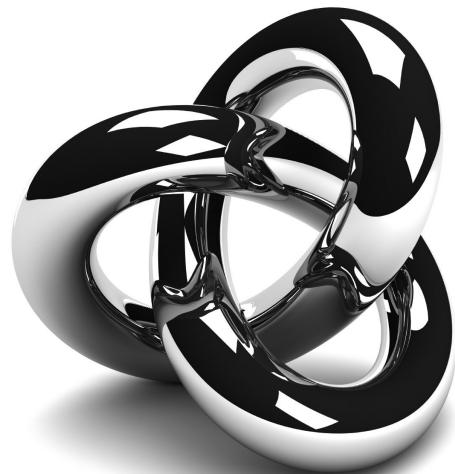


Chapter 1

Equipping the Organization for Effective Decision Making

In This Chapter

- ▶ **Effective Decision Making**
- ▶ **Keys to Effective Decision Making**
- ▶ **Business Intelligence**



“Would you tell me please, which way I ought to go from here?” asked Alice. “That depends a good deal on where you want to get to,” said the Cat. “I don’t much care where,” said Alice. “Then, it doesn’t matter which way you go,” said the Cat.

Alice’s Adventures in Wonderland

—Lewis Carroll

Life is filled with decisions. Should I have the burger and fries or the salad for lunch? Should I get my significant other that new watch they’ve had their eye on, or should I buy them a new vacuum cleaner? Do I invest my holiday bonus or head for the casino? Should I buy this book or go browse the comics section? (Here is your first bit of business intelligence: buy this book!)

The choices we make can have life-changing consequences. Even seemingly trivial decisions can have big consequences down the road. It’s like your parents always told you: the key to success in life is to make good choices!

Effective Decision Making

Good decision making is as important in the working world as it is in the rest of our lives. Every day a number of decisions must be made that determine the direction and efficiency of the organizations we work for. Decisions are made concerning production, marketing, and personnel. Decisions are made affecting costs, sales, and margins. Just as in our personal lives, the key to organizational success is to make good choices. The organization must have effective decision making.

Who Is a Decision Maker?

Just who is it that must make good choices within an organization? At first blush, it may seem that only the person at the top, the chief executive officer (CEO), the president, or the chairperson needs to be an effective decision maker. If that person makes appropriate strategic decisions, the organization will succeed!

Unfortunately, it is not that easy. There are countless examples throughout history where absolutely brilliant strategic plans went awry because of poor decisions made by those responsible for their implementation. As emperor and leader of “La Grande Armée,” Napoleon Bonaparte had a fairly decent strategic plan for his campaign in Belgium. However, due to some poor decision making by his marshals, Napoleon suffered a major defeat at a little place called Waterloo.

Given this, perhaps it is important for the next level of management to be effective decision makers as well. The chief financial officers (CFOs), chief information officers (CIOs), vice presidents, assistant chairpersons, and department heads (and marshals of the army) must make good choices when creating the policies and setting the

priorities to implement the strategic plan. With all of upper management making effective decisions, the organization is guaranteed to go places!

In fact, success is not even assured when this is true. Effective plans and policies created at the top of the organization can be undone by poor decisions made further down as those plans and policies are put into action. The opposite is also true. Good decisions made by those working where the rubber meets the road can be quickly overwhelmed by poor decisions made further up the line.

The answer, then, is to have effective decision makers throughout an organization. Those lower down the organizational chart will have much better morale and will invest more energy in an activity if they have some assurance that their efforts will not be undone by someone higher up. In addition, the success of the person in the corner office is, in large part, simply a reflection of the effective decisions and successes of the people who report to them. Effective decision making at every level leads to success.

What Is an Effective Decision?

The organization that has the desired products or services, provided in the proper place, at the correct time, produced at the appropriate cost, and backed by the necessary customer support will be successful. This, of course, is fairly obvious. Any business plan or mission statement worth its salt professes to do just this.

What is not so obvious is how an organization goes about making sure it provides what is desired, proper, correct, appropriate, and necessary. The answer, as we learned in the last section, is to have people making effective decisions at all levels of the organization. But what exactly is an effective decision?



DEFINITION

Effective decisions *are choices that move an organization closer to an agreed-on set of goals in a timely manner.*

An effective decision moves an organization toward its goals in a timely manner. This definition is extremely broad. In fact, this makes a good slogan, but is too broad to be of much use in day-to-day operations. Using this definition, however, we can define three key ingredients necessary for making effective decisions:

- ▶ First, there must be a set of goals to work toward.
- ▶ Second, there must be a way to measure whether a chosen course is moving toward or away from those goals.
- ▶ Third, information based on those measures must be provided to the decision maker in a timely manner.

This information serves as both the foundation for the initial decision making and as feedback showing the results of the decision. Defining effective decision making is the easy part. Taking this rather nebulous definition and turning it into concrete business practices requires a bit more work.



DEFINITION

Foundation information serves as the basis for making a particular decision as that decision is being made.



DEFINITION

Feedback information is used to evaluate the effectiveness of a particular decision after that decision is made.

Keys to Effective Decision Making

In the previous section, we learned that three keys are necessary for effective decision making: specific goals, concrete measures, and timely foundation and feedback information, as shown in Figure 1-1. In this section, we take a detailed look at each of these three keys to learn how to encourage effective decision making.

Are We Going Hither or Yon?

In Mel Brooks's film, *The Producers*, Max and Leopold set out to stage an absolutely horrible Broadway musical, certain to fail, so they can abscond with the investor's money. Aside from this entertaining exception, organizations do not set out to fail.

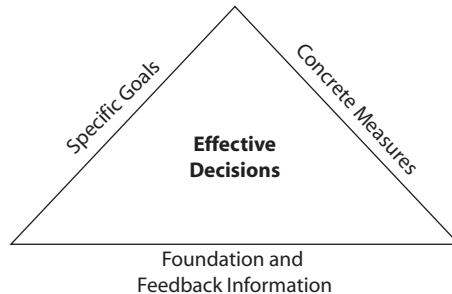


Figure 1-1 Three keys to effective decision making

On the contrary, they come together, raise capital, create organizational charts, draw up business plans, prepare massive presentations, and have endless meetings, all to succeed. The first, largest, and ultimately fatal problem for many of these organizations is they do not define exactly what that success looks like. They don't know what the destination is.

An organization may have some nebulous goals in its mission statement. Phrases such as “superior customer satisfaction,” “increased profit margin,” or “better meeting our community’s needs” grace the reception area, the annual report, and the entryway to the shareholders’ meeting. These are great slogans for building a marketing campaign or generating esprit de corps among the employees. They do not, however, make good milestones for measuring business performance.

“Superior customer satisfaction” is a wonderful goal. (The world would be a much happier place if even half the companies that profess to strive toward superior customer satisfaction would actually make some progress in that direction.) The issue is how to measure “customer satisfaction.” How do we know when we have reached this goal or if we are even making progress in that direction? What is required is something a bit more concrete and a lot more measurable.

Rather than the ill-defined “superior customer satisfaction,” a better goal might be “to maintain superior customer satisfaction as measured by repeat customer orders with a goal of 80 percent repeat orders.” This goal may need a few more details filled in, but it is the beginning of a goal that is specific and measurable. We can measure whether our decisions are taking us in the right direction based on the increase or decrease in repeat orders.

“Increased profit margin” makes the shareholders happy. Still, the organization must decide what operating costs impact profit margin and how they are divvied up among a number of concurrent projects. We may also want to state how large the increase to profit margin must be in order to satisfy the investors. Does a 1 percent increase put a smile on the shareholders’ faces, or does our target need to be more in the 5 percent range? Once these details are added, we have a specific target to work toward.

“Better meeting our community’s needs” is a noble goal, but what are those needs and how can we tell when they are met? Instead, we need to select a specific community need, such as increasing the number of quality, affordable housing units. We can then define what is meant by quality, affordable housing and just what size increase we are looking to achieve.

To function as part of effective decision making, a goal must

- ▶ Contain a specific target
- ▶ Provide a means to measure whether we are progressing toward that target

As with the dartboard in Figure 1-2, we need both a bull’s eye to aim for and a method for scoring how close we came to that target.

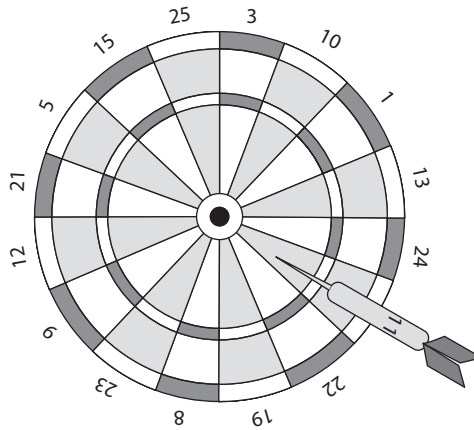


Figure 1-2 *Required elements of a goal to be used in effective decision making*

Is Your Map Upside-Down?

Goals are important. In fact, they are essential to effective decision making, as discussed in the previous section. However, goals are useless without some sort of movement toward reaching them. The finish line can only be reached if the ladies and gentlemen start their engines and begin the race.

This is where decision making comes into play. Each decision moves the company in a particular direction. Some decisions produce a giant leap. These are the policy and priority decisions usually made in the upper levels of management. These decisions determine the general course the organization is going to take over a lengthy period, a fiscal year, a school calendar period, or perhaps even the entire lifetime of the organization. It is essential that these decisions point the organization toward its goals if those goals are ever going to be reached.

Some decisions cause the organization to make smaller movements one way or another. These decisions range from workgroup policies to daily operating decisions. It could even come down to the way a particular employee decides to handle a specific customer complaint or which phone number a sales representative decides to dial next. These small variations in the organization's direction, these small steps forward or backward, when added together become a large determinant of whether the organization ultimately reaches its goals. For this reason, effective decision making is needed at all levels of the organization.

But how do we know when a decision moves the organization, either by a leap or a baby step, toward the goal? We need a method of navigation. As shown in Figure 1-3, we need a map or, these days, perhaps a global positioning system (GPS), to tell us where we are relative to our goal and to show us if we are moving in the right direction.

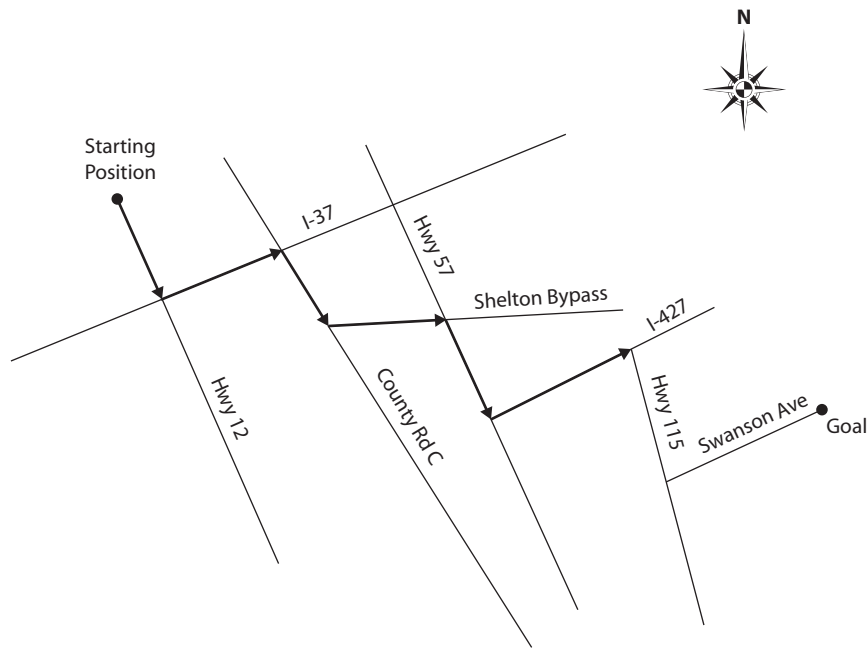


Figure 1-3 *Measuring progress toward the goal*

This is the reason why goals must include a means of measuring progress. By repeatedly checking these measures, we can determine whether the organization is making effective decisions. When the measures show we are heading away from the goals, the decision making can be adjusted accordingly. As long as our measures are correctly defined to match our goals, we have a good chance of moving ever closer to those goals.

Panicked Gossip, the Crow's Nest, or the Wireless

The sinking of the *Titanic* provides a catastrophic illustration of poor decision making. The ship was traveling at high speed in ice-laden waters—an unfortunate decision. This tragedy also provides us with an illustration of how important it is to receive feedback information in a timely manner.

News that there were “icebergs about” reached different people aboard the ship at different times. Most passengers found out about the fatal iceberg through panicked gossip as they were boarding the lifeboats. Of course, the passengers were not in a position to take direct action to correct the situation and, by the time they found out, it was far too late.

The ship's captain got news of the iceberg from the lookout in the crow's nest of the *Titanic*. This warning was received before the collision, and the captain attempted to correct the situation. However, the *Titanic* could neither stop nor turn on a dime so, ultimately, this warning turned out to be too late.

Another warning had been received earlier on board the *Titanic*. The wireless operator received an ice warning from another ship, the *America*, and even passed that warning on to a land-based wireless station. This message was received hours ahead of the collision—plenty of time to take precautions and avoid the tragedy. Because of the large workload on the wireless operator, however, this warning was never relayed to anyone on the *Titanic* with the authority to take those precautions. The feedback information aboard the *Titanic* is shown in Figure 1-4.

In the previous section, we learned about the need to use defined measures to get information to our decision makers. As the story of the *Titanic* illustrates, the timing of this feedback information is as important as its content. Feedback information that does not reach the proper decision makers in a timely manner is useful only to those investigating the tragedy after it has occurred. The goal of effective decision making is to avoid the tragedy in the first place!

As with the passengers on the *Titanic*, information in our organizations may come in the form of panicked gossip among lower-level personnel. Unlike those passengers, these people might even pick up some important information in advance of a calamity. Even if this is the case, these people are not in a position to correct the problem. Furthermore, we need to base our decision making on solid information from well-designed measures, not gossip and rumors.

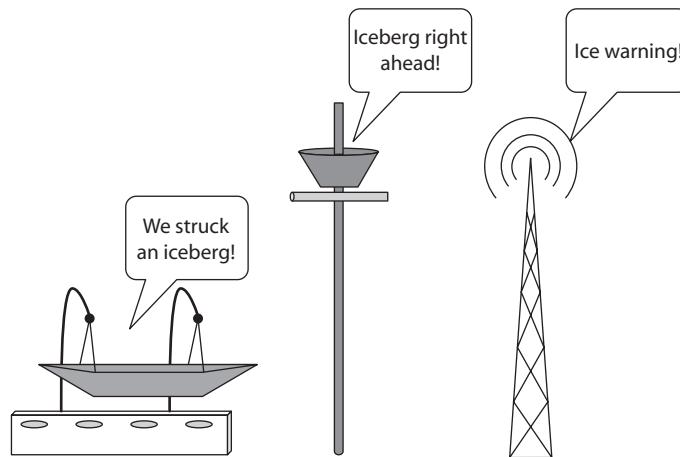


Figure 1-4 Aboard the *Titanic*, feedback information was not given to the decision makers in a timely manner.

Like the captain of the *Titanic*, the decision makers in our organizations often get feedback information when it is too late to act. The information may be extremely accurate, but if it does not get to the decision makers in time to make corrections, it is not helpful. The numbers in the year-end report are not helpful for making decisions during the current year.

Similar to the wireless operator, our organizations often have a person who has the appropriate information at the appropriate time. The situation breaks down when this person does not pass the information along to the appropriate decision maker. This may occur, as in the case of the *Titanic's* wireless operator, because that person is overworked and has too much information to get out to too many people. It may also occur because organizational policies or structures prevent the flow of information. Finally, this may occur because the infrastructure is not in place to facilitate this communication.

Business Intelligence

The first step in effective decision making is to set specific, measurable goals. As these goals are being set, the objective is to get accurate, useful information to the appropriate decision makers to serve as a foundation for the decision and as feedback on the effectiveness of that decision. Having the foundation and feedback information available at the appropriate time is extremely important. The question becomes: How does an organization go about obtaining and distributing this information? As the title of this book suggests, the answer is through the use of business intelligence. In fact, this objective serves as our definition of business intelligence.



DEFINITION

Business intelligence is the delivery of accurate, useful information to the appropriate decision makers within the necessary timeframe to support effective decision making.

Business intelligence is not simply facts and figures on a printed report or a computer screen. Rows upon rows of numbers showing detailed sales figures or production numbers may be extremely accurate, but they are not business intelligence until they are put in a format that can be easily understood by a decision maker who needs to use them. Concise summaries of customer satisfaction or assembly-line efficiency may be easily understood, but they are not business intelligence until they can be delivered in time to meaningfully affect daily decision making.

We also discovered earlier in this chapter that effective decision making is important at all organizational levels. Timely foundation and feedback information is needed as part of that effective decision making. Therefore, we need to make business intelligence available throughout our organizations.

Business Intelligence and Microsoft SQL Server 2012

Fortunately, Microsoft SQL Server 2012 provides tools to support all aspects of business intelligence. Integration Services enables us to create automated processes to cleanse data and move it into a business intelligence warehouse, when necessary, to ensure we have accurate information available in a timely manner. Numerous online analytical processing (OLAP) features, such as key performance indicators (KPIs), multidimensional expression (MDX) queries and scripts, and the BI Semantic Model (BISM), enable us to slice, dice, and summarize information so it can be presented in a meaningful manner. Data mining permits us to find and present patterns and behavior predictors that might not otherwise be found in the data. Finally, Reporting Services (along with other Microsoft end-user tools) facilitates the delivery of this information to decision makers throughout the entire organization.

In Chapter 2 of this book, we learn more about the concepts used when creating and delivering business intelligence. We see the types of questions business intelligence can help us answer. We also examine the kinds of information and the timeliness of that information required at various levels within an organization.

Finally, we become acquainted with Maximum Miniatures, Incorporated, the sample company we use throughout the remainder of the book. To make the business intelligence features of SQL Server 2012 easier to understand, we perform several hands-on exercises to create business intelligence solutions. Rather than looking at code snippets without any business context, we use the business needs of Maximum Miniatures. The goal of this book is not to enable you to use this or that feature of SQL Server 2012, but to help you understand how to use these features to meet business needs.