

## ***Data, Information, and Business Intelligence***

To understand the nature of information and *business intelligence*, you must first understand another term—*data*. **Data** are raw facts that describe a particular phenomenon. For example, the current temperature, the price of a movie rental, and your age are all data. **Information** then is simply data that have a particular meaning within a specific context. For example, if you're trying to decide what to wear, the current temperature is information because it's pertinent to your decision at hand (what to wear); in this situation the price of a movie rental is not pertinent information.

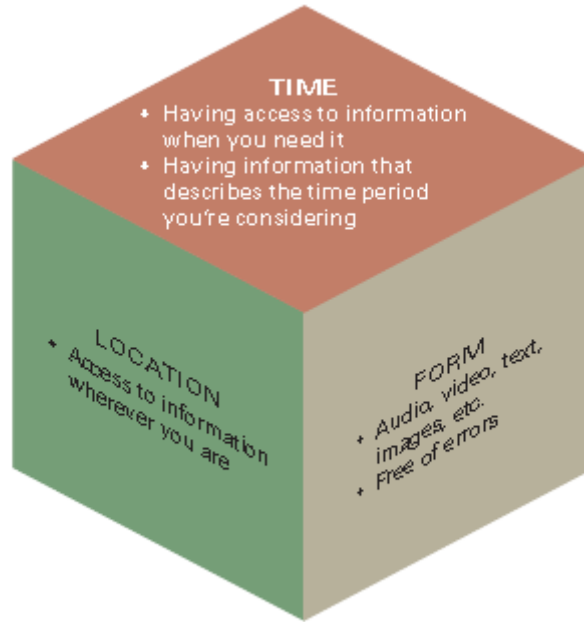
Information may be data that have been processed in some way or presented in a more meaningful fashion. In business, for instance, the price of a movie rental may be information to a checkout clerk, but it may represent only data to an accountant who is responsible for determining net revenues at the end of the month.

Business intelligence is information “on steroids,” so to speak. **Business intelligence (BI)** is knowledge—knowledge about your customers, your competitors, your business partners, your competitive environment, and your own internal operations—that gives you the ability to make effective, important, and often strategic business decisions. It enables your organization to extract the true meaning of information to take creative and powerful steps to ensure a competitive advantage. So, business intelligence is much more than just a list of the products you sell. It could combine your product information with your advertising strategy information and customer demographics information to help you determine the effectiveness of various advertising media on demographic groups segmented by location.

As a knowledge worker, you work with and produce information. As you do, you can consider it from three points of view or dimensions: time, location, and form (see Figure 1 – Personal Dimension of Information).

### ***Figure 1 (Personal Dimension of Information)***

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**THE TIME DIMENSION** The time dimension of information has two aspects: (1) having access to information when you need it, or *timeliness*, and (2) having information that describes the time period you're considering. Information, like many organizational resources, can become old and obsolete. For example, if you want to make a stock trade today, you need to know the price of the stock right now. If you have to wait a day to view stock prices, you may not survive in the turbulent securities market. It's no wonder that over one-third of all stock transactions today occur over the Internet.

Your information is useful and relevant only if it describes the appropriate time period. For example, most utility companies provide you with a bill that not only tells you of your current usage and the average temperature but also compares that information to the previous month and perhaps the same month last year. This type of information can help you better manage your utilities or simply understand that this month's high utility bill was caused by inclement weather.

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**THE LOCATION DIMENSION** Information is no good to you if you can't access it. The location dimension of information means having access to information no matter where you are. Ideally, in other words, your location or the information's location should not matter. You should be able to access information in a hotel room, at home, in the student center of your campus, at work, on the spur of the moment while walking down the street, or even while traveling on an airplane. This location dimension is closely related to mobile and wireless computing.

To keep certain information private and secure while providing remote access for employees, many businesses are creating intranets. An ***intranet*** is an internal organizational Internet that is guarded against outside access by a special security feature called a *firewall* (which can be software, hardware, or a combination of the two). So, if your organization has an intranet and you want to access information on it while away from the office, all you need is Web access and the password that will allow you through the firewall.

For example, Sutter Health, a nonprofit network of 33 hospitals with 4.5 million patients, uses an intranet to allow doctors, specialists, lab technicians, and patients to communicate via the Internet. Sutter's intranet even supports a virtual emergency room. It allows doctors—from various locations throughout a given hospital—to view and perform a preliminary diagnosis on emergency room patients.

**THE FORM DIMENSION** The form dimension of information deals with two primary aspects. The first is simply having information in a form that is most usable and understandable by you—audio, text, video, animation, graphical, and others. The second deals with accuracy. That is, you need information that is free of errors. Think of information as you would think of a physical product. If you buy a product and it's defective, you become an unsatisfied customer. Likewise, if you receive information that is incorrect, you're very unhappy as well.