Business Intelligence Applications for Presenting Results

The results of the types of data analyses you just learned about can be presented with

1.dashboards and

2. data visualization technologies.

Today, users are increasingly relying on data that are real time or almost real time. Therefore, you also study real-time BI in this section.

Dashboard

Dashboards evolved from executive information systems, which were information systems designed specifically for the information needs of top executives. Today, however, many employees, business partners, and customers can access an organization's digital dashboards.

A dashboard provides easy access to timely information and direct access to management reports. It is user friendly, it is supported by graphics, and, most importantly, it enables managers to examine exception reports and drill down into detailed data.. One outstanding example of a dashboard is the Bloomberg Terminal.

Bloomberg LP (www .bloomberg.com), a privately held company, provides a subscription service that sells financial data, software to analyze these data, trading tools, and news (electronic, print, TV, and radio). All of this information is accessible through a colorcoded Bloomberg keyboard that displays the desired information on a computer screen, either the user's screen or one that Bloomberg provides.

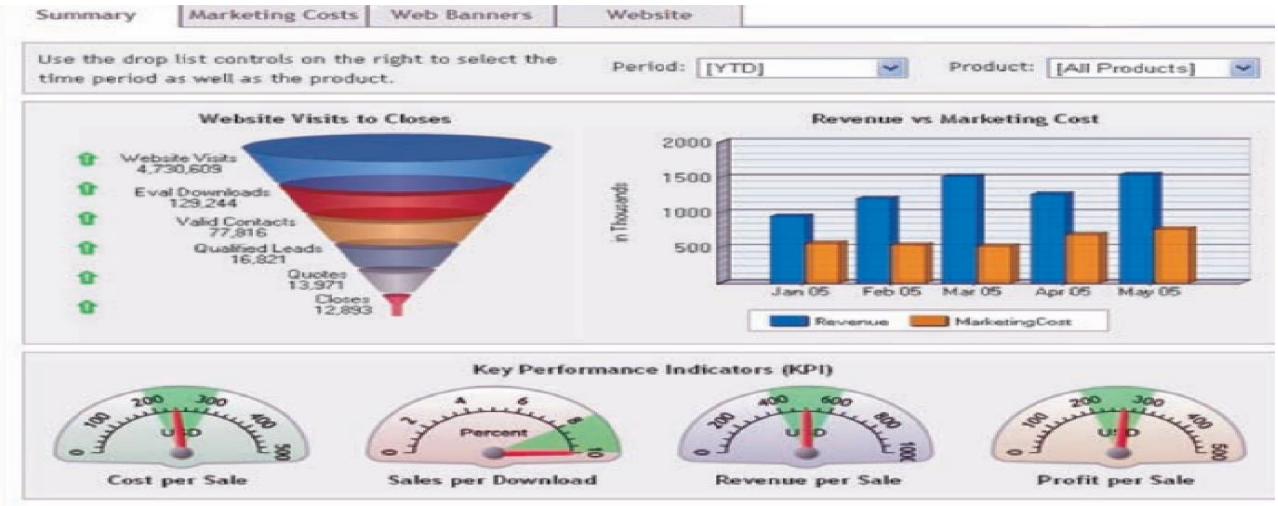

FIGURE 12.3 Sample performance dashboard. (*Source:* Dundas Software, demos1.dundas.com/Dundas Gauge/Marketing-Dashboard/Summary.aspx)

Users can also set up their own computers to access the service without a Bloomberg keyboard. The subscription service plus the keyboard is called the Bloomberg Terminal. It literally represents a do-it-yourself dashboard, because users can customize their information feeds as well as the look and feel of those feeds (see Figure 12.4).

Carlos Osorio/Toronto Star/Zuma Press

FIGURE 12.4 A Bloomberg terminal.

Data Visualization Technologies

After data have been processed, they can be presented to users in visual formats such as text, graphics, and tables. This process, known as data visualization, makes IT applications more attractive and understandable to users. Data visualization is becoming increasingly popular on the Web for decision support. A variety of visualization methods and software packages that support decision making are available. Two particularly valuable applications are geographic information systems and reality mining

Geographic Information Systems

Geographic Information Systems. A geographic information system (GIS) is a computer based system for capturing, integrating, manipulating, and displaying data using digitized maps. Its most distinguishing characteristic is that every record or digital object has an identified geographical location. This process, called geocoding, enables users to generate information for planning, problem solving, and decision making. In addition, the graphical format makes it easy for managers to visualize the

data

Reality Mining

One important emerging trend is the integration of GISs and global positioning(GPS) . Using GISs and GPSs together can produce an interesting new type of technology called reality mining. Reality mining allows analysts to extract information from the usage patterns of mobile phones and other wireless devices. If you want to catch a cab in New York City, the next example will show you how.

Is there some kind of secret formula for finding a cab in New York City? The answer is, yes

- Singapore. The idea of making it easier to find a cab has traveled to Singapore. Commuters who cannot find a cab use an app that points them to places where they are more likely to find one. The Agency for Science, Technology, and Research gathered sensor data from taxis on the road, including time, place, speed, and whether the taxis were occupied. Researchers developed a predictive mobile application that informs passengers where they are most likely to find empty cabs and cabbies where they are most likely to find fares. The app even tells train commuters where to get off the train so that they will have the best chance of finding a taxi. Interestingly, taxi companies in Singapore are not pleased with the app. They do not want the app to bypass their own dispatch systems.