to describe both a process and the product of that process. Research means to design, gather, analyze, and report information; and it also means the output of that process.

Objectivity in the research process is necessary to ensure (it is hoped) that conclusions derived are based on fact rather than hearsay, opinion, or emotion. The bits of information collected during the research process are called *data*, a plural Greek word. So, when using the word *data*, always use it with a plural verb form. For example, you would say, "The data reveal a tendency, *not* the data reveals a tendency."

The term *research* thus encompasses a mind-boggling array of data and methods that can be used in decision making. Differing information needs require differing methods of data collection and analysis. Some data are routinely collected and readily available, such as sales and cost information or census information collected by governments. This routinely and readily available information is called *secondary* data. However, most needs for information are very specific and data need to be gathered for a unique purpose. This type of data is called *primary* data.

Some research is called *applied* and other research is called *basic*. Applied research is used as input for making specific decisions. Basic research is conducted to expand knowledge on some subject, not to use the information directly for problem solving. Much of the applied tourism research done is what we call *proprietary* research, meaning an organization funds the research and holds onto the information, not sharing it. Most of the basic research conducted in the field of tourism is published and therefore shared and is termed *public* research. With this background in mind, let's take a look at the *what*, *who*, *when*, *where*, and *how* of research.

## **Types of Tourism Research**

Research comes in four forms: descriptive research, experimental research, predictive research, and simulative research or modeling. We next describe each type of these briefly.

**DESCRIPTIVE RESEARCH.** This involves the collection of information to describe aspects of the tourism industry or phenomenon. Such aspects include the size and positive and negative impacts of tourism, the number of tourists at different locations and during differing seasons, the characteristics and behaviors of tourists, the number of jobs within each sector of the industry, the amount of taxes directly paid by tourists and industry members, inventories of the tourism industry in terms of number of sector members, and list of attractions and recreational resources; the possibilities for descriptive research are endless. Data collected by individual tourism enterprises are a form of descriptive research: for example, number of rooms rented, length of stay, table turnover rate, and so on.

## FYI THE HONG KONG DEMAND FORECASTING SYSTEM

Tourism investment, especially investment in destination infrastructures, such as airports, highways, and rail-links, requires long-term financial commitments and the sunk costs can be very high if the investment projects fail to fulfill their design capacities. Therefore, the prediction of long-term demand for tourism-related infrastructure often forms an

important part of project planning and appraisal. The automated demand forecasting system developed by a team of tourism researchers at The Hong Kong Polytechnic University provides forecast of future tourist arrivals to Hong Kong as well as their expenditures at the destination. Demands on airlines, tour operators, hotels, cruise ship lines, and recre-

ation facility providers can also be generated on a sector-by-sector basis.

The system is automated. Businesses that subscribe to the system may conduct their own scenario analysis on demand forecasts for their products and services. They can generate forecasts based on tourists' country of origin, for different frequencies (e.g., monthly, quarterly, annually), and over different periods.