Chapter 1
Research in Business

CHAPTER LEARNING OBJECTIVES

After reading this chapter, students should understand…

1. What business research is and how it differs from decision support systems and business intelligence systems.
2. The trends affecting business research and the emerging hierarchy of research-based decision makers.
3. The different types of research studies used in business..
4. The distinction between good business research and that which falls short of professional quality.
5. The nature of the research process.

KEY TERMS

Key terms are shown in **bold,** as they appear in the text, throughout the lecture notes.

PowerPoint

* A complete PowerPoint slide set comes with this chapter. It is organized as the chapter is organized. Each chapter contains a complete review of chapter concepts and issues. Each, at minimum, contains the following slides:
	+ Learning Objectives
	+ Pull Quote, used to open this chapter
	+ Exhibit art
	+ Key Terms
	+ Additional Discussion Opportunities: Section of slides at the end of the chapter slide set that you can rearrange within the slide set as desired. Suggestions for using these slides are in the notes section of each slide or in the *Discussion and Project Ideas* section of this manual. This slide section contains several types of slides, including but not limited to the following:
		- Additional Pull Quotes from Research Thought Leaders
		- PulsePoint: statistic drawn from a research project that relates to some chapter concept
		- Each Snapshot in the chapter: mini-case that relates to one or more chapter concepts.
		- Each PicProfile in the chapter: research related image that relates to one or more chapter concepts or an emerging concept.
		- Each CloseUp in the chapter: more in depth profile of a research concept or project.

Test Bank

The test bank for each chapter contains the following:

* Multiple choice objective questions of several types:
	+ Definition-based questions on key terms and concepts
	+ Application-based questions posing decision scenarios
	+ Application-based questions asking for justification or explanation
* Essay Questions
* An answer key for each question that indicates question difficulty level:

Discussion and Project Ideas

* **Snapshots**
	+ ***Mercedes-Benz and TNS Infratest Devleop Stars Insight***…reveals issues related to using affinity groups as research subjects, and web-enabled research.
	+ ***Overcoming the Jitters***…describes the prevalence of the fear of public speaking and how speakers overcome their apprehension.
* **PicProfiles**
	+ ***Preference for Pepperoni***…provides a sample pictogram of pizza preference.
* **CloseUp**
	+ None in this chapter.
* **PulsePoint:** Published research reveals many ways that businesses use research. You might use such research findings to discuss a current phase of the research process or a current issue. This PulsePoint relates to hiring expectations of firms. You might use

this finding to stimulate a discussion on how organizations might use research to track employee behavior on the job.

* **34**…The percent of employees who never consider that their bosses, clients, or colleagues think before posting to a blog, discussion forum, or social network.
* **Pullquote**
* Use each chapter’s pullquote to discuss a current issue related to the chapter. In this case, the quote deals with the emergence in business of the importance of analytical benchmarks informing decision making at every level of an organization. You can use this quote to discuss the disadvantages facing organizations that do not invest in research and analytical benchmarking.
* “Forward-thinking executives recognize that analytics may be the only true source of sustainable advantage since it empowers employees at all levels of an organization with information to help them make smarter decisions.”

Wayne Eckerson,

director of research, business applications and architecture group,

TechTarget

* **Class discussion or research project:**
* Have students investigate various journals for an article of interest to them. The article should be no more than two years old and have sufficient content for a two page report. The object of the critique is to describe how the study followed, or failed to follow, the criteria for good research, as described in Chapter 1. Students should speculate on which of the writer’s conclusions were warranted, and which were not. (Use Article Critique Instructions to Students as a handout.)
	+ The relationship between research, the manager, and the researcher.
	+ The conflict that can exist when the manager is the researcher.
	+ The characteristics that identify good and bad research.

Article Critique Instructions to Students

For your first research project, please investigate one of the journals listed below for an article of interest to you. The article should be no more than two years old. Choose one that has sufficient content from which you can write a report a two-page report (approximately two double-spaced pages).

The object of your critique is to describe how the study followed, or failed to follow, the criteria for good research, as described in Chapter 1. Speculate on which of the writer’s conclusions were warranted and which were not. In addition to Chapter 1, Chapters 2 and 3 may be helpful in getting you started.

Journals to consider:

|  |  |
| --- | --- |
| * Academy of Management Review
* Administrative Science Quarterly
* Business and Society Review
* Decision Sciences
* Financial Management
* Harvard Business Review
* Industrial and Labor Relations Review
* Journal of Accountancy
 | * Journal of Applied Behavior Science
* Journal of Applied Psychology
* Journal of Banking and Finance
* Journal of Finance
* Management Review
* Personnel Journal
* Public Administration Review
* Training and Development Journal
 |

Other journals may also be used.

* **WWW Exercises:**
* TNS Infratest is the research company profiled in the snapshot in Chapter 1 about Mercedes Benz. Have students visit the TNS Infratest website and using exhibit 1-5 What Actions Guarantee Good Business Research, how has TNS Infratest exhibited its experience and credentials.
	+ [www.tns-infratest.com](http://www.tns-infratest.com)
* Nielsen revealed its best-liked TV ads and its methodology on the following site. Have students use Exhibit 1-3 to discuss the methodology used to arrive at the Nielsen conclusions.
	+ <http://www.marketingcharts.com/wp/television/nielsen-reveals-2012s-best-liked-tv-spots-youtube-unveils-most-viewed-video-ads-25514/>

CHAPTER vignette

# Bringing Research to Life

Use this vignette to determine how well the student has identified what is going on between sponsoring firm and possible research supplier and what tasks each party is responsible for during and following the meeting.

* Overview
* Myrna Wines, director of consumer affairs for MindWriter, Inc., must assess MindWriter’s CompleteCare program for servicing laptops.
* She sent several well-respected research firms a request for proposal (RFP).
* She and her team are interviewing the last of those firms, Henry & Associates.
* Myrna wants to find a research supplier from whom she can learn, as well as one she can trust to do high-quality research.
* The last interviewee is Jason Henry, a partner in Henry & Associates who comes highly recommended.
* After viewing his presentation and conferring with her team, Henry & Associates is chosen to conduct the required research.
* They schedule a date to meet with CompleteCare personnel.
* Jason Henry’s tasks during the meeting:
* Asking probing questions
* Listening to the facts that have been gathered
* Determining what the problem is from management’s point of view
* Identifying what the problem is at various levels of abstraction
* Myrna Wine’s tasks:
* Listening
* Discussing
* Looking at things from different viewpoints
* Jason Henry’s tasks after the meeting:
* Measuring
* Scaling
* Project design
* Sample
* Finding elusive insights
* Collaborating with Myrna in order to produce a report of results

CHAPTER Lecture Notes

Why Study Business Research?

* **Business research** is a systematic inquiry that provides information.
* More specifically, it is a process of planning, acquiring, analyzing, and disseminating relevant date, information, and insights to decision makers in ways that mobilize the organization to act in ways that maximize business performance.
* Managers use this information to guide business decisions and reduce risk.
* Multiple types of projects can be labeled “business research.”
* Decision scenarios:
* You’re the manager of a full-service restaurant. You’ve experienced significant turnover in your waiter/waitress pool, and some customers have commented that the once-friendly atmosphere is changing. Is this a problem for which business research should be used? Where will you begin in trying to solve this problem?
* You’re the head of the state’s department of transportation. You must determine which roads and bridges will be resurfaced next year. You usually look at the roads and bridges with the most traffic, in combination with those representing the biggest economic disaster if closed. However, these are often located in the most affluent regions of the state. Because your decision has numerous operational, financial, and public relations ramifications, your manager suggests using business research to assist with your decision making. Should you authorize the research?
* Decision scenarios and decision makers can be found in every type of organization, whether for profit, non-profit, or public.
* Decision makers rely on information to make more efficient and effective use of their budgets.
* At no other time in history has so much attention been placed on measuring and enhancing **return on investment (ROI)**.
* At a basic level, measuring ROI means calculating the financial return for all expenditures.
* Over the past dozen years, technology has improved our measuring and tracking capabilities, while managers simultaneously realized their need for a better understanding of employee, stockholder, and customer behavior in order to meet goals.
* Although business research helps managers choose better strategies, the cost of such research is being scrutinized for its contribution to ROI.
* A **management dilemma** is a problem or opportunity that requires a management decision.
* Factors that should stimulate your interest in studying research methods:
1. Information overload.
2. Technological connectivity.
3. Shifting global centers of economic activity and competition.
4. Increasingly critical scrutiny of big business.
5. More government intervention.
6. Battle for analytical talent.
7. Greater computing power and speed.
	* • Lower-cost data collection.
	* • Better visualization tools.
	* • Powerful computations.
	* • More integration of data.
	* • Real-time access to knowledge.
8. New perspectives on established research methodologies.

Information and Competitive Advantage

* Understanding the relationship between business research and information generated by other information sources is critical for understanding how information drives decisions relating to organizational mission, goals, strategies, and tactics.

## Goals

* Even very different types of businesses have similar types of goals, which are related to such things as:
* Sales (membership)
* Market share
* Return on investment
* Profitability
* Customer acquisition
* Customer satisfaction
* Employee productivity
* Machine efficiency
* Maximization of stock price or owner’s equity

## Decision Support

* The need to complete exchanges with prospective customers drives every organization.
* An exchange can be a purchase, a vote, attendance at a function, or a donation to a cause.
* Each exchange, along with the activities required to complete it, generates data.
* If organized for retrieval, these data constitute a **decision support system (DSS)**.
* During the last 25 years, advances in computer technology made it possible to share this collected data among an organization’s decision makers, over an intranet or an extranet.
* Sophisticated managers have developed DSSs where data can be accessed in real time.
* These managers have a distinct advantage in strategic and tactical planning

## Business Intelligence

* A **business intelligence system (BIS)** provides managers with ongoing information about events and trends in the business environment.
* In our restaurant scenario, it might be collecting customer comments.
* In the MindWriter example, it might be data about laptops needing repair.
* Exhibit 1-1Some Sources of Business Intelligence

## Strategy

* It costs less to retain a customer than to capture a new one, so businesses place a high value on keeping customers buying.
* That is why customer satisfaction, customer loyalty, and customer assessment studies represent a significant portion of research studies.
* Microsoft recently decided to tie its 600 managers’ compensation to levels of customer satisfaction rather than to sales and profits.
* **Strategy** is defined as the general approach an organization will follow to achieve its goals.
* A firm usually implements more than one strategy at a time.
* The discovery of opportunities and problems, and the resulting strategies, often result from a combination of business research and BIS.

## Tactics

* Business research contributes significantly to the design and selection of **tactics**.
* Tactics are specific, timed activities that execute a strategy.
* The purposes of business research include:
* Identifying and defining opportunities and problems.
* Defining, monitoring, and refining strategies.
* Defining, monitoring, and refining tactics.
* Improving our understanding of the various fields of management.

Hierarchy of Information-Based Decision Makers

* Not all organizations use business research to help make planning decisions. Increasingly, however, the successful ones do.
* Exhibit 1-2 shows an emerging hierarchy of organizations in terms of their use of business research.
* In the top tier, organizations see research as the first step in any venture.
* They use creative combinations of research techniques to gain insights that will help them make better decisions.
* They may partner with outside research suppliers.
* Every decision is guided by business research.
* There is generally enterprise-wide access to research data and findings.
* In the middle tier, decision makers periodically rely on research information.
* Decision makers turn to business research when they perceive the risk of a particular strategy or tactic to be too great to proceed without it.
* They rely heavily on tried-and-true methodologies, such as surveys and focus groups.
* They often choose the methodology before fully assessing its appropriateness to the problem at hand.
* There is limited access to research data and findings.
* In the base tier, managers primarily use instinct, experience, and intuition to facilitate their decisions.
* Decisions are supported with secondary data searches.
* They often rely on informal group discussion, a small number of individual interviews, or feedback from the sales force.
* Large firms that occupy this tier are often influenced by culture; smaller companies because they think formalized research is too expensive to employ.
* Managers who do not prepare to advance up the hierarchy will be at a severe competitive disadvantage.

# the research process: A preview

# Exhibit 1-4 models the sequence of the research process. Recycling, circumventing and skipping occur. Some steps are begun out of sequence, some are carried out simultaneously, and some may be omitted. The idea of a sequence is useful for developing a project and for keeping the project orderly as it unfolds. The research process begins with understanding the manager’s problem--the management dilemma. In other situations, a controversy arises, a major commitment of resources is called for, or conditions in the environment signal the need for a decision.

# In every chapter, we refer to this model as we discuss each step in the process.

# Exhibit 1-4 is an important organizing tool because it provides a framework for introducing how each process module is designed, connected to other modules, and then executed.

## Is Research Always Problem-Solving Based?

# Researchers often are asked to respond to “problems” that managers needed to solve.

# Applied research has a practical problem-solving emphasis. The problem-solving nature of applied research means it is conducted to reveal answers to specific questions related to action, performance, or policy needs. Pure research or basic research is also problem-solving based. It aims to solve perplexing questions or obtain new knowledge of an experimental or theoretical nature that has little direct or immediate impact on action, performance, or policy decisions. Basic research in the business arena might involve a researcher who is studying the results of the use of coupons versus rebates as demand stimulation tactics, but not in a specific instance or in relation to a specific client’s product.

# Both applied and pure research are problem-solving based, but applied research is directed much more to making immediate managerial decisions. Is research always problem-solving based? the answer is yes. Whether the typology is applied or pure, simple or complex, all research should provide an answer to some question.

# What is Good Research?

* Good research generates dependable data that are derived by professionally conducted practices, and that can be used reliably for decision making.
* It follows the standards of the **scientific method**: systematic, empirically based procedures.
* Exhibit 1-5 shows actions that guarantee good business research.
* Characteristics of the scientific method:
* Purpose clearly defined.

Research process detailed.

* Research design thoroughly planned.
* High ethical standards applied.
* Limitations frankly revealed.
* Analysis adequate for decision maker’s needs.
* Findings presented unambiguously.
* Conclusions justified.
* Researcher’s experience reflected.
* Good business research has an inherent value only to the extent that it helps management make better decisions that help achieve organizational goals.
* The value of information is limited if the information cannot be applied to a critical decision.
* Business research finds its justification in the contribution it makes to the decision maker’s task and to the bottom line.

**A Glimpse at Four Research Studies**

From each of the illustrations of management dilemmas, we can abstract the essence of research. How is it carried out? What can it do? What should it not be expected to do? Answer: (1) What is the decision-making dilemma facing the manager? (2) What must the researcher accomplish?

## ClassicToys

You work for ClassicToys, a corporation that is considering the acquisition of a toy manufacturer. Investigate six companies that are potential candidates. Pertinent data are collected from public sources because of the sensitive nature of the project: company annual reports; articles in business journals, trade magazines, and newspapers; financial analysts’ assessments; and company advertisements. The team members then develop summary profiles of candidate firms based on the characteristics gleaned from the sources. The final report highlights the opportunities and problems that acquisition of the target firm would bring to all areas of the business.

## MedImage

You are the business manager for MedImage, a large group of physicians specializing in diagnostic imaging (MRI, nuclear, tomography, and ultrasound). A health insurance organization has contacted you to promote a new cost-containment program. You begin by mining data from patient files to learn how many are using this carrier, frequency of care visits, complexity of filings, and so on. You consult insurance industry data to discover how many potential patients in your area use this care plan, or similar care plans with alternative insurance carriers, and the likelihood of a patient choosing or switching doctors. You attempt

to confirm your data with information from professional and association journals. You develope a profile that details the number of patients, overhead, and potential revenue realized by choosing to join the plan.

## MoreCoatings

MoreCoatings, a paint manufacturer, is having trouble maintaining profits. The owner believes inventory management is a weak area of the company’s operations. In this industry, many paint colors, types of paint, and container sizes make it easy for a firm to accumulate large inventories and still be unable to fill customer orders. You look into the present warehousing and shipping operations and find excessive sales losses and delivery delays because of out-of-stock conditions. An informal poll of customers confirms your impression.

You familiarize yourself with the latest inventory management techniques. You ask the warehouse manager to take an inventory, and you review the incoming orders for the last year. You run a pilot line using the new control methodology. After two months, the data show a much lower inventory and a higher order fulfillment rate. You recommend that the owner adopt the new inventory method.

## York College

You work for York College’s alumni association. It is eager to develop closer ties with its aging alumni to provide strong stimuli to encourage increased donations and to induce older, nontraditional students to return to supplement enrollment. The president’s office is considering starting a retirement community geared toward university alumni.

The study consists of four parts.

**Phase 1**A report on the number of alumni who are in the appropriate age bracket, the rate of new entries per year, and the actuarial statistics for the group.

**Phase 2**The next step in the study is to describe the social and economic characteristics of the target alumni group. You review gift statistics, analyze job titles, and assess home location and values. In addition, you review files from the last five years to see how alumni responded when they were asked about their income bracket. You are able to describe the alumni group for your director when you finish.

**Phase 3**The third phase of the study is to explain the characteristics of alumni who would be interested in a university-related retirement community. You make an extensive report to both the alumni director and the university president covering the number of eligible alumni, their social and economic standings, and the characteristics of those who would be attracted by the retirement community.

**Phase 4**The president needs to predict the number of alumni who would be attracted to the project so that she can adequately plan the size of the community. Using the data collected, you can predict the initial demand for the community and estimate the growth in demand over the next 10 years.

## What Dilemma Does the Manager Face?

In the ClassicToys study, the manager, the senior vice president for development, must make a proposal to the president or possibly the board of directors about whether to acquire a toy manufacturer and, if one is to be acquired, which one of the six under consideration is the best candidate. In MedImage, the physicians in the group must decide whether to join the proposed managed health care plan of one of their primary insurers. In the MoreCoatings study, the owner of the paint manufacturer must decide whether to implement a new inventory management system. At York College, the president must propose to the board of directors whether to fund the development of a retirement community.

## The Types of Research Studies Represented by the Four Examples

All four studies qualify as applied research and can be classified as reporting, descriptive, explanatory, or predictive.

## Reporting

At the most elementary level, a **reporting study** provides a summation of data, often recasting data to achieve a deeper understanding or to generate statistics for comparison.. A reporting study calls for knowledge and skill with information sources and gatekeepers of information sources. Such a study usually requires little inference or conclusion drawing. In the ClassicToys study, the researcher needs to know what information should be evaluated in order to value a company. In the York College study, for example, interviewing the director of local retirement facilities might have revealed other sources to include in the search.

## Descriptive

A **descriptive study** tries to discover answers to the questions *who, what, when, where,* and, sometimes, *how.* The researcher attempts to describe or define a subject, often by creating a profile of a group of problems, people, or events. Such studies may involve the collection of data and the creation of a distribution of the number of times the researcher observes a single event or characteristic (known as a **research variable**), or they may involve relating the interaction of two or more variables. In MedImage, the researcher must present data that reveal who is affiliated with the insurer, who uses managed health care programs (both doctors and patients), the general trends in the use of imaging technology in diagnosing illness or injury severity, and the relationship of patient characteristics, doctor referrals, and technology-use patterns.

The descriptive study is popular in research because of its versatility across management disciplines. In not-for-profit corporations and other organizations, descriptive investigations have a broad appeal to the administrator and policy analyst for planning, monitoring, and evaluating. In this context, *how* questions address issues such as quantity, cost, efficiency, effectiveness, and adequacy.

## Explanatory

For our purposes, an **explanatory study** goes beyond description and attempts to explain the reasons for the phenomenon that the descriptive study only observed. Research that studies the relationship between two or more variables is also referred to as a *correlational study* . The researcher uses theories or at least hypotheses to account for the forces that caused a certain phenomenon to occur. In MoreCoatings, believing the problem with paint stockouts is the result of inventory management, the owner asks the researcher to detail warehousing and shipping processes. The researcher tests this hypothesis by modeling the last year of business using the relationships between processes and results.

## Predictive

A **predictive study ,**is rooted in theory like explanation. In business research, prediction is found in studies conducted to evaluate specific courses of action or to forecast current and future values. The researcher is asked to predict the success of the proposed retirement facility for alumni for York College based on the number of applicants for residency the project will attract. This prediction will be based on the explanatory hypothesis that alumni frequent programs and projects sponsored by the institution because of an association they maintain between their college experience and images of youthfulness and mental and physical stimulation.

We would like to be able to control a phenomenon once we can explain and predict it. Being able to replicate a scenario and dictate a particular outcome is the objective of **control .** In the York College study, if we assume that the college proceeds with its retirement community and enjoys the predicted success, the president will find it attractive to be able to build a similar facility to serve another group of alumni and duplicate that success. Control is a logical outcome of prediction. At York College, if a control study were done of the various promotional approaches used with alumni to stimulate images of youthfulness, the promotional tactics that drew the largest number of alumni applications for residency could be identified. Once known, this knowledge could be used successfully with different groups of alumni only if the researcher could account for and control all other variables influencing applications.

# Answers to Discussion Questions

## Terms in Review

**1. What is business research? Why should there be any question about the definition of research?**

Business research, as it is used in this text, is a systematic inquiry that provides information to guide managerial decisions. More specifically, it is a process of planning, acquiring, analyzing, and disseminating relevant data, information, and insights to decision makers in ways that mobilize the organization to take actions that maximize business performance.

Questions arise when people begin to provide their own definitions of research, which in some way restrict the meaning of “research” to specific approaches, topics, or procedures.

**2. What is the difference between applied research and basic or pure research? Use a decision about how a salesperson is to be paid, by commission or salary, and describe the question that would guide applied research versus the question that would guide pure research.**

Applied research has a practical problem-solving emphasis. Basic or pure research aims to solve perplexing questions or obtain new knowledge of an experimental or theoretical nature that has little direct or immediate impact on action, performance, or policy decisions. For applied, you might ask: “In retail sales at Norstrom’s, how would salary compensation affect monthly revenues?” For the pure research question, “What compensation factors influence motivation to acquire sales leads, initiate contacts, close sales, and continue post-sale service?”

1. **Distinguish between an explanatory and predictive research study.**

An explanatory study goes beyond description and attempts to explain the reasons for the phenomenon that the descriptive study only observed. The researcher uses theories or at least hypotheses to account for the forces that caused a certain phenomenon to occur. A predictive study, is rooted in theory like explanation. In business research, prediction is found in studies conducted to evaluate specific courses of action or to forecast current and future values. Control is a logical outcome of prediction.

1. **Distinguish between a reporting study and a descriptive study.**

A reporting study provides a summation of data, often recasting data to achieve a deeper understanding or to generate statistics for comparison. A reporting study calls for knowledge and skill with information sources and gatekeepers of information sources. Such a study usually requires little inference or conclusion drawing. A descriptive study tries to discover answers to the questions who, what, when, where, and, sometimes, how. The researcher attempts to describe or define a subject, often by creating a profile of a group of problems, people, or events. The descriptive study is popular in research because of its versatility across management

disciplines.

## Making Research Decisions

1. **A sales force manager needs to have information in order to decide whether to create a custom motivation program or purchase one offered by a consulting firm. What are the dilemmas the manager faces in selecting either of these alternatives?**

To choose either option, the sales manager must first determine the goals of the motivation program, in terms of desired attitudes and behavior. He/she needs to know the current motivation level of the employees, and the incentives or penalties that would motivate them to adopt desired attitudes and behavior. If the existing program can achieve the desired results, it would be the right choice. However, if it only meets some of the requirements, the manager would have to weigh such things as total benefits, cost, ease of administering the training, implementation time, cost and development time of a custom program, and so on.

**6. Toyota had a major problem with unexplained acceleration in several of its top models in 2010. It closed down production and stopped sales of multiple models. What types of research might Toyota have conducted to make these decisions?**

The Japanese car maker, long viewed as the leader in automotive quality, recalled the 2009-2010 model years of the RAV4 crossover vehicle and Corolla and Matrix sedans; the 2005-2010 Avalon sedan; the 2007-2010 Toyota Camry, excluding hybrid

versions; the 2007-2010 Tundra pickup; the 2008-2010 Sequoia sport-utility vehicle; and the 2010 Highlander SUV.

Mechanical research undertaken: Safety Research and Strategies, a Massachusetts-based safety research firm, identified 2,274 incidents of sudden unintended acceleration in Toyota vehicles causing 275 crashes and at least 18 fatalities since 1999.

Toyota first identified problems with the accelerator pedals on the Tundra pickup in March 2007. After months of testing, the company determined that the problem was caused by the material in the accelerators' friction lever and made a change. At that

time, Toyota considered it a drivability issue unrelated to safety, according to its filing with the National Highway Traffic Safety Administration. Furthermore, the company's investigation found that condensation from heaters caused increased friction in the gas pedal, making it stick in some cases. Toyota lengthened the arm of the friction lever and changed its materials. As part of the recall involving pedal entrapment with floor mats, Toyota said it would install a new brake override system in all its vehicles so that if both brake and accelerator are depressed the brake will take precedence.

Reputation and loyalty research: Toyota enjoys a deep pool of loyal customers built up over decades of making high-quality vehicles for the reliability and longevity. However, problems have been slowly building. The T100 pickup sold in the 1990s failed to hit Toyota's usual mark for quality, Beginning around 1999, thousands of Toyota owners complained about mysterious "sludge" buildup that wrecked their [engines](http://money.usnews.com/money/blogs/flowchart/2010/01/29/toyota-shows-how-giants-stumble##), prompting criticism that Toyota was growing too fast and skimping on quality; Toyota resisted the claims but settled a class action lawsuit brought by owners in 2007. Toyota owners have also complained about faulty headlamps on the Prius hybrid, and more than 100,000 Tundra pickups were recalled in 2009 for problems with rusting frames.

Consumers have noticed. Surveys by CNW Marketing Research in Brandon, Ore., show that from 1997 to 2007, Toyota consistently ranked at the top for non-luxury carmakers, neck and neck with Honda. For 10 straight years, consumers rated Toyota 9.1 or higher, on average, out of 10. In 2008, that rating slipped below 9 for the first time, and in the latest survey—which took place before the gas-pedal recall—respondents gave Toyota an 8.5 rating-- lower than Honda, Buick, Mazda, Volkswagen, [Ford](http://money.usnews.com/money/blogs/flowchart/2010/01/29/toyota-shows-how-giants-stumble##), and even Saturn.

Financial research: On the business side, Toyota badly miscalculated when it built a new pickup plant in Texas, with sales far below projections.

See the 2009 book, *How the Mighty Fall*, where business guru Jim Collins outlines five stages of decline that many big companies go through.

**7. You have received a business research report done by a consultant for your firm, a life insurance company. The study is a survey of customer satisfaction based on a sample of 600. You are asked to comment on its quality. What will you look for?**

I would ensure that the purpose of the research had been clearly defined; that the research process had been thoroughly documented and planned; that limitations had been revealed; that highly ethical standards were applied; that there was adequate analysis; that the findings were straightforward (unambiguous); that the conclusions were justified, and that the researcher’s credentials were stated. Further, I might evaluate the demographics of the 600. Were they all in the same age range? From the same region of the country? Buyers of similar insurance products?

**8. As area sales manager for a company manufacturing and marketing outboard engines, you have been assigned the responsibility of conducting a research study to estimate the sales potential of your products in the domestic (U.S. or Canadian) market. Discuss key issues and concerns arising from the fact that you, the manager, are also the researcher.**

This is a touchy situation. As a representative of the company, I would like to present fair and unbiased facts. However, it would be tempting to slant the information. For instance, a common source of bias is to understate demand. This makes sales goals easier to achieve, which makes the sales department look good. Understating demand, however, may mean that production gears down, which can negatively impact availability and customer satisfaction, and hence the ability to make sales. And if sales projections are too low, it may mean layoffs or territory consolidations.

On the plus side, it would help me pinpoint key products, salespeople, territories, and customers. All of which could help me refine the sales force, it’s methods, and training needs.

## Bringing Research to Life

**9. What evidence is presented in the Bringing Research to Life vignette of efforts to understand the management dilemma?**

In this vignette, Myra Wines is looking for a ways to improve customer satisfaction. She has access to the CompleteCare facility and its records, from which customer information may be pulled, including what repairs were done to each customer laptop and possibly any customer feedback on the actual repair service. A rational assumption would be that the CompleteCare service repair records serve as a data warehouse. From this, Myra, with the assistance of Henry and Assoc. can mine such information as customer names and contact information, most frequently repaired laptops, issues related to repair frequency, parts with the highest failure rates, shipping services used, and so on. A fairly complete picture of the management dilemma should develop. Remember to stress with students that the management dilemma represents the business’s perspective of the situation and often are the symptom(s) of the problem. The management dilemma is not the same as what is researched to find a solution.

## From Concept to Practice

**10. Apply the principles in Exhibit 1-5 to the research scenario in question 8.**

First, you would need to clearly define the purpose of the research. Is “estimate the sales potential” too vague? Is the research to support production expansion? Increase or layoff of the sales staff? Adjust product design? Increase or decrease in the number of dealers selling the products?

Then, a research process would need to be defined. In other words, putting on paper an overview of the entire research project. Following this, the research procedures must be planned. Will data be based on past sales only? On customer or dealer surveys? By interviewing salespeople? By obtaining and reviewing competitors’ sales?

Next, one must ensure that the report will be unbiased. What safeguards will be put into place to safeguard the information provided by, and/or the personal information of, the study participants? Who will ensure that the data gathered (and recommendations made) will not exceed the scope of the study?

Then, if any limitations are recognized, they must be stated. For instance, sales records are limited to the prior six months. Or, project sales may be affected by the number of visitors to the boat show.

When the information is gathered, it must be tied to the collection instruments and thoroughly analyzed. For instance, one should count ALL survey responses, not just a sampling or percentage of them.

Findings should be clearly organized and presented in charts, graphs, and words, and clearly tied to the conclusions or recommendations made. In other words, the findings should clearly justify the conclusions.

And, finally, one should present his/her qualifications to both conduct the study and make the recommendation.

## From the Headlines

**11. Kathy Lee Berggren, a professor of oral communication at Cornell University, indicates “a lot of my students really [only] scratch the surface with the type of research they’re doing.” According to Andy Guess, at Inside Higher Ed, “Just because students walk in the door as ‘digital natives’, doesn’t mean they’re equipped to handle the heavy lifting of digital databases and proprietary search engines that comprise the bulk of modern, online research techniques.” Students erroneously think a Google search is research.**

**As you read through the reasons that should stimulate your interest in studying research methods or evaluate the nine factors that guarantee good research, what actions do you propose to narrow the gap between students’ research competence and what’s required of a modern college graduate about to become a manager?**

Student answers will vary widely here, but it will get them thinking about what they can do to be better researchers. This will make a good brainstorming question for day one. Keep them focused on the list of factors in