There’s an old rule of thumb for people young and old who want interesting and fulfilling careers: do what you love and the money will follow. When Phil Bundy and Hans Stuyvesant, owners of The Bike Guys bike shop in State College, Pennsylvania, met as college freshman roommates, they had never heard that advice. Little did they know that their experience would be a perfect example for entrepreneurs everywhere. They spent all their free time in college doing what they loved—riding and fixing bicycles. And, just three months before graduation, Phil and Hans opened their own bike shop. They looked forward to continuing to do what they loved. But they weren’t prepared for everything involved in running a shop. While their knowledge of bicycles was solid, they had a lot to learn about running a business. What they ultimately learned was a big surprise: they discovered over and over again that even for a small shop like The Bike Guys, maintaining accurate and detailed computer-based records of business operations was the key to success.

- They needed computer-based information to convince a bank to fork over $30,000 in start-up capital.
- They needed the ability to surf the Web for the best prices on parts so they could incorporate competitive pricing into their operation.
• They needed to determine what goods and services brought in the most income and what their highest expenses were.
• They needed the ability to use other people’s information to promote their business.
• And finally, Phil and Hans found they needed computer-based tools to run their business efficiently so they could focus on their love—bicycles.

The young businessmen could not have known they would become information technology “specialists” just so they could fix bikes for a living, but they had no choice, and they grew into the role.

In the Beginning
Phil Bundy and Hans Stuyvesant liked each other almost from the first moment they met, struggling to haul their bicycles up the narrow winding staircase of the freshman dormitory. Hans came to Penn State University from the Netherlands after serving a year in the Dutch army. Phil grew up on a farm about 20 miles from campus. Hans and Phil found their classmates constantly scheming to become overnight millionaires by exploiting new technology or creating some ingenious product or unique toy. Hans and Phil, on the other hand, spent their time doing what they loved: riding their bicycles together and with the bike club, and—even more importantly—repairing their friends' bicycles just because they loved the challenge.

Hans and Phil became high-tech bike specialists by helping their friends on bike tours. In fact, Phil and Hans went into business during the bike tours—almost without noticing. Tired of phone calls day and night from biking colleagues in crisis, the roommates decided to schedule times they would be available to do bike repairs. They stationed themselves on the college green Monday, Tuesday, and Thursday afternoons to help bike club members. Soon their “customers” insisted on paying for parts and services.

Falling into Business
Although they were servicing a lot of bikes, Phil and Hans didn’t think of what they were doing as a business. Typically, when they fixed someone’s bike on the road, they agreed on a price, wrote it and the owner’s name on a piece of paper, and the biker paid as soon as the group returned to town. On one challenging trip Hans stopped to help a biker who had a problem with gears. He quickly fixed the problem for Meg, a business major. His words, “I think this is the beginning of a wonderful friendship,” proved true. Meg’s formal business training and her study of information systems was instrumental in the months to come.

Meg told the hobbyist mechanics that they weren’t charging enough for their services. She realized that Phil and Hans possessed expertise not available at the local bike shop. Feeling it wasn’t fair to their friends, Phil and Hans resisted charging more, but Meg pushed them. “They will pay,” she said. “Believe me, I’m a business major. People will pay for needed service. Friends or no friends.” She was right. Soon the roommates convinced the university to let them use a vacant ground-floor room in a dormitory for servicing bikes by arguing that the service helped keep cars off campus.

Although she didn’t say so right away, Meg had thought about Phil and Hans starting a business almost from the first time she saw them working.

Building a Business Plan
Facing their last semester before graduation, Phil and Hans had some career choices to make. With Meg’s gentle prodding, the two friends realized they did not
want to send resumes; they did not want positions in corporations; they wanted to have their own business. Their timing was good: the owner of the only bicycle repair shop within 20 miles of campus was retiring and offered his place for rent. That’s when Phil and Hans went through another change. Excited about becoming more established, they were also apprehensive about taking on more responsibility. And, they realized they needed money to work from a storefront.

Meg agreed to develop a business plan so they could apply for a bank loan. At a minimum, that required estimates of revenue and expenses, which Phil and Hans were ill equipped to make. The roommates had kept some repair notes from road trips in a shoebox but had no organized record of whom they had helped, the types of bikes they repaired, the types of repairs they did, or even how much money they made. That information would be extremely helpful now, and they kicked themselves for not thinking of it sooner. Instead, they had to rely on their memories and imaginations.

Estimating expenses seemed fairly straightforward: rent was $1,100 per month, with a six-month security deposit. Estimating the quantities and costs of items needed, Meg used a spreadsheet to determine they needed $5,000 to stock the shop.

Forecasting sales for the first and second years was a bit more challenging. Meg agreed to tackle the pile of repair notes Phil and Hans dumped on the floor. She sorted them by year, then recorded the service and the charge on each note in a spreadsheet. The notes reflected revenue increases of about 20 percent between the first and second years, 25 percent in the third year, and 23 percent in the first six months of the current year. The trick was trying to guess total sales for each year. How much activity wasn’t reflected in the repair notes?

With these new records, the entrepreneurs asked for a five-year $30,000 loan. In an era of high-tech venture capitalism, the bank’s loan manager Marge Calahan was reluctant to extend a loan for a low-tech enterprise. But Dave Lewis, deputy branch manager and biking buddy, convinced Marge to review the application. A week later, she contacted Phil to tell him the business plan was a bit sketchy. The bank needed the following information by 10:00 a.m. the next day:

- More information about the shop’s promotion plans and how they would sustain a continual influx of new customers.
- Information on the degree of expertise that mountain bikers need for the types of bikes they own. Some figures on the numbers of bike club members and the value of their bicycles would also be helpful.
- Information about any discount agreements the future shop owners anticipated having with suppliers.
- Estimated profits (not just sales and service revenue).

**Key Information Starts the Ball Rolling**

Responding to the call, Meg and the men prepared two cash-flow spreadsheets, indicating estimated sales and incorporating $20,000 annual salaries for all three. Creating a promotion plan was more challenging. Phil and Hans thought customers would continue to come to them as they always had, but that wasn’t what the bank wanted to hear. They wanted a concrete action plan. In their response, Phil and Hans cited the university’s bike club as a unique and valuable resource:

- The club had planned increasingly challenging excursions, which would attract more people with more high-tech bikes.
Part I

THE INFORMATION AGE

• The club wanted to help its star members. It offered to provide Phil and Hans access to the club’s student and faculty records, which indicated who had a bicycle on campus. In addition, the club was happy to announce the shop’s opening and any special events. The partners’ affiliation with the university allowed them to place those announcements free of charge.

The trio used presentation software to create attractive slides with the additional information the bank requested. As the bank officer suggested, the presentation discussed the growth of the university biking club and clubs in neighboring towns. In addition, Hans’s Internet research uncovered sales data from bike manufacturers and biking trade organizations. All the data showed an increase in the use of high-tech bikes. Also included in their presentation were some ideas on how to boost business by organizing more tours and competitions and by creating a Web site.

The extra effort worked: the bank agreed to the loan, with inventory as floating collateral. The only thing left was the name: they settled on The Bike Guys.

Learning a Lesson the Second Time

In the beginning, there was no real difference in the way Phil and Hans conducted their business. They provided the same service for the same fees to the same basic clientele in the same casual manner. Unfortunately, after compiling historical records for their bank loan, the partners did not follow through by keeping those records current. After about six months, they finally got around to hiring an accountant to handle their taxes. That’s when they realized their business was in chaos. They didn’t have records of customers, services rendered, and bikes serviced; they needed that information to pay appropriate taxes and to run their business. They had to play catch-up, working 12, 16, or 18 hours a day, fixing bikes during the day and trying to sort out their finances at night. The accountant told them what Meg had said from the start: they needed a computer and some small-business programs to keep useful records of their business operations. That’s when Meg took over business operations. She purchased a PC and a shrink-wrapped accounting software at the university bookstore, which she used to record all business activities: income from services rendered and parts sold; and expenses, including rent, salaries, parts, and loan payments. At any time she could calculate total income and expense for any period. She could also evaluate total outstanding debts (accounts payable) and money owed to the shop (accounts receivable).

Using Information to Succeed

Although Meg didn’t work on the bikes, she quickly started taking charge of the information side of the business. Consequently, she started playing a role in modifying the business. Her first project: getting the shop to carry bike accessories (simple biking clothing, water bottles, odometers, and the like) to generate some additional revenue. Searching Web sites of bicycle manufacturers, biking magazines, and bike catalogs, Meg found sites where she could order parts, pay online, and receive goods the next day for very competitive prices.

Hans looked on as Meg started recording client information and activities on the shop’s PC, and he quickly took an interest in promoting the business. He wanted more information tracked: each transaction with each customer including customer name, address, and phone number; bicycle make and model; repairs performed; and—if the client agreed to provide
further information—the names, gender, and birth dates of spouses and children.

With that information, Hans convinced everyone to try some promotional activities: advertising in local newspapers and magazines and through the bike club, and mailing brochures with discount coupons to long-standing customers and some of the club’s lists. The shop attracted bikers from Boalsburg, Bellefonte, and other towns. Meg convinced the guys to use part of the loan for a television ad and hired a local firm to produce it. After the ad aired four times in one week, business boomed.

Phil and Hans had bought their computer to handle their business operation. But, it became clear that having computerized business and client information was invaluable as they faced the challenges ahead.

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**Business Challenges**

In the next three chapters, you will learn what Phil and Hans need to know: how to harness information technology to help build and maintain their bike shop.

◆ *In Chapter 1, “Business Information Systems: An Overview,”* you will learn what information you need, in what form you need it, where you might find it, and what computer-based information tools you need to build a business.

◆ *In Chapter 2, “Strategic Uses of Information Systems,”* you will learn how to use information strategically, to face the unexpected challenges and problems of running a business, and to succeed in a competitive field.

◆ *In Chapter 3, “Information Systems in Business Functions,”* you will learn how you might best use information technology to help manage a business, whether you need to price parts on the Internet to keep your costs down, or automate your payroll functions to maintain efficiencies.