This module on owning and operating a construction electrician business is one of 36 in a series on entrepreneurship. The introduction tells the student what topics will be covered and suggests other modules to read in related occupations. Each unit includes student goals, a case study, and a discussion of the unit subject matter. Learning activities are divided into individual activities, discussion questions, and a group activity. Units (and subject matter) in this module are planning your business (services, customers, competition; important personal qualities; legal requirements); choosing a location (importance of the general area you live in; what you need from your business location); getting money to start (statement of financial need; purpose of a business description); being in charge (dividing the work; paying for services; how to hire employees; supervising and training employees); organizing the work (making an estimate; work orders; work schedules; time planning); setting prices (factors that determine prices); advertising and selling (advertising methods; what makes a good ad; selling your services); keeping financial records (planning your record-keeping; handling credit; daily cash sheet); and keeping your business successful (profit/loss statement; making your business more successful; profit and personal satisfaction). A summary and quiz complete the document. (A teacher's guide is available for this module.) (CT)
GETTING DOWN TO BUSINESS:

Construction Electrician Business

Module 33
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GETTING DOWN TO BUSINESS:

Construction Electrician Business

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INTRODUCTION

How are you going to use your job skills after you finish school?

Have you ever thought about starting your own construction electrician business?

This module describes people who have started and managed a construction electrician business. It gives you an idea of what they do and some of the special skills they need.

You will read about

- planning a construction electrician business
- choosing a location
- getting money to start
- being in charge
- organizing the work
- setting prices
- advertising and selling
- keeping financial records
- keeping your business successful

You will also have a chance to practice some of the things that owners of construction electrician businesses do.

Then you will have a better idea of whether a career as a construction electrician business owner is for you.

Before you read this module, you might want to study Module 1, Getting Down to Business: What’s It All About?

When you finish this module, you might want to read

Module 31, Getting Down to Business: Auto Repair Shop;
Module 32, Getting Down to Business: Welding Business;
Module 34, Getting Down to Business: Carpentry Business;
Module 35, Getting Down to Business: Plumbing Business;
Module 36, Getting Down to Business: Air Conditioning and Heating Service.

These modules are related to other programs in trades and industry.
UNIT 1

Planning a Construction Electrician Business

Goal: To help you plan a small business as a construction electrician.

Objective 1: Describe the services, customers, and competition of a construction electrician business.

Objective 2: List three personal qualities the owner of a construction electrician business should have.

Objective 3: List two ways to help a construction electrician business "stand out" from its competition.

Objective 4: List two special legal requirements for running a business as a construction electrician.
RICHARD AND JEFF PLAN THEIR CONSTRUCTION ELECTRICIAN BUSINESS

Richard Novotny and Jeff Shimus met when they were both construction electricians working for someone else. They decided to start their own electrical subcontracting business as partners.

Richard had worked for five years as a construction electrician for an electrical contractor. He set up and drew the diagrams for electrical systems for new offices and factories. He supervised the workers who installed these systems.

Jeff had been a salesperson and then a sales manager for a large hardware store. He had also done construction work for several home builders. He was especially good at the electrical work.

Richard and Jeff both got licenses as electrical contractors. They opened a shop in Rosewood and named it R-W Electric. They install electric wiring and machinery in buildings during construction. The business also sells electrical supplies at a discount to people who are doing their own electrical work.

Richard and Jeff enjoy running their own business. "We use all our electrical skills and knowledge. We’ve learned how to manage our own business besides," says Richard.

Selling also appealed to the partners. So they added the sale of supplies to their business, even though some friends advised against it. "You’ll cut into your own business by helping do-it-yourselfers," they argued.

Richard and Jeff did not agree. "We contract mainly for electrical installation in new offices and plants. But we sell supplies mainly to do-it-yourself homeowners. So we can really expand our market by adding discount sales. Now we get the best of both worlds. We work in commercial construction and sell supplies for home repair and remodeling."
Planning a Construction Electrician Business

There are many, many small businesses in America. Small businesses can have as few as one worker (the owner) or as many as four workers. A small business owner is "self-employed." Often a whole family works together in a small business.

Richard and Jeff have thought about four main things in planning their construction electrician business. (1) They have thought about their services, customers, and competition. (2) They have decided their personal qualities are right for the business. (3) They have decided to offer special services so they can compete well. (4) They have learned about legal requirements for running their business.

Services, Customers, and Competition

Services. Construction electricians install and connect electric wires, switches, and other outlets in new buildings. They also wire and install electrical equipment such as lighting and heating systems.

Construction electricians use plans and blueprints to decide on the placement of electrical systems. They mend, fit, and fasten conduit—that is, tubing—to inside partitions on walls. They pull wires or cables through the tubes, twist the ends together with pliers, and cover the ends with connectors. They then test the circuits for proper connections and grounding.

Self-employed construction electricians usually become electrical contractors. They may subcontract the electrical work on a building project from a general contractor. Or they may start a business of their own, doing repairs and remodeling or installing special types of machinery or equipment.
The construction electrician trade is a service occupation. Some construction electricians, though, move into sales of electrical supplies and equipment.

Customers. A construction electrician business has different types of customers depending on the services or products offered. Customers include builders, general contractors, and owners of homes and offices. A construction electrician who sells supplies, like Jeff and Richard, may even have other construction electricians as their customers.

Competition. Competition in electrical construction and contracting is high in most urban areas. During periods of heavy building, the demand for services rises. Then there may be enough business for everyone who can do good work. When building drops, competition increases, and you may need to offer different products or services to stay successful.

Important Personal Qualities

Self-employed construction electricians and electrical contractors who do their own electrical subcontract work need good skills in electrical construction.

- They must be good at using tools.
- They must be able to read plans and blueprints.
- They must know how to decide the amount of materials that are needed for each job.
- They must be able to measure and properly place conduit, switches, and electrical equipment.
- In remodeling and repair work, they must be able to install new wiring on equipment quickly, neatly, and safely.

Construction electricians also need to be physically fit, able to work in cramped or high places, and able to use sharp tools and power equipment.
To become a good electrical contractor, a construction electrician needs other qualities, for example:

- to be able to get along with developers, homeowners, one's own employees, and workers in other trades;
- to be careful and have patience for all the details of managing a job;
- to be willing to work different hours, often switching from long hours to periods of little work;
- to be a good manager of people, time, work, and money—as you will see in this module.

How to Compete

Contractors usually compete for every job by bidding at the lowest price that will let them do the work and still make a profit. There are also other ways to stay ahead of the competition. These are some examples.

Offer a service for which there is high demand. When new building goes into a slump, many electrical contractors do more remodeling and repair work. Rising building costs and changing lifestyles will increase the need to remodel or put additions onto old buildings. Construction electricians will be needed to do the electrical work for these projects.

Locate in an area that needs the services you offer. In the next unit you will learn more about the importance of location for a construction electrician business.

Build a reputation for doing good work on time. Owners or general contractors can lose a lot of money if electrical contractors do not deliver on their subcontracts. Maybe your bid is the same as, or even a bit higher than, another electrical contractor's. In this case, having a good reputation can help you get the subcontract for the electrical work.
Have many contacts. To get jobs, you need to know people who either need work done or know people who have work to be done. Having friends and relatives in the construction business is a big help. If you refer customers to people in other specialty trades, they may do the same for you.

Legal Requirements

Compared to most other construction trades, electricians have a higher percentage of apprentice-trained workers. To become an apprentice, you must be at least 18 years old, and you probably will be required to have graduated from high school or vocational school. Apprenticeship requires several years of on-the-job training. A certain number of hours of related classroom instruction is also required.

Bonding is often required of specialty contractors to work on public construction jobs and other large jobs. The owner (or general contractor) requires a bond, which is a fixed amount of money, to protect against the specialty contractor's failing to deliver.

Bonding companies write bonds for specialty contractors if their yearly revenues are high enough. A construction electrician who becomes an electrical contractor must first succeed on smaller contracts that do not require bonding. Then the contractor would have a better chance to become bonded for work on larger contracts.

In some areas you must belong to the local electricians' union before you can subcontract for any of the work on a large construction project. A contractor's license is required in some states but not in others. You need several years of experience and must pass a state test to get a contractor's license. You must also have proved your financial soundness.

License requirements differ from state to state. Contact the licensing agency in your state to learn what is required where you live.
You will usually need a city business license also. Having a business license protects you from not being paid for work you have done. You will have to find out exactly what the legal requirements are in your local area.

Summary

As a self-employed construction electrician you can do the electrical work for new construction, repairs, and remodeling for homeowners, builders, and developers. Some construction electricians who work for themselves do small jobs that require only electrical work. Others subcontract electrical work in larger construction jobs from construction owners or general contractors. Still others become general contractors and subcontract other work while doing the electrical work themselves. You need good construction skills and managerial ability to succeed. Competition is heavy, but having a specialty that is in demand, being located in an active area, and having good contacts and a good reputation will help you compete. Apprenticeship, bonding, and licensing are common legal requirements to be able to work in the construction business.
Learning Activities

Individual Activities

1. List two common legal requirements for a construction electrician to be in business for him- or herself.

2. Do you think you would like to use your training in construction electricity to become an electrical contractor? Check "yes" or "no" for each item below.

   a. I prefer to work steady hours.  
   b. I must have a neat, quiet place to work.  
   c. I like to deal only with other trade workers.  
   d. Once I get started on a job, I don't like having to change it.

3. Explain why physical endurance is more important than strength for a construction electrician.

4. List two ways to compete if you are an electrical contractor with a construction background.

5. Look up "electrical contractors" in the service directory of your local newspaper's classified section or in the Yellow Pages of the telephone book. List the different types of services and specialties mentioned.
Discussion Questions

1. Do you think that Richard and Jeff have a good combination of skills for success as electrical contractors? Why, or why not?

2. What are some problems and benefits to working for yourself as a construction electrician as opposed to being a regular employee of a construction company?

3. When an electrician subcontracts for a construction job, he or she is making a commitment to do certain things. Discuss what these things are.

Group Activity

In groups of two or more interview an independent construction electrical contractor to find out how this person chose this work.

Develop a set of questions to ask, for example: (1) How did you get your training? (2) How did you decide what to specialize in? (3) What do you like most about this type of work?

Take notes on the person's answers, and make a report to the class.
UNIT 2

Choosing a Location

Goal: To help you choose a location for a construction electrician business.

Objective 1: List three things to think about in deciding where to locate a construction electrician business.

Objective 2: Pick the best location for a construction electrician business from three choices and explain your choice.
Richard and Jeff alive about 30 miles apart. They had each been doing work out of their homes. The entire area in which they lived was built up and still growing. They agreed it was a good area to start an electrical contracting business. But they were not sure about the site for their business.

"Maybe to save money we can both keep working out of our homes at first," Jeff said. "We can divide up the work of running the business. Then I can handle my part at home, and you can too. We'll still be together when we're at the job site."

Richard thought they should rent a business location right away. "As partners, we'll have to plan and make decisions together," Richard noted. "And we can't sell supplies unless we have a store location."

Jeff saw the point. Both Richard and Jeff began checking commercial rental spaces listed in the papers in their home towns.

After much looking, they found a 3,000-square foot building renting for $500 a month. It was located about halfway between their homes.

Richard and Jeff checked out the building site very carefully. They made a list of the changes that were needed. The landlord agreed to pay for materials if they did the work.

Six weeks and lots of hours of hard work later, Richard and Jeff opened their electrical business in its new location.
Choosing a Location

Importance of the General Area You Live In

When construction electricians start their own businesses, they must first decide what area to service. Before starting an electrical contracting or supply business, you should ask these questions:

- Is this an area where I want to live?
- What's the competition?
- Are there enough customers in the area who need my special services?

You should read trade magazines to keep up to date about building trends in your area. For example, right now in the West, contract electrical business for commercial and manufacturing construction is going down (it was high when Richard and Jeff started their business, though). Electrical construction for institutional building and one-family housing is going up.

The housing mix and income level of the area are also important for a construction business. Older homes have more need for repair and remodeling, for example. People who own houses in a higher economic area can also afford to pay for more expensive remodeling. The houses are of better quality and design. The remodeling work will be more interesting and will need careful finish work.

The amount of competition in the area will affect your chance of success. If you locate in an area where the demand is high, there may also be many other electrical contractors in the area. Then you must compete effectively.

Being familiar with an area helps you compete. If you are new to the area, you will need to find out about building codes and common practices. You will need to find out what unions construction electricians belong to.
and whether contractors hire nonunion workers or workers who belong to only certain unions.

Having friends or relatives in the construction industry is a good way to find out more about the area. It also helps to read the newspaper and find out where building and remodeling are going on.

**What You Need from Your Business Location**

For the most part, a construction electrician works at the job site. So if you start your own business as an electrician or electrical contractor, you may not even need a business location. Before you decide to use your home or rent a shop or office, you must think about what you need.

Generally, a self-employed construction electrician or electrical contractor needs to think about five things.

- **Where will you store your tools and equipment?** You may keep your tools and equipment in your car, in your home, or in a locked storage area. If you are on a large job, you may be able to store your tools and equipment in a building or storage shed at the job site.

- **Where will you handle your bookkeeping and keep your financial records?** When you are in business for yourself, you need to keep your own business records, pay bills, etc.

  You should think about your own needs for keeping records and planning. Do you want to have books on electronics and electricity handy? If so, where will you put them? Can your workbench serve as a desk, or do you need a desk or even a separate office?

  You will probably want to keep a balance between a workplace that is large enough to do many different kinds of work and one that is not too expensive to maintain.

- **How will customers find you and contact you about work?** If you run a store or rent an office, people will know where to find you at any time. If you work out of your home, this is not so easy.

- **How will you advertise?** Electricians and electrical contractors should stay in touch with people in the building and housing trades. If your business is in your home, you must use advertising and personal contacts to remind people of your services.
How will you get new business? A telephone is a must. When you are out on a job, someone must take messages. A family member or employee can answer phones for you. When no one is home, you can use a phone minder to record messages or have an answering service take your calls.

Paying for a Separate Business Location

Many electricians and electrical contractors have a separate business location. This makes their business more visible. It helps them keep some space between work and their personal life. Having a separate business location is also a good idea when there is more than one owner. You can split the cost, and you have a place to work together. Whether you decide to rent, lease, or buy a business location depends on your own personal and business needs.

Before you decide to rent or lease a space, you should check the available business sites in your area. Electricians and electrical contractors need industrial or commercial space. Most newspapers list available space for rent in the classified ads. Reading the ads will give you a better idea of what you can afford in your general area.

If you decide to rent or lease a space, you should check the site carefully. It should be in good condition. It should give you the room you need for work and storage. It should also be convenient for your customers to visit to arrange or check on a job.

Summary

An electrical construction or contracting business needs to be located in an area where the demand for its services is fairly high and where there is not too much competition. Of course, you should also be in an area where you like to live and work. Whether you work out of your home or pay for a business site, you need room for storage, managing the business, and staying in touch with people who need your services.
Learning Activities

Individual Activities

1. List three things to think about in deciding the general area in which to locate an electrical construction or contracting business.

2. List two ways you could find out whether your area would be good for a new electrical contractor specializing in one-family residential construction.

3. List three things you would like to have in your own place of business.

4. Two ads in the paper list commercial property for rent. "A" has 625 square feet for $250/month. "B" has 1,200 square feet for $840 a month. Calculate the cost per square foot to see which property is a better buy.

5. Look in the classified section of the newspaper for commercial and industrial property for rent. List the features in the ads that you would like to have in an electrical contracting business location.

Discussion Questions

1. Get a map of your own community. Decide on three places in different parts of the community where a construction electrician might be wise to locate his or her business. Explain why each is a good choice.
2. Suppose you want to be a self-employed construction electrician but do not like city living. Discuss what services you could offer to have a successful business in a rural area.

3. Discuss the pros and cons of using your home for your electrician business vs. renting a business site.

**Up Activity**

Assume that you will open a construction electrician business in your area and do the following:

1. Use the information you found in the Individual Activities to decide what geographical area your service will cover. You can do this in the following way. Take a local map. Locate the construction electrician businesses in your area on the map. Draw a boundary around the area that includes these places.

2. Discuss possible locations for your business. Use your knowledge of the area's business and residential patterns as well as developing areas. Discuss the advantages and disadvantages of each.

3. Decide on the best location.

4. Discuss what kind of an office to look for (or state why you have chosen to work out of your home).
UNIT 3

Getting Money to Start

Goal: To help you plan how to borrow money to start a construction electrician business.

Objective 1: Write a business description for a construction electrician business.

Objective 2: Fill out a form showing how much money you need to borrow to start a business as a construction electrician.
JEFF AND RICHARD GET MONEY TO START THEIR BUSINESS

Jeff and Richard knew what type of business they wanted to start. They had their location. The next step was to be sure they had enough money to get started.

Richard and Jeff each agreed to put in $1,500 of their own money to start their electrical business. Ron Taylor, an accountant, helped them write up a statement of financial need. The statement listed all the expenses they would have in the first three months. It also listed the money Jeff and Richard had on hand for getting started.

Jeff and Richard found that their start-up expenses would probably be more than the money they had on hand. So they decided to request a loan from the credit union they belonged to.

"To get a loan you need a complete business description," the loan officer told them.

So Richard and Jeff wrote down their plans for R-W Electric. They explained that they would offer both electrical contracting services and electrical supplies for sale. They described the competing businesses and how they thought they could meet the competition.

The credit union loan officer reviewed their statement of financial need and business description. When Richard called, the loan officer said they could get the loan. And the interest rate was lower than any bank's interest rate.

Richard called Jeff right away. "We've got the money to start, partner!" he yelled happily into the phone. Then they went out to celebrate.
Getting Money to Start

Purpose of a Statement of Financial Need

A statement of financial need helps you make sure you have enough money before you start a business. Many small businesses fail because they do not plan well and start out with too little money.

Besides helping in your planning, your statement of financial need helps other people decide whether you are a good risk. It shows whether you are a good judge of costs and earnings for a new business.

What a Statement of Financial Need Includes

The statement of financial need shows money on hand and the expenses you expect your business to have in the first few months.

The statement of financial need for Jeff and Richard's electrical business is shown below.

<table>
<thead>
<tr>
<th>STATEMENT OF FINANCIAL NEED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expenses (for first three months)</strong></td>
</tr>
<tr>
<td>Salaries</td>
</tr>
<tr>
<td>Building &amp; Property</td>
</tr>
<tr>
<td>Repairs &amp; Remodeling</td>
</tr>
<tr>
<td>Equipment &amp; Furniture</td>
</tr>
<tr>
<td>Inventory or Supplies</td>
</tr>
<tr>
<td>Advertising</td>
</tr>
<tr>
<td>Other (phone, license, insurance)</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
</tbody>
</table>
Richard and Jeff needed supplies not only for their own contracting but also to sell to store customers. The cost of purchasing supplies and their rent raised their total start-up expenses to the point that they needed a business loan. Some construction electricians are able to start their own businesses more cheaply. If you have your own tools and work from home, start-up expenses will be less.

Purpose of a Business Description

Writing a business description takes time. But it is good to have for these reasons:

- It forces you to be clear about what your business will be like. It makes you think through some hard questions before you start, such as, "What is my competition? What will I do to compete successfully?"

- A business description helps others decide whether your ideas are worth backing. Richard and Jeff's description made them and their business sound good. It helped convince the credit union that the loan would be used wisely.

What a Business Description Should Include

Your business description turns your idea into something real. It should include the following information.

1. State the type of business you plan to go into and your business name if you have one. Richard and Jeff described R-W Electronics as providing both goods and services for electrical construction.

2. Describe the products or services you will provide. Richard and Jeff explained that they would do electrical subcontracting for commercial construction. They would also sell electrical supplies to homeowners doing their own remodeling or building.

3. Describe your business location and why you chose it. Richard and Jeff showed that they knew the kinds of construction needs that were high in their area. They explained how and why they
chose the shop they did. They explained all the work they had done to get it ready.

The business description should also include the points below. Jeff and Richard's description of R-W Electronics explained each one in detail.

4. State who your customers will be and how many you might serve.
5. Describe your competition.
6. Outline your plan for competing: unique services, your business image, etc.
7. Discuss your plan for running the business and keeping it successful.

With a statement of financial need and a business description, you are ready to apply for a loan if you need one. Some banks and credit unions set money aside to help small businesses get started. The Small Business Administration (SBA) will help finance new businesses if others refuse to do so. The SBA is a good source of information about how to get a loan.

You may also borrow money from friends or ask people to invest in your business. In this case, it is wise to have a lawyer check your plan before you go ahead.

Summary

Before you start a business you need enough money to cover your start-up expenses. Your statement of financial need shows the total expenses of getting started, the total money on hand, and the total business loan needed. Your business description puts your plan in writing and helps you get the loan.
Learning Activities

Individual Activities

1. List the advantages and disadvantages of borrowing money from friends to start your own business as a construction electrician.

2. List three things that a business description for a construction electrician should include.

3. What are the problems and benefits of borrowing money versus using only your own capital to start a business as a construction electrician?

4. List two reasons for writing a statement of financial need for a new business even if you do not plan to request a loan.

Discussion Questions

1. Except for rent and buying supplies, Jeff and Richard were able to keep their start-up expenses fairly low. Discuss how new electrical contracting business owners could keep down the start-up expenses of repairs and remodeling, equipment and furniture, and salaries.

2. Suppose under "Potential Customers" the business description for R-W Electric simply said "builders in this area." What else should it say?

3. Lucy Black is a skilled construction electrician. She asked for a $10,000 loan to start an electrical contracting business but was turned down at the bank. Her statement of financial need included
$5,000 for rent and remodeling of the shop in a choice downtown location. Discuss how Lucy might change the financial requirements of her location to increase her chance of getting a loan.

Group Activity

In groups of three to five students, write a business description for Richard and Jeff's electrical business. The business description should be at least 500 words long.
UNIT 4

Being in Charge

Goal: To help you learn about managing work and people in a construction electrician business.

Objective 1: Decide how to divide the work of a construction electrician business among several people.

Objective 2: Pick the best person for a specific job in your construction electrician business.

Objective 3: Describe one kind of training construction electricians might give their employees.
RICHARD AND JEFF SHARE BEING IN CHARGE

Richard and Jeff knew before they started R-W Electric that they got along well with each other. But they still had some trouble deciding how they could work together best. They wondered who should run each aspect of the business.

Before they hired any employees, Richard and Jeff made the decisions together. They set up the supply store together. They talked often about how to increase business. Richard and Jeff set up a recordkeeping system they both liked, and they both made regular entries.

On small contracting jobs, one partner did the work while the other stayed at the shop. But then they could not share the electrical work, which was why they had become partners in the first place!

"We need an employee to help run the store," they decided. "And for larger jobs, we need to hire other construction electricians to work with us."

After a while, Richard and Jeff worked out a way to share some parts of running the business and divide some of the work. Jeff managed the supply sales. Jane Foreman was hired to do secretarial work and to act as clerk in the store. Jeff supervised Jane.

Richard did most of the estimating for electrical contracting jobs. He also hired construction electricians when they needed help on large jobs.

Jeff and Richard kept working together on electrical work and recordkeeping. They also spent a lot of time talking things over. "Two heads are better than one when it comes to making the big decisions," Jeff and Richard agreed.
Being in Charge

What It Means to Be in Charge

You are "in charge" when you own your own business and work for yourself. Being in charge means that you must make your own decisions. To be in charge you need self-discipline. No one makes you work or tells you what to do. For someone who is used to taking orders, learning to be in charge may be one of the hardest tasks of small business ownership.

Learning to be in charge takes discipline and persistence. But you must also become skilled in directing your own work and the work of others. If you go into business with a partner, you have to work out a way of sharing decisions. Sometimes you can divide the job of running things between you.

Dividing the Work

Many different kinds of work need to be done in a construction electrician business. The person in charge makes sure that they all get done. If you are a self-employed construction electrician, you may do all the electrical work and manage the business yourself. If you hire people to work for you, you have help. But then it is up to you to decide who does what. The owner of an electrical construction business must divide up both the construction work and the work of managing the business. The work can be divided among you and your partners, if you have any, and people whose services you pay for.

In Richard and Jeff's business, they decided they would both do the bookkeeping themselves. First they had to agree on the information they needed. Then they designed forms and agreed they would both fill the
forms out the same way. If one partner was ill or out of town, the other partner was able to keep the records up to date.

If you have more than one person keeping books, it helps to have everyone meet once a month to check your records and bring them up to date.

Partners must also make major business decisions together. Sometimes one person will get the information and recommend what should be done. For example, Jeff usually suggests to Richard when they should add a new product to their sales line. Since Jeff handles purchasing of supplies, he knows when a change is needed. But both partners have to agree before they make any big changes.

Paying for Services

Many small business owners pay independent agents to help them manage their businesses. Such agents are not regular employees, because they sell their services to other businesses besides yours.

A small business owner may pay for many services. Some services, like bookkeeping and accounting, help the owner make decisions about money. The owner may decide to pay for other services, like phone answering or typing, to get the day-to-day work of the business done. Jeff and Richard pay to have a janitorial service clean their store once a week.

What to Look for in Hiring Employees

An electrical contractor or self-employed construction engineer may have regular employees or may hire people as needed to work on each contract. Either way, you should hire good people. They should have good skills, and they should show up when they are supposed to. Your own success depends on good work from employees. You must also pay them enough
to keep them working for you. You have to strike a balance between keep-
ing salaries low so you can keep more of the revenues yourself and keeping
your employees happy. As a boss you must:

- select employees who can do the work you need to have done;
- decide what to pay them;
- supervise their work; and
- train them as needed.

Supervising and Training Employees

To be a supervisor you need to get along with employees. You must 
make sure they do a good job but not make them feel stupid or put too
much pressure on them.

Richard and Jeff supervise employees differently, depending on their
skills and their personal needs. They prefer to hire people like Jane
Foreman who don't need much supervision. But they still have to be there
when an employee has a question. The owner also has to check the
employee's work to see if it is getting done and getting done right.

A business owner often finds people who want to work and are easy to
get along with but who need more skills. Then it is your job to help
train them.

Training someone well may take a lot of time, but it is rewarding to
pass on your own skills and experience. And you add to your own success
when you train someone to do a better job.

You can do some training on the job. Working closely with employees
on tasks that are new to them or that are complex is an important part of
training. You can also give employees books to read and have them observe
you or other skilled workers.
Summary

Electrical construction business owners need to define all the important jobs that must get done in their business. They must decide which jobs to do themselves, which ones to contract out, and which ones to hire employees to do. Before hiring an employee, you should decide what personal qualities and skills the person needs to do the job. As a boss you must also provide training to help each employee do the best possible job.
Learning Activities

Individual Activities

1. List two possible benefits and two possible problems of hiring employees to do electrical construction work versus doing it all yourself.

2. Ted Wong is a self-employed construction electrician who does electrical work for home jobs. His brother Robert wants to work for him, but Robert has only taken one shop course so far. List two ways Robert could get training so he could help Ted.

3. You are an electrical contractor with your own business—wiring lighting and heating systems for new homes. You want to hire an employee to help you with all aspects of the electrical work. Decide which of the three job applicants described below to hire, and explain your choice.

<table>
<thead>
<tr>
<th>Lee Jones</th>
<th>Lynn Jenks</th>
<th>Ray Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed apprenticeship in electrical construction</td>
<td>Has learned wide range of electrical skills in a vocational program</td>
<td>Some on-the-job training in electrical wiring</td>
</tr>
<tr>
<td>Very serious, quiet person</td>
<td>Fun to work with, easy-going</td>
<td>Eager to learn, hardworking</td>
</tr>
<tr>
<td>Wants top salary</td>
<td>In the middle of the pay range you had in mind</td>
<td>Will start at minimum salary</td>
</tr>
</tbody>
</table>
4. List three ways you could handle bookkeeping for your electrical contracting business.

You want to hire someone to install electrical equipment for a big construction job you contracted for. List three personal qualities or skills you will look for in the person you hire. Why is each one important?

Discussion Questions

1. Discuss ways that electrical contractors could find out about people who might want to work for them as construction electricians.

2. Discuss the advantages and disadvantages of having a partner in making decisions for your own electrical contracting business.

3. Discuss how you could find out what additional training is needed by a new employee you hired to assist you with electrical contract work.

Group Activity

Suppose you hired a construction electrician to work for you and the person turned out to do very poor work. As a class, write a list of Dos and Don'ts for how you would fire this person. Think about such things as giving notice, giving termination pay, and talking it over.
UNIT 5

Organizing the Work

Goal: To help you organize the work of a construction electrician business.

Objective 1: On a work order form, list what needs to be done for a customer.

Objective 2: Plan a work schedule for an electrical contracting business owner or employee.
Thursday was a busy day at R-W Electric. Richard went to estimate the cost of electrical wiring and installation for a factory being built in South Hills.

When Richard returned to the store, he wrote up a bid for the factory job. He knew that other electrical contractors planned to bid on the job. So he added less profit than usual to keep the total cost down.

Meanwhile, Jeff was doing some rewiring and installing of extra lighting in a welder's new shop. Jeff had hired an electrician, Joe Smith, to help on this job. The work order showed each part of the job and who was to do it.

There had been a delay in getting the conduit needed for the welder's shop job, so Jeff checked his work schedule. He decided to spend some time trying to pick up the conduit from some suppliers he knew. "Since Joe expected to work today and you can't use him, I'll have him help me on another job," Richard told Jeff.

Richard took Joe to help him connect a new piece of equipment in a nearby shoe factory. When they finished, he hurried back to the store. Jane had asked to leave early that day. So Richard took over the customer she was waiting on. He reminded himself to stay later tonight to bring the books up to date.

"And I'd better be sure to check with Jeff in the morning about ordering supplies for the Sullivan job." He made a note on his schedule so he wouldn't forget. It was closing time, so he closed the store. Then he went to the office and kept working.
Making an Estimate

Richard and Jeff first make an estimate before they agree to do electrical work for a building project. The estimate takes into account the cost of materials and labor as well as other price factors.

When more than one electrical contractor competes for the job, each one submits a bid. The bid states a price for which they agree to do the work. Because Richard and Jeff do only the electrical work of a construction project, they are subcontractors. The general contractor usually awards subcontracts to the person in each specialty trade who submits the lowest bid. Sometimes a higher bid is accepted if the contractor promises extra work or to deliver faster.

Work Orders

Sometimes a self-employed construction electrician or electrical contractor accepts a job that takes more than one person to do. If it is a very large, complex job, like wiring for a large factory, a superintendent may be hired to assign work as the job proceeds. On smaller jobs, the person in charge can use a written work order to assign work.

The work order records the agreement between the general contractor and subcontractor and requests workers to do work. When Jeff and Joe did the electrical work for the welder's shop, they used the following work order.
**R-W ELECTRIC, ELECTRICAL CONTRACTORS**
License #123457
109 Bark Street, Rosewood, OH

<table>
<thead>
<tr>
<th>Customer Order No.</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Name</td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td></td>
</tr>
<tr>
<td>Job Order #</td>
<td></td>
</tr>
<tr>
<td>Description:</td>
<td>Rewire shop for 225 amp power and install three drafting lights</td>
</tr>
</tbody>
</table>

Ref: Your Purchase Order 5662002384

<table>
<thead>
<tr>
<th>Person(s) Doing Work</th>
<th>Estimated Time</th>
<th>Description of Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smith</td>
<td>5 hours</td>
<td>Install raceways and wiring</td>
</tr>
<tr>
<td>Shimus</td>
<td>1 hour</td>
<td>Install switches and circuit breakers</td>
</tr>
<tr>
<td>Shimus, Smith</td>
<td>3 hours</td>
<td>Install 3 drafting 100FC lighting fixtures</td>
</tr>
</tbody>
</table>

Work Started On: 3/6
Work Finished On: 3/7

<table>
<thead>
<tr>
<th>Labor (9 hours @ $30)</th>
<th>Material</th>
<th>Tax (5%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>270.00</td>
<td>300.00</td>
<td>15.00</td>
<td>585.00</td>
</tr>
</tbody>
</table>

The work order gives the customer a record of the work to be done. It also reminds the electricians who will do the work to schedule time for the job.
Scheduling Work

Careful scheduling is important in construction and remodeling work for at least two reasons. First of all, you are expected to complete the job on time. Unless each task takes place as planned, you can get far behind. Second, certain jobs must be done before others can be started. For example, you must install conduit lines before you can thread the wiring and connect it to circuit breakers.

Besides needing to do tasks in order, you must also plan your schedule to fit with the tasks of workers in other specialties. For example, a construction electrician on a house remodeling job will have to do electrical wiring after the carpentry crew constructs the frames and before they put in drywall.

A work schedule helps you assign people to tasks and make sure the tasks all get done in the right order. You can also use a written schedule to remind yourself of points during a job when other construction workers need to come in.

The schedule may be changed many times to keep workers busy in spite of delays. If supplies for one job have not arrived, the electrical contractor may reschedule workers to begin another job.

Because there are so many unknowns, the schedule for a job must be flexible. The most important things for the contractor or subcontractor to keep in mind in scheduling work are to:

- estimate the total length of time in which you can do the job, taking into account possible work stoppages, delays in delivery, etc.;
- arrange tasks in an order that will allow you to assign workers quickly to other tasks, when they finish one task or when they must wait for someone or something to finish a task;
- make sure you know workers' personal schedules so you can quickly replace people or reschedule to keep the work moving; and
make sure the people who work for you or who must coordinate with you know your personal schedule. A worker or the general contractor may need to get in touch with you quickly. You can post your daily schedule at the worksite or leave it with the person who answers your phone when you are out.

Time Planning

A major problem for most small business owners is planning their own time. Owners tend to work long hours, especially when they start the business. There are a number of ways to improve your use of time. One of the most useful is to list all the things you want to do. Then rank them in order of importance and do the most important ones first.

Having a written daily schedule also helps you plan your time. It is important to make reasonable time estimates and to allow time for the unexpected. Try to allow time for doing the things that you enjoy doing as well as for things you have to do. Try to group tasks and set aside regular time periods for all the necessary ones.

Often a person will find that there just isn't time to do everything. Then you must make choices and accept the fact that some things on your list won't get done. At that point, you may need to talk to other people and change agreements on getting some things done. Or you may need to delegate some work to others so that you have more time for management tasks.

Summary

Making an estimate and bidding on a job is the first important part of organizing work for an electrical construction business. On most jobs you may use a work order to assign work. Scheduling and time planning are important whether you work alone or with others.
Learning Activities

Individual Activities

1. List three things you will usually find on a work order for an electrical contracting business.

2. Jeff Shimus connected a vapor degreaser and installed a battery charger for a computer manufacturing company. He paid $200 for the materials plus 5% tax. He spent nine hours doing the work and charged $30 an hour. Fill out the work order below for this job.

<table>
<thead>
<tr>
<th>Person Doing Work</th>
<th>Description of Work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LABOR</th>
<th>MATERIALS</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Today Richard has four jobs he must do and three he would like to do if he can. Fill out a daily work schedule for him using the following information.

Must Do:                          Estimated Time:
Complete warehouse, lighting installation 2 hours
Pick up supplies for factory wiring 1 hour
Estimate work for department store construction 3 hours
Like to Do:  
Visit dentist  
Order new business cards  
Get car radiator fixed  

Estimated Time:  
1 hour  
1 hour  
2 hours

<table>
<thead>
<tr>
<th>Morning</th>
<th>Afternoon</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 - 9</td>
<td>1 - 2</td>
</tr>
<tr>
<td>9 - 10</td>
<td>2 - 3</td>
</tr>
<tr>
<td>10 - 11</td>
<td>3 - 4</td>
</tr>
<tr>
<td>11 - 12 Lunch</td>
<td>4 - 5</td>
</tr>
<tr>
<td>12 - 1</td>
<td>5 - 6</td>
</tr>
</tbody>
</table>

4. List two reasons for keeping a written daily schedule if you own an electrical contracting business.

5. A work order may not be enough to assign work for very large jobs. List two other ways an electrical contractor might assign work on especially large jobs.

Discussion Questions

1. Look back at the daily schedule you filled out for Individual Activity #3. Discuss your reasons for leaving out the task or tasks you left out.

2. What problems could arise if you did not use a work order but just told your employees what jobs to do?

3. Richard Novotny loves doing electrical work, but since he and Jeff started their electrical contracting business he spends less time on electrical construction jobs than he used to. Does this mean he made a mistake? Why, or why not?
Group Activity

Cindy Jackson is a self-employed construction electrician. She starts each day early, doing the books and answering phone messages. Then she looks at supply catalogs and ads in the paper for sales on supplies. Then she goes out on repair and remodeling jobs. But she usually finds that the day ends before she gets as many jobs done as she promised.

As a group, come up with three or more ideas on how Cindy can improve her use of time.
UNIT 6

Setting Prices

Goal: To help you decide how to set prices for a construction electrician business.

Objective 1: Pick the best price for one of the services of a construction electrician business.
**How Prices Are Set at R-W Electric**

When they started, Richard and Jeff had to bid on most of their electrical contracts. So they had to make a very careful estimate of costs. They tried to add just enough profit to make money on the job and still bring in a low bid.

To make a bid Richard filled out a bid form. It listed all the materials needed for the job, their cost, tax, and the total cost. It listed all the steps in doing the work, the total hours of labor, and the total cost of labor.

In setting his labor price, Richard tried to stay in line with his competition. Electrical contractors in the area charged from $25-$35 an hour. Richard tried to stay in the middle of the range—at $30. He could do this and still make a good profit if he could keep his operating expenses down.

In pricing parts to be sold, Jeff also had to figure the cost of parts and sales tax. Then he added a "markup" to cover operating expenses and profit. Jeff was able to sell parts and supplies at discount prices because he bought them at even lower wholesale prices.

Richard and Jeff knew that their business success depended on how well they set prices. If they charged too much, people would not use their services. But if they charged too little, they would not make a profit.
Setting Prices

Pricing is important in an electrical business. First you must set your hourly charge for labor and operating expenses. Then you must decide how many hours a certain job will take. You also have to decide on the materials you'll need for the job and how much they'll cost. Finally, you must decide on how much to add for profit.

If you set your hourly rate too high, you'll lose business to your competition. If it's too low, your profits will suffer. If you make a mistake in figuring out your needs for a certain job, you'll also have problems. Good pricing sense is essential to earning your "bread and butter."

Factors That Determine Prices

When you prepare a bid for an electrical job, you must think about three things: cost of materials, cost of labor and operating expenses, and profit. For materials, you will charge the customer what you paid to buy them. For labor, you will charge a standard hourly rate multiplied by the number of "person-hours" needed to do the job. The "labor" rate covers money paid for salaries, rent, utilities, and other operating expenses. You must also add a certain amount for profit.

Total materials. This is the cost of the electrical supplies needed for construction or remodeling jobs. This is also called cost of goods sold. For example, to wire a new house for electricity you would use plastic-coated wire, circuit breakers, and transformers.

A skilled electrical contractor can figure out in advance how much of each type of material a job will take. Once the job starts, the electricians must use the materials carefully to avoid mistakes and waste.
The cost of materials may vary. It depends on which supplier you use, whether you buy a large or small amount, and whether supplies are scarce or plentiful at that time of year in your local area.

Since materials costs rise rapidly, it is important to ensure that the prices suppliers quote you today will be the same next week or month when you're ready to buy. If you think prices will change, you should add something to your estimate to cover the expected increase.

In some states you must pay sales tax on materials you buy. You need to know what percentage of sales tax to add to the cost of materials. Then you can add it to the estimate.

**Total labor**: This is the hourly cost for electricians and electricians' helpers on a construction job plus operating expenses. To figure out your hourly labor rate you need to know the hourly wage you pay each worker. Hourly wages for electricians and helpers may be fixed by the local electrical workers' union. If you use nonunion labor, you may be able to pay a lower wage. You must add payroll taxes, fringe benefits (such as medical coverage and sick leave), and insurance. Next you must add a percentage to cover your other operating expenses—for example, rent and electricity for your office, repair and depreciation of equipment, office supplies, and advertising.

In estimating the number of hours it will take to do a certain job, you must know:

- which workers you will need for each part of the job; and
- the number of hours you think each worker will need to work on the job.

You must take into account possible delays due to bad weather, late delivery of supplies, etc. Electrical contractors often add a certain amount of hours or weeks to the labor estimate to cover such problems. When you have decided the number of hours the job will take, multiply this number by your standard hourly rate. Include this total in your bid to the customer.
Profit. This is the amount you add to the price of the job beyond what it will cost in materials, worker salaries, and operating expenses. Out of the profit you pay your own salary and make improvements in the business. For example, you may buy a new truck or more tools or remodel your office. Profit is the owner's reward for running the business and taking the risks.

A typical profit margin in the construction industry is 10% to 15%. However, the percentage of profit on a job can differ depending on how much the estimator thinks the customer will accept. Electrical contractors try to put the profit fee at the highest possible level that allows them to win the bid. Deciding the percentage of profit is one of the most important parts of estimating each job.

On small jobs a fixed percentage may be added to the hourly labor charge to provide for profit. On large jobs the profit fee is added to the cost of materials and labor.

Other Factors That Affect Price

Competition. The prices your competitors charge also affect what you can charge for construction and remodeling work. This is because customers often get more than one estimate when they want a job done and compare prices. Everything else being equal, the customer will usually pick the "lowest bidder."

If you do work of better quality or work faster, you may be able to get business even though you charge more than the competition. But most customers take their business to the person or company charging the least.

Demand. Demand for your services will also affect what you can charge. Certain kinds of work have to be done, so the demand for them stays high even if prices rise. For example, if the wiring in a home has been damaged, it must be repaired before the house is sold. But suppose that a couple wants to have their kitchen rewired so they can install a...
microwave oven. If they find that this will cost too much, they may simply not have the job done. The demand will be higher for necessary work than it is for work that people can live without.

Demand can also depend on your own reputation. If you become known for good, fast, honest work, more people will bring jobs to you even if you charge a bit more than someone else.

Summary

In setting prices for electrical work you must take into account the cost of materials and the cost of labor. Included in labor is salaries, other operating expenses, and profit. The amount of competition and the demand for your services also affects what you can charge.
Individual Activities

1. What are the advantages to the electrical contractor of providing free estimates for electrical construction jobs? What are the advantages for the customer?

2. List three things that are included in the hourly labor rate for an electrical contracting business.

3. You just opened an electrical contracting shop and someone asked you to estimate a job. You think the job will cost you about $40 for materials and tax, and $45 for salaries and other operating expenses. Your competition has estimated the job at $105. Which price should you charge?
   a. $85
   b. $100
   c. $125

4. In making an estimate for an electrical installation, Richard Novotny figured that materials plus tax would cost $5,000 and that salaries and operating expenses would cost $5,000. He wanted to make 10% profit. How much should he estimate for the job?

5. The price of electrical supplies has gone up by 10% since last year. Jill Travers decides she must either raise her prices or cut down on her number of employees to keep her electrician business from going into debt. List one problem that doing each of these things could cause.
Discussion Questions

1. An electrical contractor who runs a business with regular employees has to take into account some factors in setting prices that an electrician working alone does not. Discuss such factors.

2. "Richard Novotny would save money by not making an estimate on each job, because he would not have to spend time traveling to the job site and making the estimate." Discuss what is wrong with this statement.

3. Discuss ways that you could increase the demand for your electrical services.

Group Activity

In pairs, role play a discussion between Richard Novotny and Tim Watson, who needs to have the wiring in an old factory replaced because of damage. Try to come to an agreement.

Richard's point of view: Does not want to give a firm estimate because he does not know how much damage there is. Would rather charge for materials actually used and time actually spent.

Tim's point of view: Wants to know how much the job will cost before he gives a go-ahead on the work. If it costs too much, he would prefer to wait until he can save more money.
UNIT 7

Advertising and Selling

Goal: To help you learn ways to advertise and sell the services of a construction electrician business.

Objective 1: Pick one way to advertise a construction electrician business.

Objective 2: Write an ad for a construction electrician business.

Objective 3: Describe one way to sell the services of a construction electrician business.
RICHARD AND JEFF'S ADVERTISING AND SELLING METHODS

In the area where R-W Electric was located, there was a lot of competition. There was also a lot of demand for a good electrical subcontractor and supply business. When they opened their business, Jeff and Richard set aside $1,000 for advertising. They had business cards printed and got forms and stationery printed with the same typeface.

They also had the phone company make up an ad for their business to put in the Yellow Pages. When the Yellow Pages came out a few months later, the ad for R-W Electric was there in the section for "Electric Contractors--Industrial and Residential." The business was also listed in the section for "Electric Supplies--Retail." Richard and Jeff felt that having a good reputation would bring them more business. So they tried hard to satisfy their customers. They tried to be polite with everyone they dealt with.

Jeff found that his electrician's experience was a big help in selling supplies. He was able to help customers pick out supplies; he could also explain how to do electrical repairs or installations to people who had never done such things before.

As time went on, Richard and Jeff both got to be good with customers' questions. They also made it a point to train their sales clerks so that they were good in dealing with customers too.

Building good customer relations took lots of time, but Richard and Jeff enjoyed it because they both liked people. And they knew that getting along well with all kinds of people was an important part of their business.
Advertising and Selling

Advertising Methods

When a construction electrician starts a subcontracting repair or supply business, it pays to advertise. Advertising helps you stand out from your competition. Even more important, it lets people know what services you offer. Unless you have more business than you want, you should spend at least something on advertising.

There are many good ways to advertise an electrical contracting or supply business. For example, you can use:

Word of mouth. People who have used your services and been satisfied will probably tell other people about you when they need those services. Having a reputation for good work at a fair price and for doing jobs on time will help bring you new business. These qualities will also bring your old customers back again.

A business card. Your business card is a good way to tell people about your business. You can have a large number of cards printed at a fairly low price. Then you can hand a card to each customer, supplier, and other people whom you meet. It helps to have a special design on the card so people think of your business as soon as they see it.

Printed forms and stationery. Some business owners use standard forms and plain paper and envelopes because they cost less. Others think it is worth the extra cost to have their own business name printed on the forms and stationery they use. If you have a business logo, it can be printed on your stationery and forms too. Suppose you did a job for someone three years ago. In checking his files, he finds your work order with your business name and phone number printed right there. This could make the difference between him calling someone else or bringing more business back to you.
The Yellow Pages. People who are looking for building, remodeling, or home repair services may turn to the Yellow Pages in the phone book. You should have a one-line listing of your business name and phone number under "Electrical Contractors--Industrial and Residential," or in another section that describes your business better. For example, you might have a listing under "Electric Supplies, Wholesale," or "Electronic Equipment and Supplies--Repairing" depending on the type of special service you want to provide.

A special ad in the Yellow Pages costs more than a simple one-line listing, but it helps readers see what is special about your business. If you offer special services or if you simply want to stand out from the competition, an ad can make the difference in getting extra business.

Newspaper ads. Ads in the local papers reach large numbers of people at a fairly low cost. Newspaper ads are a good way to build up new business or to advertise sales. They are also useful for introducing a unique product or service.

Most city newspapers have a section in the classified ads that lists people in different trades who have services to provide. If you are willing to take on a variety of small or odd jobs, this may be a worthwhile way to advertise.

Your vehicle. If you use a truck or van for your business, you may want to paint your business name, etc., on it. This helps attract new customers and gives a professional image to your business.

Other methods. You could advertise your business in still other ways. For example, you could use direct mail, radio, or TV. Outdoor advertising should include a sign on the building where your business is located. It could also include billboards or bus ads. The advertising medium you use depends on the kinds of customers you want to attract and how much you want to spend.
What Makes a Good Ad?

Newspapers and TV broadcasts are full of ads. What makes one catch your attention? Here are some general rules of thumb.

A good ad needs to be simple so that people who hear it or see it understand what it is about.

The ad should stand out. It should catch people's eyes or ears so they will pay attention and will remember what was said.

Your ad should be easy to recognize so that it makes people think about your business. Having a special jingle, tune, or slogan could help people tune into a radio ad for your business and recognize it the next time they hear it. Having a unique design in a printed ad or on your stationery, signs, and van will do the same thing.

The ad should give people important information about your business. For example, your location, phone number, services offered, and whether you accept credit cards are items that will help people decide whether to bring their business to you.

The ad should also make people want to buy your products and services. For example, the Yellow Pages ad for an electrical contracting business could mention that it is a full service construction and maintenance firm that provides 24-hour emergency service. Or it could state that your business does lighting design. Customers with these special needs will probably notice your ad more than the others.

Selling Your Services

Once you have attracted customers, you must "sell" them on using your services. Here are some examples of how to do this.
Do safe and attractive work. Customers expect the electrical fixtures and equipment in their home or work place to be safe, lasting, and neatly installed. If you use cheap materials or do a sloppy job, you may save a little on materials or labor. But you often lose more than you save by not satisfying your customers or by having complaints later on.

Treat customers with respect and care. Besides being polite, you must be prepared to give the customer attention and information. A "hard sell" will turn some customers off. On the other hand, you should not expect your services to sell themselves. You must explain what you have to offer and what the choices are. Try not to push customers, but if they ask for help in deciding, be ready to respond.

Be businesslike. The way you conduct yourself is part of being businesslike. You should:

1. greet customers and talk to them about what they need;
2. explain the products and services you offer;
3. answer questions and explain why a job costs what it does and take the time it does; and
4. get an agreement in writing as to the terms of the sale and when the job will be paid for.

Being businesslike also means having a business area that is attractive. You want to impress your customers with the neat, attractive work you can do. So it helps if you and your employees are dressed neatly, keep your vehicle and tools neat and orderly, and clean up the job site at the end of each day.

Care about your community. The work of your business and other construction businesses has a major impact on your community. Your work affects the appearance of buildings in the area, and in the construction business you need to be concerned about building codes and living patterns.

It is also important to have a good relationship with other businesses in your community. If you cannot meet a customer's needs or cannot safely
take on a certain contract, you should not accept the work. Ideally, you would know of someone better to do the job and refer the customer to that person instead. If you have time, you might also help with worthy community projects like sponsoring a bowling team or donating materials for an auction.

Summary

Advertising lets people know what services your business has to offer. There are many ways of advertising, depending on the types of people you want to attract and how much you want to spend. To "sell" your business you must meet people's needs, deal with them in a helpful way, and be a good community member.
Individual Activities

1. List three ways to "sell" your construction electrician services when you deal with homeowners or builders.

2. List three things that a good ad for your business should do.

3. Match the advertising medium on the left with the statement that fits it best.

   - Word of Mouth
   - Newspaper Ad
   - Yellow Pages
   - Business Card

   a. Easy to keep handy
   b. Reaches people who want to buy, but don't know whom they want to buy from
   c. Doesn't cost anything
   d. Good for advertising a sale

4. People hire an electrical contractor to do work in their homes for many reasons. Check which customer needs you think Richard and Jeff's electrical business appeals to and list one way it appeals to each need you checked.

   - Comfort:
   - Convenience:
   - Pride or status:
   - Saving money:
   - Security or safety:
Discussion Questions

1. Discuss ways in which you could advertise your own electrical building or repair business on a regular basis and reasons you would choose or not choose each one.

2. Can an ad be liked by some customers and not by others? If you owned a remodeling business, what could you do about that?

3. Joseph Raincloud just became a licensed electrical contractor. He lives in a rural area and wants to specialize in doing electrical work for remodeled farms and homes. Discuss the pros and cons of advertising his new business with: (a) skywriting; (b) television; and (c) direct mail.

Group Activity

Working in groups, design a printed ad for Richard and Jeff's electrical business. Decide whether you want the ad to appear in the Yellow Pages, local newspapers, or a flyer to be mailed to people's homes. The ad should include: (a) a headline; (b) copy; (c) an illustration; and (d) information identifying R-W Electric.
UNIT 8

Keeping Financial Records

Goal: To help you learn to keep financial records for a construction electrician business.

Objective 1: Fill out a customer billing form for the services of a construction electrician.

Objective 2: Fill out a daily cash sheet for money a construction electrician receives and pays out in one day.
With the help of Jeff's cousin Tom, the owners of R-W Electric set up a good recordkeeping system.

Tom was an accountant for a number of general and specialty contractors in the construction trades. He suggested a recordkeeping system based on the percentage of work completed on subcontracting jobs rather than on cash received. "This gives you a better idea of true profits or losses," Tom explained. "And you can use it to bill the contractors you work for each month rather than waiting until each job is finished."

Richard and Jeff still found it important to use a daily cash sheet to keep track of the money coming in and going out each day. With two partners and several store clerks handling cash, checks, and credit payments, this seemed to be a good idea.

By the end of each month they billed contractors for the percentage of the job they had completed that month. For some jobs that they finished in less than a month, the percentage was 100%. But some jobs were spread out over a long time because the electrical work had to follow different phases of the carpentry or other craft work. In this case, they decided how much of the total job they had finished—30%, for example; then they billed the contractor for 30% of the total bid price.

Richard also suggested keeping a record to compare the actual amount of labor needed for each job with the original estimate. This helped him improve his estimates on future bids.
The Importance of Good Financial Recordkeeping

To succeed in business for yourself you not only need to be a good electrician, but you also need to keep track of finances and make money decisions. Whether you do your own bookkeeping or hire someone to do it, you will need a system that works for you and gives you the information you need to run your business.

You need separate financial records for your business. These are the purposes of financial records:

They help you keep track of revenues, which is the money coming into the business. Money will probably come into your business in the form of cash, checks, and credit payments. It may come in for work to be done, work just completed, or work for which the customer owes you on a number of different jobs you have done or are still doing. You need to keep track of all these forms of revenues.

They help you keep track of expenses, which is the money you must pay out. Money must be paid out for supplies, overhead, employees' salaries, and other bills you pay to keep your business going. Good financial records show how much and to whom you paid.

Financial records help you write business reports. Business owners must prepare financial reports for tax purposes or to get a loan. Good records make it much easier for you to prepare reports when you need to.

Finally, financial records help you make business decisions. To improve your business or raise your profits, you need to know how you have done so far. Unless your records tell you this, you cannot make wise decisions about the business.
Planning Your Recordkeeping

To prevent recordkeeping from becoming a burden, you must decide who will do it and how to do it. The type of system you use may be very different, depending on the size and type of business you have. Keeping financial records for an ice cream store, for example, is quite different from keeping records for a building contractor who does several hundred thousand dollars' worth of business each year.

Many small business owners hire someone to help them with bookkeeping, which is financial recordkeeping, and with accounting, which is making financial decisions. But the owner must work with the bookkeeper or accountant.

The owner must explain the way payments are made, the amount of money coming in, whether credit is given, etc. These things affect the type of financial records you keep. In turn, the records must be in a form to give you information needed for making decisions about your business. For example, if credit customers owe for a long time, you may need a new credit policy or payment arrangement. If your expenses exceed your revenues, you need to change your business in some way. Over time, the accountant may also suggest changes in your procedures if your profit/loss statement does not show enough profit.

Handling Credit

Most businesses that sell costly products or services, including electrical contractors' businesses, accept credit. This means that they let the customer owe them at least part of the job price for a short time.

As a business owner, you should clearly state your credit policy—that is, whether you accept credit and on what terms. Your customers also need to know whether you will accept national credit cards. Some businesses give a discount if customers pay quickly or charge extra for late payments.
Credit sales and payments must be recorded carefully. When you provide goods and services to a credit customer, it means that you have spent money but have agreed to wait for payment. You need a complete record for your own information and to remind customers that they must pay you. Upon payment you should record the fact that payment was received and give the customer a copy of the receipt. This helps avoid disagreements about whether you have been paid.

Some businesses use a separate customer account form to keep a record of how much credit a customer owes and a billing form to request payment. Below is an example of a customer billing form that R-W Electric sent to a general contractor; the form indicates that partial payment on a subcontract to install electrical equipment and lighting in a new factory has been received.

<table>
<thead>
<tr>
<th>Billing Date</th>
<th>Description of Service</th>
<th>Amount Charged</th>
<th>Previous Payment Received</th>
<th>Percentage Due</th>
<th>Remainder to be Billed</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/31</td>
<td>Install lighting and equipment as per contract #1173</td>
<td>$10,000</td>
<td>0</td>
<td>3,000</td>
<td>7,000</td>
</tr>
<tr>
<td>4/30</td>
<td>Work completed</td>
<td>$3,000</td>
<td>7,000</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Paid in Full as of ________
Signed: ______________________
Daily Cash Sheet

To list all the money coming into and going out of the business in a day you should fill out a daily cash sheet. This helps you catch errors or missing money as quickly as possible.

To fill out a daily cash sheet for your business you must first add up all the cash sales (whether paid in cash or by check) you received that day. Then you must add up all the payments received for prior work, for which the customer still owed. These are called credit sales. Adding cash sales and credit sales gives you the total revenues for your business in one day.

On the other side of your daily cash sheet you must list all the money your business paid out for the day. These expenses may include salaries, building or vehicle expenses, equipment and tools, supplies bought, and expenses like insurance or advertising.

The daily cash sheet for R-W Electric on June 18 is shown below.

<table>
<thead>
<tr>
<th>REVENUES</th>
<th>EXPENSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Sales $5,000</td>
<td>Salaries</td>
</tr>
<tr>
<td>Credit Sales $3,000</td>
<td>Building Expenses $100</td>
</tr>
<tr>
<td></td>
<td>Tools and Equipment 200</td>
</tr>
<tr>
<td></td>
<td>Materials 450</td>
</tr>
<tr>
<td></td>
<td>Advertising 50</td>
</tr>
<tr>
<td></td>
<td>Vehicle Expenses 50</td>
</tr>
<tr>
<td></td>
<td>Other (Insurance) 150</td>
</tr>
<tr>
<td>TOTAL REVENUES $8,000</td>
<td>TOTAL EXPENSES $1,000</td>
</tr>
</tbody>
</table>
On June 18 the total revenues for R-W Electric were $8,000 and total expenses were $1,000. The figures for each day might be very different, however. Some days revenues were low and expenses were high. Some days Jeff and Richard took in more than they paid out. Summing up their daily cash sheets over a month, along with the record of the percentage of completion of each job, gave them a good idea of how their business was doing.

The information on your daily records is periodically summarized and organized into forms that show how the business is doing, such as a balance sheet and a profit/loss statement. You will learn about profit/loss statements in the next unit. If you do go into business for yourself, get the advice of a bookkeeper or accountant about how to complete a balance sheet.

Summary

All small businesses must keep financial records to keep track of money coming in and going out. Good records help you write financial reports and make decisions about your business. If you accept credit, you need customer account forms and billing forms to record payments made and amounts due. A daily cash sheet records the total revenues and expenses for your business each day.
Learning Activities

Individual Activities

1. List two reasons for keeping complete financial records if you have your own electrical contracting business.

2. Complete the following customer billing form for Arbogast Contractors, which subcontracted with R-W Electric to do the electrical installation for the new Diktastix factory. After the July 31 billing, Arbogast paid Richard and Jeff $1,000 for the 20 percent of the work that they had completed. By August 31, the work was 50 percent completed, so they billed Arbogast for another 30 percent of the contract cost.

<table>
<thead>
<tr>
<th>Customer: Arbogast Contractors</th>
<th>Work Completed: 50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1177 Elm</td>
<td>As of Date: 8/31</td>
</tr>
<tr>
<td>Rosewood</td>
<td>Payment Due: 9/15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Billing Date</th>
<th>Description of Service</th>
<th>Amount Charged</th>
<th>Previous Payment Received</th>
<th>Percentage Payment Due</th>
<th>Remainder to be Billed</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/31</td>
<td>Electrical Installation as per Contract #1344-G</td>
<td>$5,000</td>
<td>0</td>
<td>$1,000</td>
<td>$4,000</td>
</tr>
<tr>
<td>8/31</td>
<td>SAME</td>
<td>$1,000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

75
3. Fill in a daily cash sheet for R-W Electric for August 31. On that day Jeff and Richard received $350 for electrical supplies. They also received the balance of $1,000 due on a job for Arbogast Contractors. R-W Electric paid out $500 in salaries and $125 for a printed ad.

<table>
<thead>
<tr>
<th>REVENUES</th>
<th>EXPENSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Sales</td>
<td>Salaries</td>
</tr>
<tr>
<td>Credit Sales</td>
<td>Building Expenses</td>
</tr>
<tr>
<td></td>
<td>Tools and Equipment</td>
</tr>
<tr>
<td></td>
<td>Materials</td>
</tr>
<tr>
<td></td>
<td>Advertising</td>
</tr>
<tr>
<td></td>
<td>Vehicle Expenses</td>
</tr>
<tr>
<td></td>
<td>Other</td>
</tr>
<tr>
<td>TOTAL REVENUES</td>
<td>TOTAL EXPENSES</td>
</tr>
</tbody>
</table>

**DAILY CASH SHEET**

**R-W ELECTRIC**

**Date:** Aug. 31, 19XX

**Discussion Question**

Discuss the conditions under which you would try to get customers to pay in cash for building or repair services and the conditions under which you would give credit.

**Group Activity**

Make a list of the types of business decisions Jeff and Richard might make for when they would need information from financial records. Group them as to whether they are wise decisions when the business is "in the black" (doing well) or when it is "in the red" (losing money).
UNIT 9

Keeping Your Business Successful

Goal: To help you learn how a construction electrician business can stay successful.

Objective 1: Determine the net profit, profit ratio, and expense ratio for a construction electrician business.

Objective 2: State one way to increase profits.

Objective 3: State one way a construction electrician business can be changed to increase sales.
Richard and Jeff Make Their Business More Successful

R-W Electric was now two years old. Saturday night Richard and Jeff had a party at the shop to celebrate. Bright and early the next day they had a meeting with their accountant, Tom.

"Here is your profit/loss statement for the first two years of your business," Tom said, covering a yawn. "Your net profit went up about 50% from Year 1 to Year 2. You have to split the profit in half, though. It still means a low salary for you two."

Richard and Jeff were pleased with their profit increase. But they had wanted more growth in total revenues than they had gotten.

"This year I'd like to top two hundred thousand in total revenues," Richard said. Jeff agreed. "Now, how are we going to do it?"

Richard and Jeff looked at some of the other financial breakdowns Tom had prepared. They found that 10% of their revenues came from supply sales and 90% came from electrical subcontracting.

Then they compared the profit ratio for sales and subcontract work. "We make almost 30% profit on selling supplies and only about 19% on subcontract work," Jeff noted.

The partners agreed that they could make their business more successful in two ways. First, they would expand their supply sales business. Second, they would raise their labor prices for electrical subcontracting.

"Who knows, Tom? If we make enough money next year, maybe we can even pay you a little more," Richard and Jeff joked. Tom said he'd be very happy if they could increase their revenues while keeping their profits high.
How to Measure Financial Success

To figure out the financial success of your business you can compare revenues, cost of goods sold, and expenses over time. You can also compare net profits and profit and expense ratios from year to year.

The two-year profit/loss statement for Richard and Jeff's electrical business is shown below.

<table>
<thead>
<tr>
<th>TWO-YEAR PROFIT/LOSS STATEMENT FOR R-W ELECTRIC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Year 1</strong></td>
</tr>
<tr>
<td>$</td>
</tr>
<tr>
<td>Revenues</td>
</tr>
<tr>
<td>Electrical Services</td>
</tr>
<tr>
<td>Electrical Supplies</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
</tr>
<tr>
<td>Gross Profit</td>
</tr>
<tr>
<td>Expenses</td>
</tr>
<tr>
<td>Salaries</td>
</tr>
<tr>
<td>Rent &amp; Utilities</td>
</tr>
<tr>
<td>Advertising</td>
</tr>
<tr>
<td>Office Supplies</td>
</tr>
<tr>
<td>Transportation Costs</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
<tr>
<td>Net Profit</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
The figures in this statement provide some very important information about the success of R-W Electric.

Net profit for each year is found by subtracting total expenses from gross profit. Was $15,300 a good profit for R-W Electric's first year? One way to answer this question is to ask, "Will this meet the needs of the owners?" In this case, the profit is quite low. Many businesses do not make much profit in the first year, however. Another way to answer this question is to compare the net profit to the total revenues Richard and Jeff took in. Then you can see what percentage of revenues they kept as profit. This percentage is called the profit ratio.

The profit ratio for R-W Electric is found by dividing each year's net profit by total revenues for that year. For Year 1, $15,300 divided by $90,000 is .17, or 17%. For Year 2, $22,800 divided by $120,000 is .19, or 19%. These ratios are similar to those of other electrical contracting businesses.

The expense ratio is the percentage of revenues that a business pays out again as expenses. The expense ratio for R-W Electric was 30% for the first year and 28% for the second year. So R-W Electric's profit ratio went up from Year 1 to Year 2 as the expense ratio went down. This also suggests Richard and Jeff are doing well.

In spite of the profit growth, though, Richard and Jeff were not satisfied. Why? Because even with a good profit ratio, their total revenues were not high enough to bring them a good profit.

Many business owners have a goal to make their business grow a certain amount each year or to do a certain level of business. Richard and Jeff's goal is to earn at least $200,000 in their third year of business. To reach this goal they need to make some changes in their business.
How to Make Your Business More Successful

In order to increase revenues in an electrical construction business you can:

- increase sales by providing more goods or services to customers;
- or
- raise prices by charging more for your services.

If you want to raise your profits, you can also:

- keep operating expenses low; or
- pick your jobs carefully, avoiding jobs on which you cannot make a fair profit.

To increase sales you may need to do more advertising or hire more workers. You may also need to change or add to the services you offer. Richard and Jeff found that they were making more profit selling supplies than subcontracting construction work. So they decided to expand their supply sales business. They will probably also need to expand their subcontracting work to reach their revenue goal for Year 3.

Raising prices is a way of keeping more of your revenues as profit. Richard and Jeff planned to raise their contracting price by increasing their labor rate. Because they had a reputation for good work, they felt there would still be a demand for their services. They decided to pay close attention to their financial records after they raised their prices. If business began to drop, they might have to try something different.

Sometimes you can reduce your expenses by cutting office costs. For example, you can make fewer copies of forms or use fewer secretarial services. You may also be able to cut costs for materials. Avoiding waste of materials is one way to keep these costs down.

There are many ways to cut costs in business. Each idea may save you only a little, but together they can make a real difference.
Another way to reduce expenses is to avoid jobs that you think may be "losers." Sometimes electrical contractors take on jobs that are too large for their business to handle. Or a job may be very hard to do. In the contract construction business, it is very important to know your own limits. Successful contractors pick their jobs wisely. Some jobs cost more than they are worth, both in money and in headaches.

Getting Information to Change Your Business

Small business owners must be aware of the world around them to stay successful. Besides watching their own profit, they should look for new products and services for which there is growing demand or, in other words, a good market.

Richard and Jeff knew that electrical supply was a growing market. They read the papers and talked to people about the decreased amount of new home construction and the increased amount of "do-it-yourself" home repairs. They also read about a steady demand for commercial construction at higher prices. Based on this information, they decided to expand their supply business to homeowners and raise their labor price to be in line with other prices. Like other small businesses that succeed, R-W Electric changed as the world around it changed.

Profit and Personal Satisfaction

When people go into business for themselves, they often expect to make more money than if they worked for someone else. Sometimes they do. But many small business owners make less money on their own.

Many people need to make a certain amount of money before they feel happy with their success. On the other hand, some small business owners consider personal satisfaction more important than profit. As long as they have enough to keep going, they prefer to work for themselves.
Some people who start their own businesses find that the long hours and extra worries are not worth it, even if they make a good profit. But many small business owners find that they really enjoy the freedom and challenge of being their own boss. They wouldn't go back to being an employee, "no matter what."

Summary

Small business owners usually look at success in terms of personal satisfaction as well as profit. Comparing yearly profit/loss statements lets you see whether your business is successful. To keep it successful, you need to increase revenues, decrease expenses, or change or improve your products or services.
Learning Activities

Individual Activities

1. List two ratios you can calculate from a profit/loss statement and explain what each one tells you.

2. List three ways to increase the profits of an electrical contracting business.

3. Complete the two-year profit/loss statement below for Waramatsu Electrical Contractors, Inc.

<table>
<thead>
<tr>
<th>TWO-YEAR PROFIT/LOSS STATEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waramatsu Electrical Contractors, Inc.</td>
</tr>
<tr>
<td>Year 1</td>
</tr>
<tr>
<td>Revenues</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
</tr>
<tr>
<td>Gross Profit</td>
</tr>
<tr>
<td>Expenses</td>
</tr>
<tr>
<td>Net Profit</td>
</tr>
</tbody>
</table>

4. Calculate the profit ratio and expense ratio for Waramatsu for each year. Is the business staying successful?

5. List two ways an electrical contractor can keep down office expenses to increase profits.
Discussion Questions

1. If you were trained as a construction electrician and began your own electrical contracting business, would you be more concerned with profit or personal satisfaction?

2. Some electricians or contractors do not want to increase their sales beyond a certain level. Can you give some reasons for this?

3. Discuss the reasons why sales for an electrical contracting business might go down.

Group Activity

Invite a successful construction electrician business owner in your town to come speak to your class. Make up a list of questions ahead of time to ask your guest. The following are sample questions:

- Why did you start your business?
- What kinds of tasks do you do as a business owner?
- What special abilities must a good small business owner have?
- How do you judge the success of your business?
- What changes have you made in your business to make it more successful?
SUMMARY

This module has described the types of small businesses you can open with a background as a construction electrician. Such businesses may involve electrical installation, repairs, or maintenance in new or remodeled residential or commercial buildings. They may also involve the sale of electrical supplies or equipment.

If you have experience in the electrical construction trades, good managerial skills, and the personal qualities that make for success, you might consider opening your own business as an electrician or electrical contractor.

Starting a business takes careful planning and enough money to pay all your expenses. You must be well organized to handle the many tasks of running a business. Good money management is also a must.

In order to own and operate a successful business you need training and experience. You should take courses and get on-the-job experience as a construction electrician. You can learn business skills through classes, reading, experience, and using the advice of people who have succeeded in business.

Many small business owners do not make a lot of money. But they have the personal satisfaction of using all their skills and making their own decisions. You must decide for yourself how important these factors are for you. Perhaps starting a small business based on a background as a construction electrician will be a good career choice for you.
QUIZ

1. An electrical contractor who opens a business needs to
   know the basics of
   a. home rental.
   b. construction.
   c. real estate.
   d. retail selling.

2. An electrical contractor needs to be able to read
   a. foreign languages.
   b. license plates.
   c. blueprints.
   d. want ads.

3. In order to compete as a construction electrician in business for yourself you should
   a. work only on remodeling jobs.
   b. work only on new construction jobs.
   c. offer services that are in demand.
   d. work only for contractors.

4. To get a contractor's license you must
   a. pass an exam.
   b. make a certain amount in yearly revenues.
   c. take a contracting course.
   d. complete several buildings.

5. Most of a construction electrician's work is done
   a. at home.
   b. at the job site.
   c. in an office.
   d. in a vehicle.
6. Which of these areas is best for locating an electrical contracting business specializing in electrical work for remodeled homes?
   a. A rural area
   b. A large, old city
   c. A newly incorporated city
   d. An area of high-rent apartments

7. A business description is most important to help a construction electrician
   a. attract customers.
   b. advertise.
   c. get a loan.
   d. buy supplies on credit.

8. "Money on hand" for starting a business may include
   a. a bank loan.
   b. inventory.
   c. personal savings.
   d. insurance.

9. Hiring a bookkeeper means that the construction electrician who owns the business
   a. does not understand money matters.
   b. wants help in keeping good financial records.
   c. will not have to keep track of expenses.
   d. is more interested in profit than in electrical work.

10. What is the best way to find out whether a person you might hire has good electrician skills?
    a. Watch the person do some electrical work.
    b. Talk to the person's vocational education teacher.
    c. Ask to see the person's high school transcript.
    d. Ask the person to describe his or her experience.
11. List two ways you could help train a new employee to install wiring in a factory.
   a. 
   b. 

12. List two amounts that are recorded on a work order in a construction electrician business.
   a. 
   b. 

13. The most important thing to keep in mind when electrical business owners make up their own schedule is:
   a. the amount of profit they want.
   b. what their employees prefer.
   c. the importance of each task.
   d. what they enjoy most.

14. List two factors that affect the price of an electrical construction service.
   a. 
   b. 

15. A Yellow Pages ad is a good way for a construction electrician to
   a. attract new customers.
   b. announce special sales.
   c. raise prices.
   d. advertise free.

16. Printing your contractor's license number on your business forms probably appeals most to your customers' need for
   a. pride or status.
   b. economy.
   c. comfort.
   d. security.
17. A good way to sell your electrical services is to
   a. treat customers well.
   b. lower quality.
   c. do any job that a customer requests.
   d. hire more employees.

18. A customer billing form is used when the customer
   a. gives you a downpayment.
   b. pays on credit.
   c. pays in cash.
   d. gets a discount.

19. A daily cash sheet for a construction electrician business
    shows the
    a. amount of profit.
    b. outstanding debts.
    c. monthly rent.
    d. cash sales.

20. Taking the difference between gross profit and expenses
    for the year gives you the
    a. profit ratio.
    b. expected profit.
    c. net profit.
    d. expense ratio.

21. List two ways to increase profits for an electrical
    business.
    a. _____________________________________________
    b. _____________________________________________

22. A good way to increase sales for an electrical business
    is to
    a. find a cheaper supplier.
    b. remodel your office.
    c. sell new products.
    d. sell services for which competition is high.
### PROJECT PRODUCTS

#### Entrepreneurship Training Components

<table>
<thead>
<tr>
<th>Vocational Discipline</th>
<th>Module Number and Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Module 1. - Getting Down to Business: What's It All About?</td>
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<td>Agriculture</td>
<td>Module 2. - Farm Equipment Repair</td>
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<td>Module 6. - Dairy Farming</td>
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<td>Module 29. - Energy Specialist Service</td>
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<td>Trades and Industry</td>
<td>Module 30. - Hair Styling Shop</td>
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<td>Module 31. - Auto Repair Shop</td>
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<td>Module 36. - Air Conditioning and Heating Service</td>
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</table>

**Related Resources:**

- Resource Guide of Existing Entrepreneurship Materials
- Handbook on Utilization of the Entrepreneurship Training Components