




How to Start an

HVAC BUSINESS

THE COMPLETE GUIDE



Are you looking to become an HVAC technician or start your own HVAC business from scratch? Or are you just looking to learn more about the HVAC industry?

Either way, you've come to the right place!

We're going to break down everything you need to know about the HVAC industry, how you can get into it, and what it takes to start an HVAC business.

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WHAT IS HVAC?



Let's start off by describing what HVAC is and what kind of day to day work you can expect as an HVAC technician.

HVAC stands for Heating, Ventilation, and Air Conditioning – sometimes HVACR where the R is for Refrigeration. The types of projects range from working on heating systems, cooling systems, and ventilation systems. Essentially, HVAC works on the equipments that control the temperature and quality of air in the building, generally working in homes, schools, office buildings, factories and other commercial properties.

WHAT KINDS OF PROJECTS DO HVAC TECHNICIANS WORK ON?

These are some typical **jobs and projects** that a technician may have to complete:

- Install or repair HVAC systems and/or parts according to design specifications
- Install electrical wiring and controls
- Connect HVAC systems to air ducts or water lines
- Inspect HVAC systems as part of maintenance
- Determine HVAC systems' energy use and make recommendations to improve the system's efficiency

However, there are some drawbacks of these projects. While most of the work is done indoors, sometimes you may have to work on a heat exchanger outside in really bad weather. Occasionally, the workspace is cramped or small because of the way the HVAC systems are designed. HVAC work can vary greatly but deciding on your specialization can impact the types of jobs you do.

OVERVIEW OF THE HVAC INDUSTRY



Here's a fun fact for people considering the HVAC industry, according to the [U.S. Bureau of Labor Statistics](#), "employment of heating, air conditioning, and refrigeration mechanics and installers is projected to grow 14 percent from 2014 to 2024, much faster than the average for all occupations."

SO WHAT DOES THIS MEAN?

For the people looking for a relatively high paying job without having to complete a four year degree program, HVAC gives them a strong chance of finding a well paying job after graduating.

Additionally, prospects for those with degrees from accredited technical schools or apprenticeships have never been better. Systems are becoming more complex and 'smart' so many firms are turning to experienced, educated, and trained graduates.

For those already in the HVAC industry looking to start their own business, this means that the industry is growing and there is going to be a continued increase in demand for HVAC services over the next decade. For example, units already installed have to be replaced in the next 10 to 15 years.

WHY IS HVAC GROWING?

Apart from the continued maintenance and replacement of existing HVAC systems, environmental concerns are causing many buildings to switch to newer energy saving heating and air-conditioning systems that are more efficient. This efficiency reduces costs and helps save the environment.

Existing systems that have already been installed will have to be replaced in 10 to 15 years. And of course, the maintenance of these systems requires on-site checks by technicians.

HOW TO BECOME AN HVAC TECHNICIAN



There are primarily two paths to becoming an HVAC technician: complete a degree from a trade or technical school or receive training through an apprenticeship.

THE APPRENTICESHIP ROUTE:

Many HVAC technicians receive training through an apprenticeship that can last three to five years. This process typically includes an annual 2,000 hours of on-the-job training and at least 144 hours of technical education. Through an apprenticeship, students learn how to read blueprints, learn about the tools of the trade, safety practices, and about the various heating and cooling systems.

you to work 8000 hours to the status of journeyman.

The biggest benefits of becoming an apprentice is that you earn while you learn, even though you may only get paid a small percentage of a journeyman's wages. This is a great option for people who cannot afford to go to college.

BASIC REQUIREMENTS TO BECOME AN HVAC APPRENTICE

- At least 18 years of age
- Must have a high school diploma
- Pass a math test
- Have a valid driver's license
- Pass a drug test

There are many trade associations through which you can apply to become an apprentice. You can find one by searching for 'HVAC apprenticeship' in 'Your Location,' where your location is where you want to complete your apprenticeship. The apprenticeship programs vary in requirements by state and city. For example, the [California HVAC Apprenticeship](#) program is a five year program requiring

THE TECHNICAL SCHOOL ROUTE:

You can become an HVAC technician by completing a postsecondary program from a trade school, technical school or community college. Today, many community colleges offer courses in heating, air conditioning, and refrigeration. You will graduate with an associate's degree or certificate, and typically, these courses range from 6 months to 2 years.

Since the programs are relatively short and inexpensive, this is a good option for people who don't want to spend four years completing a bachelor's degree or who can't afford to not work while studying.

However, it doesn't end there. Some HVAC technicians need to get certified while others could also benefit from certifications.

HVAC CERTIFICATIONS

Note: These certifications are different from licenses or other formalities that are required by states. Those licenses vary from state to state, which we will cover later in this post.

1. EPA 608 CERTIFICATION

The **EPA 608 certification** is required for any HVAC technician buying, handling, or working with refrigerants. To get certified, you must pass a written test. Apprentices are exempt from certification if they are continuously supervised by a certified technician. There are four levels of certifications:

1. For servicing small appliances (Type I).
2. For servicing or disposing of high or very high-pressure appliances, except small appliances and MVACs (Type II).
3. For servicing or disposing of low-pressure appliances (Type III).
4. For servicing all types of equipment (Universal).

2. NATE CERTIFICATION

The North American Technician Excellence (NATE) certification is an industry approved written exam that is nationally recognized throughout the industry. NATE certified HVAC technicians tend to earn more money and have better job prospects too.

3. HVAC EXCELLENCE CERTIFICATION

The HVAC Excellence certificates test experience rather than book knowledge. You are required to have a couple years of experience before you can take the tests. However, these certificates are widely recognized in the HVAC business.

BENEFITS OF HVAC CERTIFICATIONS

- Gives you credibility if you run your own HVAC business
- Opens up opportunities to work on larger and more complex projects
- You may earn more money than those without certifications
- It is a competitive advantage if you're looking for a job



HOW TO START AN HVAC BUSINESS

Starting an HVAC business can be a rewarding experience but it comes with the normal challenges of running a small business. As you may know, 50% of small businesses fail within the first year and 95% fail within five years. There are many mistakes that contribute towards the failure rate but with careful planning, a detailed business plan, and a watchful eye over finances, you can be a part of the 5%.

There are four levels of value that you can provide to your customer, with the fourth one (relationships) being the most important in building a long and successful business.

1. Products and Features
2. Price and Cost
3. Value Added Services
4. Relationships

Before you build good relationships you must earn credibility and trust. Every interaction with a customer reinforces trust and credibility, including pricing, quality of the work, consistency of the quality, certifications, customer service, and much more.

As you speak with customers and prospects, you should be prepared to answer any objection they may have. By thinking about these questions, you are going to build trust and a long term relationship with your client who will stick with you and refer you to other people. These are some common questions and concerns HVAC contractors face that you may want to address:

- Which new HVAC systems are the most efficient and why this is the right system for you?
- What are the costs and benefits of repairing your system versus replacing it?
- What is your return on investment?
- What kinds of financing options are available for you?



- How can you maintain the system to avoid costly repairs?

Many individuals are concerned that HVAC businesses aren't always honest about estimates and try to overcharge them since they don't know much about the system. Be transparent and honest and it will pay off in the long run. Some thing you can do to build trust:

- Offer a detailed written quote, clearly stating what is included
- Be open about contingencies – if you find something that is beyond what you expected, be clear about it

Other things you may want to include are estimated completion date, payment policy, warranties, and information about the parts you're going to use.

There are many resources such as books, blogs and websites for running a small business successfully, so we are going to focus on the two methods of starting your own HVAC business and the specifics that relate to the HVAC industry.

1. HVAC FRANCHISE

There are many nationally and regionally recognized HVAC franchises that you could buy. The advantage of buying a franchise is that you're able to buy credibility and trust of the brand. Think of it this way, if you opened a McDonalds franchise tomorrow, people would be lining up to buy fries and hamburgers without thinking about who actually owned the business. In addition, you would also get expert help in setting up the business, from the business plan to finances and purchasing.

On the other hand, there are some downsides to becoming a franchisee too. It is important to remember that a franchisor will normally take an up front fee (can range from \$50,000 – \$80,000) for licensing out their rights and reputation. In addition, you will have to annually pay a percentage (5-8%) of your revenue regardless of whether you actually turn a profit or not.

[This site](#) lists most of the available HVAC franchises. Before you decide to go the franchise route, do a lot of research to make sure it is the right fit for you.

For staff, you can hire part time workers to help manage your office or even full-time employees or HVAC contractors to interact with customers and complete repairs and installations on site. You may want to hire as few people as possible initially to keep costs low. This means handling a lot of work by yourself.

Insurance is necessary to run an HVAC business. There are two types of insurance you may want to get:

GENERAL LIABILITY INSURANCE

This type of insurance is also called Commercial General Liability Insurance and is necessary for any small business owner. It protects you from accidents and mishaps. This insurance can also cover litigation costs and settlements.

WORKER'S COMPENSATION

In most states, worker's compensation is only required if you hire employees. It acts as insurance if your worker gets injured or hurt while working. It provides medical benefits and wage replacements to the injured worker.

II. YOUR OWN HVAC BUSINESS

We are going to first give you an overview of starting an HVAC business and later cover topics like HVAC software, state requirements, and startup costs.

You can still own a successful HVAC business without being a franchisee. The costs are generally a lot lower since you aren't paying the one-time 'buy-in' fee. You would essentially need to pay state HVAC license fee, certifications costs, a truck and your equipment. As we stated earlier, completing an HVAC certification can make a big difference as an employee and business owner.

HVAC LICENSE REQUIREMENTS (BY STATE)



States may have different licensing requirements for HVAC technicians. The rules vary greatly, with some not requiring a license while others reciprocating licenses from certain states. To make this simpler, we have compiled a list of licensing authorities for each state so you can go and see what the state you wish to work in requires.

State	CERTIFICATION AUTHORITY
Alabama	Alabama State Board of Heating and Air Conditioning Contractors
Alaska	Regulation of Mechanical Administrators
Arizona	Arizona Registrar of Contractors
Arkansas	Heating, Ventilation, Air Conditioning & Refrigeration Licensing Board
California	Contractors State License Board
Colorado	State licensing not required. Local licensing may be.
Connecticut	Department of Consumer Protection
Delaware	Board of Plumbing, Heating, Ventilation, Air Conditioning and Refrigeration Examiners
District of Columbia	Board of Industrial Trades
Florida	Construction Industry Licensing Board
Georgia	State Construction Industry Licensing Board
Hawaii	Department of Commerce & Consumer Affairs, Professional and Vocational Licensing
Idaho	Division of Building Safety
Illinois	State licensing not required. Local licensing may be.
Indiana	State licensing not required. Local licensing may be.
Iowa	Iowa Plumbing and Mechanical Systems Board
Kansas	State licensing not required. Local licensing may be.
Kentucky	Public Protection Cabinet, Department of Housing, Buildings & Construction
Louisiana	Louisiana State Licensing Board for Contractors

Maine	State licensing not required. Local licensing may be.
Maryland	Board of Heating, Ventilation, Air Conditioning and Refrigeration Contractors
Massachusetts	Department of Public Safety
Michigan	Department of Licensing and Regulatory Affairs
Minnesota	Department of Labor & Industry
Mississippi	State Board of Contractors
Montana	Montana Department of Labor & Industry
Nebraska	Department of Labor
Nevada	State Contractors Board
New Hampshire	State licensing not required. Local licensing may be.
New Jersey	Division of Consumer Affairs
New Mexico	New Mexico Regulation & Licensing Department
New York	State licensing not required. Local licensing may be.
North Carolina	State Board of Refrigeration Examiners
North Dakota	Secretary of State
Ohio	Department of Commerce
Oklahoma	Construction Industries Board
Oregon	Construction Contractors Board
Pennsylvania	Pennsylvania Department of Labor & Industry
Rhode Island	Department of Labor and Training, Workforce Regulation and Safety
South Carolina	Residential Builders Commission
South Carolina	Contractor's Licensing Board
South Dakota	State licensing not required. Local licensing may be.
Tennessee	Board for Licensing Contractors
Texas	Department of Licensing and Regulation
Utah	Division of Occupational and Professional Licensing
Vermont	State licensing not required. Local licensing may be.
Virginia	Department of Professional and Occupational Regulation, Board for Contractors
Washington	Department of Labor & Industries
West Virginia	Division of Labor Contractor Licensing
Wisconsin	License, Permit and Registration Services
Wyoming	State licensing not required. Local licensing may be.

HVAC BUSINESS MODEL



If you are planning to start your own HVAC business, you will want to consider all the services you can offer and price them appropriately. These are some common services that are offered:

HVAC REPAIR

This is pretty straightforward. You offer repair services for HVAC systems to different types of customers like hospitals, schools, office buildings, and residential homes. Typically, you will be called out to a job for a non-functioning system, will have to diagnose the problem, and then replace the part with inventory you carry with you if approved by the customer.

CARRIER HVAC INSTALLATION

As stated earlier, the number of HVAC replacements are increasing as customers seek newer, more efficient systems, so there is still a good opportunity to specialize in new system HVAC installations

HVAC MAINTENANCE

As an added bonus to installing HVAC systems for clients, you can offer an annual maintenance package. You can also sell this service to clients other than the ones you've installed systems for.

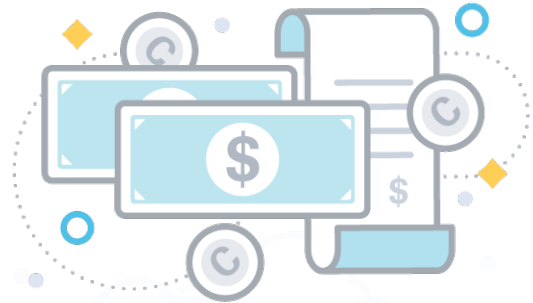
HVAC BUSINESS STARTUP COST

You're all set to start your own HVAC business (not franchise). Now comes the most important question before beginning any new venture:

How much is it going to cost?

Well surprisingly not that much!

According to Entrepreneur Magazine, the average startup cost for an HVAC business can range between \$2,000 and \$10,000. This figure assumes you're buying a used van or truck and you're keeping equipment cost to a minimum. However, this startup cost can run up to \$100,000 if you purchase everything up front. This is unlikely though since you would lease most of the equipment.



WHAT ARE COMMON EXPENSES FOR A NEW HVAC BUSINESS?

- Van for transportation and equipment
- HVAC tools
- Specialty tools
- Safety equipment
- HVAC software
- Supplies

Other monthly expenses:

- Business insurance
- Rent
- Wages
- Utilities
- Certifications
- Marketing
- Office supplies
- Car insurance/fuel

HVAC BUSINESS PROFIT

First we are going to discuss a little about salaries for HVAC technicians since this is a relatively high paying field that does not require a four year degree.

The median salary for an HVAC technician was \$45,110 in May 2015. The lowest 10% earned around \$27,800, while the highest 10% earned more than \$71,700!

Apprentices usually earn half the amount of what an experienced technician earns but this increases as he/she becomes more experienced.

Now, to the economics of an HVAC business. Most successful HVAC contractors aim for a 12% net profit margin.

Installing a new HVAC system, which can cost a few thousand dollars, can net an HVAC business between 5-10% in profits. According to Contract Excellence, a trade magazine, a normal service call costs about \$225 while an annual maintenance contract can net roughly \$400 a year. However, there is a lot of discrepancy as prices vary greatly by location. So take these numbers with a pinch of salt.

Due to the seasonality of the HVAC business (in most climates, the prime season lasts 7 months), many HVAC contractors include a high gross profit margin (about 45%) on equipment and limit the use of labor hours. They prefer getting jobs done quickly and moving on to the next project.



HVAC MARKETING PLAN



There are a ton of ideas that you can read up online for marketing small businesses. So we are going to go over just some of our favorites tips.

Marketing can become very expensive especially if it doesn't generate any leads. "Industry sources estimated that acquiring a single customer costs an HVAC contractor between \$200 and \$300," which would not be sustainable. You want to be around the average or below, at least when you're starting out. Hustle hard and keep your marketing budget small until you continue to grow. Word of mouth and organic growth are the best marketing channels for small businesses.

DIRECTORIES

You have to register your business on business directories like [Yelp](#) and [Angies List](#). It helps with search engine listings and helps customers find you.

SIGNAGE

You may want to invest in adding your branding or logo to your van. It gives you more visibility. You can also buy yourself and your team uniforms with your logo on it.

WEB PRESENCE

You have to your own website. Keep it simple and professional. It is not very expensive to get a good website made now days, and here's a quick

guide from us on how to setup a simple site using Squarespace. However, there is also a benefit to hiring a professional to build and manage your website as they can better bring in traffic and ultimately customers using your website. SEO (Search Engine Optimization) is very important for local businesses as it allows you to rank in search results when people search for your services in your location. Outsourcing SEO to experts can give you the boost in traffic you need to get going.

Pay per click search advertising can also be an effective tool for marketing your business. When users search for services you offer in Google in your served location, your ads could appear at the top of the results. [Click here](#) to learn more about local PPC advertising for service businesses.

We also recommend you create social media accounts and post occasionally. However, you don't want to post often initially and then two months later have zero posts, so keep it consistent and balanced if you go that route.

LAST LESSON

Get used to rejection. Starting a new business is hard and being rejected is even harder, but you should be prepared to hear "no" many times. Keep your head up, work hard and it will pay off.

HVAC SOFTWARE

Today, HVAC businesses and technicians have plenty of options to choose from when it comes to picking HVAC software. At the basic level, most of the softwares provide estimates, invoices, customer management, and scheduling features. We are going to go over some of the popular options on the market.

ACOWIN

Acowin is a Windows based software that can integrate with accounting software like Quickbooks. You can use Acowin to gather customer site information, track equipment and warranties, generate service agreements, schedule jobs and a lot more. The ACOWIN Project Management system is one of Acowin's most prominent features which allows you detail out extensive information about the project.

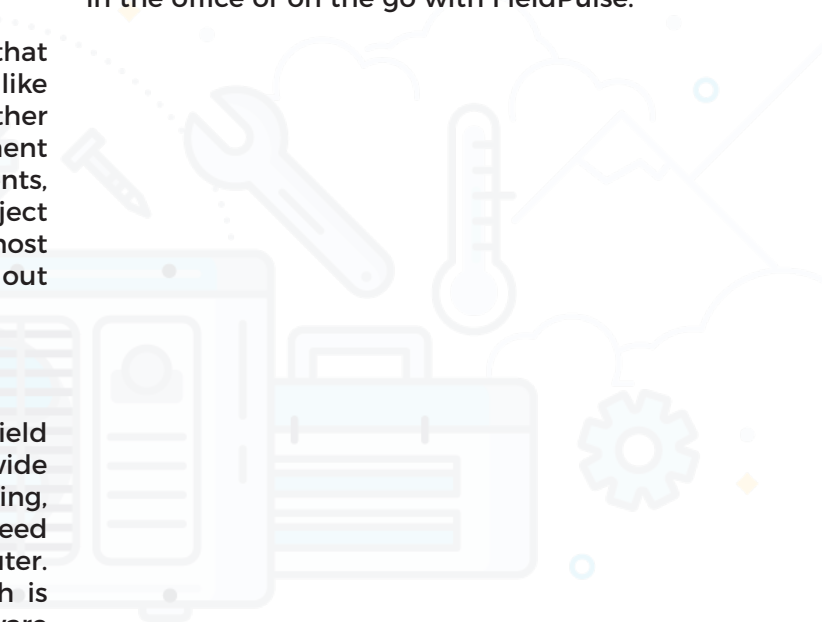
INTAC INTERNATIONAL

Intac International is another popular field service software that can be used by a wide variety of field service businesses like plumbing, cleaning and landscaping services. Wintac need to be downloaded and used on your computer. The most popular license costs \$2,695, which is recommended for HVAC services. Intac's software allows you to create estimates, schedule jobs, manage inventory and your fleet. It also integrates with many other applications like Quickbooks and TomTom

FIELDPULSE

FieldPulse is a monthly subscription software (starting at just \$20 a month) for HVAC businesses. Not only is it easy to setup and use, but it's affordable with no contract obligations, which makes it a great option for new and growing businesses. FieldPulse has a modern interface with full functionality for mobile apps (iPhone, Android, and tablet) in addition to a computer based WebApp. Schedule jobs with detailed information

and notes to dispatch team members, then track status updates with geotagged locations from your team members. Create detailed estimates and invoices from the office or at the job site and provide your customer instantly with an invoice PDF to quickly and professionally service your customer. All of your customer history is conveniently stored in their customer profile for full traceability. Seamlessly manage your operations in the office or on the go with FieldPulse.



FieldPulse[®]

All-in-One Service Business Management
Software FieldPulse business management software handles
job scheduling, business invoicing, employee time tracking, customer
relationship management, and much more!

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