

Smart Home Technology and the Future of HVAC

Why HVAC Contractors Must Embrace Smart Home Tech
to Survive and Thrive



Introduction

The HVAC industry stands at a critical juncture. According to Air Conditioning Contractors of America (ACCA), the industry is poised for explosive growth in the coming decade.

At the same time, some challenges are testing traditional HVAC business models, including technician shortages and the high cost of acquiring new customers.

The rewards will be substantial for companies that adapt to the new reality; for companies that don't, it might be a struggle just to survive. In this comprehensive analysis, we will delve into the causes of these challenges, expose the inadequacies of current solutions, and present a compelling case for why smart technology is not just an option, but the only viable path forward for HVAC businesses.

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According to ACCA, the HVAC industry will:



Increase in value from \$25.6 billion in 2019 to \$35.8 billion in 2030



Create 13% more HVAC mechanic and installer jobs from 2018 to 2028, much more than the average for all occupations



Register a compound annual growth rate (CAGR) of 9.7% from 2019 to 2025



Challenges and Opportunities

The HVAC services market is predicted to grow by \$10.2 billion from 2019 to 2030 (ACCA, n.d.). However, this growth won't necessarily be shared equally among HVAC contractors; the ones who will reap the biggest rewards will be the ones who figure out how to navigate the significant challenges that face a rapidly changing industry. Several trends are already upending the HVAC world, including:



A shortage of trained HVAC technicians.

According to the most recent BLS data, there will be an average of 42,500 job openings for HVAC techs every year for the next decade. That's nearly half a million new HVAC techs that will need to be trained and recruited in the next ten years.



Rising customer acquisition costs.

It costs an average of \$350 to acquire just one new customer. Homeowners often use Google to find HVAC services, driving up keyword costs. This leaves contractors at the mercy of Google's algorithms and ever-increasing prices.



A break/fix model that's broken.

People don't think about their HVAC systems until something breaks, usually in the height of summer or winter. More often than not, they turn to Google to find help, and it's often someone different every time. Customers end up paying more for high-season repairs and contractors have to struggle to find enough techs to meet high-season demand.

Add to these issues the fact that it's relatively inexpensive to start a new HVAC contracting business – meaning that in any given market there is stiff competition for the same customers – and you have an environment that makes it increasingly expensive and challenging for contractors to acquire customers and turn a profit.

So how can HVAC contractors clear these hurdles and position themselves to reap the rewards of a growing market? Let's look at some of the current strategies that HVAC companies use and how these are proving inadequate.

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Traditional Upselling and Maintenance Plans: A Profit Mirage

So how do you get more business out of each customer, while at the same time making the most efficient use of a limited pool of technicians? Traditionally there have been two approaches. Upselling customers on more expensive equipment and repairs, and signing customers up for maintenance plans. Both offer the hope of increased revenue, but both fall short of the desired goals. Let's take a look at why this is.

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Most people know next to nothing about their HVAC systems or how they work, yet they rely on these complex systems to keep them comfortable all day, every day. Homeowners and landlords need to be able to trust that the HVAC technician they've hired has their best interests at heart.

While sales people aren't inherently untrustworthy, they are often viewed skeptically by consumers due to their primary motive of making sales. When contractors turn technicians into salespeople, they risk eroding customer trust.

Customers typically view technicians as impartial experts focused on solving problems rather than selling products. Blurring this line can lead to increased customer skepticism and ultimately result in higher churn rates.

Additionally, most technicians enter the HVAC trade because they enjoy hands-on work, solving mechanical problems, and helping people. Pressuring them to upsell products can make it harder to attract and retain qualified technicians.



Upselling and traditional maintenance plans ultimately fall short for two reasons: they fail to build a trusting relationship with customers, and they don't offer the customer much in the way of real value.



Maintenance plans, on the other hand, seem like a more reliable approach. By signing customers up to an annual plan, you can conduct routine maintenance during the off-season, helping to make your yearly workflow more predictable. There's also the potential to catch problems before there's a breakdown, meaning you can fix them before the peak season and save yourself and the customer time and money.

However, there are a few big problems with traditional maintenance plans. These include:



Low renewal rates.

People sign up for maintenance plans but then don't renew them, mostly because they sign up for them to get a discount on a repair but don't see the value in the long term.



High administrative costs.

Traditional maintenance plans involve a lot of administrative effort to keep them going – calling customers, scheduling appointments, sending reminders, and potentially sending out multiple trucks if a problem is found that the onsite tech can't handle – that eats into profits.



Limited predictability.

You can only do seasonal preventative maintenance 1-2 times a year, meaning things still can and do break down in-between visits.

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If these methods aren't the answer, *what is?*

The Smart Tech Imperative

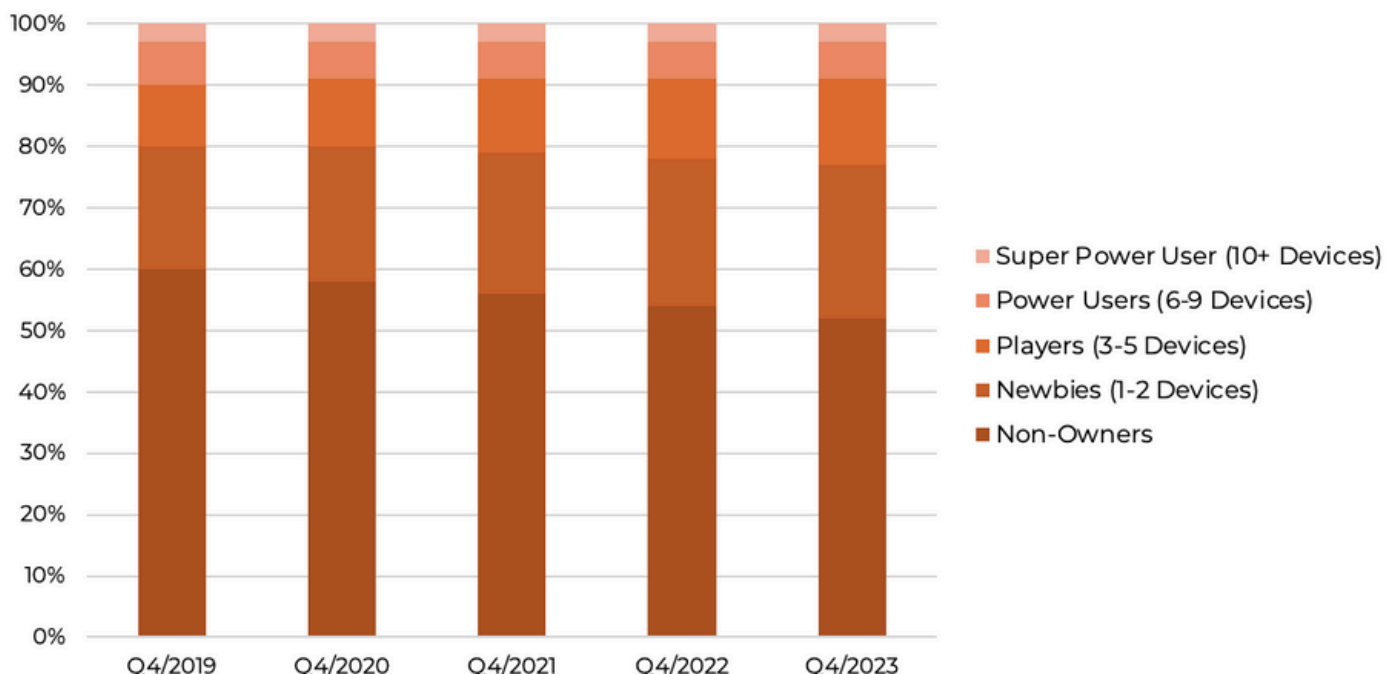
In our increasingly connected world, it's easy to forget how recent all this interconnectivity is. The first iPhone came out 17 years ago and the first smart thermostat a year later; fast forward to today and 45% of all homes have at least one smart home device (Parks Associates, 2023). This trend is only going to increase, as consumers look to save on energy bills without sacrificing comfort.

The answer to the issues facing HVAC contractors lies in adopting this new smart home technology – smart thermostats, temperature sensors, water valves, and other connecting devices – and making them work for you, your technicians, and your customers.

Consumers like smart home automation because it promises to make their lives easier and save them money. But for HVAC contractors, it offers an opportunity to rethink the existing business model, a chance to get around the obstacles that we've outlined earlier in this article. With smart home technology, there's the potential to monitor HVAC equipment remotely, allowing you to proactively fix problems before there's an expensive breakdown. There's also the ability to automate things like service reminders and maintenance appointments, reducing the administrative burden for maintenance plans.

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Number of Smart Home Devices Owned



By embracing a proactive, connected approach to HVAC service, you can redefine your relationship with customers, make your business less seasonal, and make more efficient use of your technicians. Let's see how:



Building better relationships.

With smart technology, you transition from emergency responders to proactive partners in home comfort. You can offer maintenance plans that provide customers with genuine peace of mind, as you're able to spot system irregularities in real-time, not just during infrequent scheduled visits. By proactively addressing issues, often before customers are aware of them, you demonstrate your commitment to their comfort. Customers who know you're actively looking out for them are far more likely to call you directly when they have a concern, rather than go running to Google.



Smoothing out demand.

Smart home automation, and the smarter maintenance plans you can offer based on it, allow you to distribute service more evenly throughout the year. Pre-season testing – including remote, automated testing – and proactive maintenance allow you to smooth out seasonal spikes and improve your off-season cash flow.

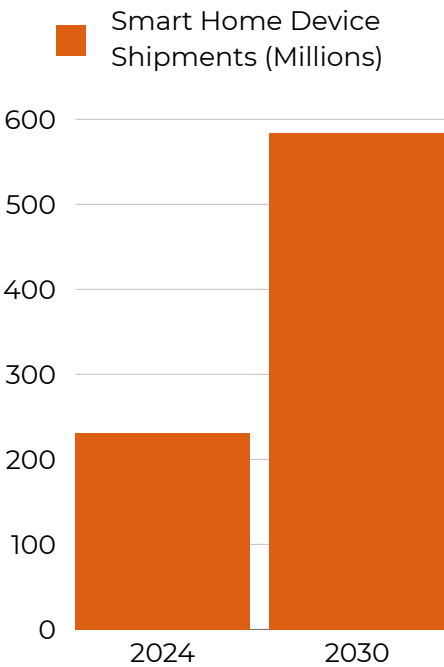


Solving the technician shortage.

You can't control the number of trained technicians in your market, but you can make better use of the technicians you have. Smart home technology lets you be proactive with maintenance, which means more off-season repairs and fewer peak-season emergencies. Smarter dispatching also helps you prioritize the time of your most highly trained technicians, allowing you to send them to homes with known issues while assigning less experienced techs to handle routine preventative maintenance visits.

There's another benefit to embracing the smart home revolution and building stronger relationships with customers: you can become their supplier of smart home devices. According to a report from market research firm ABI Research, smart home device shipments for energy management will grow from 230.9 million in 2024 to over 584 million in 2030 (ABI Research, 2023).

Traditional upselling can be off-putting, but when customers trust their HVAC technicians, and when they're not forced into a hard-sell situation because something has broken down, they're more likely to be receptive to new purchases. This new revenue stream, coupled with the ability to develop better relationships with customers, offers to boost profits for HVAC contractors that lean into smart home automation.



A hand giving a thumbs up next to HVAC gauges.

Making the Transition

It's easy enough to talk about leveraging smart home technology to expand and modernize your HVAC business; going about it is a more daunting prospect.

Making the transition to a smart technology-centric business model requires careful planning and execution. Here are a few key things to consider:

1) Select Technology That You Can Own

- Select a comprehensive smart home platform that you, as a contractor, can brand and own as your own
- Choose a platform that has a customer-facing app that's engaging and easy to use, that you can also put your brand on
- Ensure seamless integration with existing CRM and dispatch systems, and develop a data management and analysis strategy

2) Prioritize Platforms Offering Regular Utility

- Look for solutions that provide daily value to customers, not just occasional utility like appointment scheduling
- Seek platforms where engaged users interact frequently (e.g., logging in multiple times per day)
- Consider features that encourage regular engagement, such as:
 - Monthly energy usage reports
 - Alerts for unusual patterns or potential issues
 - Remote temperature adjustment

3) Workforce Training and Development

- Implement a comprehensive training program for technicians on smart system installation and diagnostics
- Develop new roles for data analysts and remote diagnostic specialists
- Create career pathways that leverage smart technology expertise

4) Customer Education and Onboarding

- Develop clear, compelling marketing materials that explain the benefits of smart HVAC systems
- Create a streamlined onboarding process for new smart system customers
- Implement a customer success program to ensure ongoing engagement and satisfaction

5) Business Model Adaptation

- Redesign service plans to leverage smart technology capabilities
- Develop new pricing models that reflect the added value of proactive, data-driven service
- Create performance metrics that align with the new business model (e.g., predictive accuracy, remote resolution rate)

6) Continuous Improvement and Innovation

- Establish a feedback loop to continuously refine smart system algorithms and service protocols
- Stay abreast of emerging technologies (e.g., AI, machine learning) and their potential applications in HVAC
- Foster a culture of innovation within your organization



Conclusion

HVAC contractors face a critical choice. Companies that continue to embrace outdated models will watch their acquisition costs soar and their market share dwindle, while those that embrace the smart technology revolution will ride the wave of industry growth to a brighter future.

The technician shortage isn't just a problem to be solved, it's a wake-up call for transformation. Smart technology isn't just a tool, it's the key to unlocking a new era of growth, profitability, and purpose in our industry.

The future of HVAC is smart, proactive, and built on trust. The companies that embrace this future will see:

- Dramatically reduced customer acquisition costs compared to traditional marketing channels
- Boost in service plan renewal rates, fostering long-term customer relationships
- Maximized customer lifetime value through extended retention, increased service adoption, and becoming the trusted first choice for future system upgrades
- A workforce that's engaged, fulfilled, and growing in both salary and capability
- Steady, predictable revenue streams that smooth out seasonal volatility
- A competitive edge that's difficult for traditional providers to match
- Delivery of a high level of service that's a win-win for contractors and homeowners

The transition won't be easy. It requires investment, strategic thinking, and a willingness to challenge long-held assumptions. But the alternative is a recipe for eroded margins and a talent drain that many HVAC contractors won't recover from.

The choice is clear. Will you be part of shaping the future of HVAC – and take advantage of the opportunities that smart technology offers – or will you be left behind?

About Building36

At Building36, we're pioneering the future of HVAC maintenance through smart home technology. Our innovative platform empowers HVAC professionals to transition from reactive repairers to proactive partners in home comfort. By leveraging real-time data and predictive analytics, we help contractors build stronger customer relationships, optimize their operations, and navigate industry challenges.

Building36 Partner Benefits

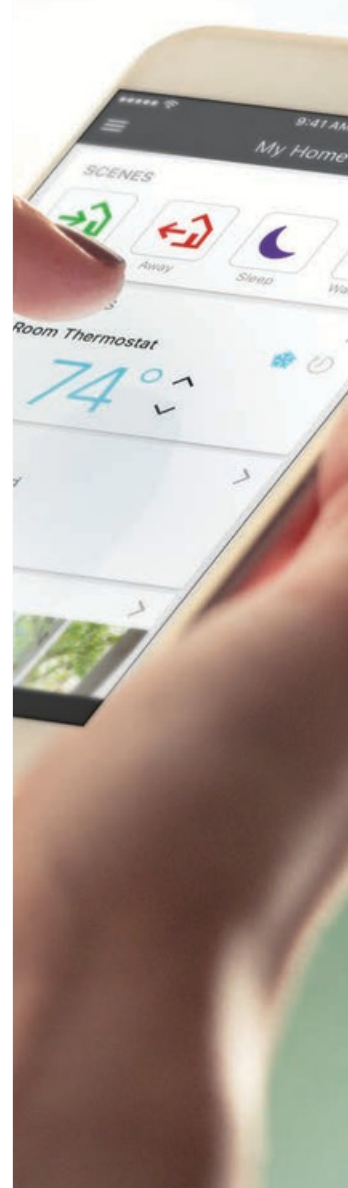
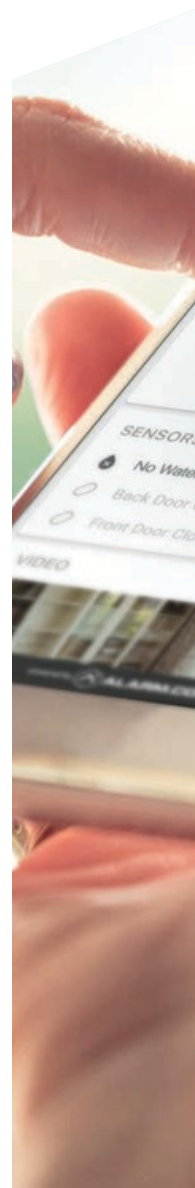
- ✓ **86%** lower acquisition costs
- ✓ **93%** renewal rates
- ✓ **5x** customer lifetime value

Partner with Building36

Ready to grow your HVAC company with Building36?

Visit **building36.com/become-a-partner** to start the Partner application.

For questions, please send a message to **sales@building36.com**.



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