

HIGH PERFORMANCE HVAC TODAY™

If You Don't Measure, You're Just Guessing!™

Working in a
Family Business:

Success through Communication

ALSO IN THIS ISSUE:

Typical Commercial System
Cooling Performance

Three Tips for Increasing
Service Agreement Sales

Five Steps to Becoming A
Performance-Based Contractor



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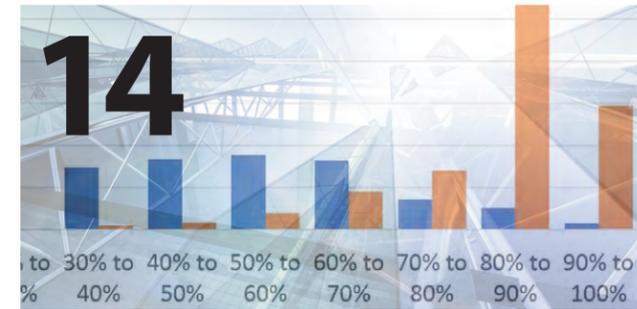
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SEPTEMBER 2018

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HIGH PERFORMANCE HVAC TODAY™



TECHNICAL:

Commercial System Performance

Ben Lipscomb explains how to use data to understand typical performance levels for existing commercial equipment and systems before and after system renovations.



MANAGEMENT:

ABCs of High-Performance Contracting – Part 3

In this installment, Dominick Guarino explores the *Five Steps to Becoming a Performance-Based Contractor*.

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SALES:

Increase Service Agreement Sales

Drew Cameron provides three tips — based on his experience working with high-performance contractors — you can use to increase service agreement sales.



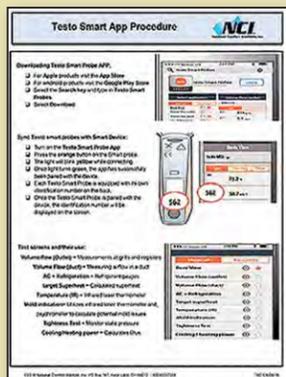
COVER STORY:

Family Businesses: Success Through Communication

Owning a family business isn't easy. Contractor Tom Johnson shares how his family and company make it work.

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FREE Monthly Download



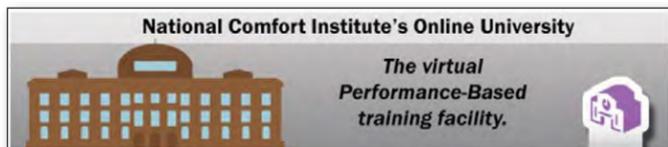
In this issue we focus on a procedural checklist for using the Testo Smart Probe App. It is available in both the [Apple](#) and [Google](#) stores.

The checklist provides you with six steps for syncing the app with the probe and an explanation of the test screens and what they are used for.

This one-page data sheet is a nice addition for techs who are new to using Testo Smart Probes as well as for the pros who just need a refresher.

Go to ncilink.com/md0918, or use your phone with the QR Code below.

By registering for free on NCI's website, you can access this download and many more.



Online University

Featured this month is the second module of National Comfort Institute Inc.'s System Performance Testing Series:



Measuring Static Pressures. In this course you will learn how field testing shows that most HVAC systems deliver only 57% of the rated equipment capacity.

Taking this course will help you find out how "Delivered Efficiency" explains the ACTUAL efficiency of a system – not just the AFUE or SEER rating of the equipment.

Learning how and where to take the static pressure reading is a big step in learning this.

Read more at ncilink.com/ou0918.



BLOG POSTS

ROOFTOP CURB DIAGNOSTICS AND SOLUTIONS

Rooftop equipment curbs can contribute to the deterioration of commercial HVAC system efficiency by as much as 40%. In this blog, Rob Falke examines what you can do to quickly diagnose and solve any curb issues you encounter in the field. He highlights three of the top curb issues and details their solutions.



Read his blog here: ncilink.com/FalkeOnCurbs.

DOES YOUR BUSINESS OPERATING SYSTEM NEED A TUNE-UP?

NCI's David Holt compares the operations of a contracting firm to a computer operating system. He says, "Just like a computer, your business needs a powerful operating system that 'directs traffic.' Your business operating system has four major modules: leadership, people, processes, and execution."



Read his blog here: ncilink.com/bOS

There's an APP for that... Mobile Smart Probe

This month we feature the Testo Smart Probe App which turns your mobile phone or tablet into a remote control and measurement device. The app works with the following Testo measure-



ment instruments: 405i, 410i, 605i, 510i, 115i, 549i, 805i, 905i, a testo 552 or a testo 770-3. It works on both iOS and android mobile devices.

The app uses bluetooth technology to share air conditioning and refrigeration measurement data, Airflow (register and grille), infrared temperature and mold indicators, and more. The app can create and send PDF reports (including photos of the measurement location) and can handle up to six probes at the same time.

This **FREE** app is available in both the [Google](#) and [Apple](#) Stores.

MyHomeComfort.org

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As an NCI-certified professional, you are uniquely trained to solve comfort, energy, safety, and health issues for home owners. **They are looking for you, so don't miss out!**

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Your Support Team on Your High-Performance Contracting™ Journey

Your key to success in Performance-Based Contracting™ is a strong support network – always there when you need it. NCI helps its members overcome the typical hurdles associated with implementing the measured performance approach.

Membership Options: Turbocharge your membership with added learning opportunities and financial incentives.	High Performance HVAC Alliance	Learning Excellence Premium Upgrade	Learning Excellence Live Upgrade	Learning Excellence Online Upgrade	Membership
Unlimited Toll-Free Support	✓	✓	✓	✓	✓
High Performance Talk Discussion Forum	✓	✓	✓	✓	✓
Find-A-Certified-Professional Lead Generator	✓	✓	✓	✓	✓
i-NCI: Mobile-Friendly Technical & Sales Tools	✓	✓	✓	✓	✓
Hundreds of Technical & Marketing Downloads	✓	✓	✓	✓	✓
Members-Only Newsletter	✓	✓	✓	✓	✓
Article Library Featuring Technical & Business Articles	✓	✓	✓	✓	✓
Live & Online Training and Conference Discounts	✓	✓	✓	✓	✓
Member Rewards NCI Training Bucks on Purchases	15%	15%	15%	15%	5%
Training Incentive Partner Program Dollars	Maximum	Maximum	Maximum	Maximum	✓
NCI Online Store Discounts	✓	✓	✓	✓	✓
ComfortMaxx Air™ - Airflow Testing Software	✓	✓	✓	✓	✓
Unlimited Online University Courses	✓	✓	✓	✓	✓
Unlimited Webinar Access	✓	✓	✓	✓	✓
Bonus Annual NCI Training Bucks Earned	\$4200	\$4200	\$4200	\$1200	✓
ComfortMaxx Pulse™ - Air & BTU Testing Software	✓	✓	✓	✓	✓
ComfortMaxx Verify™ - Full System Testing Software	✓	✓	✓	✓	✓
Free Print Subscription to High Performance HVAC Today	✓	✓	✓	✓	✓
One Paid NCI Summit Conference Registration	✓	✓	✓	✓	✓
EGIA Premium Membership	✓	✓	✓	✓	✓
70% OFF 5-Day 2019 Success Week Bootcamp	✓	✓	✓	✓	✓
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TODAY'S WORD

By Mike Weil

STEM and the Performance-Based HVAC Contracting Industry



Mike Weil is editor-in-chief and director of communications and publications at National Comfort Institute, Inc. He can be reached at mikew@ncihvac.com.

For those of you who don't know, I live in the great city of Cleveland, OH -- home of the Cleveland Browns, Cavaliers, and Indians. We have the Rock-n-Roll Hall of Fame, the Great Lakes Science Museum, world class entertainment venues, the internationally acclaimed Cleveland Orchestra, and so much more.

I am proud of these things. I am also proud of the fact that in a recent survey conducted by Emerson Climate Technologies, Ohio is ranked number one when it comes to which states are the best to work in the HVACR trades.

Ohio tops the Emerson list with more than 1,400 certified technicians employed and earning a competitive median salary. The state also has around 9,000 job openings in HVACR, and is home to **eight** accredited trade schools. This is what helped put Ohio at the top.

This is great stuff, right? But it still might not be enough.

In the July issue of this magazine I wrote a column entitled, "[Where Have All the HVAC Technicians Gone](http://ncilink.com/TechShortage)" (ncilink.com/TechShortage), which addressed the severe shortage of young people, especially women, coming into the field. In mid-August, Emerson released results from their fourth annual consumer survey which revealed some more interesting facts.

This survey, which went to more than 2,000 people, found that two out of five Americans believe the shortage of people involved in the science, technology, engineering, and math (STEM) fields is at a crisis level. This is despite a national focus on STEM over the past 10 years.

Although the survey found students today are twice as likely to study STEM fields compared to their parents, the number of roles requiring STEM expertise is growing at a rate that exceeds current workforce capacity.

Here in Cleveland, a focused effort by one of the local media outlets is the year-long initiative called, "[Girls In STEM](http://ncilink.com/STEM)" (ncilink.com/STEM) that has been drawing a lot of attention throughout Northeast Ohio. This is terrific and I have found there are many other major cities across the country with similar television programming.

Manufacturers have raised the ante as well. Emerson isn't alone in its promotion of STEM to the general population. But more needs to be done.

The Emerson survey found less than 50% of parents say their daughter is encouraged to pursue a STEM career. This "encouragement gap," according to Emerson, represents a significant opportunity, as nearly half of their survey respondents (48%) believe STEM jobs in the U.S. will grow in the next 10 years.

Emerson is helping address this issue through its own "We Love STEM" initiative and partnerships with universities and technical colleges. These organizations provide hands-on digital work experiences for current young students and people re-training for second careers.

"There is an increasing demand for highly skilled HVACR professionals, especially with a retiring workforce," said Becky Hoelscher, director of air conditioning aftermarket sales for Emerson Commercial and Residential Solutions. "The importance of valuable training and the number of job openings is soaring."

In the Performance-Based Contracting Industry, the need for skilled field workers is even higher than the norm.

I like what I see happening here at home and throughout Ohio. I think efforts of manufacturers and others in our industry are starting to make some headway. But now it is your turn. So what are you doing to push STEM in your communities?



EGIA Foundation Awards \$50,000 in HVAC Scholarships

The EGIA Foundation announced recently the first-ever winners of its HVAC scholarship program. Twenty selected students, all pursuing an HVAC-related course of study during the 2018-19 academic year, will each receive an award of \$2,500.

These scholarships will help with the costs of specialized education and training. This includes accredited or otherwise approved community colleges, universities, or vocational/technical schools. During its first year, the EGIA Foundation Scholarship Program reached over 1,000 interested students from 39 states across the U.S.

"The HVAC industry needs more young adults and professionals entering the workforce," said Bruce Matulich, EGIA Foundation Chairman and CEO.

"The EGIA Foundation Scholarship Program is our way of bringing visibility to the industry and building awareness and interest with those who may not have otherwise considered a career in HVAC."

The Foundation plans to award another class of students with its 2019 Scholarship Program. Applications will be accepted starting in the fall of 2018, with awards counting toward the 2019-20 academic year.

As the foundation grows, the Schol-

arship Program will expand to include awards in other industry vocations, including solar PV, plumbing, home performance, and more. School administrators, educators, and contractors interested in the scholarship can visit www.EGIA-Foundation.org.

To learn more about the EGIA Foundation Scholarship Program, and its commitment to improving the national labor

market by developing the next generation of home services industry workers, visit EGIAFoundation.org/Scholarship.

COOLING TOWER ON WHEELS BEGINS COUNTRY-WIDE TOUR

EVAPCO's new eco-Air demo trailer has begun a voyage across the USA, beginning in Los Angeles, CA. The traveling, working demo unit is designed to give building owners, manufacturer's reps, mechanical contractors, and others a look at the operation and efficiency of the coolers.

On one side, the demonstration unit features an adiabatic cooler; on the other, NEMA fan motor/EC fan motors, and eco-Air control panel with automated PLC for BAS Integration. The unit also has a piped water-distribution system for adiabatic pads and nitrogen-charged stainless steel coils with aluminum fins.

For more information: <http://ncilink.com/evapcoTour>

SCOTT JOHNSON RECEIVES LIFETIME ACHIEVEMENT AWARD



National Comfort Institute, Inc. recently recognized trainer Scott Johnson for his lifelong contributions to the HVAC Industry, by presenting him with the organization's Lifetime Achievement Award.

The award recognizes Scott's ever-growing legacy as the knowledge he imparts journeys from one of his students to the next. It flows across the industry inspiring the hearts, minds, and hands of those affected by his unselfish quest to educate others.

Scott is recognized with this award for his ongoing role as a legendary teacher, leader, pioneer, and visionary. His immeasurable contribution will long withstand the test of time.

Congratulations to Scott Johnson.



NEW BAS FROM TACO

Taco Comfort Solutions recently introduced their Clarity³ turnkey building automation system (BAS).

The Clarity³ takes the guesswork out of optimizing equipment operation and energy savings by establishing an intelligent framework for connectivity. It uses BACnet to provide a flexible, simple, and fully programmable BAS.

Clarity³ is based on a find/learn/act approach. The "find" theme narrows the features focus on easy navigation, searching, and bookmarking. The "learn" function gathers insights: dashboards, reports, and graphics that ease learning. "Act" restores order with command features and notifications if problems arise.



Clarity³ follows standards, yet is customizable and scalable to all building types. For more information go to ncilink.com/Clarity3.

FUJITSU INTRODUCES MINI-SPLIT ALEXA COMPATIBILITY

Fujitsu General America announces new mini-split compatibility with Amazon Alexa.

The company's Halcyon line of heating and cooling products now features voice-activated control through an Amazon Echo device, if the mini-split has built-in Wi-Fi, or if Fujitsu's Wi-Fi device is installed.

After setting up the Fujitsu FGLAIR app, your customer has 13 Alexa commands including on/off operation, increase and decrease temperature,



changing operating modes, requesting current temperature setting, and more.

For more information, please visit this website: ncilink.com/FujitsuAlexa.

CONNECTORS FROM SOUTHWIRE

Southwire has enhanced its EZ-In™ Mini-Split cable offering with connectors and tools created to make mini-split installations faster and easier.

Connectors are liquid-tight and steel- and zinc-plated. Tools include a rotary cutter, compact jacket cutter/conduit scorer with a reamer blade, and heavy-duty, stainless steel wire strippers.

Visit ncilink.com/SW for more info.

Upcoming 2018 NCI Training Schedule

Combustion Performance & Carbon Monoxide Safety Certification Program

Sept 5-7: South Plainfield, NJ
Sept 11-13: Richmond, VA
Sept 18-20: Pittsburgh, PA
Sept 25-27: Emmetsburg, IA
Oct 2-4: Boston, MA

Duct System Optimization & Residential Air Balancing Certification Program

Sept 18-20: Columbus, OH
Sept 18-20: Los Alamitos, CA*
Sept 25-27: Charlotte, NC
Oct 9-11: Omaha, NE

Residential HVAC System Performance & Air Balancing Certification Program

Sept 5-7: Baltimore, MD
Sept 11-13: Salt Lake City, UT
Oct 16-18: Las Vegas, NV

Commercial Air Balancing Certification Program

Sept 25-27: San Antonio, TX
Oct 2-4: White Plains, NY
Oct 9-11: Landover, MD
Oct 9-11: Los Alamitos, CA*

Commercial HVAC System Performance Certification Program

Sept 11-12: Los Alamitos, CA*

National Balancing Council Commercial Balancing with Certification

Oct 15-19: Cleveland, OH

Optimize Economizer Performance with Certification

Sept 13: Los Alamitos, CA

Introduction to Hydronic Testing, Adjusting, & Balancing

Oct 23-25: Los Alamitos, CA*

*Subsidized NCI training offered by Southern California Edison.

Visit NCIlink.com/ClassSchedule to view the latest schedule of NCI Training events

High Performance the DiFilippo Way

Service is a mindset. It requires a targeted focus on the customer and on doing what is right. When Vince DiFilippo bought the service business from his brother's HVAC company in 1989, Vince's mission was to provide something that no one else in their marketplace was providing.

He wanted to provide service performed by educated and certified technicians with a focus on customer comfort and safety.

DiFilippo's Service Company, Paoli, PA (a western suburb of Philadelphia) is in a heavily saturated HVAC market with very tough competition. He wanted the company to stand out in a way that mattered.

"Our focus, almost from the beginning, was to be highly trained and certified. We pride ourselves on that. Our logo even says we are 'Certified Home Comfort Experts,'" Vince says.

"We believe people need more than just heating and air conditioning," he continues. "They are investing in a relationship with a company that shares responsibility for their family's comfort and safety. We've learned that our clients want reliability, honesty, and integrity."

IN THE BEGINNING ...

"When I bought the service division from my brother, I was the only employee. I shared an office person with my brother."

His newlywed wife, Laura (they married the year he bought the service business), held a good job at Vanguard Investments. That was a good thing because in the beginning, Vince didn't take home a paycheck for the first seven or eight months.

"I kept re-investing everything back into the business," he explains. "Laura was working all the time. I was working all the time. I sold my car because I wasn't using it and we needed the money to live."

Today the family-owned company employs 14 people and has five service and two installation vehicles. Vince is the company CEO who handles sales and the technical side of the business. Laura is president and manages the operations and financial side. Together they built the company into a state-of-the-art high-performance contracting business.



LET THERE BE LIGHT!

Since those very early days, education and training were focal points for both DiFilippos. Both owners agree that training is the light that helps separate them from the pack.

While Laura takes charge of the business training, Vince handles all technical training. He even built his own training laboratory right in their headquarters building. In fact, he says that it is all the training that helps them find and keep good field and office personnel.

"In this day and age, the HVAC Industry suffers from a shortage of technicians. This is particularly true in our area," he says. "All the good techs are already employed someplace. Many of those not employed may look good on paper, but that doesn't always translate in the field. We find it is just better for us to 'grow' our own technicians."

Vince adds, "We take young people with basic knowledge, and we pay for them to go to technical training. We train them from the ground up. We teach them to do things the DiFilippo Way, not the industry way."

CREATING EXCITEMENT

"Our staff is very young. But they seem to take well to The DiFilippo Way," Vince explains. "We hire based on attitude and train for aptitude. Our technical expertise is really a draw, especially when we conduct interviews."

"During an interview, if they are excited about training and are anxious to learn more, then our lab is the hook. The lab is the lottery ticket for them."

"Plus, we pay for outside training. We bring in outside people -- from manufacturers to consultants. I'll do some training. But it isn't enough. We want our technical team to be certified in certain disciplines as well."

Vince focuses on safety training and certification -- combustion and carbon monoxide (CO) safety is key.



Says Laura, "From the beginning we started with CO training and certification. No one else in our market was even talking about it."

Technicians at DiFilippo's carry certifications from both the North American Technician Excellence (NATE) and the National Comfort Institute, Inc. (NCI). The company is also affiliated with a number of trade organizations including:

- ACCA
- Better Business Bureau
- NATE
- NCI



- The Service Roundtable.

Laura says it can be very expensive to join so many organizations and send team members to their training. But she also says, "I think the HVAC industry has done a really poor job preparing people to work in this industry."

"The kids we get out of trade school come to us unprepared. Over the years we've watched some bigger and very successful contracting firms like Isaac Heating and Air Conditioning in Rochester, NY create their own universities to train their people."

"They are walking testimonials that this approach really works. So, we model our company on those concepts."

BEING THE BEST

Because of this approach, it is little wonder that DiFilippo's Service is one of the most expensive HVAC contracting companies in town. After all, as Vince likes to say, "You get what you pay for."

"When one of our technicians comes to a customer's house, we are confident that 98% of the time he will find the problem and resolve it," Vince says.

"This goes way beyond turning screwdrivers and replacing parts. It is about truly understanding the system, not just the individual appliance-

es. This means they know the interrelationship between the ductwork, the equipment, and the home itself. It is all connected. And I think this is what sets us apart and why we have been successful."

Laura DiFilippo says training means different things to different people. She says, "We operate in a high-end residential market. We don't want our techs in front of customers until we are positive they are confident and know what they are doing."

"It can take up to six months before we have a technician ready to be in a truck, by himself, just to do maintenance," she adds.

COMMUNICATING WELL IS THE SECRET SAUCE

The DiFilippo Way includes helping everyone in the company to become better communicators. For field technicians, Vince says that means asking a lot of questions and listening to the answers. He explains that many of the questions are part of scripts learned at NCI training.

He says, "So many clients tell us we ask questions that no one ever asked them before. Our proposals include information that few of my competitors include in their proposals. The secret is to present information in terms customers understand, and that is



much harder to do without the right training and coaching.”

Vince adds that the measurement and diagnostic techniques – as taught by NCI – makes things easier.

“It creates ‘aha’ moments with our customers. This is especially true when proposals from other contractors call for complete box or duct changeouts and we can resolve customer issues without so much bruhaha.

“We are replacing undersized down drops, increasing some returns, adding some vents here and there. We are doing this based on measurements and testing. Everything is based on proper airflow.”

OPPORTUNITIES ABOUND

Laura points out increases in new

housing developments where many mechanical systems aren’t being installed correctly.

“Vince finds a lot of ducts that go nowhere, with caps missing, and runs that have holes in them. Consumers buy these magnificent homes at outrageous prices and can’t figure out why they aren’t comfortable,” she says.

“The opportunity is that we can go in and figure out what the problem is without always needing to replace equipment. Customers LOVE that,” Vince says.

Of course, CO testing and combustion safety also differentiates DiFilippo’s Service, even though some of their competitors do offer it.

“The difference is that our technicians are trained in not only how to

conduct the tests, but how to help the customers understand what is happening,” Laura continues.

“All our technicians carry CO testers and printers. They print results on two tapes – one that goes with the invoice and one that stays with the packet in the unit.

“They show customers the print-out and explain what it means to their comfort and safety. And when another of our techs comes out for service, they start with that tape for a baseline before they do any more CO testing.”

“Again,” Vince says, “very few of our competitors do this.

WORKING IN A FAMILY BUSINESS

Many HVAC companies are family-owned and operated businesses. For



the DiFilippos, being a husband and wife team poses many potential problems. Laura says it can be super hard.

“Being a husband and wife team can blur the lines between family, business, and your marriage,” she explains. “We make a great effort to separate work with family. We look out for each other. And we stay in our lanes – me on the business side, Vince on the sales and field side.”

Vince adds that being in business together is also a matter of great trust.

He says, “Who can I trust more than my spouse? Plus, Laura brings this completely different part of the process together that I don’t like to deal with. She handles the numbers and human resources. She is the contact and the personality.

“I like getting my hands dirty. I don’t like to be in meetings. Laura likes to run meetings. We have this nice balance. And again, there is a cut off.

“When we go home, we are done talking about business. We make it a rule to not talk business for the rest of the night or over the weekend.”

“We have a great deal of respect for each other,” Laura says. “The fact that we stay in our own lanes and respect each other is key. We also aren’t afraid to ask for help – from our peer groups,

from business coaches, and so on. This industry has provided an amazing life for us. But we work it together, as a team,” she says.

THE DIFILIPPO WAY

What is the DiFilippo Way? It is everything explained above. And it is also Vince and Laura’s take on High-Performance Contracting. It is about service and being the very best in terms of training and certification, so they can provide customers the very best in comfort solutions, energy efficiency, and safety in their homes. As Vince says, it is about doing things properly – each and every time.

Which is why DiFilippo’s Service in Paoli, PA is the September 2018 Contractor Spotlight.

MEMBER REWARDS

TIP

Training Incentive Partner Program



Put your incentive dollars to work
Convert incentive dollars into NCI Bucks for immediate use to train your Performance-Based Contracting team

Why is this such a great benefit?

Let’s face it, training is a big investment in terms of time and money. TIPP is designed to earn incentive dollars toward training through purchases of equipment, products, and services that you already buy from NCI industry partners. So when you do have the time to train your team, the dollars are already banked, ready to be used.

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UNDERSTANDING, ACCELERATED

Typical Commercial Cooling System Performance

Commercial performance-based contractors know there are tons of opportunities in finding and fixing issues left behind by lower quality competitors, mother nature, and father time. By measuring performance, diagnosing, and fixing issues, you'll see the opportunities for improvement and the impact you make every day.

Do you ever wonder if the systems you work on are typical compared to systems across the nation? What about how the level of performance you typically achieve stacks up against your performance-based contracting peers?

Answering these questions helps us understand what level of performance is poor, just ok, or great. This helps us guide our customers to make the right decisions about what needs to be done and how much to spend.

Should a customer with a system delivering 80% of its rated capacity invest more to get to 90% or 100%? Should a customer with a tired system replace the equipment, improve their duct system, or do they need to do both?

What is the specific scope of work necessary to improve performance to an acceptable level?

We need to answer these questions for every unique situation, customer, and system. Knowing where a system stands compared to a typical system provides context that can help a customer understand their current system condition, where it could be, and how to get it there.

TYPICAL PERFORMANCE DATA

Through our [ComfortMaxx™ software](#), [National Comfort Institute, Inc. \(NCI\)](#) has collected performance data on thousands of jobs that allow us to gain insight into typical system performance nationwide. For this article we took

data from more than 800 commercial systems tested prior to renovation work being performed. Contractors used pre-renovation performance measurements to help customers understand how their system is currently doing, and to justify the cost of the necessary upgrades to improve performance.

Using this data-driven sales process resulted in more than 400 completed renovation jobs. That's a sales success rate of about 50%! Who knew performance testing could help you close one out of every two deals?

Let's take a look at the data to understand typical performance levels for existing equipment and systems before and after system renovations. The data is presented in statistical charts called histograms. These histograms show the percentage of systems within different performance ranges. The performance metrics include the Cooling Equipment Performance Score (CEPS), and the Cooling System Performance Score (CSPS).

CEPS is the field-measured cooling capacity at the equipment **divided** by the equipment's rated capacity under field-measurement conditions. The CEPS helps us understand how the equipment itself performs.

The CSPS is the field-measured capacity at supply registers and return grilles **divided** by the equipment's rated capacity under field measurement conditions. The CSPS gives us the performance of the entire system including equipment and duct system.

COOLING EQUIPMENT PERFORMANCE SCORES

Figure 1 shows the percentage of systems on the vertical axis and ranges of CEPS on the horizontal axis. The bars give the percentage of sys-

tems performing within each CEPS range. The blue bars are for "Test-in" readings before renovations, and the orange bars are for "Test-out" after renovations.

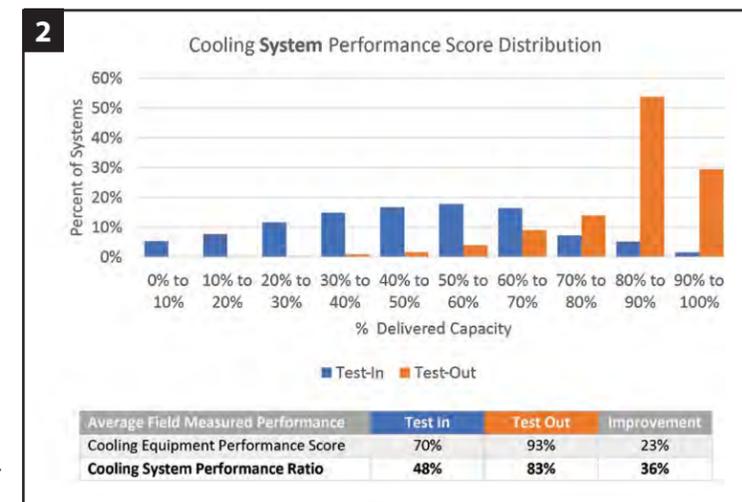
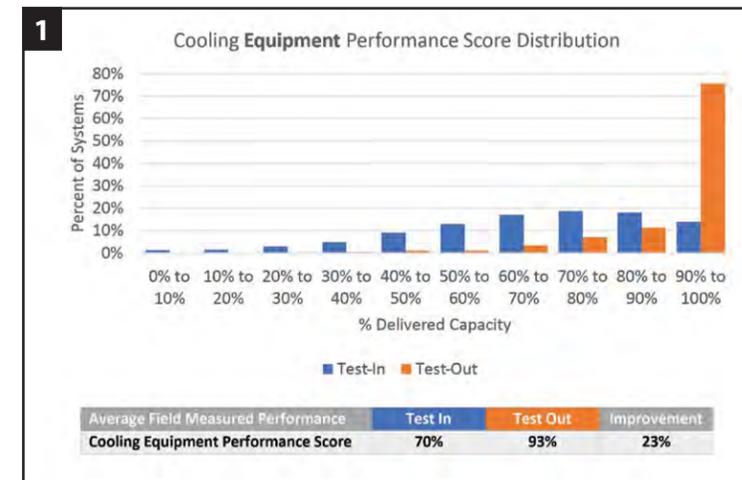
As an example of how to read the chart, we see that just under 20% of equipment tested-in between 70% and 80%. We also see that only 7% of equipment tested-out at this level after renovations were done.

From the table we can see that the average CEPS was 70% at test-in, but the chart tells us that's not the whole story. Almost as many pieces of equipment tested-in between 80% and 90% as between 70% and 80%.

The shape of the Test-in distribution is very wide and flat, which means your odds of guessing how a system is performing without measuring are not very good. As NCI likes to say, *"If you don't measure, you're just guessing!"*

On the other hand, the Test-out distribution is tall and narrow, with more than 75% of equipment testing-out between 90% and 100%. Performance-based contractors can be reasonably confident they can bring the score up to 90% or higher.

Some of these contractors are so confident in their work that they offer a performance guarantee to customers. This guarantee promises the contractor will get performance to a certain level. They will keep trying until they do, or the customer doesn't pay!



COOLING SYSTEM PERFORMANCE SCORES

Now we'll look at the same data for the system score, or CSPS (see **Figure 2**). You'll notice the same pattern in the shape of the data, where the Test-in distribution is wide and flat and the Test-out distribution is narrow and tall.

In addition, Test-in system scores are much lower than the equipment scores across the board — 22% lower on average — indicating significant losses through the duct system plus poor equipment performance.

The Test-out system scores are still lower than the Test-out equipment scores, but there's a much smaller gap of only 10% on average. This shows renovations significantly improved equipment operation and significantly reduced duct losses.

To realize the largest improvement,

you need to consider the whole system. Even if your aim is to improve equipment performance alone, it's critical to evaluate the ductwork to make sure equipment can "breathe."

Undersized duct systems are the top contributor to low equipment airflow, which is the number one issue causing low equipment performance.

In next month's issue of **High-Performance HVAC Today**, we'll take a look at the top 10 issues that impact total system performance and break down how you can diagnose and fix them.

In the meantime, I encourage you to use this data to show customers how their system stacks up against other systems around the country.

Tip: Even if you're a residential contractor, or if you work on more heating than cooling systems, this data holds valuable information you can reference with your customers. NCI's data indicates that there's only minor differences between residential and commercial or heating and cooling performance scores.



Ben Lipscomb is a registered Professional Engineer with more than 14 years experience in the HVAC industry. This experience includes laboratory and field research, Design/Build contracting, and utility energy efficiency program design. He is National Comfort Institute's engineering manager and may be contacted at benl@ncihvac.com.

Three Tips for Increasing Service Agreement Sales

Time to elevate your game. There has been plenty written by many people in our industry about selling service agreements. Their articles appear in the trade publications and online. Many HVAC Industry trainers teach about how to sell service agreements. You can even watch videos and listen to podcasts on the subject.

My tips don't refute anything they teach or write about. I am simply going to share some insights based on my study, lessons learned in my company and client companies, lessons learned outside the industry, and most importantly – lessons learned from customers.

To put it another way, in a service-based business model, for me to get the results I want for my business, I must deliver the outcome my customers want for their lives. The better the delivered outcome, the more people will pay. However, not all customers are willing to pay for the highest level of access or experience.

IT'S ABOUT CHOICES

Throughout my career, I run into contractors who offer their customers a choice between two types of service agreements – maintenance and/

or repair agreements. Some even offer a combo agreement. Unfortunately, I find that most companies have defaulted to just offering maintenance agreement programs.

This is a problem. So, what should you do? Following are three tips to help set your service agreement program on the path to success and growth.

TIP #1:
Realize that customer satisfaction is worthless, and that customer loyalty is priceless

– If you want your service agreement program to take flight and soar to new heights, stop thinking of it as something that locks your customers to your company for tune-ups in the shoulder seasons.

A good service agreement program is the single most important part of your overall marketing platform to create customer loyalty and referrals. In other words, the service agreement is a relationship marketing model.

Typically, the most successful and profitable companies with the greatest number of service

agreements and highest customer happiness scores, reviews, and referrals get 50% of their leads from technicians who generate opportunities from existing customers. Twenty-five percent of these leads are from referrals by existing customers or by proximity to existing customers. The remaining 25% comes from advertising and marketing efforts.

Countless studies reveal that loyal customers and their referrals yield a greater impact on a business' top line revenue and net profit than new customers.

Think about this: Your existing customer base will buy 67% more than a new customer lead from your marketing. Estimates show that landing a new customer actually costs five to 20 times more than selling into an existing relationship.

LOYAL CUSTOMERS ARE GOLDEN!

Loyal customers buy 54% more quickly than non-loyal customers. A customer who buys twice is twice as likely to buy than one who buys once. They cost much less to reach and sell – It costs approximately \$40 to reach, visit, and close a customer versus \$325 and up for non-customers.

Loyal customers yield higher closing ratios – 80% plus for loyal customers versus 35% or less for non-customers. The lifetime value of a loyal customer is 20 times their annual volume.

A 5% increase in customer loyalty can mean up to an 85% increase in profits, according to *Harvard Business Review*.

Referrals are the best form of advertising and one of the greatest sources of high margin business. Loy-



al customers are the best way to generate referrals. They refer 107% more than non-loyal ones. Word-of-mouth advertising is 50 times more effective than any other form of advertising. Consumers are six times more likely to rely on a recommendation than on advertising and yield closing ratios of 78% versus 32% for cold acquisition.

Plus, referrals are 1/8th the cost of broad market advertising acquisition. Some more facts:

- Customer referrals spend 200% more than the average customer.
- Referred customers bring you a 25% higher profit margin.
- A referred customer is 18% more loyal than a customer acquired by other means.
- Referred customers are four times more likely to refer more customers to you or your company. They do this because they like to pay their being referred forward and share a great idea.
- Customers referred by other customers have a 37% higher customer retention rate.

Loyalty and referrals don't come from simply satisfying customers and offering what someone can get through another outlet for less. You must offer something people cannot get anywhere else. Make customers so happy that they feel compelled to tell others so that the relationships you develop are PRICELESS.

CREATE SOMETHING UNLIKE ANYTHING ELSE OUT THERE

TIP #2:
Be different, better, and more

– Let's consider a differentiated

approach to yield better results and get more people buying our agreements for more money.

First, don't measure yourself against others in the industry or competitors. Aspire to a greater calling – the calling of truly serving others beyond what most companies think is practical.

In other words, go beyond the things you offer and become the "boutique for the discerning homeowner." Solve real problems. Become a Whole House, System Performance, Access, and Control Customer Care Service Provider.

Brand yourself as being focused on the "distinguishing customer with distinctive tastes" who wants to be catered to with unique custom solutions, pampered with extraordinary service, and impressed with a caring and impactful experience.

Delivering such an experience starts with your marketing, which promotes a brand promise and expectation of what is to come if they contact you.

Next, your Customer Experience Coordinators need to honor the promise when contacted. They need to set the next stage of expectation, which focuses on making the booking and confirmation all about information, convenience, and communication of differentiated expectations.

There are some great technology platforms that can enhance these steps and put your company in a class of service all by itself.

Once the technician is dispatched,



it is all about communication and the customer experience. The customer should feel good about the process and the information shared.

They should understand the things they *have to do*, what they should *consider doing*, and what things they *don't have to do but would enhance the system performance and improve the living experience*. They should be able to make smart decisions to be better caretakers of their home and what to spend.

Getting your team to deliver such an experience comes from creating a culture where your people feel good about the brand and relationship they have with the company so that customers will feel good about the brand and relationship. Passion and purpose breed passion and connection.

ENGAGE AND CONNECT

TIP #3:
Create a community with levels of engagement and connect with a cause

– Simon Sinek in his book, “*Start with Why*,” states that people want to associate with people and do business with companies that believe what they believe. Today, more than ever before, people want to feel fulfilled. The way to accomplish this is to be part of something bigger than the transaction. People want a sense of community and purpose.

If a company sells products and services, the business is transactional. If a company chases a purpose bigger than

money and is about impacting not only the lives of those they serve but also the community, customers feel great about spending what they spend.

To accomplish this, create a multi-level High-Performance Service Agreement platform to appeal to as many people as possible. This can funnel them to various levels of engagement over time versus offering a one-size-fits-all approach. Offer an agreement with the highest level of access and benefits.

Connect the customer to your company-created community. Get involved in charitable causes they feel are important. Then step down the level of access, benefits, and investment to where you can offer a free service agreement to everyone!



Next time, I'll share the specifics of a multi-tiered High-Performance Service Agreement platform designed to offer customers choices, so you are offering options, not ultimatums.

Once the prospect becomes your loyal customer, you can escalate the

relationship where they choose to raise their level of loyalty and/or can buy other products and services you offer in other channels (e.g. plumbing, electrical, smart home). Loyalty yields repeat business and referrals.

BOTTOM LINE: Deliver a differen-

tiated customer experience that makes a life impact, is memorable, ensures loyalty, generates repeat business, and is worth telling others about. Don't fit in. Stand out.

Be REMARKABLE! 



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The ABCs of High-Performance HVAC Contracting: PART 3

Five Steps To Becoming A Performance-Based Contractor

In the third installment of this ongoing series we will explore the first five of 10 distinct steps to help you on your path to embracing High-Performance HVAC – should you choose to accept this mission.

It's important to understand that anyone can become Performance-Based – it's not an exclusive club designed to keep people out. As the saying goes, the "rising tide raises all ships." The more contractors doing this, the better it is for everyone, including your company, our industry, and most importantly, your customers!

Let's take a look at each of the steps on the path to High-Performance Contracting™:

STEP 1 – EXPLORE THE COMMITMENT AND KEEP AN OPEN MIND

The primary barrier to entering this realm of contracting is the level of your commitment. The more committed you are, the greater your chances of succeeding. Attending one class and learning a little bit about air diagnostics or balancing does not constitute the level of commitment necessary to succeed. It's a start, but you must follow through. This means getting the right training, tools, and instruments for your entire team to efficiently and professionally move up to the next level.

The foundation of Performance-Based Contracting (PBC) is measurement. *If you don't measure, you're just guessing.* If you think you can learn some buzzwords and skip over the foundation of High-Performance HVAC – which is testing – you'll waste precious time and money.

If this is your intent, this series may not be for you, at least at this time. You may

want to download the articles, save them to a file, and go back to them once you are ready to take a serious look at this part of the HVAC contracting business. I hope you decide to read on and find that it's a commitment worth making.

PBC requires you to be open to the possibility there may be a better way. For example, many of us have done things the same way for many years. We live by the rule, "If it ain't broke, don't fix it," right? WRONG.

There's much truth to the saying, "if your mind is not growing, it's probably shrinking." So, keep an open mind to the new ideas presented here, and to the possibility that some of the old ways were never right in the first place.

Many of us grew up in this industry with rules of thumb that have been passed on from tech to tech, father to son, to grandson. Remember the telephone game you played as a child, where you sat in a circle and whispered a phrase into the next person's ear, and it would be repeated over and over until the last person spouted out words that didn't even resemble the original sentence? We've been playing the telephone game in our industry for more than 50 years now. Perhaps some original rules of thumb were fairly close - others not. Until recently, we didn't have an easy way to check.

Many of these rules, like "a six-inch duct can handle 100-120 CFM," don't work today. Perhaps when that rule of thumb was created, it was based on short straight runs of sheet metal with nearly perfect transitions. Do those conditions resemble the kind of HVAC systems installed over the last 30 years? I think you know the answer to that one.

An important step is being open to the possibility that not only are your installations not perfect, they may be a lot more messed up than you think. As we interviewed Performance-Based Contrac-



tors across the country, we found this was one of the toughest things to come to grips with.

"We thought we did high quality work," a Kentucky High Performance contractor confessed. "Our family business goes back 30+ years, and we always felt our systems worked. The first time we measured the performance of one of our systems, our jaws dropped. That was one of the toughest moments in our company's history," he recalls.

Remember: *If You Don't Measure, You're Just Guessing!*

STEP 2 – DECIDE IF YOU NEED TO CHANGE

The only person who knows whether High Performance is right for you is you!

Examine your current business – are you happy with how it's going? Are you moving forward, or are you in a rut? Are you making money, or are you just keeping up with the bills hoping that someday things will be different?

Be honest with yourself. Whether you're a two-man shop, or a \$5-million business, are you making enough money to finance the company's growth and put money in the bank for

your future? If your net, pretax profit is less than 10%, there's room for improvement. If it's less than 5%, you're basically in a holding pattern. If it's less than 2% (the industry average – yuck), you're definitely going in the wrong direction.

So how do you pull out of the current rut? Decide today to be a different kind of contractor. There are lots of opportunities to grow in different directions. You could start doing duct cleaning, launch a solar division, or dive into home performance and insulation. But will that really change the complexion of your business?

Unless you can get the profits you need and deserve for your whole business, these other things can often be huge distractions, draining your energy and resources.

There's nothing wrong with organically growing your business with add-

on services if your main business is strong and profitable. Unfortunately, these add-on services often mask real problems and hide the bleeding in your business.

PBC is not an add-on business. Although you could add on new services, like independent third-party testing and balancing, the premise of Performance-Based Contracting is to change how you're doing the things you already do. It is a way to transform your core business both technically and profitably.

STEP 3 – START YOUR EDUCATION

If you're still reading this, you've made a decision to examine PBC a little closer – congratulations! Get started right away by becoming more educated on the air side of HVAC. If you're reading this, chances are you already have a good understanding of the equipment



Catch up on all the installments of this series:

Part 1: What is High-Performance HVAC and Why Do It?
ncilink.com/ABCs-1

Part 2: Is It the Right Fit for Your Company?
ncilink.com/ABCs-2



and refrigerant side. If not, seek good training in these areas as well.

True performance includes all aspects of the HVAC system and its interactions with the building. Proper design, sizing, installation, airflow, and combustion adjustment, refrigerant charging, and so forth, are all critical factors in system performance. This series is not meant to cover what goes on inside the equipment (with the exception of combustion testing), although equipment selection and sizing are critical.

RECOMMENDED TRAINING

Start with a simple class that provides the basics of airflow and static pressure testing. This provides the necessary foundation for better understanding duct system diagnostics and necessary improvements. NCI (National Comfort Institute), provides a class titled, *Duct System Optimiza-*

tion that can help. It takes you from the very basics through advanced static pressure and airflow diagnostics, to how to improve and optimize duct system performance.

NCI keeps the concepts simple and backs them up with easy-to-follow forms, reports, and procedures. While some colleges offer air balancing courses, you'll find they are typically directed at engineers. As such, they provide little guidance in terms of field diagnostics, system renovation, and residential balancing. NCI's class teaches the basic principles of PBC and weaves in the business, sales, and marketing approaches into the training.

Another key component of PBC is the combustion side of heating equipment. This is yet another area riddled with myths, legends, and rules-of-thumb. Some of these false assumptions have become part of our build-

ing codes, especially combustion air and venting rules. There are three key issues when it comes to combustion appliances – safety, comfort, and energy use. High-Performance HVAC addresses all three.

Over two decades ago NCI recognized the need for reality-based carbon monoxide safety and combustion training. Today the organization is the world's largest combustion efficiency and safety training and certification body with well over 15,000 certified CO/Combustion Analysts.

NCI's Jim Davis, one of the top authorities on carbon monoxide and combustion, wrote a National CO and Combustion Diagnostics protocol which remains the most comprehensive step-by-step protocol available today. This certification class was designed with High Performance in mind, so it includes much more than just the technical education.

STEP 4 – GET THE RIGHT TOOLS

You must have the right tools to help diagnose performance issues and then test-out the system once you've installed and/or fixed it. This is not the place to cut corners. The right tools can make all the difference in your accuracy, speed, and professionalism in front of the customer. Every now and then a contractor asks us if he can make his own flow hood out of cardboard or sheet metal. My advice is **absolutely not!**

This is critical. The right instruments do time consuming calculations that make thorough testing feasible. They also are the difference between being perceived as a professional and looking like some nutty experimenter. Besides, if you ever had to defend your home-made instruments to an engineer, homeowner, or even a jury, what would you use for a calibration certificate – one or two-ply "comfort" paper?

Don't give in to the temptation to



cut corners when it comes to instruments. It's better to invest in a few key high-quality instruments than throwing money at a bunch of cheap imita-



tions. These will likely end up collecting dust on a shelf somewhere because you don't trust your readings.

In a future installment of this series we'll look at each of the tools needed to get started, and what tools you'll want to add as you grow into a full-fledged Performance-Based Contractor.

STEP 5 – PRACTICE, PRACTICE, PRACTICE

Any professional athlete, actor, or entertainer will tell you what makes them great is how much they practice before they hit the field or get in the spotlight. The same goes with Performance-Based diagnostics – especially on a sales call.

There's nothing more embarrassing than showing up at a customer's home

with a shiny new instrument and fumbling around in front of them trying to figure out how to turn it on, let alone use it properly. Talk about performance anxiety!

Start with your own home or shop. Once you've received the training and purchased the right tools, then measure *your* home's HVAC system performance. Next test a family member's system, or better yet, one of your employees' systems.

Don't wait too long after any training to begin testing – get out there and test within a week following your training. Borrow the tools if you must, but start right away. The danger of putting this on a shelf for a month, or two, or six, is most people can-

not retain information that long without putting it into practice.

Don't waste your hard-earned money and more importantly your precious time, unless you're willing to get out there and start testing. **NCI**

In the next installment of The ABCs of High-Performance we'll look at five additional steps needed to get your business on the High-Performance track.



Dominick Guarino is publisher of High-Performance HVAC Today magazine and CEO of National Comfort Institute, Inc. He can be reached at domg@ncihvac.com

Working in a Family Business: Success through Communication

According to *Forbes* magazine, 44% of the 400 richest Americans made their wealth working in family businesses. Some of the largest and strongest corporations in the world — Ford, Samsung, Nordstrom, Toyota, Walmart, and thousands of other very recognizable companies — started out as family businesses long before they went public. Some say family-owned and operated businesses are the backbone of the world's economy.

Those of us who are a part of a family business also know they can be the biggest cause of fric-

You must be aware of your shortcomings and be OK with having someone — like a family member/partner — point them out to you

tion, fighting, and discord! This article is meant to have you think about these issues and deal with them BEFORE they become a problem.

SOME HISTORY

I am a third-generation plumbing and HVAC contractor in Cambridge MN. My grandfather, Otto, was the first plumber in our town. He plumbed most of the homes and buildings in Cambridge when indoor plumbing first came to our community.

My father, Bob, was (like me) the youngest in his family. Grandpa actually died when my father was two-years-old, so there was a 30-year break in the business lineage.

Dad started his plumbing and HVAC company in 1964. It prospered through the growth years of the late 1960s and early 1970s. With five boys at home, he decided we needed to stay busy. So he bought us each a calf to care for. That led to a growing farm business as well!

In October 1974, my father was injured in a farming accident that cost him all the fingers on his right hand, as well as the tips of his first two fingers and thumb on his left hand. I was 10-years-old at the time.

That is how I came into the plumbing and HVAC business. My father had no technicians 'on-call'. He ran the after-hours calls. After recovering from his accident, those after hours or weekend calls involved him taking me out with him, so I could be his 'hands.' He stood over my shoulders and told me what to do to fix whatever we were working on.

I was getting invaluable training, but at the time I just

wanted to stay in bed or watch TV shows like *Giligan's Island* like the rest of the kids my age.

ENTERING THE FAMILY BUSINESS

When we weren't fixing things, I was writing for him. I wrote out all job quotes, invoices, and ledger cards. I resented it most of the time.

Fast forward to the 1980s. I was in college, living in the big city, and loving my freedom.

In the spring of my junior year, my mother called, crying. Dad hadn't been able to cash a paycheck for months. She begged me to come home and run the business before they had to declare bankruptcy.

I came home to work in the business for a



\$160/week salary. We were COD everywhere, had no employees, and were more than \$50,000 in debt.

Clawing away, I climbed the company up and out of that hole. I called my older brother, Mark, who was a plumber at a shop 40 miles away to come and join me. He did. We worked 60 to 70 hours per week. Slowly we built the business back up.

WHOSE COMPANY IS THIS?

That is when the first family issue reared its ugly head. Dad owned the business and the building it was housed in. He was now happy. The bills were paid, disaster avoided, and all was well. He had no desire to talk with us about buying him out. He avoided any such discussions like the plague.

As a result, the stress between my brother, father, and me was awful. Finally, Mark and I got enough courage to move everything out of his building and forced a sale offer, which Dad eventually accepted with the comment: "I guess this is what you think the value of my life's work is!"

From my perspective, we were giving him a lot for a company that we saved and built value back into. But we didn't talk about that and this lack of communication caused a huge rift that took years to get past.

My brother Mark and I made a simple 50-50 ownership agreement. We didn't want to waste money on a lawyer. There wasn't much to decide. He was a good plumber and I was good at service and sales. We made a good

team. Mark ran the jobs in the field and I ran the office and sales.

THINGS CHANGE

For more than 20 years that worked. Then, as Mark aged, he decided he didn't want to 'turn wrenches and shovel dirt' anymore. He wanted to have a 'cushy' office job too. He had no training, no experience, and a typical construction worker's vocabulary.

This marked the beginning of the end. For more than 20 years we made many assumptions and communicated poorly. Now we needed to talk to figure out these changes and had no idea how to go about it. Since we had a 50-50 ownership, we had no means to break a tie.

We both dug in our heels. We worked at the same company and did not talk to each other for 10 months. The business suffered severely. Most of our employees left. We were moments away from having to declare bankruptcy.

Fortunately, I can report we finally did come to an agreement. Mark retired four years ago. Today we are much better at being brothers than we were at being business partners!

ASSUMPTIONS DO NOT EQUAL COMMUNICATIONS

I learned a lot of lessons from this experience. Most importantly is to never go into business with anyone whom you cannot communicate openly and honestly with. This might seem simple, but it is not! This is not about who you can be friends with. It's about who you can trust. Who you can share your hopes and dreams with. It's about who you can hear 'no' from without pouting.

You must be aware of your short-

comings and be OK with having someone point them out to you. Some key elements you need to discuss regularly include:

■ **Vision.** All owners must be aligned on vision.

■ Clearly defined **Roles and Responsibilities.**

■ The plan for **Accountability.** This is something that most business owners fail to address. Who are you directly accountable to?

■ **Growth strategy.** This seems easy, but it can be very difficult, especially if visions are not in alignment. All owners must know and understand what the financials are for your individual business. If one or more of the owners does not understand this, alignment cannot happen.

■ **Goals.** Again, this sounds basic, but it's critical all owners understand each other's goals for the business. Without such understanding, conflict nearly always begins.

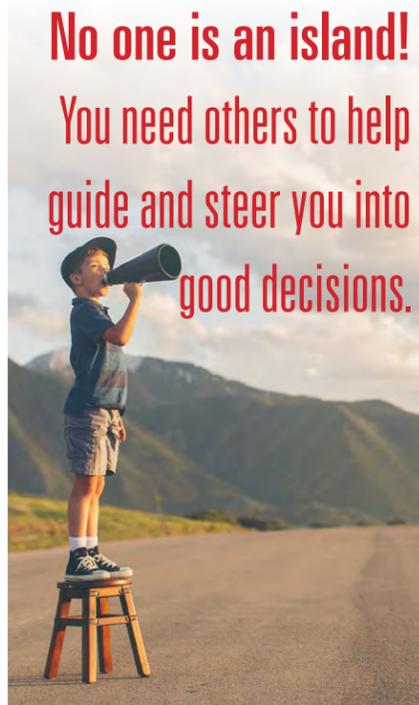
■ **Control structure.** Each owner must be aware of and in agreement with the management structure. One micromanager can really disrupt this. Being aware of your own strengths and weaknesses really helps.

■ **Exit plan.** This can be huge. Going into business with someone without communicating how to retire is simply irresponsible.

If you plan to bring children or spouses into the business, first make sure they really want to. Don't project your desires onto them. Open and honest communication is key.

WRITTEN LEGAL AGREEMENTS ARE A MUST

Next, you must write an agreement as to what happens if owners and



managers disagree. Questions like, who carries the tie-breaker vote? Can I force a sale of stock? What if we come to an impasse? What if one of us dies? There are many more such questions that a good business attorney will help you sort through.

You must review this document regularly, at least every two years. More often is better. Why? Because things and situations change. As you age and mature, so should this document and the business.

Another tough lesson for me was the importance of having competent outside council. All too often we are just too close to a situation to address it rationally and reasonably.

I recommend having several trusted people in your life who you can bounce ideas off. Some of these may be paid positions, including a CPA or your lawyer (both of which you must have). Some owners set up a Board of Directors that meet regularly to advise them. Others use business coaches. Some simply have business peers with whom they share ideas, talk about is-

sues, and help each other.

The point is: No one is an island! You need others to help guide and steer you into good decisions. If you try to do it alone, you will almost always fail!

COMMUNICATE, COMMUNICATE, COMMUNICATE!

I learned I had to face reality head on, no matter how ugly. Having been literally moments from bankruptcy twice in my life, I can say with complete certainty things don't get better until you first acknowledge the problems.

This is also where trusted advisors help. In my case, by conversing with a trusted advisor, I found a private investor (who happened to be a very satisfied customer) who gave me an operating loan with no collateral. Without that advisor, my life would have taken a completely different trajectory and my family business would have failed instead of thrived.

I cannot stress this enough — communication is the key. If you plan to be in business with anyone, especially a family member, communication is always the single most important element. If you are already in business, please review a few of these thoughts and have discussions with your business partners about them. I think you may find those discussions very enlightening.



Tom Johnson is a HVAC and plumbing contractor in Cambridge, MN. He is also a trainer for NCI in the Carbon Monoxide and Combustion safety course. As a contractor, Tom has received many awards, including Contractor of the Year from both NCI and PHCC. He can be reached at: tom@tmjohnsonbros.com

"The air filter works great!"

— Dawn Mroczek, GV's Heating, Glenview, IL

Well it looks good, anyway, right? What could possibly be wrong about this?

Dawn Mroczek from GV's Heating and Cooling is the September 2018 winner of our Photo-of-the-Month contest, as voted on by the subscribers to the [High-Performance HVAC Today magazine](#) and visitors to the website. She will receive a \$50 gift card.

You can too – submissions are always welcome. If you'd like to submit a photo for consideration in our Photo-of-the-Month contest, [go to ncilink.com/POMSubmit](http://go.ncilink.com/POMSubmit) and fill out the information as requested. If you don't submit, you cannot win!

THE OCTOBER CONTEST OPENS ON SEPTEMBER 10, 2018.

If you'd like to be in the running for our next contest, you have plenty of time to submit your photos in any of our three categories: The Good , The Bad , WTH (What the heck).



Introducing NCI's First High Performance Mobile App:



FREE APP

NCI's new AirMaxx Lite™ app features easy-to-use data entry and easy-to-display reports.

Get started on the path to High-Performance HVAC™ today!

Download this free app (available for both Android and iOS phones) onto your phone or tablet, and immediately start using it to display an airflow 'grade' for your customers.



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ARE YOU A HIGH-PERFORMANCE BUSINESS? Your Training Tools Are Here.

High-Performance Service and Maintenance Workshop

Learn how proper HVAC system installation and repair requires mastering various methods to help keep customer's homes comfortable and energy-efficient.

Oct. 2-3 in Plymouth, MN
Nov. 6-7 in Fort Worth, TX
Nov. 13-14 in Houston, TX
Nov. 27-28 in Austin, TX

High-Performance Sales and Install Workshop

While many HVAC contractors believe that "low-bid" is the only way to win new customers, learn why high-performance contractors know better.

Oct. 16-17 in Houston, TX



The Goodman® Business Toolbox and Amana® Brand Business Academy were created to deliver world class tools and training to help dealers grow profitable and sustainable businesses.

Go to these links to register for these NCI-led events and other training:

NCILink.com/ToolboxTrainingGoodman
NCILink.com/ToolboxTrainingAmana



SUMMIT 2019: SAVE THE DATE!

The High-Performance HVAC Summit 2019 is coming. We are returning to Orlando Florida the week of April 15 – 18, 2019 and it promises to be one of the best Summits yet. More information will be available shortly. So, mark your calendars today and get ready to rock down the Path to Performance.

We look forward to seeing all of you in Orlando in April.

NCI MEMBERS: ARE YOU USING COMFORTMAXX™?

One very important feature of your NCI membership is having FREE access to the **ComfortMaxx™** testing software series. All members have access to ComfortMaxx Air™ -- an easy-to-use cloud-based testing tool that allows you to record and calculate System Airflow information based on static pressure measurements.

All you do is collect four system pressures at the indicated locations. Lookup airflow on the appropriate fan chart for the equipment brand – or use our generic chart. Then produce detailed PDF reports for yourself and for the customer. They can help you generate more leads, add credibility to your testing, provide baseline

data for when you test-out, and truly differentiate you from competitors.

In addition, ComfortMaxx Air now has a new feature called “Lightening Mode” which allows your techs to perform testing much faster.

If you are a Learning Excellence Member, you get **ComfortMaxx Pulse™**, which includes everything in Air but enables you to take the pulse of your customers’ systems by adding temperature and delivered BTU measurements. It’s designed to get a quick 15 to 20-minute initial diagnostic on a system’s performance. Its focus is to create lead generation through service, or a quick test during a sales call.

If you are interested in having the ultimate in total HVAC System Performance testing software, the **ComfortMaxx Verify™** is for you. Verify enables you to conduct full system performance testing before and after completing HVAC System renovation work and balancing the system. This includes full room-by-room airflow and performance testing. Using Verify, you can provide your customer with a side-by-side comparison report showing that you delivered what you promised.



As owners and leaders, it’s up to you to implement ComfortMaxx. If you need help, contact customer care at 800-633-7058. They can help you get signed up, set up, and started so

you can take advantage of this amazing benefit.

For more information you can also download a PDF datasheet on ComfortMaxx™ from <http://ncilink.com/CMLit>.

DID YOU KNOW ...

The fact is most members of organizations don’t know all the benefits their membership brings. Do you know what your NCI membership provides for you?

The answer: plenty. Here is a quick rundown of what your \$100/month membership fee provides for you:

- **Live Support, Lead Generation, and Software.** This includes unlimited toll-free phone support, access to the High PerformanceTalk Discussion Forum, a Premium Listing in NCI’s web-based Find-a-Certified-Professional Lead Generator, and ComfortMaxx Air™ software.
- **Downloadable Tools and Knowledge Libraries.** This includes an extensive Download Library, i-NCI Mobile-Friendly Tools and Applications, an exclusive Member Newsletter, the largest library of Performance-Based Contracting articles, as well as a subscription to this magazine.
- **Discounts and Rebates.** Members receive Live and Online Training Discounts, access to the Member Rewards Training Incentive Partners Program (TIPP), NCI Training Bucks Program, and NCI Online Store discounts.

And there is so much more, including discounts to the **NCI High-Performance HVAC Summit** annual meeting. Plus you can add options that even further enhance the benefits of your membership.

Do you want to really take advantage of these benefits?

Then go to ncilink.com/ExploreNCIMembership for more information. Or call 1-800-633-7058 today.

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Customer Service Doesn't Have To Be Dead



Dominick Guarino is publisher of HVAC Today magazine and CEO of National Comfort Institute, Inc. He can be reached at domg@ncihvac.com

As I started planning this article, two very recent bad customer service experiences came to mind. One involved a car leasing company that made turning in a perfectly maintained car hell on earth.

Then there was the landscaping company that promised a "one-day" makeover (at a pretty hefty price), but took nearly four days to do a bad job. Their equipment was so poorly maintained, I had to get out my tools and fix their bed edger so the project wouldn't take five days or more.

Within two days my very expensive "make-over" beds were completely covered in weeds (apparently they forgot to spray before mulching). I'm still waiting on the callback on that one – which was promised over two weeks ago.

What do these experiences have in common? The **worst** customer service happened after the work was completed. Things like calls not returned, promises made unkept, and unsatisfactory interactions left me with an increasingly bad taste in my mouth. It seems customer service is all but dead today. But it doesn't have to be.

HOW DO YOU TURN IT AROUND?

Every HVAC contracting business owner or manager reading this has, at one point or another, likely been guilty of these sins. But let's talk about the positive aspects of callbacks and poorly delivered service.

What? Positive aspects? Absolutely! Every callback and customer complaint can be a huge opportunity.

In a world of really bad customer service, you can truly shine by taking advantage of a mistake, sloppy or poorly executed work – virtually anything requiring you to "fix" a customer.

The truth is, it's not hard to do. The secret is catching it in time, making a big deal about it, and blowing your customer away with your re-

sponse. When you do it right you'll not only have a customer for life, you'll get enough referrals through that one simple action to pay for it 10 times over.

How do you go about turning a customer service nightmare into a public relations dream? Here are four simple steps:

1. Take all complaints seriously, and have someone other than the person who caused the problem or received the initial complaint handle the follow-up. If you have two CSRs, let them handle each other's complaint calls. If you have only one, assign the follow-up to someone else in the company. If you're small, that's likely you – not necessarily a bad thing.

2. Listen carefully to the complaint, let the customer talk it out, empathize with them, but don't necessarily agree yet – you don't have enough information.

3. Respond sincerely. Once you've heard them out, if their complaint is legitimate, let them know that you will take care of it. Say just enough to diffuse the situation and leave the customer feeling good about the interaction.

4. Blow them away. Now comes the good stuff. Once the customer is off the phone, and you've had time to think your response through, it's time to do something far above and beyond their expectations.

Besides fixing the problem, do something extra without looking for credit or recognition. Maybe send them a gift basket or a gift card. It's actually better to send a gift **not** related to your services. If you decide to do this, make sure the gift is real – with no strings attached.

The bottom line is you can take a bad situation and make it a great one that knocks customers' socks off in a way that they wouldn't think of going anywhere else. You have the unique opportunity to prove you are a truly great company – and then some, and win a customer for life! 

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