

A Logical Approach to Signage



CLS Facility Services
Facility Management Solutions

PART I – EXECUTIVE SUMMARY

Signs.

We see them everywhere, every day, seemingly all the time.

We humans are besieged by thousands of marketing impressions from dawn 'till dusk, and signs are a big part of that mix. Signs dominate the landscape of our cities, towns and suburbs. They invite us to eat, drink, bank, bowl, shop, sleep – they show us the way to nearly every consumable product and function within our modern world.

From this vast universe of signs, let's now focus our attention on one sign: yours.

Your sign resides in a sea of signs. It's the first impression your business makes on visitors; it tells them who you are, showcases your logo and points them to your store. It invites them inside, and it sets the table for what everyone involved hopes is a pleasant and productive visit. In all likelihood, it's one of the primary components of your business' brand.

Your sign, therefore, is very, very important. And so, it's very, very important that your sign looks its best, and functions optimally, at all times – despite any number of factors that could do it harm.

Without a doubt, a poorly functioning sign puts your business at a competitive disadvantage. And with so many signs all around us, and so many invitations to spend hard-earned dollars at stores that surround yours, that's not a disadvantage you should accept.



We know what you're thinking: "My plate's already well-past full; signage isn't exactly a top-of-mind concern." At CLS Facility Services, we understand that; we're business owners, too. Since our company was founded in 1970, we've serviced thousands of signs for retail customers around the country. Through the years, we've seen it all: rusted signs in corrosive marine environments; filthy signs near construction zones; flickering signs; signs with non-illuminated letters and numerals – sometimes spelling unintended and awkward words (or worse). The list goes on.

At CLS, we think signage has flown under retail's radar for far too long, and it deserves its share of attention in your facility management spend. Hence – this e-book. We wrote it with a dual purpose in mind:

First, we want to share some basics of signage with you — what types of signs are typically used for retail applications, and what makes one type more appropriate than another.

Secondly, what we really want to emphasize is the importance of sign maintenance. At CLS, we believe a strategic and consistent program of sign maintenance is a wise financial move. Equally important, it helps to ensure that visitors find your store amidst the sea of signs we mentioned earlier; it gives them the best possible first impression as they prepare to enter your store; and it conveys your corporate brand in advance of a customer's in-store experience.

Beyond those areas, we share strategies in this e-book for retrofitting existing neon and incandescent signage with newer and highly efficient LED lighting. And finally, we offer suggestions on what to look for in an outsourced sign maintenance partner.

We hope you find this information helpful.





PART II – SIGNAGE 101: A QUICK PRIMER

Statistics don't lie. So, just to support our earlier argument about the importance of signage for retail businesses like yours, consider some numbers.

In 1997, the California Electric Sign Association and the International Sign Association published the results of a survey commissioned by the University of California – San Diego. Among the findings:

- On average, one additional on-premise sign resulted in an increase in annual sales revenues of 4.75%. In other words, if a business had been grossing \$500,000 annually in sales, the addition of just one on-premise sign resulted in a \$23,750 increase.
- On average, one additional on-premise sign increased the annual number of transactions by 3.94%.
- On average, one additional 36-square-foot wall sign added \$0.06 per transaction, while one additional 144-square-foot pole sign added \$0.78 per transaction.

Ideally, your business' outdoor signage should fill three primary roles:

- It should attract new customers;
- It should brand your business in consumers' minds;
- It should help to create impulse sales.

That said, ask yourself some fundamental questions about your current signage:

- What kind of first impression does it make? Beyond the business name, what's the underlying message that it really conveys?
- Is it easily read by drivers, or is it a mashup of letters, numerals, symbols and assorted graphics?
- Does it convey what you actually sell, or is it ambiguous? (This is more of a branding question, but we're posing it anyway.)
- Is your sign illuminated effectively?
- Do you, as an owner or manager, even know when it's not fully illuminated?
- Is it being regularly maintained?

Your signage makes your business' first impression on potential customers, and it welcomes back repeat customers. Choosing the right type of signage, and committing to maintaining it over time, is the kind of strategy that puts your business in place to succeed. And, for owners, managers and facility managers, it's one less thing to worry about.

In addition to a great name, great graphics and a great logo, it's essential to have the right kind of sign. With that in mind, let's briefly examine the most common types of outdoor signage:

Channel letters:

A standard channel letter is an individual, three-dimensional letter manufactured from sheet metal or aluminum. Once it's fabricated and painted, it's then fitted with lighting components such as neon gas tubes or light-emitting diodes (LEDs). A translucent plastic face then fits on the face of the letter "can" and a trim cap border is applied to its edges.



As for mounting, channel letters may be attached directly to a building's façade (this is called flush mounting); or, they can be mounted on a raceway (a rectangular mounting structure which also contains the sign's electrical components) or a wireway.

Channel letters are commonly used because they provide great visibility, when designed, fabricated and installed properly.

Familiar examples of channel letters include Toys"R"Us, FedEx and Bank of America.

Cabinet signs:

A cabinet sign is essentially a box – usually rectangular, but it doesn't have to be – with lamps inside of it. Cabinet signs are manufactured from aluminum or steel, and faces are digitally printed on Plexiglas or Acrylic sheets. The background of the sign can be either translucent or opaque (i.e., non-lighted). Also commonly referred to as "wall" or "box" signs, cabinet signs are ideal for applications that require a large copy area and related graphics. Also, cabinet signs are used when small letter sizes and/or graphic elements make the use of channel letters impractical.



Familiar examples of cabinet signs include Denny's, Best Western and AAMCO.

Pylon signs:

As the name suggests, a pylon sign is basically a cabinet sign on a pole. Pylon signs can be single sided or double sided, and they're used when height is needed to help a business stand out – or to help it be seen from a distance, which is common on freeways and long stretches of road.



These days, lots of newer pylon signs are fitted with LEDs. But fluorescent and neon are still used in many pylon signs as well, and we believe that will continue for several years to come. If you're interested in learning more about the many LED options for pylon and other sign types, call us – we love talking about exciting technologies like LED. We can help you learn more, and work with you to determine if LEDs are right for your specific signage applications.

Pylon signs dot the American landscape, so you're probably quite familiar with them. BP, McDonald's and Burger King are but a few of the many pylon signs that tower over our highways and byways.



Did You Know: Golden Arches are a Golden Goose

*"The very first thing that McDonald's installs at a new location – even before they break ground – is a sign. McDonald's spends about **\$40,000** on signage per location."*

**What's Your Signage?: How On-Premise Signs Help Small Businesses Tap Into a Hidden Profit Center, a handbook developed by The New York State Small Business Development Center, Albany, New York (www.nyssbdc.org).*

Monument signs:

A monument sign is a street-level sign that can include a lightbox, channel letters, or opaque options that include a message board or non-illuminated letters. Traditional materials that are used to fabricate monument signs include bricks, sign foam and aluminum.

Monument signs are used to add an air of sophistication to a business, a facility or a planned community. When positioned amidst landscaping, they provide an attractive street-level appearance. They're commonly used in multifamily, healthcare and banking applications, among many others.





PART III – APPLICATIONS FOR SPECIFIC SIGNAGE TYPES

Now that we've identified the most common signage types, let's look at some examples of common applications.

Take channel letters – they can be either flush-mounted – i.e., drilled right into a wall – or raceway-mounted. In the latter case (raceway-mounted), a metal extrusion runs behind the letters, which supports the letters and also holds the power supplies.

Flush mounting generally looks better, we believe. But it requires penetrations into walls. Before choosing this option, it's critical to check with your landlord and get clarity on specific building requirements.

Different applications require different installation and maintenance approaches, as well as different equipment during installation and maintenance. For example, we service signs at locations around the country, so it's very helpful for us to know in advance where a particular sign is located. Is it situated on a wall? Behind a wall? Is it a pylon sign? If we're going out on a service call, we want to know this information, because it impacts how the sign is serviced. If it's behind a wall, for example, that entails a different access strategy than if it is on a wall.

Knowing all the key information up front helps us determine how to service a particular sign in the most efficient way possible, so that you don't incur additional costs for unnecessary equipment or labor.

A facility management company like CLS will have experience with all signage types and applications, and can work with your business to determine which one meets landlord requirements and offers the best alternative at the lowest possible cost. We've been doing this a long time – we know how to make efficient maintenance calls, handle outage calls when necessary – and we properly stock our trucks in order to avoid costly return trips.

In our case, we're extremely versatile in that regard; if the maintenance call requires a crane, we'll get a crane. If it requires a bucket truck, we'll get one. If it only requires a truck and ladder, we're on that as well. Sign manufacturing companies don't usually have extensive nationwide maintenance networks in place with resources to meet specific requirements. Therefore, it's important to understand how a service provider works, and what their service capabilities are, before engaging them on an ongoing basis.

Stats Reinforce Importance of Signage

A national survey asked businesses about sign changes and the impact of those changes on business performance. It yielded some significant findings regarding both economic impacts and sign preferences.

- Sign changes generally had significant, positive impacts on sales, number of transactions and profits. Roughly 60 percent of businesses reported increases averaging about 10 percent.
- Sign changes also led to small positive impacts on employment. Nearly a quarter of respondents reported hiring more people.
- While most single establishments and small firms have either wall signs or pole signs, most large companies have both. In general, larger companies tend to have more types of signs.
- Helping customers find their location was the most important purpose for respondents. Legibility is the most important characteristic of signs across all sizes of companies.
- Business logos and the size and location of the signs were more important for companies with more establishments, for whom branding is presumably more important, compared with single establishment companies."

Source: The Economic Value of On-Premise Signage Prepared for the Signage Foundation, Inc. Prepared by the Economics Center, University of Cincinnati, August 2012.



PART IV – SIGN MAINTENANCE STRATEGIES



As we stated in our Executive Summary, whether you're a business owner, manager or facility manager, it's likely that signage currently isn't top of mind with you. You're not alone in that regard. At CLS, we find that most retail businesses view signage reactively—not proactively. In football, offensive linemen generally go unnoticed until one of them commits a penalty. Likewise in retail, signs go unnoticed until something goes wrong – lights burn out, facing gets cracked, or dirt buildup obscures lettering.

At CLS, we believe signage deserves proactive maintenance, not reactive maintenance.

Like any piece of equipment or machinery, signs must be maintained and cared for. Certainly, that encompasses the basic tasks associated with most preventive maintenance (PM). But it also means accounting for the universe of variables that affect signs, then analyzing data, and making smart

decisions based on your analysis. That may not seem overly challenging if you manage a dozen or so stores. But if you manage hundreds or even thousands of stores, small decisions add up to big expenditures.

Think of patient care in a hospital. Each patient has different medical challenges and should be treated differently. In order to do so, doctors need relevant information – about the patient, about his or her condition, and about unique circumstances that may determine the ultimate course of treatment.

Signage maintenance is really no different. Good decisions occur when thoughtful questions are asked up front.

Here are just a few to consider:

- Do you know the age and condition of the signs at all of your facilities?
- Are there geographic or locational challenges (e.g., marine environments, construction dust) that may affect your signs' appearance or electrical performance?
- Do you know when each of your signage units was last serviced?
- How many emergency signage calls did you have in your last fiscal year (for non-illuminated letters or other issues), and how much did those calls cost you in total?
- What is the age of each sign?

At CLS, we pioneered a solution that takes the guesswork out of management and maintenance for signage and other facility management systems. It's called ***PM Logic***[®], an industry exclusive solution from CLS that transforms troubleshooting into logical and effective HVAC maintenance management.

PM Logic[®] provides easy, Web-based access to industry knowledge that can save you time, keep your equipment healthy and efficient for years, and optimize your facility management budget.

PM Logic[®] is an easy-to-use online interface that provides comprehensive data-driven analysis and operational recommendations, including:

- PM recommendations for your specific signage portfolio, including situational and environmental variables;
- Repair tracking and status updates, including a detailed history of service calls, repairs, open work orders and previous quotes;
- Equipment evaluation and replacement data;
- Equipment replacements.

PM Logic[®] provides a wealth of site-sensitive signage asset management knowledge. Just as important, it makes that knowledge easy to access and manage through CLS' simple online system.

One of the central questions that ***PM Logic***[®] answers is, what level and frequency of repairs does your signage really need? ***PM Logic***[®] addresses this through what we call the ***PM Logic***[®] Score.

PM programs for most building systems are designed to deliver the same frequency of service across a company's portfolio of stores, regardless of age, condition or other key variables. At CLS, we think this approach just doesn't make sense.

It's easy to budget a set number of annual PMs for every store, but it's not prudent. For example, there is no good reason to schedule four PMs on a brand-new sign located in arid Utah. If your portfolio also includes an older set of signs in hot and humid Mobile, Alabama with a history of problems, wouldn't you rather take two PMs away from the Utah store and add them to the Mobile store's annual PM program? We think it's a sensible approach; but with numerous stores under management, the broad task can be overwhelming.

Enter the **PM Logic®** Score. As part of our proprietary **PM Logic®** solution, a separate score is created for each sign based on that specific sign's history, no matter the number of signs or stores. Key inputs are derived from CLS' extensive field experience, as well as from specific customer-supplied information.

Nighttime Inspections Are Money Well Spent. Need Proof?

Many store managers show up for work each morning after daybreak, and they may leave before sundown. Therefore, they may have no idea if signage illumination burns out in specific channel letters—or even in an entire box light!

That's where night inspections pay off. A facilities management provider like CLS offers low-cost night inspections that identify non-illuminated channel letters, box signs or monument sign lighting. From there, we can repair the problem quickly, without the need for an emergency call. This saves businesses money, it mitigates damage to their corporate brand, and it heads off potentially embarrassing misspellings of their store name. In the age of social media, one embarrassing picture can spread virally through cyberspace and really damage your brand. Simple night inspections are a low-cost tactic to help you avoid this unnecessary problem.



Depending on the **PM Logic**® Score, CLS' technical team then determines the optimal level and type of repairs needed on the sign. We provide a list of stores that can get by with, say, two PMs per year, and others that may need six. Your budget will stay the same; you're simply allocating resources where they are most needed.

In the end, a **PM Logic**® Score serves as a driver for us at CLS to act intelligently on your behalf when we send a quote to you. **PM Logic**® Score is the personification of CLS working alongside our customers, sharing information so that decisions can be made intelligently about undertaking – or not undertaking – expensive repairs.

If you as a facility manager oversee hundreds or even thousands of stores, and a vendor like CLS makes strategic and informed recommendations to you about your signage expenditures, then your job becomes much, much easier.

[Click here](#) for more information on CLS' suite of Logic solutions: **PM Logic**®, **QC Logic**® and **CM Logic**®.

PART V – SIGNAGE RETROFITS: Neon-to-LED Sign Lighting Retrofit Advantages and Strategies

Consider a hypothetical scenario: Let's say you have three dozen retail stores located throughout the mid-Atlantic region of the United States. Each of those stores has signage, both inside the building and outside of it. Some signs are big, like the ones outside that announce your company name and logo. Some are small, like the exit signs throughout your interior spaces.



If these buildings are more than a few years old, it's likely that much of the signage is neon. Neon has been a bedrock signage technology for decades. It's defined corporate brands; it's illuminated our paths along highways, byways and city streets. Neon is part of the fabric of America. It's also antiquated, inefficient, and expensive to operate, maintain and replace.

Chances are, for building owners and managers like you, neon is taking a bite out of your property's bottom line. And that bite is getting bigger each year.

What to do? Enter LED. LEDs provide considerable energy savings over time; they offer maintenance cost savings; they deliver a more even distribution of light, which improves aesthetics inside and outside a building. In turn, that even provides enhanced security and employee safety.

There's more. LED lighting is an environmentally friendly technology — considerably more so than neon. And, the better quality lighting produced by LEDs lead to higher levels of tenant satisfaction, including potentially improved health and efficiency.

Recently, [we posted a blog that touched on the many benefits of lighting retrofit projects for retail and commercial buildings](#). At CLS, we believe these same benefits can potentially be realized by retrofitting neon signage with LEDs.

In this section, we'd like to offer some tips for planning a signage retrofit project, and then implementing it successfully. These tips are general, and intended to provide strategic guidance. Each signage retrofit project comes with its own challenges, so each one requires a unique approach.

Evaluate the relationship between cost and ROI before implementing an LED sign lighting retrofit:

LEDs are more cost effective today than when they first came on the market just a few years ago. In a short period of time, the cost has come down, and we see that trend continuing. As costs continue to fall, ROI for building owners and managers will continue to rise. Keep in mind that even though costs may continue to fall, that doesn't necessarily mean that waiting will actually save you money in the long-run. Waiting also means that you are missing out on the potential energy savings that come with LED, so acting sooner may be in your best interest depending on your particular situation.



ROI is different for everyone, and certain variables can determine the extent to which ROI justifies your up-front cost. These include your current electricity costs with the signage you now have; how long you plan to remain in a given location; and how many feet (or inches, as the case may be) of LED you plan on using, both for specific signage, and for all cumulative signage in a given facility.

This can be a cumbersome calculation as the number of facilities increases, and it can make for a difficult analysis. Experienced facility management providers like CLS are specially trained to conduct signage analyses and provide ROI expectations. We encourage you to consider using one.

Buy LED lighting from a reputable source:

When LEDs first hit the market, lots of companies sold them — including many fly-by-night outfits. Many of those providers are no longer in the game, so when it comes to honoring LED product warranties, companies that are out of business can't honor them.

We recommend buying LEDs from known entities and reputable sources. GE and Sloan LED are two manufacturers that are viable, healthy, time-tested and reliable.

Consider a signage audit:

Chances are, you use signs for a variety of tasks, whether they be illuminating your business from the street or indoor uses. As part of a signage audit, think about how you use your signage, whether that differs from location to location (and if so, how it differs), and then analyze how LED could positively impact your business, and your bottom line.

For example, your audit can include a brightness analysis – you can go outside at night, take readings on the brightness of your signs, take photos of them from different distances and angles, and this information will help you determine the effectiveness of your signage portfolio. Certainly, you can do this yourself; but typically, it's a task that facility management companies like CLS perform every day.

Lighting rebates don't drive purchases like they used to, but they may still be available:

A facility management company like CLS has its finger on the pulse of the lighting rebate game; we check on behalf of our clients to see what rebates are available.



Neon signage isn't going away completely. But there's no question that LEDs are an exciting development in building technology; there's so much to talk about with them, and we'll be touching on many LED-related topics in future blogs and e-books.

PART VI – WHAT TO LOOK FOR IN A SERVICE PROVIDER



The number 13 is traditionally viewed as unlucky. But in the world of facility maintenance, it can be a real benefit to you.

That's because 13 key questions can help you, as a store owner, manager or facility manager, understand which vendor is best qualified to handle your national signage maintenance and repair requirements.

Life is filled with options, and signage maintenance is no exception. Lots of

companies provide maintenance and repair. When it comes to managing signage at multiple locations, choosing the *right* vendor is a crucial decision. The right service provider will save you time, headaches and of course, money. Lots of money. The wrong vendor? Well, the costs add up quickly. Let's look at our 13 questions in detail:

#1

Question:

How long have you been in business?

For businesses of every size, scale and function, there's so much riding on the smooth operation of your building systems. The company that maintains them should have a depth and breadth of experience over years — decades preferably. Someone new to the business may be able to provide adequate service. But like anything, experience in the facility management realm matters.

#2

Question:

Who are your current customers?

Potential clients like you should know about other customers served by this provider. What types of businesses do they operate? Retail? Office? Industrial? Multifamily? How many locations do those customers own? What's the average size of their facilities? Where in the country are they located? And what specific services have these customers outsourced to this provider?

#3 Question: **What services do you provide?**

Ideally, that list should include every service needed to keep building systems running smoothly throughout the year, from comprehensive PM planning and implementation to troubleshooting, repairs and replacements. Also, make sure that they have the experience to handle your portfolio of signage. It should also include a full range of administration and support services and tools to ensure accurate, timely reporting to you. Those services and tools should be designed to help you easily track signage expenses so that you can stay within your budget.

#4 Question: **How long have you been delivering each of those services?**

This may seem similar to Question #1, but it goes deeper. Some companies (actually, we've found quite a few through the years) will list a variety of services that they offer. In reality, though, their greatest strength may lie in delivering one or two key services, while they only have limited experience delivering other services that they list.

#5 Question: **Who are your internal experts who can assist me with each of the services that you provide?**

For example, do you have an in-house technician that I can talk to when I need to, as opposed to someone from customer service? Providing facilities maintenance at dozens, hundreds or even thousands of locations is a complex task, and an enormous responsibility. The vendor you delegate to handle this must have in-house experts that you can call on when you need technical information — whether it's for a simple question, a routine issue, or an emergency.

#6 Question: **What is your quoting process?**

It's a simple question: "Tell me how your quote process works. From the time I call you, to the time I get the quote in my hand, what happens in your company?"

#7 Question:
What is your current quote approval percentage?

Quote approvals are votes of confidence; statements of trust. In the building systems realm, you can always find a cheaper quote. But if eight out of 10 times, a customer approves a vendor's quote, then that speaks volumes about the level of trust that vendor has established with the customer.

#8 Question:
How do you as the vendor evaluate the accuracy of the quote – i.e., the amount of time for the labor, and the price for the material?

Many national building systems service providers subcontract work in markets they serve. It's how the business operates. To use an HVAC example, if one of your stores in Tuscaloosa, Alabama is warm and getting warmer by the minute, a national HVAC vendor will dispatch a technician who will then issue a quote back to the national service provider to fix the problem. If he estimates six hours of labor to replace a compressor, who in the service provider's company is validating that quote before it is sent to you? The technician said a replacement compressor would cost \$2,000 as the material expense; is it really a \$2,000 compressor, or is it a \$1,500 compressor?

As the customer, you want to make sure you're getting the right labor and material at the right price. It's essential, therefore, to know precisely what the national vendor you hire does to "watch your back" in all related matters. A technical person should be reviewing all quotes from a third-party contractor, prior to passing it along to the customer.



#9 Question:
Who will be responsible for my account?

Who is the key go-to person at your company? Many national vendors assign customer service representatives to this role. Customer service reps do well taking work orders and processing them. But when you have an issue you feel needs to be escalated, many times the service rep needs additional assistance.

A higher level of service results from a provider who assigns a business manager to each customer — a sales-oriented professional who is adept at negotiation and understanding your business. A business manager's job is to intercede before issues and problems arise, view those problems from the customer perspective, gather facts, make sense of it all, and work with the customer to resolve the issue.

#10 Question:
What types of reports can I expect to receive from your company?

If you as a customer award a national vendor 500 stores, your spend on building systems management is significant. So what kind of reporting does that vendor provide? What types of reports are available to you? Do you as the customer have the flexibility to decide? For example, do you want to know dollars spent on PM versus repairs? The PM to TM ratio? (This means that, for every dollar spent on PM, how many dollars do I spend on repairs?) In a larger sense, are the reports they generate valuable and actionable, or do they simply report dollars spent?

We think strategic reporting – and proper analysis of facts and figures – is essential. A proprietary management system like CLS Facility Services' *PM Logic*® provides comprehensive reporting that is ideal for national HVAC management. We believe it's the standard by which any national reporting system should be measured. [Check it out and then see how another vendor's reporting system stacks up.](#)

#11

Question:**How are your service calls handled?**

Recall a recent problem with one of your locations. Ask the provider in question how they handle such emergencies, and to follow it through to resolution. Ask them to take you through the steps that they follow, from start to finish when responding to your needs. Do you ask for anyone in particular, or are you connected with whoever is available? What is their response time for emergency service? How quickly can you expect them to arrive on site for a regular call? Will they call in advance to let you know the status of the technician?

#12

Question:**Do your service representatives work out of your office, or are they remote?**

Many remote service representatives work from home. As a result, they're subject to a variety of potential home-related distractions during the day, and sometimes, those distractions can occur when customer issues arise. Conversely, office-based service representatives are focused solely on delivering customer service from the centralized office in which they work.

#13

Question:**Do you have a scorecard system for your vendors?**

The vendor you hire will subcontract work for each of your facility requirements around the country. So how do they evaluate the technicians that they hire to work in your facilities? What kind of scorecard system do they use for them? The technician that's being sent to a remote store is a mystery to you; as a national facilities manager, how does your vendor make sure that he or she is sending you a qualified technician? Is their insurance certificate up to date? Do they even have the proper certificate? Do they have a license? Are they bonded? In short, what's the process?

So there they are – 13 questions that can help make a big facilities management decision a little more, well, manageable.

PART VII – CONCLUDING THOUGHTS

Whatever your business goals may be, it's safe to say that your signage should look its best, and function as intended—24/7/365. We hope this e-book helped you better understand the different types of signage available to your business; strategies for maintaining your signage; and the importance of optimal signage for your business.

If you're looking for more information on signage, including LED retrofits, we encourage you to call our lighting, electrical and signage professionals directly at 800-548-3542, or [fill out our contact form](#). We love talking about this stuff – we welcome your questions, and we value the opportunity to spark dialogues about your business, and the ways in which technology and strategy can interact to strengthen your bottom line.