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Smart IT with Passion

The Most Critical IT Security Protections Every Business Must Have In Place NOW To Protect Themselves From Cybercrime, Data Breaches And Hacker Attacks

Cybercrime is so widespread that it's practically inevitable that your business – large OR small – will be attacked. However, a few small preventative measures CAN PREPARE YOU and minimize (or outright eliminate) any reputational damages, losses, litigation, embarrassment and costs.

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Author: Bryan Herbstritt, MBA, Technology Architect
2130 South 3140 West, Suite A, Salt Lake City, Utah 84119
https://www.fidelitech.net | 801-263-8858 | Info@fidelitech.net

When You Fall Victim To A Cyber-Attack Through No Fault Of Your Own, Will They Call You

Stupid…Or Just Irresponsible?

It's EXTREMELY unfair, isn't it? Victims of all other crimes – burglary, rape, mugging, carjacking, theft – get sympathy from others. They are called "victims," and assistance and support comes flooding in.

But if your business is the victim of a cybercrime attack where client or patient data is compromised, you will NOT get such sympathy. You will be instantly labeled as stupid or irresponsible. You will be investigated and questioned about what you did to prevent this from happening – and if the answer is not adequate, you can be found liable, facing serious fines and lawsuits. You will be required by law to tell your clients and/or patients that YOU exposed their private records, financials and data to a criminal. Your competition will have a heyday over this, and clients will leave in droves once they discover you've been compromised. Your bank will NOT come to your rescue either, and unless you have a very specific type of crime insurance, **any financial losses will not be covered**.

Here's The Ugly Truth:

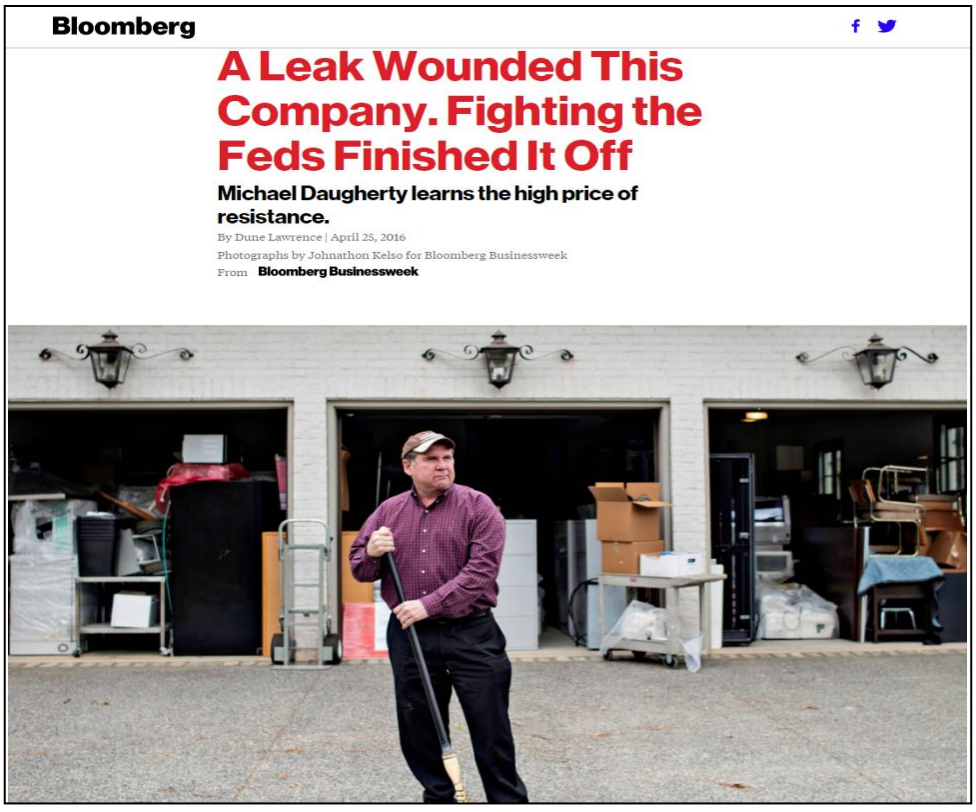
You already know that cybercrime is a very real threat to you – but it's very possible that you're underestimating the potential damage, OR **you are being ill-advised** and underserved by the employees and/or vendors you hired to protect your business from these threats.

ONE cyber-attack…one slipup from even a smart, tenured employee clicking on the wrong e-mail…can open the door to ABSOLUTE FINANCIAL DEVASTATION, and undo everything you've worked so hard to achieve. **Take the story of Michael Daugherty, former CEO of LabMD.** His $4 million Atlanta-based company tested blood, urine and tissue samples for urologists – a business that was required to comply with federal rules on data privacy as outlined in the Health Insurance Portability and Accountability Act, or HIPAA.

He HAD an IT team in place that he **believed** was protecting them from a data breach – yet the manager of his billing department was able to download a file-sharing program to the company's network to listen to music, and unknowingly left her documents folder (which contained over 9,000 patient files) open for sharing with other

users of the peer-to-peer network. This allowed an unscrupulous IT services company to hack in and gain access to the file and use it against them for extortion. When Daugherty refused to pay them for their "services," the company reported him to the Federal Trade Commission, who then came knocking. After filing some 5,000 pages of documents to Washington, he was told the information he had shared on the situation was "inadequate," and the FTC requested in-person testimony from the staff regarding the breach, and more details on what training manuals he had provided to his employees regarding cybersecurity, documentation on firewalls and penetration testing. (QUESTION: ARE YOU ACTUALLY DOING ANY OF THIS NOW?)

Long story short, his employees blamed HIM and left. Sales steeply declined as clients took their business elsewhere. His insurance providers refused to renew their policies. The emotional strain on him – not to mention the financial burden of having to pay attorneys – took its toll, and eventually he closed the doors to his business, jamming medical equipment into his garage where it remains today (image below).



"Not My Company…Not My People…" You Say?

Don't think you're in danger because you're "small" and not a big target like a J.P. Morgan or Home Depot? Or that you have "good" people and protections in place? Think again. Every single day, 82,000 NEW malware threats are being released, and more than HALF of the cyber-attacks occurring are aimed at small businesses; you just don't hear about it because it's kept quiet for fear of attracting bad PR, lawsuits and data-breach fines, and out of sheer embarrassment – but make no mistake: small businesses are being compromised daily, and the smug ignorance of "that won't happen to me" is an absolute surefire way to leave yourself wide open to these attacks.

In fact, the National Cyber Security Alliance reports that **one in five small businesses have been victims of cybercrime in the last year** – and that number is growing rapidly as more businesses utilize cloud computing and mobile devices and store more information online.

You can't turn on the TV or read a newspaper without learning about the latest online data breach, and government fines and regulatory agencies are growing in number and severity. **Because of all of this, it's critical that you have these security measures in place.**

But I Have A Great IT Guy I Trust…

Many business owners are shocked when they get compromised because they BELIEVED their IT company or guy had it "handled." However, there is a virtual army of thousands of hackers and very sophisticated crime rings that work around the clock to overcome <u>known</u> protections – and you can't stop a brand-new threat that was invented yesterday with a security system that was designed six months to a year ago. It requires special expertise to stay on top of all of this, which is why many don't.

To that end, here's your quick checklist. If YOUR company isn't actually implementing ALL of these protocols – OR if you don't know if you are – WHY NOT? <u>What hasn't your current IT company told you about all of this</u>?

1. **Security Awareness. The #1 Security Threat To ANY Business Is**…You! Like it or not, almost all security breaches in business are due to an employee clicking, downloading or opening a file that's infected, either on a website or in an e-mail; once a hacker gains entry, they use that person's e-mail and/or access to infect all the other PCs on the network. Phishing e-mails (an e-mail cleverly designed to look like a legitimate e-mail from a website or vendor you trust) are

still a very common occurrence – and spam filtering and antivirus cannot protect your network if an employee is clicking on and downloading the virus. That's why it's CRITICAL that you educate all of your employees in how to spot an infected e-mail or online scam. Cybercriminals are EXTREMELY clever and can dupe even sophisticated computer users. All it takes is one slipup, so constantly reminding and educating your employees is critical.

On that same theme, the next precaution is implementing an Acceptable Use Policy. An AUP outlines how employees are permitted to use company-owned PCs, devices, software, Internet access, e-mail, and acceptable BYOD (Bring Your Own Device) protocols. We strongly recommend putting a policy in place that limits the websites employees can access with work devices and Internet connectivity. Further, you have to enforce your policy with content-filtering software and firewalls. We can easily set up permissions and rules that will regulate what websites your employees access and what they do online during company hours and with company-owned devices, giving certain users more "freedom" than others.

Having this type of policy is particularly important if your employees are using their own personal devices (BYOD) and home computers to access company e-mail and data. With so many applications in the cloud, an employee can access a critical app from any device with a browser, which exposes you considerably.

If an employee is logging in to critical company cloud apps through an infected or unprotected, unmonitored device, it can be a gateway for a hacker to enter YOUR network – which is why we don't recommend you allow employees to work remote or from home via their own personal devices.

Second, if that employee leaves, are you allowed to erase company data from their phone or personal laptop? If their phone is lost or stolen, are you permitted to remotely wipe the device – which would delete all of that employee's photos, videos, texts, etc. – to ensure YOUR clients' information isn't compromised?

Further, if the data in your organization is highly sensitive, such as patient records, credit card information, financial information and the like, you may not be legally permitted to allow employees to access it on devices that are not secured, but that doesn't mean an employee might not innocently "take work home." If it's a company-owned device, you need to detail what an employee can or cannot do with that device, including "rooting" or "jailbreaking" the device to circumvent security mechanisms you put in place.

2. **Multi-Factor and Strong Authentication. Require STRONG passwords and passcodes.** Passwords should be at least 8 characters and contain lowercase and uppercase letters, symbols and at least one number. On a cell phone, requiring a passcode to be entered will go a long way toward preventing a stolen device from being compromised. Again, this can be ENFORCED by your network administrator so employees don't get lazy and choose easy-to-guess passwords, putting your organization at risk. Are they? If you and your employees are not being forced to do a password reset every 30-60 days, **THEY ARE FAILING YOU**.

   Multi-Factor authentication is the best way to protect you from the cybercriminals today. Utilize Multi-Factor Authentication whenever possible. This is extremely important for ANY web accessible sites or services. It adds a necessary additional layer of security to ensure you are protected even if your password does get stolen. **Do you want your data to still be PROTECTED even in the event of a stolen password or device?**

3. **Patching. Keep your network and all devices patched and up-to-date.** New vulnerabilities are frequently found in common software programs you are using, such as Adobe, Flash, Microsoft or Chrome or other Web Browsers; therefore it's critical you patch and update your systems and applications when patches become available. If you're under a managed IT plan, this can all be automated for you so you don't have to worry about an employee missing an important update.

4. **BDR and Backups. Have A Business-Class Image Backup BOTH On-Premise And In The Cloud.** This can foil the most aggressive (and new) ransomware attacks, where a hacker locks up your files and holds them ransom until you pay a fee. An advanced endpoint protection solution is also extremely important to a fast ransomware or crypto bug recovery. If your files are properly backed up, you don't have to pay a crook to get them back. A good backup will also protect you against an employee accidentally (or intentionally!) deleting or overwriting files, and against natural disasters, fire, water damage, hardware failures and a host of other data-erasing disasters. Be sure your backups are encrypted. Unencrypted backups and backups without restricted access can be modified by many modern threats. And what good is a backup if the ransomware attack can access and either modify or delete your backups. Again, your backups should be AUTOMATED, retain version history, have restricted access controls, and be monitored; the worst time to test your backup is when you desperately need it to work!

5. **Don't allow employees to access company data with personal devices that aren't monitored and secured by YOUR IT department.** The use of personal and mobile devices in the workplace is exploding. Thanks to the convenience of cloud computing, you and your employees can gain access to pretty much any type of company data remotely; all it takes is a known username and password. Employees are now even asking if they can bring their own personal devices to work (BYOD) and use their smartphone for just about everything.

   But this trend has DRASTICALLY increased the complexity of keeping a network – and your company data – secure. In fact, your biggest danger with cloud computing is not that your cloud provider or hosting company will get breached (although that remains a possibility); the biggest threat is that one of your employees accesses a critical cloud application via a personal device that is infected, thereby giving a hacker access to your data and cloud application.

   So if you ARE going to let employees use personal devices and home PCs, you need to make sure those devices are properly secured, monitored, multi-factor authentication is enable, and maintained by a security professional. Further, do not allow employees to download unauthorized software or files. One of the fastest ways cybercriminals access networks is by duping unsuspecting users into willfully downloading malicious software by embedding it within downloadable files, games or other "innocent"-looking apps.

   But here's the rub: most employees won't want you monitoring and policing their personal devices; nor will they like that you'll wipe their device of all files if it's lost or stolen. But that's exactly what you'll need to do to protect your company. Our suggestion is that you allow employees to access work-related files, cloud applications and e-mail only via company-owned and monitored devices, and never allow employees to access these items on personal devices or public WiFi.

6. **Advanced Endpoint Protection Solution.** In the event that one of your employee's slipups an Advanced Endpoint Security Solution takes your antivirus protection to the next notch. The key difference is it is consistently monitoring for irregular activities and notifies a Central Command Center 24/7 of any potential intrusions. If an intrusion is detected a forensic analysis is completed immediately while the customers technology department is contacted about the vulnerability. Any new or modified files from the intrusion can also be reversed taking the computer back to the state as if the user never accidentally slipped up. With the increase in frequency of major data breaches perpetrated by highly advanced cyber-attacks, we're clearly at a point where the traditional endpoint security technologies are no longer sufficient. For IT security leaders,

implementing a next-generation advanced endpoint protection solution is a highly likely, if not inevitable, project. Many of these types of solutions either replace or run in tandem with Anti-Virus and Anti-Spam solutions.

7. **A Business-Class Good Firewall And Proper Updates.** A firewall and network security appliance acts as the frontline defense against hackers blocking everything you haven't specifically allowed to enter (or leave) your computer network. But all firewalls need monitoring and maintenance, just like all devices on your network, or they are completely useless. This too should be done by your IT person or company as part of their regular, routine maintenance. HOWEVER, it's not uncommon for an IT guy to forget to turn on one or more of the intrusion detection and prevention features; often they are disabled to work on the firewall, but then never turned back on, making the device useless. DOES your firewall or network security appliance have the ability to FULLY scan Encrypted traffic? Does your firewall or network security appliance have sandbox testing abilities to stop and scan for an unknown potential threat or vulnerably?

8. **Protect Your Passwords.** Do you or anyone you know use a password protected excel or other type of document to keep a record of your passwords? Not only do you need to apply security policies on your network but you need to do the same for both the use and storage of passwords. You should Deny or limit USB file storage access devices, enable enhanced comprehensive password policies, set user screen and device timeouts, limit user access, and use a secure password management utility. A secure password management utility not only helps you monitor and control passwords and password policies within your company but protects you against cybercriminals. Take control over the unknown with a multi-factor password protection product. Don't give a cybercriminal the opportunity to break the password protection of your Excel spreadsheet and take advantage of you. Use Multi-Factor and a secure password managing product.

9. **Encryption.** Is your data protected at rest, in motion, or on mobile devices? Both HIPPA and PCI DSS require your customer and cardholder data to be protected. This is handled through an Endpoint Encryption product, SSL encryption, and other security devices and technologies available to deploy today. Even if you are not held by some form of compliance or regulatory mandate to encrypt your data it is still a best practice in order to fully protect your company from any form of unauthorized access. Is your company protecting your sensitive data in case of loss? Are you at risk of a costly breach?

10. **Protect Your Bank Account.** Did you know your COMPANY'S bank account doesn't enjoy the same protections as a personal bank account? For example, if a hacker takes money from your business account, the bank is NOT responsible for getting your money back. (Don't believe me? Go ask your bank what their policy is on refunding you money stolen from your account!) Many people think FDIC protects you from fraud; it doesn't. It protects you from bank insolvency, NOT fraud.

    So here are three things you can do to protect your bank account. First, set up e-mail alerts on your account so you are notified any time money is withdrawn. The FASTER you catch fraudulent activity, the better your chances are of keeping your money. In most cases, fraudulent activity caught the DAY it happens can be stopped. If you discover it even 24 hours later, you may be out of luck. That's why it's critical that you monitor it daily and contact the bank IMMEDIATELY if you see any suspicious activity.

    Second, if you do online banking, dedicate ONE computer to that activity and never access social media sites, free e-mail accounts (like Hotmail) and other online games, news sites, etc., with that PC. Remove all bloatware (free programs like QuickTime, Adobe, etc.) and make sure that machine is monitored and maintained behind a strong firewall with up-to-date antivirus software.

    And finally, contact your bank about removing the ability for wire transfers out of your account and shut down any debit cards associated with that account. All of these things will greatly improve the security of your accounts.

Are You REALLY Willing To Be <u>Complacent</u> About This?

Look, I know all of this appears to be a giant distraction and cost that interferes with REAL work. You and I both realize that implementing proper security protocols won't win you the "employer of the year" award or deliver an ROI – in fact, we HOPE by doing OUR job, it never has to deliver one.

BUT if you foolishly choose to turn a blind eye and be arrogant, complacent or careless, cybercriminals WILL take advantage of you. You WILL pay the ransom…NOT YOUR FAILING IT COMPANY that was SUPPOSED TO PROTECT YOU. This tsunami of pain will land directly on YOUR desk to deal with, everyone pointing the blame at YOU. YOUR bank account. YOUR business. You will be faced with significant losses, costs and an emotional drain on you and your team as you deal with a breach.

Mark Twain Once Said, "Supposing Is Good, But KNOWING Is Better"

If you want to know for SURE that your current IT company (or IT person) is truly doing everything they can to secure your network and protect you from ransomware, bank fraud, stolen and lost data and all the other threats, problems and costs that come with a data breach, then you need to call us for a **Security And Backup Assessment**.

- Is your network really and truly secured against the most devious cybercriminals? And if not, what do you need to do (at a minimum) to protect yourself now?

- Is your data backup TRULY backing up ALL the important files and data you would never want to lose – and (more importantly) how FAST could you get your IT systems back online if hit with ransomware?

- Are your employees freely using the Internet to access gambling sites and porn, to look for other jobs and waste time shopping, or to check personal e-mail and social media sites? You know some of this is going on right now, but do you know to what extent? Are they downloading illegal files (music and video) and exposing you, as happened with LabMD?

- Are you accidentally violating any PCI, HIPAA or other data-privacy laws? New laws are being put in place frequently, and it's easy to violate one without even being aware; however, you'd still have to suffer the bad PR and fines if a breach happens and the investigation reveals YOU didn't take necessary precautions – and ignorance is not an acceptable excuse that will get you out of a lawsuit.

- Is your firewall and antivirus configured properly and up-to-date? No security device is "set and forget." It needs to be constantly monitored and updated – is yours? Is your IT company giving you the assurances that it is?

- Are your employees storing confidential and important information on unprotected cloud apps like Dropbox that are OUTSIDE of your backup? Could they walk off the job with a list of all your clients and go work for a competitor?

I know it's natural to want to think, "We've got it covered." **Yet I can practically guarantee my team will find one or more ways your business is at serious risk for hacker attacks, data loss and extended downtime – I just see it all too often in the number of businesses we've assessed over the years.**

Even if you have a trusted IT person or company who put your current network in place, it never hurts to get a third party to validate nothing was overlooked. I have no one to protect and no reason to conceal or gloss over anything we find. If you want the straight truth, I'll report it to you.

You've spent a lifetime working hard to get where you are. You earned every penny and every client. Why risk losing it all? Get the facts and be certain your business, your reputation and your data are protected. Call us at 801-263-8858 or you can e-mail me personally at bryan@fidelitech.net.

Dedicated to serving you,

Bryan Herbstritt, MBA, Technology Architect
Web: https://www.fidelitech.net/report2019/
E-mail: bryan@fidelitech.net

