

## **TECH**Minutes

### September 2015

Your Small Business Technology Information Source!

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#### Don't Fix an IT Problem Just to Have to Fix it Again



We live in a world where money is the solution to all problems. If you have a

problematic piece of technology, what do you do to fix it? You can call in the professionals, or shell out for new hardware or software. Either way, you're spending money, but the difference in how much you...



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### **About Directive**

We are a technology consulting firm specializing in technology implementation and management for businesses. We're known for providing big-business, Enterprise-Level IT services to small and medium-sized businesses.

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### Two-Factor Authentication: An Easy Way to Make it Hard for Hackers

Have you heard the news? Passwords are old-school methods of authenticating account logins. If you want to maximize the security of your business, using two-factor authentication is your best bet.

#### Why Passwords Aren't Good Enough

Passwords might have been valuable once upon a time, at the dawn of computing when hacking was in its infancy, but thanks to advanced hacking techniques, finding out a user's

password has grown increasingly easy. In fact, all a hacker needs to do so is to trick a user into forking over sensitive information by posing as someone with authority through an email message or phone call (a tactic known as "phishing"). That's right; it's really that easy.

Granted, not all business professionals will fall for these simple tricks. Still, that doesn't mean that your employees, who aren't nearly as skeptical as you, won't unintentionally throw your business under the bus by handing out your credentials like it's candy on Hal-(Continued on page 3)

### How You Approach Technology Affects Your Entire Budget



Chances are that when you begin going through your expense reports, one of the most glaring expenses your business has is payroll. It is possibly the most crucial cost you will be subject to. In fact, small businesses need to realize that by hiring employees, a large portion of your operational budget is out the window. To properly grow a business, you may need to take an alternative view to the traditional business model; including your technology management.

#### **Annual Budgeting is a Must**

When you set up a budget for your business, you first have to estimate all the expenses you absolutely have to take on in order to operate your business properly. These include:

- Rent/Mortgage
- Insurance
- Procurement costs
- Payroll and requisite taxes
- Marketing and sales
- Utilities (electric, water, Internet, etc.)
- Estimated maintenance costs
- Legal & accounting fees
- Licenses & fees
- Office supplies
- Travel costs
- Interest & depreciation

This may be a daunting task, especially if you are new to business and new to a market. Once you ascertain what it costs to run your business annually, you have to be confident that you have the demand necessary to facilitate taking on these costs. By completing this

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### 4 Ways to Equip Your Business With the Technology it Needs



In a world where time is a luxury that the average business owner lacks, it can be burdensome to come up with

new technology initiatives. The main issue that this presents is that it can be difficult to improve your operations if your technology's growth is stunted. Stagnate technology deployment can be detrimental to your business's success.

Therefore, it's recommended that you take a moment to seriously consider the last time you significantly improved an aspect of your company by integrating new technology. This could be as simple as purchasing new workstations or server hardware, or upgrading to a new software that knocks the socks off of your legacy applications. If you can't remember the last time you made an improvement like this for your technology, we have news for you; it's probably holding your business back from accomplishing bigger and greater things.

#### Be Open to Change

You've heard the old adage, "Nothing risked, nothing gained." It applies to IT, too. If you're unwilling to make changes to your network, you won't be able to reap any of the many benefits that upgrading your infrastructure might yield.

#### **Ask Your Team**

One of the best ways you can find out how you can improve technological innovation in the workplace is by asking your team what they feel could be improved on. You might just find that they need better technology in order to perform their jobs to the best of their ability. If this is the case, they'll appreciate you asking how to make their jobs easier.

#### Where Do You Want to Be?

Consider where you want your business to be in the next five, ten, or even fifteen years. What technology could you use to achieve this goal? Is your current technology holding you back? If you consider how your use of IT affects your business model, you might be able to justify taking the time to innovate and introduce new solutions for your business.

#### **Outsource the Responsibility**

If you and the rest of your staff simply don't have time to even consider IT innovation, you're in luck. Directive's outsource IT management and consultation services are capable of taking on this responsibility so you don't have to. We can provide your business with professional technology consultation that can help you make educated decisions about the future of your business.

Directive knows exactly how the small and medium-sized business wants to operate its technology infrastructure. We can work with you to ensure that it's always operating at maximum capacity. This will help both you and your employees get more done throughout the workday. Give us a call at 607.433.2200 to learn more.



### How You Approach Technology Affects Your Entire Budget

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task, you can attempt to play out different scenarios to get a better grasp on what is possible for your business over the next year. If you want to implement any major change to your business strategy, you'll want to include it at this stage.

Technology can be a significant expense, when you take into consideration that the costs are represented by several of the variables listed above. Not only do you need to procure the technology systems, but you need to improve the depreciated computing systems, to meet the specifications required to operate efficiently. You also have to consider the costs of IT support, since these systems are notoriously hard to predict. This often results in runaway technology costs that sap both the capital and operational budget.

At Directive, we provide solutions that can assist your business to ward against those runaway technology and support costs. Our comprehensive managed services offering delivers small and medium -sized businesses the opportunity to get all the technology support they need, for a consistent monthly flat-rate. With our remote monitoring and management solution, we can provide proactive maintenance to the machines attached to your network to ensure they remain reliable. We also make available help desk support and even on-site support for those times when remote support isn't an option. These managed IT services can be indispensable for a business searching for a way to navigate your technology's support, without having to pay a premium price.

Managed IT services give you the opportunity to use more of your capital toward the administration of your business (like payroll), and to take on projects to make your business more efficient, without having to worry about the return on investment of your technology. Call us today at 607.433.2200 to learn more about our managed IT services and other technology-related solutions.



### IT PAYS TO REFER A FRIEND!



### **Two-Factor Authentication: An Easy Way to Make it Hard for Hackers**

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loween. As the owner of your business, it's your responsibility to make sure that all of your infrastructure's bases are covered.

"Directive can help equip your business with the highest quality standard for your organization's security solutions."

#### Introducing Two-Factor Authentication

In the most basic terms, two-factor authentication is a way to make it more difficult for hackers to access your accounts. This is typically done by using a separate security credential that only you have access to. This additional security measure is often enough to dissuade hackers from attempting to access your network (or bank account, email, Facebook, etc.). For them, it's simply a matter of risk and effort, versus the reward. If the return on investment isn't worth the effort, they'll probably leave you alone.

Some of the most popular methods of two-factor authentication include:

- SMS Message: A secondary code is sent to your smartphone. All you have to do is enter it when your account prompts you to and you'll have access to your account.
- Email to a Secondary Address: If you'd rather not receive your authentication code with your phone, you can simply check your secondary email address for it.
- Voicemail: You can even have your security code sent to your phone's voicemail, or in an automated voice call.

Two-Factor Authentication Apps: Some accounts, like Google and Microsoft, allow for easy authentication simply by connecting your account to an application on your smartphone.

There are plenty of two-factor authentication choices out there. Directive can help equip your business with the highest quality standard for your organization's security solutions. Our services range from providing preventative measures, remote monitoring, and even offering two-factor authentication. Reach out to us at 607.433.2200 to find out more about how Directive can assist your business.



### **VoIP is the Ultimate Solution for Your Communication Woes**



One major technology pain point businesses have revolves around communication. If your cli-

ents and prospects can't effectively reach your staff, customer support and productivity is weakened. Customers need more out of your phone system, and VoIP solutions offer more features with less expenses.

As defined by Gartner's IT glossary, Voice over Internet Protocol (VoIP) is:

[...] based on an IP standard that is capable of transporting voice and data packets over the same network. Unlike circuit -switched networks, IP doesn't require a dedicated connection for an entire call. Voice signals are converted to packets that are sent across the network and reassembled in the correct order when they reach their destination. VoIP services can be deployed over the Internet or private IP networks (LAN/WLAN).

Why should your business invest in a powerful VoIP solution? There are several reasons, but the most prominent one is that it's a huge opportunity to save on your business's operation expenses. Here are three reasons why VoIP is a significant contender for your business's primary communications solution.

- Cost Savings: As already mentioned, VoIP has the ability to reduce communication costs every month in operational expenses.
  Legacy telephone companies are known for bundling together services that your business might not necessarily utilize, meaning that you're wasting money paying for services that aren't needed. A VoIP solution allows you to select from a variety of services, and you only pay for the ones that you use.
- Simple to Set Up: Because VoIP uses your Internet to transmit your voice, there are no extra wires that need to be added to your business's infrastructure. There's no overhaul of your entire cabling infrastructure to add new lines. Of course, this simplicity comes with a downside; your Internet connection must be stable and your bandwidth needs to be able to handle the increased traffic.
- Versatility: If you're new to VoIP, you'll be glad to hear that it's super easy to use on several different types of devices. You can access your VoIP account through your browser, even if you're on the move. All you need is an IP-enabled phone. This helps you stay productive even when you're not in the office.



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### Now You Can Blame Hackers for Your Next Speeding Ticket



Since the dawn of the computing age,

hackers have taken advantage of all sorts of tactics in order to crack systems and ruin lives. With the Internet of Things bringing connected devices from all over the place into the mix, there are more opportunities than ever to take advantage of unsuspecting users. In fact, even car computers are capable of being hacked.

WIRED reporter Andy Greenburg experienced this terror first-hand, though he was expecting it to happen. In fact, he's already had two run -ins with this type of hack. The first time was in 2013, when researchers Charlie Miller and Chris Valasek accompanied Greenburg as he drove a Ford Escape. As he reports, "they sat in the backseat with their laptops, cackling as they disabled my brakes, honked the horn, jerked the seat belt, and commandeered the steering wheel." This doesn't sound like something you'd want to happen while driving on the highway; that much is for certain.

Two years later, and this is precisely what happened the second time Greenburg met up with the researchers. Miller and Valasek instructed Greenburg to drive on the highway while they remotely hacked the vehicle. The only issue is that he didn't know when the attack would strike. Still, they assured him that they wouldn't try anything life -threatening, but when you're faced with a vehicle that you have practically no control over, that's a little hard to believe. The two succeeded, taking over the air conditioning, spamming the windshield wipers, and blaring Kanye West (the self-proclaimed "greatest living rock star in the world," mind you) at maximum volume. They then mercilessly cut the transmission and brakes, which abruptly ended Greenburg's ride down Interstate 64.

Yes, that's right. Hackers can remotely mess with your vehicles if they really want to. The code used by Miller and Valasek is designed to use the Jeep's entertainment console as a jumping point, issuing commands to the dashboard functions, steering wheel, brakes, and even the transmission. Though the code is only in the possession of the

researchers (for the time being), you can bet that hackers are always looking for ways to profit off of the misfortune of others, and it's only a matter of time before they find a practical use for hacks just like this one, and much more.

Following this troublesome vulnerability being exposed, there was a recall on the Jeep Cherokees affected by this code, though Chrysler wasn't able to locate a definitive defect. Either way, such a drastic stunt only proves how technology is pushing toward greater communications without paying equal attention to security. In order to avoid the "crash and burn" aspect of The Internet of Things, it's imperative that you take action now before it's too late to do so.

This means that, as a business owner, it's up to you to take the proper precautions to shield your organization's network from potentially malicious activity. Integrating powerful security solutions is one way you can make accessing your network easy for your employees...

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Chris Chase Solutions Integrator



Charlotte Chase Solutions Integrator

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