TECHMinutes

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Your Small Business Technology Information Source!

This Issue:

The Virtual Hand that Terrorizes the Cradle

In today's connected home, Internet security needs to extend beyond the PC. Any device that's connected to the Internet needs to be password protected, secured with a firewall, and utilize available security apps. These precautions should be taken even with seemingly harmless devices like baby monitors. A family from Ohio recently learned this lesson the hard way.

As reported by WXIX-TV in Cincinnati, a hacker...

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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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How Much is Your Data Worth?

It's been said that a company's data is its most important resource. If this is true, then is it possible to assign a monetary value to your files? If you attempted to do so, you may come to the conclusion that your company's data is more valuable than anything else in your business, maybe even your own job!

Determining the Value of Your Data

Assigning value to your data can be a difficult task to accomplish, primarily because some files are more valuable than others. For example, your file of hilarious memes has little-to-no value to anybody except you and your funny bone, whereas the file containing contact information for every client and vendor would be categorized as "super valuable." To assign an accurate value to your data, you would have to take into consideration discrepancies like this.

Evaluating the worth of every single file in your company's server would be a cumbersome task. Doing an exercise like this really isn't recommended, because ultimately, it's a huge

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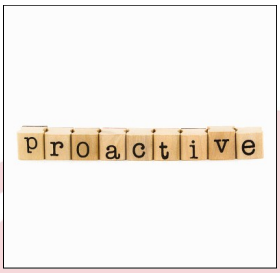
A Lesson from Y2K's Unsung Heroes



Fifteen years ago, a simple oversight in technology development caused worldwide panic. The crisis was Y2K, and the fear was that, on New Year's Eve, computers would reset to 1900 instead of 2000, causing all technology to fail. Thankfully, New Years Eve came and went without incident and people got worked up over nothing. You've heard story, but you may not have heard about all the work IT companies did to save the day!

Behind the Scenes of Y2K

In 1999 IT professionals were putting in crazy overtime hours to remediate the software of critical systems in order to prevent the doomsday scenario forecasted by the sensationalism-driven media. Thankfully, IT professionals didn't have to update every single computer or piece of software in the world because newer systems were designed with this oversight corrected, but they did have a tall order facing them, having to work on many older systems that were widely in use.

After 2000 rolled around and the receipts from the IT work done were collected, it turned out that the worldwide cost of remediation to fix the Y2K bug totaled over $300 billion! Y2K remediation services rendered included; programming services to fix mainframe, minicomputer, PC and UNIX application code, and patches to PC software and OS upgrades. $300 billion may seem like a huge sum of money, but all of this money pales in comparison to the damage to the world's economy would have been if its technology-dependent infrastructures were to crash.

Thanks to the tireless and diligent efforts of IT professionals, very few systems around the world were affected on January 1, 2000. That morning, the world breathed a big sigh of

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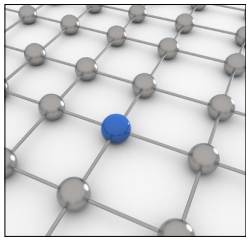
Internet vs. Intranet



Can you tell the difference between the two words, Internet and Intranet? The difference is much more than simply two letters. Both are valuable marketing tools, particularly for small businesses, but what exactly differentiates them from each other? The key to understanding this is a simple English lesson.

A quick analysis of the word "Internet" splits it into two parts; inter and net, meaning network. The word inter is a verb meaning to "put in the earth, bury"[i]. Network is simple enough to guess, meaning too many things to list here – in this case, we'll go with an "interconnected group of people". As great as it is to see the Internet as a network of zombies obsessed with technology, the more proper etymologically-sound definition for inter would the Latin preposition meaning "between". So, in essence, the Internet is a massive group of people connected by their computers.

However, Intranet means something else entirely. The word-forming element intra means "within, inside, on the inside", so that makes it nearly the exact opposite of the Internet; rather than a complex network of people spread out all around the globe, an Intranet is an internal network woven between systems within an organization. If all of your small business's computers are connected like this. You have an intranet, but it's a lot more than just a technical connection. Your intranet is about the relationships you have with the people around you, and the way that they communicate with you through the technology. Directive wants to help you use it to further develop the way you utilize your intranet.

Leadership is Important

With any aspect of human interaction, it's important to hear the voice of everyone involved. To this end, an intranet is exceptionally useful. Collaboration is extremely useful when it comes to marketing, but not as important as a leadership role. Without some semblance of order, nothing can be accomplished. After all, it takes at least one push to get the ball rolling, and once it gets going it will continue to roll until it hits something or it ceases to exist. Be the person to pick the ball up and roll it again. A reliable intranet will result in more effective leadership and prompt responses. Maybe the other employees will even

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Diagnosing CPU Issues

Your PC's CPU (Central Processing Unit) is one of the many delecate components inside your computer. The CPU essentially does all of the thinking that your PC needs to do, processing instructions from your operating system and all of your programs. That might not seem like a big deal, but most CPUs today handle billions of processes every second. It doesn't store data (that's the hard drive) but if the CPU fails to work properly, you won't be getting much work done.

The CPU acts like the brain of the computer. Without it, it cannot function. However, sometimes it can be difficult to diagnose a problem with the CPU. Some of these symptoms can be associated with other problems, such as bulging or leaking motherboard capacitors, faulty power supplies, or failing video cards. A quick once-over of these problems will tell you whether you are dealing with a "brain-dead" computer or not.

You Might Have CPU Problems If...

The characteristic symptoms of a CPU failure are pretty traumatizing, and if there is a problem you will realize it. Often, due to this, your computer will completely seize up or fail to boot up properly. Your system will completely freeze up immediately after booting up, or will stop working after a few minutes. If the fans are all running very high and the system isn't turning on, you're very likely dealing with a faulty CPU. Most people recognize the "blue screen of death", which is technically called a system halt error, which will inform you that the processor (or sometimes another piece of hardware or hardware driver) is not working. Also, listen for system beeps; if there are none, then that is also a good hint that the CPU in your system has gone.

You've Been Thunderstruck

Have there been any intense storms in your area lately? Power surges can also cause the CPU to not operate properly. Just like many other pieces of hardware, too much power at one time can cause irreparable damage. Lightning striking the building, or more commonly, rebooting your computer after a power surge, are the most common causes of this problem. There's not much that can be done about this – if a power surge occurs and the CPU is damaged, it will need to be replaced. While the CPU doesn't store any data, if your computer is running during a power surge, important data can be lost. This is why backing up your data is so important.

In the event of a power outage, unplug your computer and wait for the power to come back on before plugging it in again. The best way to protect your PC from any abnormal power fluctuations is with an uninterrupted power supply (UPS). A UPS is a device that regulates power flow to electronics. It's also equipped with a battery that provides

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How Much is Your Data Worth?

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waste of time. However, if you were to do it, you would take the sum total of the value of every file and then divide that figure by how many gigabytes (or even kilobytes) your organization is using. This will give you a per-byte average of how much your company's data is worth.

Data Insurance Assessment

Of course, the value that you would assign to your own data is a completely subjective number. If you took this number to an insurance company and asked them to insure your business for what you think you're data is worth, they would want to perform their own assessment of your data's value. If an insurance company were to assign a value to your data, they might use the same three values they use to insure property.

- **Market or Appraised Value (MV)**: How much a given piece of property is worth to another buyer.
- **Assessment Value (AV)**: The value placed on a property for municipal tax purposes.
- **Replacement Cost Value (RCV)**: The value placed on a piece of property by an insurance company for the purpose of coverage.

It's common for these three values, along with the value that you assign based on your own opinion, not to be the same. Therefore, in order to come up with a value that qualifies for insurance coverage, an insurance company would take these three values and plug them into their magic insurance calculator.

Assigning an insurance value to your company's data will work slightly differently than working with physical property like an office building. For example, with the assessment value, your data isn't taxed, or at least not yet. However, both the market value and replacement cost value is applicable. How much money would your competitors pay to get their grubby hands on your data? Also, what would it cost to replace all of your data? Both of these figures would be extremely high.

Data Insurance isn't Real

If you determined an accurate value for your company's data and then strolled into the office of your local insurance company looking for coverage, they wouldn't insure you. The value of a company's data is too high. Computer data is easily prone to hackers, user error, and data loss (which makes it a high-risk commodity), and if something happened to your data, it's not like the insurance company can cut you a check to purchase new data. However, you would definitely score some points with the insurance company if you explained to them the differences between MV, AC, and RCV.

Your data is unique to your company and is therefore irreplaceable. This is why it's considered to be the most valuable asset for any modern business. Since it's irreplaceable, you need a solution that will protect your data in the event of a data-loss-causing disaster.

BDR is Better than Insurance

Directive's Backup and Disaster Recovery (BDR) solution is a much better...

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A Lesson from Y2K's Unsung Heroes

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relief and the Y2K became a footnote in the annals of history. Almost fifteen years later and it seems like people have forgotten the important role IT professionals played in diverting a civilization-crippling disaster. Instead of giving IT guys and gals ticker tape parades, Y2K has become associated with "false alarm" in the modern vernacular. It's important to raise awareness of the sacrifices made by the brave veterans of the Y2K war--lest they be forgotten.

What Lesson can We Learn in 2014 from 1999?

Here's the lesson: The Y2K crisis was averted not because it was a false threat, but because IT was proactive and did its job! When IT does its job effectively, the world and your business carries on as normal thanks to downtime-causing problems that never happen. Even though IT professionals like us are doing the heroic work of averting IT disasters, it's rare that we're ever honored with bronze statues and biopics made by Marvel Studios, and for us, we're okay with how this shakes out. It's the code of the hero. At the end of the day, after the world is saved, a true hero will tip their hat, say, "All in a day's work," and then walk away into the sunset.

Taking a proactive approach to IT is the best way to prevent technology disasters from happening to your business. Directive can be your IT hero by working behind the scenes with our managed IT services to remotely take care of issues that might otherwise turn into problems causing a major disaster like a server crash. We work tirelessly and around the clock to keep your technology running smoothly. You may not even realize that we're defending your business from crippling viruses and solving performance issues. In fact, you may even forget altogether that we're doing our job, and at the end of the day that's okay because for Directive, it's all in a day's work.

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Diagnosing CPU Issues

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power in the event of a power outage. Most UPS devices store just enough power for your workstation to shut down properly. Directive can provide you with UPS devices that will meet the needs of your business. It's especially important to have a UPS device dedicated for your server.

Things Are Starting to Heat Up!

Whenever it gets too hot, people become sluggish – even the slightest movement is exhausting. Computers are the same way. The biggest reason that the CPU will burn out is because of too much heat. The CPU processes immense amounts of data at a rapid rate, which generates a lot of thermal energy. Most CPUs have their own cooling systems which will control their internal temperature, but sometimes these also die out with age. Ideally, the CPU's temperature shouldn't exceed 50 degrees Celsius. If your CPU is exposed to too much heat for too long, permanent damage will result. The biggest contributor to heat inside your computer is dust and other filth.

The best way to prevent CPU problems is with proper PC maintenances and close monitoring. This will ensure that the CPU isn't being pushed to its limit and overheats. Give Directive a call at 607.433.2200 to keep your CPU safe - it's the intelligent thing to do!

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Internet vs. Intranet

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take some initiative and roll the ball themselves.

...But Not More Important than the Clients

The most important part of any marketing campaign are the consumers. Without them, you wouldn't have any reason to run the marketing campaign. When discussing your intranet, it's important to take into account the opinions of the consumers. There should be a way for them to interact with your employees and express what they want in your product. The more people who can view this information, the better.

Teamwork

Humans are social animals, so it's natural that communication is important to us. This communication is key to letting a marketing strategy flourish. Your company's network is the best place for this communication, so it's important to have an organized intranet. There are plenty of solutions available, and Directive can provide you with the intranet strategy that suits your needs.

If your company's intranet has seen better days, contact Directive at 607.433.2200 and see what options are available for you. With our managed IT services, we can ensure your infrastructure is sound, and provide you with the means to jumpstart your company's communication--with both your intranet and Internet.

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We partner with many types of businesses in the area, and strive to eliminate IT issues before they cause expensive downtime, so you can continue to drive your business forward. Our dedicated staff loves seeing our clients succeed. Your success is our success, and as you grow, we grow.

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