

**This Issue:**

Small Businesses Face Challenges in 2018

Warehousing Your Organization's Data Can Bring Serious Benefits

Getting Back to Basics with Data Backup

Managed IT Delivers Some Serious Value

Data Recovery Considerations: the Other Side of Your Backup Plan

How Technology Allows Fake News to Spread

**Getting Back to Basics with Data Backup**

It's no industry secret that one of the most important pieces of IT any business should have is a data backup solution. However, this is like saying that every business should have a plant: the type of plant, and (by extension) the type of data backup, matters. You want a data backup that is more like a peace lily or a cactus, hardy and resilient, and less like a basil plant or orchid, high-maintenance and requiring very specific conditions to prosper...



Read the Rest Online!  
<https://dti.io/basicbdr>

**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.

Visit us online at:

[newsletter.directive.com](http://newsletter.directive.com)

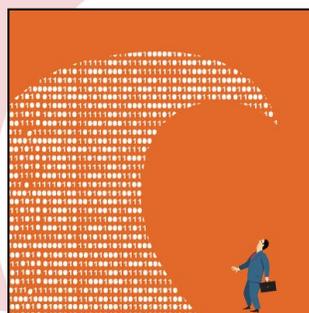
**Small Businesses Face Challenges in 2018**

The modern small business will face several challenges in 2018. The world is changing, and with it, so is business. For many small businesses, this can either be looked on as the opportunity they've been waiting for, or, it can be viewed as the beginning of the end. No matter what situations you are faced with this year, understanding what problems your business faces, and how to solve them is imperative to your small business' success.

In the technology world, 2018 will be more about utilizing innovations to the technologies that are already available rather than deploying newfangled technologies, as many small businesses focus on revenue generation rather than simply cutting their technology costs. Chances are your organization already takes advantage of many of today's most cost-prohibitive technology trends. Whether or not you are using them properly will ultimately be the difference in meeting your yearly projections. We take a look at some of the most compelling variables a small business owner needs to consider in order to take their business in the right direction.

**Running a Smarter Business**

While 2017 was a good year for the small business, many smaller organizations fall into the  
*(Continued on page 2)*

**Warehousing Your Organization's Data Can Bring Serious Benefits**

Your data is one of the most important assets at your business' disposal. It's really indispensable. Not only are large amounts of it the result of successful operations, it also can help your organization better understand the intricacies of its own operations, and where you want it to go in the future. Does your business have a process for collecting, storing, and sorting vital data so that your organization can figure out where to go next?

At Directive our technicians come to work every day to help organizations like yours make full use of your technology. Moreover, we are just starting to realize the potential of data ourselves. By having our certified technicians build a dedicated data warehouse, you are creating a construct that embraces the future of data analytics. This analysis may just be the key that allows your staff to strategically plan the next initiative that will take your business to the next level. Here are some of the types of data a comprehensive data warehouse will hold.

*(Continued on page 3)*

## Managed IT Delivers Some Serious Value



How does your organization manage its IT? For some businesses, it's not an easy choice or even a

remotely affordable one. Some companies are forced to endure subpar services from break-fix IT providers that don't necessarily have the tools available to prevent issues from happening. Others try to prevent issues from evolving into major concerns. These others are the organizations that have the right idea behind technology maintenance.

Yet, this preventative maintenance can seem a little intimidating to business owners on a budget. The break/fix method to IT maintenance is designed to provide organizations the service that they need when they are having trouble keeping their technology in

proper working order. This could be something as simple as an email access issue, or a major problem like a hardware failure. Regardless of the issue, businesses would pay out massive amounts of funds just to purchase IT support whenever it's required.

The problem with this approach is that it is rather passive until disaster strikes. Let's say that your business has a major project to complete or deadline to meet, but you can't accomplish this due to networking complications or hardware failures. You have to wait for a technician to arrive on-site to address the issue, and during this timeframe, your employees are being paid to sit around and wait for the issue to be resolved--all so they can do their jobs. This is how break-fix IT works. Your organization is basically a time-bomb when your technology isn't maintained properly. It's only a matter of time until you experience a crippling issue that completely derails productivity and costs your business an arm and a leg.

A better way to handle business-level IT support is by implementing what are known as managed IT solutions. By working with a managed service provider, your organization can take advantage of services previously anathema to it--namely, preventative solutions that aim to keep issues from happening in the first place. You can get all of the services that your organization has long-desired, but in a more conveniently priced way.

You can achieve enterprise-level network security, back up your data with cloud-based data backup and disaster recovery solutions, and remotely apply patches and security updates so that your hardware and software are always in proper working order. All of these solutions require a dedicated IT technician who can properly manage them, and Directive can provide this expert...



Read the Rest Online!  
<https://dti.io/itvalue>

## Small Businesses Face Challenges in 2018

*(Continued from page 1)*

trap of not focusing on revenue generation; setting their sights on sustainability rather than success. If your business has been around the block a bit, you may be comfortable with the “business as usual” approach. You may be surprised to know that by changing the way you approach certain core strategies, you can initiate greater revenue generation and stop focusing so much of your time and effort on practices that aren't effective and just hold your business back.

Cost cutting initiatives have been all the rage for the past several years. Many businesses utilize outsourced services such as cloud computing, print services, and staffing agencies to reduce their capital expenses. This strategy is sound--it provides an organization with more upfront capital--allowing for more a targeted approach at projects that can spur on revenue generation. The issue is that by not making ANY true capital investments, you are likely paying more.

One way to improve your business' position is to consider the value you get from recurring services. A service like the one Directive provides, where you can see an immediate return on your recurring investment, is valuable, and rare.

There are some services, however, that don't provide a rapid or sustainable return, and by paying more up front, you could actually mitigate cost that adds up over time. Paying for software you barely use per month may seem affordable if you look at the operational cost, but in true capital, renewing a yearly license for a single copy of the software may actually save you money.

As far as the revenue generation problem goes, there are two solutions that are available to every business that, once implemented, are likely to provide a solid ROI. The first is analysis. Your company generates a lot of data, and much of that data is relevant in the

context of making better business decisions. Business intelligence, that is the structured analysis of warehoused data, can provide some very useful answers. Consider that your operational data, data about staff effectiveness, data about your marketing and advertising initiatives all hold in them a small piece of truth about the way your business operates. By gaining a more comprehensive understanding of how your business functions, you can make better strategic and operational decisions.

At Directive, we are just starting to understand how to help our clients run smarter businesses. Since profit margins and returns on many goods have shrunk significantly over the years, businesses have looked to services to fill in the gaps when they don't have the capital to undertake major investments for staff...



Read the Rest Online!  
<https://dti.io/smb2018>

## Warehousing Your Organization's Data Can Bring Serious Benefits

(Continued from page 1)

### Client Information

Your business depends on the patronage of many clients—people who buy your product or service on a varying basis. However, all of your clients will have information that you want to keep on-hand in the event that you lose it. This includes contact information (like email addresses and mailing addresses) as well as phone numbers and otherwise. You should also include any information about services that you've rendered for them so that you're not caught unaware should you lose records of what type of relationship you have.

### Vendor Information

Similarly, your organization also depends on contact with vendors who provide the resources required in order

for your business to succeed. This could be in the form of software solutions provided by a developer, or hardware issued by a distributor.

Utilities, like your Internet, electricity, HVAC, etc. are equally as important, as they make your office an environment suited for work. In the event the information about your vendors is compromised or lost in any way, you will want to be ready to recover it so that your business relationships can continue to function properly.

### Analytics

While storing data and backing up any data related to your vendors and clients can help your business recover in the event of a disaster, you also want to use this information to learn more about your consumer base and create a

profitable future for your organization. Doing this is called analytics. Leveraging analytics is a great way to take seemingly arbitrary numbers and find trends that mean something for your business. There are applications that can help your organization find new markets, target the best client base, and identify inefficiencies that compromise your organization's ability to turn a profit.

If your business truly wants to take advantage of data during the new year, now is the time to take the initiative and invest in data warehousing and corresponding analysis. To learn more about these solutions, reach out to Directive at 607.433.2200.



Share this Article!  
<https://dti.io/analytics>

## Data Recovery Considerations: the Other Side of Your Backup Plan



If we asked you how your organization backs up its data, would you be able to smile and tell us all about it in

detail? While it's important to be optimistic about the future of your organization, you should never believe that you are impervious to data loss. We'll discuss some of the most important terminology behind data backup and recovery, as well as the best way to protect your organization from the crippling situations presented by data loss.

### Recovery Point Objective

How much data can you reliably restore in the event of a data loss incident? This number can be measured by RPO, or Recovery Point Objective. Basically, the recovery point objective is determined by how much of your data can be recovered following a loss incident. Situations that could cause data loss include natural disaster like a flood or fire, or it could be at the hands of a hacking attack or user error. Either way, you lose data and

it is a negative situation for any organization.

Depending on the type of data backup you have, you could go from either losing a negligible amount to up to a whole day's worth, or more. Tape backup, which has long been a staple in the business world, is only capable of so much. Since tape backup is considerably more resource-intensive than network-attached or cloud-based backup, you can only take one large backup at the end of the day, meaning that you could lose so much more data through tape than you would through a backup and disaster recovery solution like the one we offer.

### Recovery Time Objective

Once you've established how much data that you can recover in the event of a disaster loss scenario, it comes time to establish how long it will take for you to achieve recovery. The reason for this is that the time your organization is recovering data is time that your business isn't functioning as intended. In other words, downtime, where you're creating negative revenue. Therefore, the goal should be to minimize downtime

and achieve a low recovery time objective whenever possible.

Tape backup offers a longer recovery time compared to a network-attached or cloud-based backup solution specifically because the backups are larger and take more time to process (not to mention that they aren't automatic like the backup process you'll find with the BDR). Since backups can be taken as frequently as every fifteen minutes, they can be restored more quickly as compared to the antiquated processes you'll find by using tape backup. It's just one of the ways that our BDR can reduce downtime and make recovering from a data loss incident more manageable.

Does your business want to guarantee that it can survive from a data loss incident? Directive can equip your organization with a BDR solution that can maximize its chances of successfully restoring operations following a data loss incident.



Share this Article!  
<https://dti.io/recovery>

## How Technology Allows Fake News to Spread



In today's political, social, and economic environment,

information is more valuable than ever. However, this increased importance, paired with the speed that data can be dispersed via the Internet, has enabled many to use false information to manipulate the general public into agreeing with their views and acting upon them.

### Fake News and You

Many researchers believe that cyber propaganda campaigns rely on three factors in order to succeed in their mission: the tools and services used, social networking, and the motivation behind the campaign in question. Without any of these elements, spreading fake news becomes almost impossible.

Unfortunately, there are plenty of resources out there that can be used to spread a fake news campaign.

For instance, the Dark Web can provide those attempting to spread their propaganda with the tools they need to do so, safe behind a veil of anonymity. Social media

offers platforms that encourage sharing, allowing what could be an exponential spread of a story with little hands-on effort from those responsible.

Finally, while the majority of fake news that has been heard of as of late has been politically motivated, it can just as easily be used to manipulate businesses. In addition to its use as a political tool, fake news and information warfare can be used to promote a company and increase or decrease its stock--both financially and where public opinion is concerned.

### China's Fake News Marketplace

One example of the effects that fake news can have on businesses is demonstrated in the Chinese marketplace. One content distribution service, Xiezuobang, charges a user based on where the article is to be published. Services like this are easy to abuse for one's own purposes.

Furthermore, aided by systems that enable public opinions to be measured and modified, posts can be automatically posted to 3000 websites at a rate of 100 posts per minute.

In addition to these tactics, many Chinese social networks are filled with posts shared by influential users who have been paid to promote that particular content. Based on that user's popularity, the price of their content sharing services goes up.

### A Global Problem

Of course, these practices are present in more areas than just China. Researchers have been able to collect and compare disinformation campaigns from the US, Russia, and Middle Eastern countries, and have resultantly been able to identify trends in what tools are used and how these campaigns are shaped to each region.

No matter where you are located, you need to keep an eye out for misinformation and cyber propaganda online. Whether it's politically motivated, or intended to manipulate business and the market, fake news is divisive and only benefits those that spread it.

What's your opinion of fake news? Do you feel that it's a real problem?

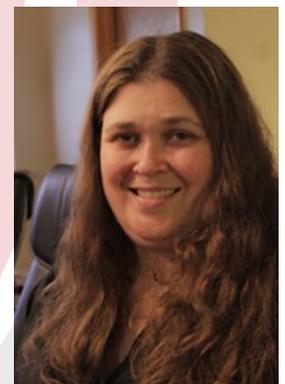


Share this Article!  
<https://dti.io/fakenews>

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.



Chris Chase  
Solutions Integrator



Charlotte Chase  
Solutions Integrator

## Directive

330 Pony Farm Road  
Suite #3  
Oneonta, NY 13820  
Toll-Free 888-546-4384  
Voice: 607-433-2200



[newsletter@directive.com](mailto:newsletter@directive.com)



[facebook.directive.com](https://facebook.directive.com)



[linkedin.directive.com](https://linkedin.directive.com)



[twitter.directive.com](https://twitter.directive.com)



[blog.directive.com](https://blog.directive.com)



[instagram.directive.com](https://instagram.directive.com)

Visit us online at:

[newsletter.directive.com](https://newsletter.directive.com)

