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## Colorado Company Taken Down By Ransomware And What That Means for Your Business



Thomas Fox is president of Tech Experts, southeast Michigan's leading small business computer support company.

Individuals, organizations, and companies have fallen victim to these attacks.

Most people recognize the fact that ransomware is a danger, but they may not realize that it can actually destroy their company.

The recent closure of Colorado Timberline after a ransomware attack is a solemn reminder of the seriousness of the dangers of ransomware.

# What Happened to Colorado Timberline?

Colorado Timberline, a printing company in Denver, was forced to cease operations for an unspecified amount of time after a severe cyber attack.

A statement on their website dated September 12th stated that they had been the victim of several recent cyber attacks, but the last – a ransomware attack – was something they would not be able to immediately recover from.

# What Happened in the Ransomware Attack?

The data locker ransomware attack took place on the evening of August 14. The ransomware accessed their database server and encrypted the files it contained.

The issue that Colorado Timberline ran into, according to an explanatory post for their customers via their Facebook page, was that the hackers insisted that physical access to their files was necessary in order to obtain the encryption key even if the ransom were paid.

Colorado Timberline explained that it was not a matter of paying the ransom, but granting the hackers further access to their data was their greatest concern.

Instead, they opted to make use of their data backups to restore the system and had their IT staff doing their best to extract as much data as possible from the encrypted database server.

#### About Colorado Timberline

Colorado Timberline's LinkedIn Page indicates that they had between 200 and 500 employees and that they had been in business for five years. They specialized in printing, including vinyl, apparel, banners, glass etching, and large format applications. In 2017 they were acquired by two out-of-state companies and their owner left in May. What impact that may have had on the decision to cease operations is not known.

#### How Data Locker Ransomware Works

Data locker ransomware malware (also known as a crypto ransomware) gains access to a computer, then it begins to search through the file system to find data that would be of value to the victim. It stays hidden as it both searches for this data then encrypts it.

Once the encryption is complete, the malware alerts the user with a message announcing that data has been taken hostage and encrypted. It will indicate how the ransom is to be paid (usually in a type of cryptocurrency, ironically) and how long before the decryption key is destroyed and the data rendered useless.

The first wave of modern ransomware attacks began to take place in 2015, according to "The Evolution of Ransomware" published by Symantec. The history of ransomware, however, can be traced back to 1989 where the first target was healthcare data systems. Now any company with valuable data is a target for attack. And, as with any type of hacking activity, the methods for infecting a computer with ransomware are continually evolving and improving. It is important for every business and organization, small or large, to make sure their cybersecurity systems are powerful enough to protect them and up-to-date against the latest threats.



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November 2018

## Line Of Business Applications: Efficiency & Productivity

"While many companies (particularly very small businesses) may not have the business scale to require this type of software, it's time-saving and the accuracy assurance cannot be denied."



 Jason Cooley is Support
 applica 

 Services Manager at Tech
 tions in

 Experts.
 action on a

regular basis.

Whether it's tracking inventory, calculating loan payments, estimating material cost for a construction

project, keeping sales records, or preparing taxes, there is probably an app for that.

You may be wondering: what are line of business applications exactly? A line of business app is any application that serves a particular busi-

ness need or assists with customer transactions in some way.

It differs from something like an email app, which could be considered a business application, but since it doesn't apply to a specific industry or specific need, it wouldn't be a line of business application.

For some people newer to the workforce, the days of old are never even considered. Remember when all restaurants used pen and paper to take orders?

The implementation of a point-ofsale system in restaurants eventually served as an all-in-one solution. Taking orders, keeping track of daily sales and cash totals, even inventory tracking and clocking in/ out can be done all from the same program.

Tax preparation and accounting software, too, has come so far. Whether you have all internal or outsourced accounting, the days of having to do much more than signing the forms after printing are over. I'm not talking using an online tax prep program at home. I mean, large scale businesses filing end of the year taxes.

Keeping monthly ledgers, banking records for large corporations,

there are some that are acceptable for their purposes. But the adage is true: you get what you pay for.

Good corporate-level line of business applications often come with some costs involved. Whether that's purchasing application licensing, paying a monthly or yearly usage fee, and for support for the applications, there will be an investment.

So how do you know if your investment will be worth it in the long run? How can you be sure using a new line of business app will be beneficial?



strange tax situations, incomes from multiple states, and just about anything else can be found in good line of business tax and accounting software. So much of this information was only done on paper for so many companies not that long ago.

While many companies (particularly very small businesses) may not have the business scale to require this type of software, it's timesaving and the accuracy assurance cannot be denied.

The examples above are just a few of many implementations of line of business applications and how they replace the ways of the past.

There are some free line of business applications out there and I am sure

If you are looking for software to make your business operate more efficiently but have questions as to how the implementation will work or if the cost is worth the benefits, reach out to the software company.

In many instances, there will be trials or demonstrations available that you just have to inquire about. Emailing or making a phone call with specific questions can really help you have a more informed look at your upcoming investment.

If you are a business that uses a managed service provider, like Tech Experts, you should also interface with your IT provider. They may have insight from other clients or past experiences and should be a part of any technology change your business is looking into.

Your productivity and efficiency could be on its way up and, here at Tech Experts, we'd love to help you get there.

### Wi-Fi 6: The Next-Generation Wireless Standard



Wi-Fi 6 (also known as 802.11ax) is the nextgeneration wireless standard that is faster than

the current

service technician at Tech Experts.

king, 802.11ac.

More than speed, it will provide better performance in congested areas, from stadiums to your own device-packed home. Fortunately, it's coming soon, slotted for a 2019 release.

Wi-Fi will now have version numbers as well. Doing away with those confusing Wi-Fi standard names like "802.11ac," Wi-Fi names will be replaced with user-friendly names like "Wi-Fi 5" and "Wi-Fi 6."

#### Faster Wi-Fi

As usual, the latest Wi-Fi standard offers faster data transfer speeds. If you're using a Wi-Fi router with a single device, maximum potential speeds should be up to 40% higher with Wi-Fi 6 compared to Wi-Fi 5.

Wi-Fi 6 accomplishes this through more efficient data encoding, resulting in higher throughput. Mainly, more data is packed into the same radio waves. The chips that encode and decode these signals keep getting more powerful and can handle the extra work.

This new standard even increases speeds on 2.4GHz networks. While the industry has shifted to 5GHz for less interference, 2.4GHz is still better at penetrating solid objects. And there shouldn't be as much interference for 2.4GHz as old cordless telephones and wireless baby monitors are retired.

#### Longer Battery Life

A new "target wake time" (TWT) feature means your smartphone, laptop, and other Wi-Fi-enabled devices should have longer battery life, too.

When the access point is talking to a device (like your smartphone), it can tell the device exactly when to put its Wi-Fi radio to sleep and exactly when to wake it up to receive the next transmission.

This will conserve power, as it means the Wi-Fi radio can spend more time in sleep mode. And that means longer battery life.

This will also help with low-power "Internet of Things" devices that connect via Wi-Fi.

#### Better Performance in Crowded Areas

Wi-Fi tends to get bogged down when you are in a crowded place with many Wi-Fi enabled devices fighting to receive and send data. Picture a busy stadium, airport, hotel, mall, or even a crowded office with everyone connected to Wi-Fi.

The new Wi-Fi 6, also known as 802.11ax, incorporates many new technologies to help with this.

Wi-Fi 6 can now divide a wireless channel into a large number of subchannels. Each of these subchannels can carry data intended for a different device.

This is achieved through something called Orthogonal Frequency Division Multiple Access, or OFDMA. The Wi-Fi access point can talk to more devices at once.

The new standard also has improved MIMO, or Multiple In/ Multiple Out.

This involves multiple antennas, which let the access point talk to multiple devices at once.

With Wi-Fi 5, the access point could talk to devices at the same time, but those devices couldn't respond at the same time. Wi-Fi 6 has an improved version of multi-user, or MU-MIMO, that lets devices respond to the wireless access point at the same time.

This wouldn't just apply to busy public places, but also at home if you have many devices connected to Wi-Fi or if you live in a dense apartment complex.

"Wi-Fi tends to get bogged down when you are in a crowded place with many Wi-Fi enabled devices fighting to receive and send data. Picture a busy stadium, airport, hotel, mall, or even a crowded office with everyone connected to Wi-Fi. The new Wi-Fi 6, also known as 802.11ax, incorporates many new technologies to help with this."

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Adam Hoffman is a field service technician at Tech

The

average

American

spends just

over 1800

hours a

*Experts.* works in an office environment, this means a lot of

sitting down and typing.

That type of sedentary work can lead to a number of health and comfort issues, not to mention productivity issues.

This means that picking an effective and comfortable workstation is absolutely necessary.

#### Getting Started

When choosing the right device for your workstation, there are a few things you should take into consideration.

First, you should decide what you will be using your workstation for and in what kind of environment. Will you be doing a lot of work from a central station or will you be out in the field? If you will be doing most of your work from one central location, a desktop computer offers the best price vs performance ratio.

Not to mention, the lifetime of a desktop usually outlasts other types of workstation devices. This is due to replaceable components and superior cooling solutions. Stationary workstations are not always a viable option for all people, specifically people who spend most of their time moving from place to place on the job.

Someone who spends most of their time in the field would be best suited using a laptop or professional tablet.

#### Budget

One of the most important factors to consider when picking a workstation is how it fits into your budget. Less is often more when it comes to workstations,



so you should always be trying to achieve the goals you set out for yourself in the most cost efficient way possible.

It is important that you purchase equipment that is going to perform well enough to complete the tasks you need it to, but any other additional features should be avoided to cut costs.

As mentioned earlier, desktop computers are the most cost efficient way to get work done around the office, so long as you'll be staying there all day.

#### Comfort and Health

Who doesn't want to be comfortable at work? Most of us spend a good portion of our lives working, so it is absolutely necessary to maintain a healthy lifestyle.

The easiest place to start is where you spend most of your day, sitting in a chair. The type of chair you use at work will greatly influence posture, comfort, alertness, and general wellbeing.

How can anyone get any work

done if they are miserable and in pain all day? Make sure to pick a chair that has good lumbar support. Ergonomic options are always a plus.

Avoid unnecessary neck strain by keeping your eyes level with your monitor. Small details can also make a big difference, such as having a keyboard with negative tilt.

Negative tilt keyboards are designed to reduce wrist sprain, which is a huge plus for anyone who types all day. These keyboards can also help avoid carpel tunnel issues.

#### Conclusion

Your workstation is an essential part of your career. Balancing cost, comfort, usability and performance is the key to building the perfect workstation for you, your employees or clients. Cover your needs first, and then don't forget to shop around for the best price available.

