IT PLAYBOOK

Your game plan for strategically structuring and supporting your business technology.

COLEMAN TECHNOLOGIES

OVERVIEW

This playbook is going to cover strategies that increase productivity and profitability, reduce risks and costs, and fuel agility and collaboration.

As you browse this guide, you will see a colored service bar on the top corner of the page, and other convenient links and QR codes leading to more information available online!

To learn more about our services, or to discuss how Coleman Technologies can help you manage your IT needs, please contact us and request a no-obligation consultation!

The Keys to Your IT Strategy

Monitoring and Maintenance
It starts with tending to your existing IT investment - early detection can prevent issues before they affect your bottom line.

Planning Ahead and Compliance
Having a solid business continuity plan will be a lifesaver in a disaster, and security compliances help prevent data theft.

Focus on Employee Productivity
Utilize solutions that engage users to collaborate and communicate while still keeping everything under control. Also, tech support should be within reach when your staff needs it.

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A Few Words From Our CEO

Thank you for taking the time to check out our IT Playbook. I'm thrilled that it's fallen into your hands.

This booklet is the culmination of years of technical knowledge and professional experience my team and I have developed. Our goal is to take the frustration, humiliation, and unnecessary guesswork out of IT, and turn it into a profit center for your organization.

At the end of the day, it's not about the technology you use. It's about you and your team getting the most out of every day. It's about how fast you can get back on your feet after an unexpected issue. It's about focusing on your business and not worrying about the tech that you use.

If you have any questions, I encourage you to reach out to me directly. You can reach me at 604-513-9428 or darren@coleman.biz.

Darren Coleman

CEO

I have always had a passion for computers and IT support since the early 90's. It is my goal to assist as many people and companies as I can in servicing their technical needs and devices while resolving their issues. This continues to motivate me to reach further, and accomplish new goals.

With the expertise of my team, we can do this and so much more.

When IT is Your Responsibility...

How much of your time is spent on day-to-day issues?

Organizations with existing in-house IT departments often look the other way when it comes to working with an outside IT company. On the surface, this is understandable; internal IT managers aren't exactly looking to be replaced.

Coleman Technologies isn't out to replace your existing IT department; we're here to supplement it.

Eliminate the day-to-day issues
IT managers often need to put internal projects and initiatives on hold to deal with day-to-day IT issues and maintenance tasks. The scenario goes like this, "*Implementing that new CRM solution is going to have to wait another day because all the workstations in accounting were just infected with Cryptolocker.*"

The 80/20 rule
If 80% of your time is spent on dealing with fixing issues, catching up on maintenance, and supporting your end-users, that only leaves a small portion of your day for actual productive work that could drive the company forward. Whether you want to get the support and maintenance off of your plate or outsource entire projects, you need someone who has the expertise to assist you.

When hiring additional IT staff isn't in the cards...
Onboarding additional in-house staff to accommodate for the increasing demand of maintenance, security, and support isn't a decision to make lightly. Ask yourself, how much work is one more body going to accomplish? Will that alleviate enough of the day-to-day tasks so internal projects get done? In other words, is the cost worth it?

Co-managed IT support
We understand, which is why IT managers rely on Coleman Technologies to eliminate the support issues, allowing them to focus on projects that will usher in new opportunities.

That's why businesses trust Coleman Technologies to supplement their existing IT department. We can work seamlessly with internal IT staff to take the edge off the support and maintenance, or focus on new projects and implementations.

When IT is <u>NOT</u> Your Day Job...
You just want everything to WORK like a lightbulb!

Business owners have much more important things to do than deal with the deployment of proper network practices, security policies, and IT maintenance; let alone day-to-day computer issues.

After all, you have a business to run. You just want your IT to WORK.

Coleman Technologies is like your virtual CIO and fully-trained IT department
Before we get started, we take a good hard look at your organization. We establish an understanding of your specific needs, priorities, and the threats that you face. This intimate knowledge of your business needs makes you feel like your account manager is another employee on your payroll.

Strategic IT planning, implementation and ongoing support
If you are outgrowing your existing solutions, Coleman Technologies can handle the strategy and fulfillment of projects of all sizes.

Your account manager will have a 50,000-foot view of your business objectives, making it less about installing new technology because it *sounds* good, but rather it gets you the results you need.

We are familiar with a broad spectrum of business solutions, such as:

- Unified communications

- CRM / business management software

- IT infrastructure planning

- Cloud computing

- Security compliances

- Mobile device management

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Choosing the Right IT Solutions

IT isn't one-size-fits-all. Here's how you sort through the options.

There's no shortage of technology challenges that businesses face, and no shortage of solutions either. You've got a business to run; you have better things to do with your time than research the different types of RAID arrays for your next server or cross-compare network security applications.

However, when you entrust your company's IT to someone else, always seek the answers to the following questions:

What will it take to maintain my network?
Consider the ongoing management costs to keep your IT up-to-date and supported.

Will it scale?
What will the ramifications be when adding five, ten, or fifty new users? Does the technology infrastructure cover the organization's long term plans?

Is there anything I can consolidate?
Through virtualization, one server can take on the role of multiple without exhausting resources.

How quickly can I recover from an unexpected disaster?
If critical hardware fails and brings the network down, or the business suffers from a significant data loss event, how soon will employees be able to work again?

Is my data protected from theft?
Are important files floating around on laptops, tablets, and smartphones? What happens if one of these devices falls into the wrong hands? What about when an employee leaves?

What happens when my staff needs support or training?
Are there training resources? Even the simplest new systems can bottleneck production. What are ongoing support costs?

What is your SLA (Service Level Agreement)?
What are the expectations for response times for non-critical, critical, and emergency support tickets? What is covered and what isn't?

Learn how Coleman Technologies answers these questions:

http://bit.ly/2zKY3iI

Who Actively Maintains Your Network?

"An ounce of prevention is worth a pound of cure." - Benjamin Franklin

Early detection prevents downtime
Many common PC problems can be detected and prevented. If left alone, eventually the problem can get in the way of productivity, and that's when things start to get costly. If an employee can't work because of a computer-related issue, your business is losing money while paying a tech to fix the problem.

We don't believe in kicking you while you are down
With Coleman Technologies managing your IT, we make your uptime OUR responsibility. If a device we're managing requires support, we're the ones responsible for getting you back up and running.

Routine IT maintenance
Our philosophy is wrapped around prevention and proactive maintenance. When regular maintenance, security updates, and software patches are applied, computers and network infrastructure suffer from fewer issues.

Faster, more accurate support
Because our technicians regularly monitor and maintain all of the devices on your network, troubleshooting new issues is more effective. The majority of support can be done without onsite visits. This keeps costs low and reduces the time to a resolution.

IT Evaluation - The Cost of Downtime

Knowing the cost of downtime of a critical IT system can help determine how crucial it is to maintain uptime. Use the following formula to calculate the cost of downtime for a mission critical component, such as a server or line-of-business application if it were down for a full business day:

Productivity Loss Formula (P)
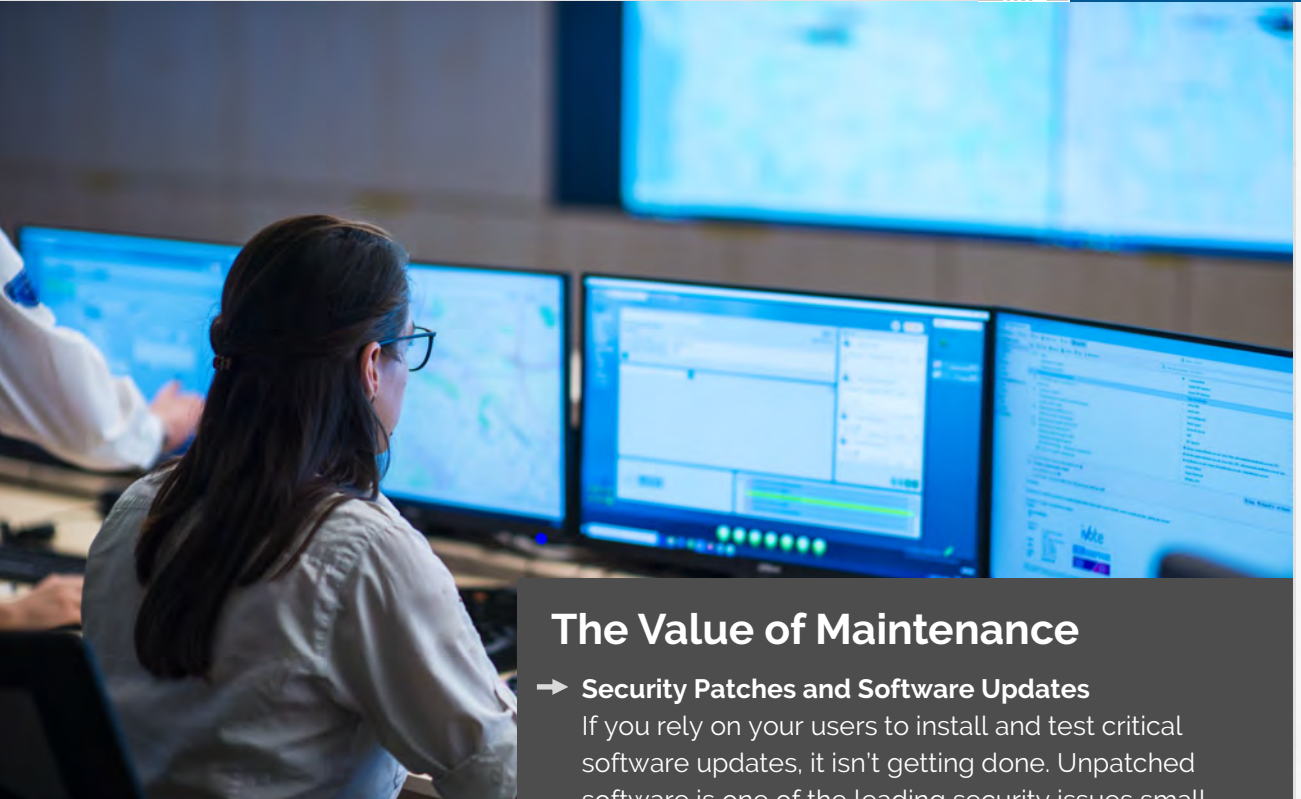P = (Number of users affected) x (% of productivity lost) x (Average salary per hour) x (Duration of downtime)

Revenue Loss Formula (R)
R = (Number of users affected) x (% of revenue loss) x (average profit per employee per hour) x (duration)

Overall Loss Due to Downtime
P + R = $$$

Cost:

24/7 Monitoring for:

Windows Desktops

Notebooks

Microsoft Servers

Antivirus

Network Printers

Firewalls

Backup Solutions

Mobile Devices

Websites

The Value of Maintenance

➡ **Security Patches and Software Updates**
If you rely on your users to install and test critical software updates, it isn't getting done. Unpatched software is one of the leading security issues small businesses face.

➡ **Fewer Support Calls, Fewer Surprises**
When your infrastructure is properly maintained, issues happen less frequently.

➡ **Make Better-Informed Decisions**
With a more stable IT environment and a team dedicated to catching early warning signs, you'll be able to make decisions regarding the growth and expansion of your business.

➡ **Enterprise-Level Resources**
Coleman Technologies utilizes tools and resources that aren't accessible to most small businesses. These tools grant faster resolutions, intensive visibility, and deeper insight of the topography of your network.

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Who's Managing Your Vendors?

Stop wasting time on long, drawn-out tech support calls with your hardware and software vendors.

You've got better things to do
It's nice when issues fall under the warranty or support agreements of your vendors, but there are hidden costs associated with getting the tech support you need.

The scenario often plays out like this:
You call your vendor. You sit on hold. You explain your issue. You are passed on to someone else. You explain your issue. You are asked if it's plugged in. Then you are passed to someone else who blames your firewall and advises you to reach out to a completely different vendor first.

We understand this nightmare.

Give yourself one throat to choke when things go wrong
Instead of juggling vendors and sitting on hold, businesses rely on Coleman Technologies to interface with hardware and software vendors. With carefully documented licensing and warranty information, we can serve as an intermediary and manage your vendors for you.

Equip your business with a virtual CIO
Your account manager at Coleman Technologies acts as your organization's CIO. With all of your technology tracked, your virtual CIO can help you make informed decisions on the future roadmap of your IT during regular business reviews.

Our Partners

We have relationships with many of the leading vendors in the IT industry. Here are a few of them:
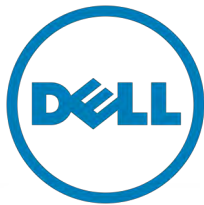
IT Evaluation: Your Most Challenging Vendors

List your top 3 most mission-critical vendors, a recent or recurring issue you have with them, and an estimate of how much time you or your team has invested in resolving it in the past 6 months.

Example:

Vendor: Invoicing/Billing Software
Issue: Users constantly getting disconnected. Have to call support.
Time spent: 20+ hours

Vendor: Time:

Issue:

Vendor: Time:

Issue:

Vendor: Time:

Issue:

Where Do Your End Users Get Support?

Empowering your staff to get all the tech support they need increases their productivity.

Employees either walk on eggshells...

For some organizations, employees might not want to bother management or decision-makers with computer issues that hinder productivity. Either they know every issue has a price tag for the company, or they simply feel it's difficult to get a resolution.

Or IT problems are an excuse

In other cases, employees might fold their arms and blame their issues on their PC. "I couldn't complete that project on time because my computer was slow." It's time to eliminate this frustrating situation once and for all.

The question is, how do you lay these issues to rest without expensive support bills?

Step 1) Get your network in check

Have your network audited, which may reveal some loose ends that need to be trimmed. Once your network is fully documented and optimized, you'll see fewer issues.

Step 2) Proactively maintain your IT

By monitoring the devices on the network and applying security patches and updates, you reduce the number of surprises.

Step 3) Back your data up (and test it!)

Also, ensure that your backup solution is easy to restore from (in other words, not tape). Your data should be backed up frequently and the process should be completely hands-free.

Step 4) Outsource your help desk

With the first three steps in place, your support needs will be greatly reduced, so outsourcing the support you need won't be as unpredictable.

Outsourcing your help desk to Coleman Technologies gives your end users the support they need for a flat rate.

Ask About Our Unlimited 24/7 Help Desk Support

Evaluate Your Current IT Support

Is your current computer support provider delivering the level of service your business deserves?

- ☐ Do they actively manage and maintain your IT or do they wait for it to break and for you to call them?

- ☐ Do you feel like you are suffering from regular downtime and computer issues?

- ☐ Does it feel like your computer guy makes the most money while you are suffering?

- ☐ Do they respond to emergencies in an hour or less?

- ☐ Do they document and understand your specific needs or do you have to explain things over and over again?

- ☐ Are they absolutely religious about backing up your data?

- ☐ Does it feel like you are paying them to learn their trade?

- ☐ Do they meet with you regularly to discuss and review their performance as well as your business plans and how it all ties in with IT?

- ☐ Can your staff submit a support ticket without worrying about an additional, unexpected bill?

- ☐ Do they work with you to actually *reduce* your unexpected IT costs?

Your organization deserves IT support that takes your business seriously. If your current support provider doesn't take the time to align your IT with your company's goals, you could be wasting your time and budget on technology that isn't helping you.

Learn how Coleman Technologies answers these questions:

http://bit.ly/2B3CllQ

It doesn't have to be a pipe dream to secure your small business's IT.

IT Security NEEDS to be Top of Mind

Are you protecting your data, your employees, and your reputation?

There is no shortage of security threats.
Just as technology innovation moves at a blinding pace, so do those trying to exploit it. While maintaining a business-class antivirus might keep out the traditional viruses we are all used to, it doesn't protect you against modern threats like spyware, rootkits, ransomware, and social engineering attacks.

Threats come from all angles.
Today, it's just as important to protect your assets from internal threats. Now that most end-users have smart phones, tablets, and personal cloud storage solutions, your company data can literally go anywhere without your control.

Small businesses like yours are being targeted.
Big enterprises aren't the only ones in the line of fire for hackers and other cyber attacks. In a 2017 study, 58% of all cyber attacks targeted small and mid-sized companies. This makes sense, because as larger enterprises employ entire teams to handle their security, smaller businesses are left wide open with inadequate consumer solutions.

Ask yourself, is your business protected from these threats?

- Ransomware threats like Cryptolocker and Cryptowall

- Aggressive DDoS attacks

- Phishing attacks and malicious email spam

- Data theft, either from malware or hackers gaining access through unsecured networks

- Data loss from lost or stolen mobile devices and laptops

- Inappropriate or time-wasting Internet content

Learn how to protect your company from all of these issues and more by reading this blog post!

http://bit.ly/2OHepOW

Relying on a Security Operations Center

Allow your team to focus on your operations, and let our team handle your security.

It isn't a secret that security is one of the most important considerations for any modern business. With the amount of data that the average organization possesses, there is going to be some value present for a cybercriminal. While your team will of course play a significant role in your cybersecurity, they can't be responsible for it all.

Between monitoring your network to proactively mitigate threats and the continuing education required for them to do so with any success, there wouldn't be enough time in the day for your employees to complete their other tasks.

This is why it is crucial to have a resource working behind the scenes to ensure that your team is able to do their work without exposing your business to threats.

We can be your business' SOC.
Our team of IT professionals knows the warning signs that signify the presence of a threat, and with the solutions at their disposal, they can spot these warning signs as they present themselves in your network. Of course, this is just the beginning. Our experienced team can also assist you in strategizing and implementing more secure measures and solutions to protect your operations, evaluating and optimizing it as time passes.

Partnering with us brings significant benefits
One of the key factors to your infrastructure's security is how consistently your infrastructure is monitored for threats. If someone is only keeping an eye out from 9-to-5, you're left open from 5:01 to 8:59 the next day.
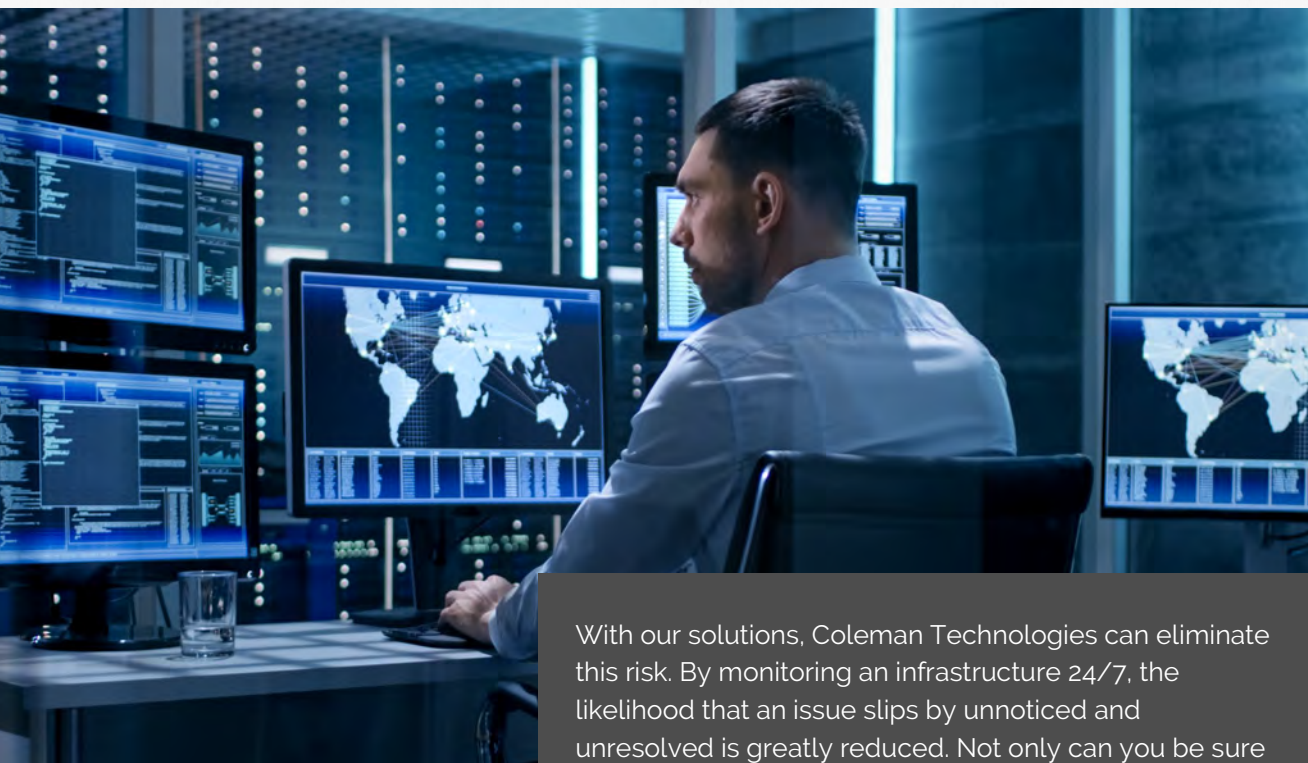
Benefits of Having a SOC

The key benefit of having a SOC (security operations center) is the improvement of security incident detection through continuous monitoring and analysis of data activity.

By analyzing this activity across an organization's networks, endpoints, servers, and databases around the clock, SOC teams are critical to ensure timely detection and response of security incidents.

With our solutions, Coleman Technologies can eliminate this risk. By monitoring an infrastructure 24/7, the likelihood that an issue slips by unnoticed and unresolved is greatly reduced. Not only can you be sure that someone will be keeping an eye out at all times, we'll also ensure that your various security solutions are maintained to be as effective as possible. Access to your resources will be managed and controlled, and any incidents will be addressed promptly and professionally.

As a result, your team can continue their productive work, with little worry about interruptions or other issues.

Is a Security Operations Center really necessary?
Cyberthreats come in all shapes and sizes, so the businesses they target are just as varied in their shapes and sizes. While your team needs to play a role in your security, leaving it all to them isn't a sustainable strategy. Relying on an SOC allows you to take that responsibility and divert it to an entire team committed to your business' operational well-being.

It Isn't About If, But When

According to a Duke University/CFO Magazine Global Business Outlook Survey, more than 80% of businesses have been successfully hacked.

It's not just the bigger companies anymore

We always hear about it when big companies like Sony, Target, BlueCross, and Home Depot are hacked. Events like this can cost millions of dollars and erode customer trust. The scary truth is that smaller businesses like yours are even more susceptible to online attacks.

It's not the size of the target

A major corporate enterprise has a massive budget for securing their IT and protecting their data. Smaller businesses don't, making them easier targets. However, good protection isn't achieved just by throwing money at the network, and good security isn't unobtainable for small businesses.

There are several points of penetration

The biggest mistake small businesses make is relying on one type of security. While having antivirus or a firewall will prevent some issues, your business is still wide open to other threats. For example, an older, unmanaged firewall might not protect your business from threats that come in through mobile devices or email spam.

The cost of a data breach

In a global study done by IBM and Ponemon Institute, it was discovered that **the average cost of a data breach involving sensitive information was $154 per record** in 2017. The recovery costs from a major data theft event includes productivity loss, cash outlay, and overhead as your business struggles to wade through the crisis.

> *Being compromised not only hurts your budget, but can degrade your reputation and the trust of your clients and prospects.*

Protecting your business

In order to safeguard your network and prevent data theft, your business needs to equip and manage a centrally controlled **firewall**. Your firewall needs to block incoming threats to ALL devices on your network. **Antivirus** needs to be deployed and up-to-date on all workstations. Your **Wi-Fi** needs to be secure. Threats come in through spam so a **spam filter** solution needs to be a part of the mix. However, without proper management of these devices, the entire system could still fail you.
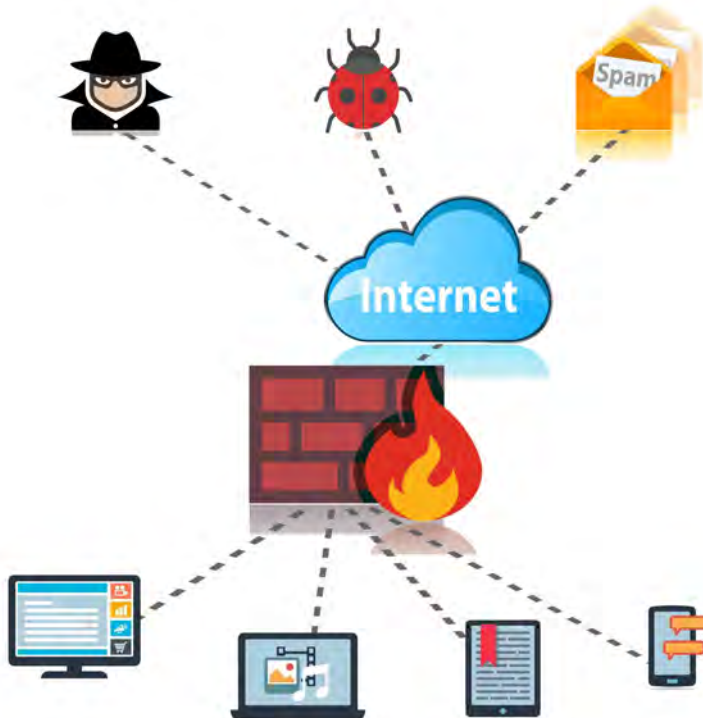
IT Evaluation: What Safeguards Are In Place?

Circle all that apply:

- Onsite / Offsite backup
- Managed Antivirus
- Anti-malware
- Spam protection
- WPA2 Wi-Fi

- Documented user policies
- Strong password policies
- 2-factor authentication
- Content filtering
- Mobile device/BYOD

- Secure VPN access
- Access control
- Compliance governance
- Network monitoring

Protecting Your Assets From Internal Threats

The range of your network is expanding, broadening the definition of security. Are your users unintentionally putting your business at risk?

Users are getting more mobile
From accessing company applications on laptops to carrying around your data on smartphones, your users are spreading the traditional perimeter of your IT footprint.

Users are getting more technically savvy
Today, many employees know their way around a computer, and if the company doesn't provide a needed solution (such as accessing files remotely), users will jury-rig their own system that decentralizes control over your own data.

Users can get into a lot of trouble
Not everybody is perfect. Businesses need to protect the network from harmful or inappropriate content, unapproved applications, and control access to time-wasting websites (like Facebook, Pinterest and YouTube).

It's time to take control back
Traditionally, most small businesses have relied on the hopes that every single employee is doing exactly what he or she should at all times and is mindful about the security of company data. Deploying consumer-grade fixes to try to control internal threats only exasperates the problem with no way to centralize the control or monitor how well it's working.

You deserve a solution designed for businesses that covers all of the variables and threats your organization faces.

IT Evaluation - Where's Your Data?

How much control do you have over your sensitive company data? While you may want users to access their email from their smartphone or edit documents while on the road, proper security policies need to be in place to prevent data loss and theft.

Circle the correct response.

_____	The number of users that work remotely all or some of the time.
YES / NO	All or some employees access email from a mobile device.
YES / NO	All or some employees use a laptop for work.
YES / NO	We have policies in place to wipe lost/stolen devices.
YES / NO	We have a controlled solution for accessing files remotely.
YES / NO	We enforce strong passwords for company devices and logins
YES / NO	We control and block inappropriate web content.

Remote Employees?

If you or your staff work from home or while traveling, it's critical that your security extends beyond your network.

Accessing company data on public Wi-Fi opens you up for intrusions and data theft, and storing data on the mobile device itself presents its own dangers.

Set up a VPN to quickly and securely access company data from anywhere without risk.

The Case for Content Filtering

Wasted Time at Work is a HUGE Problem

In a 2017 study, staffing firm OfficeTeam found the average employee wastes almost 100 minutes a day on non-work activity while on the clock. 26% of people waste two or more hours daily. For an office of 50 employees, this can add up to over $1000 of wasted payroll each day, without even accounting for lost revenue.

Content Filtering Can Return Productivity

Coleman Technologies can deploy an enterprise-level content filter that intelligently restricts inappropriate web content and can report on the productivity of your staff based on web browsing metrics at work. This can cover your technically savvy users as well, as all devices on the network would fall under the content filter.

It's the First Step in Protection

Many viruses, malware, and other threats come in through bad surfing habits. A content filter is the first line of defense.

Closing the Security Loop with End-Point Protection

Protecting the tools that your team uses directly no longer requires your constant attention.

When you really think about it, it can be disconcerting how many opportunities your team members have to potentially leave you vulnerable to threats. Today, there are more endpoints for your team to use, which equals more endpoints to potentially be breached.

As a result, defending your team and their technology is now more important than ever before.

Your team will be up against considerable threats

There are a lot of threats out there to trip up your team. Spam, ransomware, phishing, spoofing, and that's before we even consider the internal threats to your business that can interrupt your operations. There are plenty of those as well: a user with too much access, too many devices with excessive access, and overly complicated IT can all lead to problems in your business.

Coleman Technologies is here to help you and your team remain secure as they get the job done. Starting from the bottom up, we'll design a strategy that ensures your users have the security tools in place to

minimize the threats against your business and its technology. Using a variety of solutions, like multi-factor authentication and access controls, your endpoints can be protected against unauthorized usage, and regular patches and updates can help to truly reduce the number of threats you face when anti-malware software is in place.

Endpoint protections offer multiple layers of security

Obviously, endpoint protections help to protect your employees' technology solutions from threats. However, it is important to recognize that this involves much more that one would think: from the prevention of attacks that would harm your business, to identifying an attack's motives, to mitigating the full effects of an attack.

We will assist your business in deploying the security solutions you need to keep your users safe, while also helping you to educate them in the best practices they need to follow.

As a result of this, your business will be able to successfully avoid threats and maintain a higher level of productivity.

The IT Security Fundamentals

We've mentioned the major risks, here are the solutions businesses need to protect their network and data.

Firewall and Content Filter
A managed firewall will block many threats from entering your network and a content filter will control access to malicious, inappropriate, and time-wasting content.

Spam Filter
Some of the worst threats still come in through junk mail. A pre-inbox spam filter seals up this entry point and eliminates the time wasted dealing with spam.

Centrally Managed Antivirus
Not all antivirus solutions are created equal. To do any good for your business, it needs to be centrally deployed and managed, kept updated, and ran regularly.

Secure Wi-Fi
Consumer-grade security on wireless networks is easy to bypass. Your Wi-Fi should have the latest encryption methods and your router needs to be kept up-to-date.

Virtual Private Network (VPN)
If you or your staff access the network remotely, utilizing a VPN will eliminate most of the dangers that come with sending and receiving data on a public Wi-Fi network, like those found at coffee shops, trade shows, and hotels.

Documented/Managed User Policies
Not all users need access to every file and directory. You can control access with properly managed policies, as well as enforce strong passwords and file centralization.

Mobile Device Management
By dishing out policies for smartphones and tablets, you can revoke email access or wipe the device if it is lost, stolen, or the employee leaves the company.

A Solid Data Backup Solution
Backing up your data is one of the most critical components of your IT. We're going to cover this in more detail in the next section.

The Unified Threat Management Appliance

Five security solutions, one device to manage.

Eliminate the overhead of managing multiple security solutions with an all-In-one solution from Coleman Technologies.

The Unified Threat Management (UTM) appliance is a single, solid solution for small and medium-sized businesses that functions as a symphony of security solutions in a centrally managed device.

Where consumer-based products fall short of the power and control that businesses require to protect their network and data, the UTM presents enterprise-level protection without the need of purchasing, managing and maintaining multiple network security devices.

To learn more about Coleman Technologies' Unified Threat Management appliance, give us a call today at 604-513-9428 or visit http://bit.ly/2DjCB83.

Features

- Enterprise-class firewall
- Intelligent content filtering
- Antivirus and threat blockers
- Email spam protection
- Secure Wi-Fi access points
- Secure VPN for remote network access
- Centrally managed and kept up-to-date

Benefits

- Enterprise-level protection delivered to small and medium-sized businesses.
- Protects from external threats like spam, viruses, ransomware, and hackers.
- Protects from internal threats like inappropriate web content and threats from user mobile devices.
- Fully managed and supported by Coleman Technologies.

Is Your Business Prepared for a Disaster?

Are you prepared to quickly restore critical functions, handle payroll, and continue to earn revenue during the biggest disruptions?

Disaster preparedness is the big, clumsy elephant in the room.

Nobody likes to talk about it or think it could happen to them. The problem is that a disaster can come in many forms. The big ones include events like fires, floods, earthquakes, tornadoes, and other major natural disasters. While these events can be devastating, businesses need to prepare for the smaller, sneakier disruptions as well.

A power surge that puts your server out of commission, or malware (like Cryptolocker) seizing control over your files, or your line-of-business application database getting corrupted can all cost your company time, money, and even revenue.

And then there's the human element; a new employee could accidentally save over an important file, or a key executive could leave the company. No matter what interrupts business as usual, a solid **business continuity plan** can keep your head above water as long as you are prepared.

How quickly can your organization recover?

When your business faces a major disruption, it's critical to be able to bounce back quickly. Long-term downtime can lead to a devastating drop in reputation, sales, revenue, and employee engagement.

You need to ask yourself:

- How quickly can you gain access to your data?

- How quickly can you restore the functionality of your IT infrastructure?

- How quickly can your employees get back to work?

- How will you handle payroll?

- How will you inform your employees?

- How will you inform your customers?

At Coleman Technologies, we had to answer these questions for our own business. We took everything we learned and put it into this free worksheet.

Download our FREE Business Continuity Plan Cheat Sheet!

http://bit.ly/2PTOw2Z

Are You Confident in Your Backup?

A key element in your business continuity plan is a solid data backup solution. Will you be able to depend on yours?

Your data is irreplaceable
Imagine not having your client and prospect lists anymore, or losing all of your email. What about project files, document templates, and other data that your organization has produced over the years?

In an instant, all of your data could be lost or corrupted due to a hardware failure, malware, or user error.

Data loss has serious consequences
According to a recent study, over 60% of small businesses that suffer from a major data loss event file for bankruptcy within six months. Considering that in a two year timeframe 49% of SMBs reported data loss, not having a backup is a huge gamble.

It's not just about investing in backup
Not all backup solutions are created equal. Older backup devices typically utilize tape to store your data. Tape is slow and labor intensive to restore, and prone to failures. This makes it expensive to manage, difficult to test, and leads to slow recovery times. Tape also requires daily upkeep; someone needs to manually swap out the tape each day.

Will it be there when you need it?
Tape backup can take hours or days to restore, and if your business suffers from a major disaster that destroys your backup there won't be anything to restore from. If your backup isn't tested regularly, it's possible that your files won't be recoverable.

IT Evaluation - Is Your Data Backed Up?

Describe the backup solution your business has in place.

Circle your response.

What type of backup solution do you primarily use?
TAPE BACKUP / NAS DEVICE / USB HARD DRIVE / NO BACKUP / UNSURE

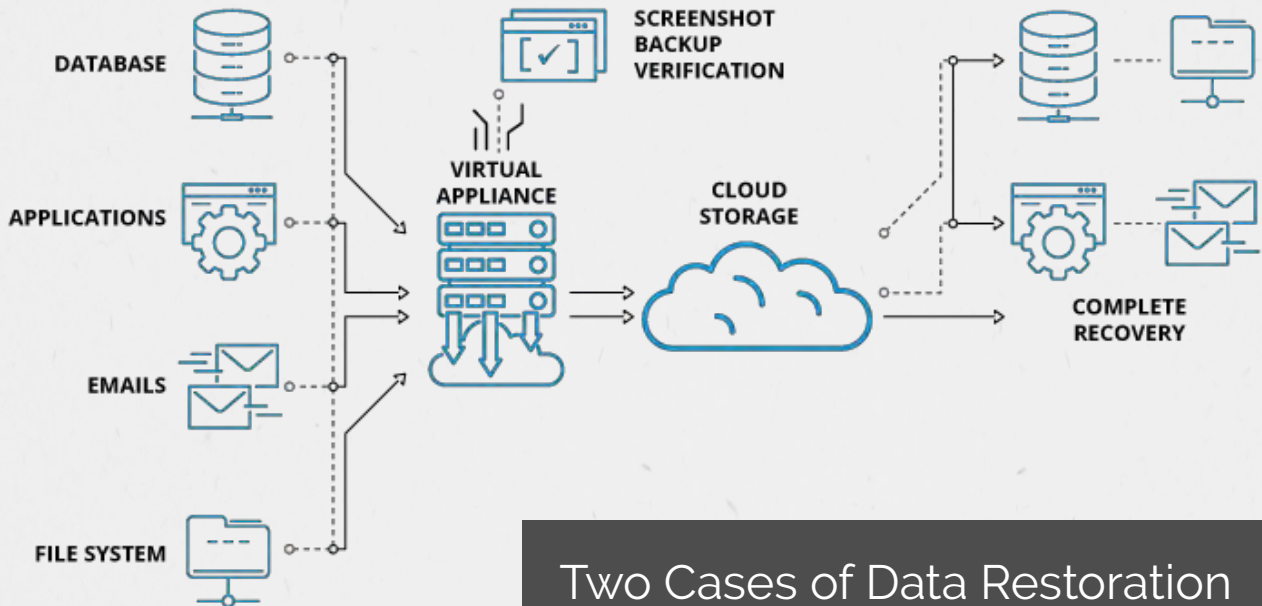YES / NO   Have you tested your backup in the last 30 days?

YES / NO   Are email inboxes backed up?

YES / NO   Does your backup solution include secure, off-site storage?

YES / NO   Are backups done automatically throughout the day?

YES / NO   Do you backup all of your data, as opposed to some of it?

YES / NO   Could you get by with JUST the data recovered from a backup?

DATABASE • APPLICATIONS • EMAILS • FILE SYSTEM → VIRTUAL APPLIANCE → SCREENSHOT BACKUP VERIFICATION → CLOUD STORAGE → COMPLETE RECOVERY

Offsite Backup

For your backup solution to fit into your **business continuity plan**, you need to be able to store and quickly retrieve a recent, tested archive of all of your data from an offsite location.

The best offsite solutions let you either virtualize from an offsite data center or ship a virtualized server overnight, letting you get rapid access to your data in the event of a major disaster.

Two Cases of Data Restoration

In this scenario, a component on your server malfunctioned and your data is inaccessible:

Restoring from Tape

As mentioned, restoring from a tape is a slow, laborious process. Presuming that your data isn't corrupt, besides the slow read/write times that could take hours (tape isn't practical for finding and restoring single files either), a technician will still need to repair the server, install the operating system, install drivers, initialize the RAID array, install software, update software, and THEN restore your data. This process can take several days.

Restoring from a BDR

A BDR from Coleman Technologies doesn't require your server to be repaired first. The BDR can be spun up as a temporary virtual machine and take on the role of the downed server. This brings you back online in minutes rather than days.

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Selecting the Perfect Backup Solution

When looking for a data backup solution that falls into your business continuity plan, be sure to check for these capabilities.

Your backup should be foolproof
Your backups should be automated and frequent. We recommend running backups throughout the day. It shouldn't matter if files are in use or users are logged in - they should be backed up.

If a backup isn't tested, it may as well not exist
The integrity of your backup needs to be tested frequently. Your backup solution needs to be easy to test. At Coleman Technologies, we're obsessed with making sure backups are working, and tested regularly.

Image-based backups, not file backups
This is a bit technical, but an image-based backup is where the drive is copied exactly, right down to the 1's and 0's. There are a lot of benefits to this, but the most important is that it significantly decreases restoration times. Most consumer-grade and many professional-grade backup solutions don't touch on this.

Secure offsite storage
To comply with your business continuity plan, an exact copy of your backup needs to be stored offsite. We aren't talking about trying to remember to take a tape home every night. It needs to be automatic. It also needs to be secure (which also rules out tape). Before sending your data to a data center for storage, your backup solution needs to encrypt the data so it can't be intercepted by hackers.

Rapid restore times
Your backup solution should be fast and easy to restore from, whether it's a single file or all of your data. It should also be able to virtualize into a temporary server in case your main server goes down, preventing an extended outage while getting your staff back to work.

Sleep Better at Night Knowing Your Data Is Protected!

BDR: Backup and Disaster Recovery

The only data backup solution that perfectly fits into your organization's business continuity plan.

The Coleman Technologies Backup and Disaster Recovery (BDR) solution is designed to fulfill all of the requirements involving digital data recovery in your organization's **business continuity plan**.

A single BDR can backup multiple servers, and in the event of a server malfunction, can virtualize and act as that server while still backing up your data. The BDR includes secure offsite storage at our state-of-the-art data center, meaning your data is safe and accessible even in the event of a major disaster, like a flood, fire, or theft.

The BDR is the most comprehensive, powerful backup solution available for businesses, and the only way to confidently safeguard your company's data.

To learn more about Coleman Technologies' Backup and Disaster Recovery service, give us a call today at 604-513-9428 or visit http://bit.ly/2DjAuks

Features

- Backs up your data every 15 minutes

- Backs up multiple servers at once

- Restores previous versions of files/folders

- Image-based backup

- Secure, encrypted offsite data storage

- Fast and comprehensive file restoration

- Can virtualize an offline server

Benefits

- The only backup solution that fits into your business continuity plan

- Data is stored locally and securely copied to a secure data center at night

- No more waiting hours or days to get your data after a server malfunction

- Fully managed and supported by Coleman Technologies.

What is the Cloud?

Cloud computing is a major innovation, improving the way businesses utilize and budget for their IT infrastructure.

So what is the cloud, really?

The cloud is a broad term for a service that utilizes cloud computing technology. This is typically the act of using powerful, high-end equipment to handle the workload that would normally be done by many individual servers. This isn't a new concept, but over the past several years major innovations and business-centric technologies have opened up a lot of cloud-based opportunities for SMBs.

Technology infrastructure as a service

Businesses can utilize the cloud to reduce their capital technology expenses and management costs. It also allows small businesses access to capabilities normally reserved for larger enterprises without the upfront costs.

Because the infrastructure is handled by the service provider/data center, the costs for managing and maintaining the equipment is much lower and displaced between all of their customers. Cloud infrastructure is scalable based on your needs, as opposed to needing to upgrade your entire network whenever you outgrow it.

The many types of cloud services

Like all technologies, there are different options that might not fit a business. We'll cover some of the risks, as well as what to look for when choosing a cloud solution.

You can break cloud services up into four different categories:

- Public Cloud

- Private Cloud

- Onsite Cloud

- Hybrid Cloud

On top of that, there are many other considerations that go into choosing a cloud solution that's right for your business.

Check out the following pages for more information about the cloud and what it can do for your business, and be sure to download the free guide we've built below.

FREE DOWNLOAD
The Five Benefits of Moving to the Cloud

http://bit.ly/2qHjSf7

We've Seen This Paradigm Shift Before

The cloud isn't a temporary trend or frivolous expense. History proves that cloud computing is here to stay.

Take a look at the late 1890s

Long before businesses were worried about computers and their IT infrastructure, they had to produce their own electricity.

Most factories required onsite generators that were expensive, produced a lot of pollution, and were expensive to maintain. If the generator failed, the business would lose time, money, and productivity (the same way yours would if your server went down).

Managed, outsourced electricity

Chicago, 1900, a turbine power station was established by the Edison Power Company. It was able to produce energy for factories that was more reliable and produced less pollution. It required fewer resources per capita and therefore, was much cheaper than using and maintaining onsite generators.

It caught on

In just 20 years, most businesses realized that supporting their own onsite generators just didn't make sense. It was so much more efficient to plug in and utilize the electricity produced by power plants that businesses completely shifted to this new model.

Today, most SMBs wouldn't even dream of generating their electricity in-house, and someday in the future, it's likely that SMBs won't consider the expense of running their entire IT infrastructure in-house.

Many businesses are already reaping the benefits the cloud has to offer.

IT Evaluation - What Can You Eliminate?

The list to the right has some of the most common IT solutions that can be hosted in the cloud.

For each solution you have, write down the initial expense and an estimation of how much you've spent keeping it running and maintained.

ONSITE SOLUTION	INITIAL COST	YEARLY COST
File/Data Storage	_____	_____
Email Server	_____	_____
Phone System	_____	_____
Application Servers	_____	_____
Microsoft Office	_____	_____
Desktop Workstations	_____	_____
TOTAL:	_____	_____

More for Less

One of our passions is giving smaller businesses the same technological benefits of larger enterprises. The cloud is the next evolutionary step that turns the tables.

Less Management

Because the majority of your mission-critical hardware is in a secure, managed environment, it's more cost effective to maintain. The expense of rolling a truck to go on site to diagnose an issue is eliminated.

Efficient Virtualized Environments

In many cases, you don't need an entire dedicated server of your own to get a particular job done. By virtualizing (the act of running multiple server instances on a single device) we can better utilize computing resources and pass on the savings.

Modern Enterprise Features

From streamlined sharing and collaboration, to mobile device access, the cloud can expand your capabilities.

Speaking of Electricity

Eliminating onsite hardware doesn't just free up the up-front hardware costs and the ongoing management costs, it also reduces your energy bills.

According to Gartner, the average server can rack up $400 a year in energy costs, and that's before you factor in the cost of cooling your server room.

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Which Cloud Model is Right for You?

With all of the benefits that the cloud brings to businesses, there are also risks you need to be aware of.

Consumer-Based As-A-Service Models
Cloud solutions geared towards home users **should not be considered for your business**. For personal use, these services are great, but it puts the security in the hands of the individual user instead of the business. Most of these solutions also lack a central area to effectively manage your users with the policies your business should have.

Many business applications are starting to offer cloud-hosted versions. Solutions like this need to be vetted out and reviewed on a case-by-case basis.

The Public Cloud
This model is based on using **shared physical hardware**, hosted at a data center. Public cloud is the most affordable because the cloud provider can have multiple customers on a single piece of hardware without sacrificing performance. This divides the cost of the hardware and maintenance between multiple customers in the same way that carpooling reduces traffic and saves on fuel.

Besides being the **most cost-effective**, a public cloud solution is scalable based on your needs. However, if your business has very specific requirements, such as data security or regulations, the public cloud might fall short.

The Private Cloud
Unlike the public cloud, this model doesn't divvy up the hardware to multiple customers. Instead, you are set up on your own **dedicated server** within the managed data center. You get the similar agility and efficiency, as well as greater levels of control and security.

The private cloud model can be more customizable for your specific needs, with a cost that's still more effective than keeping your infrastructure in-house.

The Hybrid Cloud
By leveraging the scalability of the public cloud for **non-sensitive solutions** and the private cloud for **mission critical operations**, this model gives you the best capabilities of both models without sacrifice.

The most important factor here is that the hybrid model is still more cost-effective in the long term than purchasing and managing your own hardware at your location.

Have Cloud Questions? Call us at 604-513-9428!

7 Essential Cloud Questions To Ask

Before you trust hosting your data or infrastructure in the cloud, you need to have clear answers to these questions.

☐ **Is it a public environment or a private cloud?** Is your hosted infrastructure on a shared environment or is it dedicated? Can they offer hybrid models?

☐ **Are there redundancies in place for business continuity and availability?** Is the data backed up? Are there redundant Internet connections and backup generators?

☐ **Will this cloud solution meet your industry's compliance and security standards?** Does the provider understand your specific security needs?

☐ **Will this enable you to effectively manage operational, security, and compliance risks?** Ensure that the cloud solution doesn't complicate or increase risk.

☐ **How can you control who can access files and applications securely?** It should be easy to manage and revoke control.

☐ **What are the Service-Level Agreements (SLAs)?** Is there a minimum acceptable level of performance and support the provider lives by?

☐ **Is the solution configurable to meet your needs?** Your business may require specific hardware or features that are outside the box. These need to be laid out on the table early on.

☐ **Is the contract flexible?** Are there termination fees or hidden commitments? Is there long-term price protection?

While the cloud can offer a lot of benefits, including lower costs and better capabilities, migrating to the cloud is not a decision to be made casually. We highly recommend you consult a trusted IT advisor before hosting some or all of your business in the cloud.

Coleman Technologies would be happy to offer a free consultation to discuss your specific needs, and help you determine a cloud solution that best fits your organization.

How the Cloud Ushers in Agility

The nature of cloud computing enables small businesses to achieve technology capabilities normally reserved for large enterprises.

Migrating some or all of your IT infrastructure to the cloud does more than just free up office space and reduce technology expenses. SMBs can now access better solutions and profit-growing advantages.

Cloud Hosted Desktop Environments
Imagine having secure access to all of your company files, applications, bookmarks, and computer settings no matter where you are or what device you are on.

Our hosted desktop solution delivers your Windows desktop on any desktop, laptop, tablet, or internet kiosk. You and your employees have full access while on the road, at home, or while networking. Most importantly, your access is always secure and everything is centrally managed in your cloud environment.

When hosting desktop environments on the cloud, you can eliminate the need for expensive workstations, replacing them with low-end systems or inexpensive thin clients.

Hosted Voice Over IP (VoIP)
Traditional phone systems require expensive hardware to manage and maintain. Upgrading or expanding is a massive undertaking, yet it's one of the most mission-critical pieces in your IT infrastructure. Our hosted VoIP solutions are scalable without making you jump through hoops or rethink your entire phone system every time you hire additional staff.

Hosted VoIP gives you all of the features of a traditional enterprise phone system, like call forwarding, monitoring, conferencing, hold/parking, and recording, but with the added benefit of anywhere access with your smartphone, laptop, or VoIP handset.

Eliminate overhead and expensive hardware upgrade costs.

Getting Started with the Cloud

For a successful transition to the cloud, it's critical to carefully evaluate your IT requirements and nuances.

Although the cloud brings simplicity to your business, migrating your IT infrastructure to a cloud environment can be risky if it isn't planned out.

A lot goes into a successful transition between onsite to hosted IT. You'll need to make sure you have the proper bandwidth and networking capabilities, security compliances, and that the applications you use every day can be spun up in the cloud.

Where some cloud hosting solutions encourage you to dive right in, Coleman Technologies takes a much more methodical approach by analyzing your specific requirements and mapping out your migration.

Let's talk about what the cloud can do for your business, and get started with a free consultation. Give us a call to learn more. 604-513-9428

What We Look For:

- Onsite servers that can be migrated

- Server consolidation/virtualization opportunities

- Special user access permissions

- Compliances and regulations

- File/Document management requirements

- Business critical software application compatibility

Cloud Benefits

- Eliminate some or all of your expensive IT infrastructure

- Reduce the monthly cost of managing and maintaining your IT

- Allow for seamless collaboration and file management from any device

- Utilize enterprise-level solutions, security, and best practices

Business Technology Alignment

At the end of the day, it's not about the specs in your workstations or the features on your network routers.

You shouldn't have to worry about the frivolous details of technology.
All that should matter to you and your employees is that it works, right? At Coleman Technologies, we feel very strongly about this.

In the modern office, your IT isn't just the computers and cables and different pieces of equipment. In the grand scheme of things, the hardware is the easy part. What really plays a big role in the stability of your IT is the practices behind it.

IT best practices
Fixing computers, removing viruses, and keeping software up-to-date are all important tasks that a technician performs, but what separates a mere computer tech with a business-centric IT expert is a deeper understanding of how businesses work.

For example, setting up a new wireless router can be as easy as plugging it in and following some instructions. Anybody with a little confidence could do it. Setting up that router so it doesn't cause conflicts on your network, or allow guests to infiltrate your data is a different story. Making sure your technology is aligned to your business requires more than technical know-how.

Some best practices we live by:

- Data needs to be properly backed up before taking the slightest risk.

- An untested backup may as well not be a backup at all

- If a workstation or device is touched, run through standard maintenance procedures

- Make sure all solutions fit in with your organization's security compliances

- Treat downtime as an emergency

- Document everything

- And many more

A Focus on Your IT Alignment
Beyond the topics already discussed in this playbook, the next few pages cover a few other areas that business owners and executives need to be aware of in order to sustain productivity and profitability for your business.

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Software Asset/License Management

It is absolutely crucial for businesses to NEVER let software installations get out of control.

Are you compliant?

Every piece of software your organization purchases and installs comes with a software license. If your company isn't in compliance with these legal agreements, it can come back to bite you, hard.

Negligence can lead to heavy fines

There are organizations, such as the Business Software Alliance (BSA) that issue audits to businesses they suspect to be misusing software licenses (like installing more instances of Microsoft Office than your license allows). To make matters worse, the BSA even offers a $1 million reward to whistle-blowers who **report their own organization.**

Failing these audits can result in out-of-proportion fines and in some cases, jail time.

Let us restate that - your trusted computer guy, or even a good-intentioned employee can get your business in serious legal trouble.

In order to protect your business from an audit and ensure that you are in compliance, the following best practices should be in place.

Document everything

It's crucial to track your software licenses, including how many licenses you have, how it's being used, who uses it, and where the software is deployed.

Know the rules

Some software licenses allow users to install a second copy on another device, such as a laptop or home computer. This does NOT mean you can split the license up amongst two users. Other licenses might be measured based on processor counts or the extent of usage.

Run your own audits

Having your entire network audited on a regular basis will insure you have no software license conflicts, and when combined with thorough documentation, you can properly track your software throughout its lifecycle on your network.

We encourage you to reach out to Coleman Technologies to talk about our deep-dive network audit, and if you aren't in compliance, we can work with you to get there.

Call Today for a FREE Network Audit. 604-513-9428

Bring Your Own Device (BYOD) Policy

More and more users have their own smartphones, tablets, and laptops that they use for work.

Your business still needs to control its assets

Often with good intentions, employees will set up their company email on their mobile devices, or take copies of files on business trips. While their enthusiasm is commendable, they are actually putting your business at risk for data loss. Fortunately there are policies you can put into place that protect your data while letting your staff conduct business with their mobile devices.

- Enforce security policies such as passcodes and data encryption.

- Be mindful of any specific security compliances and regulations required for your industry.

- Go easy on banning apps, but do ban the truly harmful ones. It's not about controlling what apps the user has, but where your data is going.

- Establish a plan for employee departure, including remote wiping of company data.

- The same goes for lost devices and theft, wipe the data off of the device remotely before it gets into the wrong hands.

- Utilize a cloud hosted desktop or VPN and encapsulate all data there.

- Provide education on security practices, such as only connecting to trusted wireless networks and application permission agreements.

- Document and review your BYOD policy with all employees.

- Review and update your BYOD policies regularly as technology changes.

Coleman Technologies can assist you in deploying a BYOD policy that fits your business, all the way from the strategic planning and development of your BYOD guidelines to configuring your IT infrastructure to support it.

Other Business IT Resources

Coleman Technologies is dedicated to providing educational IT resources for Langley, Surrey, White Rock, Abbotsford and other Lower Mainland areas small and medium businesses.

Follow our blog
Read about IT tips, best practices, and new developments in business technology.
colemantechnologies.com/blog

Sign up for our Mailing List
colemantechnologies.com/signup

Follow Coleman Technologies on social media
Find us on Twitter.
twitter.com/colemanbiz

Download our free whitepaper: 10 Benefits of Managed IT
Evaluate the differences between traditional break-fix IT vs proactive managed IT.
colemantechnologies.com/10-benefits

Get a FREE Network Audit
A deep dive evaluation of the strengths and weaknesses of your entire network.
colemantechnologies.com/network-audit

IT Evaluation - One on One

Ready to find out what Coleman Technologies can do for your business?

Call us today at 604-513-9428 to set up a friendly one-on-one call with one of our experienced account managers to evaluate your IT needs.

We don't believe in pushy sales people or gimmicky tricks, we just want to help local businesses grow and profit from taking a proactive approach to your IT.

Call Today To Get Started. 604-513-9428

Notes:

"The Coleman Technologies team is readily available, and always there for us. With over 3600 members in our local, we know we can rely on the fact that Darren and his team are taking great care of us. The level of service and how quickly they provide it is by far superior to any other company we have worked with."

Ryan Groundwater
President, CUPE 728

"Coleman Technologies offers quick, efficient and continued reliable service. They provide personalized care, and help our company prepare for ongoing technology changes that can affect our business. We have been a long term satisfied customer. If in doubt, call me!"

Colin Dreyer
Founding Director of Verico Financial Group, Inc

"Coleman Technologies response time is VERY good, and we greatly appreciate that. I love not having to deal with the frustration of trying to become IT experts, or take time away from doing what we do best to sort out IT issues. Their response time is VERY good, and we greatly appreciate that. They also explain things so we can understand and give what we feel is honest advice on how best to approach our challenges. Feeling that we can trust our IT advisor is a big deal. Darren and his team are the ones you want to keep your IT issues stress free so you can go on with business."

Delia Schatz
Frontline Real Estate Services Ltd.

Business continuity and data recovery are extremely important according to Bryan: "Our information is sensitive and confidential, so we require the best in these related services, and have found that with Coleman Technologies. They have also networked all of our personal computers with those in the office. We recommend Coleman Technologies to others, and they too have been very satisfied with their services. Coleman Technologies is first class!'"

Bryan Locke, Partner
Wolf and Company Charted Accountants

About Coleman Technologies

Coleman Technologies specializes in technology implementation and management for small and medium-sized businesses since 1999. Our experience and infrastructure keep our prices affordable and our clients up and running.

Our Mission

Our Mission is to be your trusted IT advisor. Coleman Technologies creates, manages, and delivers solutions based on technology that will provide our clients with the highest possible return on their investment.

We provide value, continued personalized service, and attention to your business needs. We strive to sustain growth and foster healthy relationships with and for our clients.

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