# **DTS** DanTech Services

**Computers under control!**<sup>™</sup>

## **Technology Times July 2023 Issue**

"With over 20 years of experience providing remote support to clients that rely on technology, I know what it takes to deliver business continuity. Add to that another 20 years of support in the service industry you'll not find another company that



takes customer service to heart as I do. Find out for your business what a difference it makes. "

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## 7 Common Small Businesses Problems With Technology

Can a business thrive without technology today? No. Do all businesses have teams that are ready to solve all problems with technology? That's where the issues arise. All brands have expanded needs to meet tech goals, but their teams are not up for the challenge. We'll list the common tech problems small businesses face, along with potential solutions. When you understand these issues, you'll be able to prevent them from happening.

#### 1. An Unstable Internet Connection

Connection failure is the worst thing that could happen during an important business call. The issue usually comes from the provider's side, but you need to know how to test it and make it work. The first thing you need to learn is how to ping on Mac computers. It's a simple process that shows the problem in your connection.

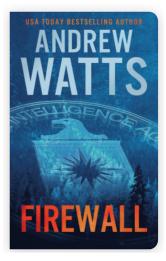
You'll find the Ping tab in Network Utility. Enter the web address that you're trying to access, and you'll get a report that shows the quality of your connection. If it's above 50 ms, you should contact your provider to solve the issue.

#### 2. Data Protection Issues

Small business owners often don't bother about keeping confidential business information safe. They keep all personal data, payment information, and sensitive files on their computer, without additional security measures. Data breaches do happen, and they are among the most serious problems small businesses face. To prevent this from happening, you need an extra layer of security on your computer. Pay for a good antivirus program! You can talk to an IT expert, so you'll learn how to keep data safe. It's best to store sensitive data on an external hard drive, which you'll keep in a well-protected place that only you can access.



#### **Book Club**



#### A Technological AI Thriller

What could be better that the spy novel? Al technological spy novel! Want to know what Al could bring? - <u>Read this book!</u>

When a scientist at the world's top AI company is murdered, a covert CIA operative must recruit a former love interest to help uncover the killer.

Nations and corporations alike are racing to dominate the world's artificial intelligence industry...by whatever means necessary.

With its genius CEO and breakthrough technology, the Silicon Valley-based Pax Al Corporation is one of the hottest companies in the sector.

But when one of their top scientists is murdered at a prestigious tech conference, company executives and foreign spies are all on the suspect list.

In the aftermath of the killing, CIA officer Colt McShane has been assigned to a joint counterintelligence unit based in San Francisco.

As the struggle for AI dominance grows ever more competitive, the factions vying for power are becoming desperate to achieve victory.

In the fight for absolute power, there can be only one winner. Each side has their own spies and secrets.

# How can you implement machine learning in your small business?

#### Step 1: Determine what business problems you need to solve

As a small business owner, you're already running low on resources. While you may have 15 tasks that need to be automated—it's simply not feasible. Focus on the most pressing challenges at the moment and account for factors like:

- Cost of development
- Development time
- Resources required
- Data required (internal/external)
- Short & long-term gains (ROI)

Run through your current operations with a fine tooth comb and identify which process could benefit from integrating an ML model. Once you have a list of processes, consult a machine learning expert.

#### Step 2: Consult a machine learning expert to create a well-defined strategy

Unless you have the in-house capabilities to create a tool, we recommend hiring an expert to get the job done. These experts will help align the internal team's objectives with the bestsuited technology. Plus, they'll create a development strategy from scratch while keeping your goals and current resources in mind.

Pro tip: You can hire a <u>machine learning expert</u> from Fiverr's database of freelancers who specialize in this process. You can narrow down the ideal person using our filters like:

- Service options
- Seller details
- Budget
- Delivery time
- Pro Verified

They'll understand what your needs are, evaluate the ROI of the project and give you an estimate of which project will bring you the most value. It's crucial as it ensures you do not waste time and effort. Ryan Nash, Chief Operating Officer at <u>Gust</u>, says, "Don't do ML for the sake of doing ML. Follow Google's advice and use <u>heuristics</u> as a first step before you implement ML. This will let you focus on the product and user experience, which are the most important parts of your business." It's also essential to ensure that there's expertise from both ends—your own business—and the technical expert. It ensures that the final product is in line with your needs and that the project always remains on track.

#### Step 3: Understand its capabilities and have the right expectations

Machine learning can help you solve some problems—but not all. You need to understand what it can and cannot do. A tool is meant to push your business forward—not the other way around. There are several roadblocks you can expect in the process. Here's what a few small business owners have to say:

 "Aside from the technical challenge of building and implementing a new system, one of the largest problems we've faced is building trust with our team and users. For our team, this looks like completing extensive testing and building a large enough dataset to support the system's accuracy. For our customers, this looks like establishing transparency and educating users about the technology so they can begin to trust it."
Carm Huntress, CEO, Credo.

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#### Shiny New Gadget Of The Month:



#### **Ultion Smart Lock**

Got a house stacked with cool gadgets? Great, but how secure is it - specifically, the door? With that in mind, the gateway to your veritable Aladdin's Cave of goodies should not only be safe, but also smart.

If you're into 'lock stats', you'll be pleased to hear the Ultion SMART lock features an 11 pin internal system and a potential 294,970 key combinations, as well as a lockdown mode if it gets attacked.

For the non lock-aficionados out there, Ultion has stuck a \$1,300 guarantee on it, which sounds like they're pretty confident of its security credentials.

If turning a key is too much for you, the motorised lock will turn with but a gentle tap, and for the seriously lazy you can ask Apple or Amazon's voice assistants Siri and Alexa to do it for you, hands-free. Similarly, it can automatically lock or unlock when a trusted person is near using GPS and Bluetooth.

The whole thing is battery operated (and should last well over a year) and doesn't require any cables or drill to install, just a screwdriver. And on top of all that, as far as door locks go, it looks rather fetching too.



Got IT Problem? - Click Here!

### Newest version of MS Edge is here

Microsoft Edge is the default browser for Windows 11, replacing Internet Explorer (IE), Microsoft's first web browser that provided user-friendly access to the internet in 1995. Microsoft IE was the most widely used browser by 1999, but its popularity brought many challenges too. As the public was becoming familiar with use of the internet, enthusiastic shoppers started saving their personal information, including home addresses and credit card details, to retail sites like Amazon and eBay, often accessed through IE. This made IE a prime target for hackers and cybercriminals.

Vulnerabilities in the software existed. They could be fixed by patches and Service Packs, but Microsoft IE's reputation was still declining, and experts were recommending that users turn to other web browsers.

Incremental improvements were being made to IE, but they just weren't matching the general improvements to the internet at large, so MS Internet Explorer was officially retired in June 2022, and Microsoft decided to start fresh.



Enter Microsoft Edge: a faster, more secure web browser, suitably designed for today's internet. It offers the high-

est rated protection against phishing and malware attacks on Windows 10 and Windows 11.

MS Edge has been built from scratch, using the Chromium open-source codebase, on which the Google Chrome web browser is designed. Using the Chromium code helps the browser's underlying performance, while reducing resource use and enhancing security.

There are also great features of Microsoft Edge that serve to optimize the users' experience.

One handy feature Microsoft Edge offers is Immersive Reader mode, which eliminates ads, graphics and other clutter, to give you just what's essential to read. To enter this mode, click the open book icon in the search bar or hit F9. Through this mode, you can also have the website text read to you audibly.

Microsoft Edge allows users to set Profile that contain their own preferences, browsing history, favorites, and settings. This can be useful if you share your computer with others in your household or if you use it for two or more different purposes, such as having stricter privacy settings while using your computer for online shopping or work purposes than for personal use.

Edge is equipped with a powerful AI-driven search option, Bing Chat. Just click the Bing logo on the browser's right-side bar, and enter your question into the search bar. It can answer most any question you have by rapidly analyzing billions of documents and compiling the information gleaned with world-class speed, usually less than a couple minutes.

Microsoft Edge offers many more features that enhance its performance, accessibility, and security and continues to make improvements. Microsoft security updates are released every two to six weeks. The browser automatically updates itself every time you restart the computer, or you can manually install them by going to **Settings & More** > **Help and Feedback > About Microsoft Edge.** 

- "Machine learning is an entirely different mode of operation, so it took a lot of time and effort to learn how to utilize it fully and optimize it to us rather than have us optimize to it." — Michael Maximoff, co-founder & managing partner at <u>Belkins.io</u>.
- "Initially, we had a tough time finding qualified individuals with the expertise and talent required to oversee the implementation and management of machine learning in our operations. Machine learning requires specialized skills and expertise like data science, statistics, and programming. It was difficult to find people with these skills that were also a good cultural fit for our organization." James Wilkinson, CEO & co-founder, Balance One Supplements.

Additionally, you must consider data privacy and current regulations around using such models. Account for these and bake in time and resources to tackle these challenges as and when they come. This will help you generate a more impactful model that's aligned with your goals and is as accurate as possible.

## Step 4: Train the tool based on your internal data and monitor the progress

You need to provide the right datasets to the ML expert so that they can train the model appropriately. It is best to conduct a complete data exploration and cleansing process before feeding it to the model. Here's what it includes:

- Identifying datasets with inherent biases, outliers, and inconsistencies
- Cleaning and labeling the datasets with appropriate labels
- Normalizing the dataset to use a consistent scale throughout
- Segmenting the dataset to ensure the correct data is fed for specific inputs

You can do this with your in-house team or ask the ML expert to do it themselves. Next, they'll feed the data and train the model until it starts to maintain high accuracy and a low false positive rate. You can also include a feedback loop to ensure the model learns with real-time data—improving accuracy. Keep monitoring the output and evaluate whether it's serving its purpose. As long as it proves beneficial in the long run, you've implemented it successfully.

#### 3. Cyber Attacks

Your website is extremely valuable, especially if it's an eCommerce store. A hacker may attack it and steal sensitive customer data. They may also ask for ransom. For a small business, these technology problems are devastating, since they make the customers lose their trust in the brand. This is why your website needs several layers of protection. Don't try to save money when developing it. Pay a remote team to perform frequent security checks and update the protocols when needed!

#### 4. Lack Of Protection Against Power Interruptions

The problems with technology aren't only related to computers. Small business owners often forget to bother with power supply issues. When the power goes off in the middle of a working day, they may face inconvenient interruptions. If it's a store with people in it, some items will inevitably go missing.

Power interruptions may occur from high voltage power surges, so a surge protector is the first solution. You should also get a voltage regulator, which will protect your computers from periods of insufficient power. A back-up generator or UPS (uninterruptible power supply) is a good idea, too. It will provide you with electricity in occurrences of power failures.

#### 5. Outdated Software

You paid for the business software years ago and never updated it? It's no wonder why your brand is facing problems with technology. Small business owners rarely think about updating their software and processes. They are convinced that they work as they are.

But if you have an in-house IT team, they can work on software updates all the time. This would give you an edge over the competitors. Your business processes will be faster and more effective. If you don't have an IT team, you can hire remote workers when you need them.

#### 6. Lack Of Data Backup

Can you imagine losing all valuable data? It can happen. Your main computer's hard drive may be damaged. All devices in the office may suffer damage from floods, fires, or earthquakes.

Data can also be lost during a cyber attack. A robust backup is essential. You can store important data on a safe cloud service or an external hard drive.

#### 7. An Incompetent Team

Even if you don't plan to establish an IT department for your business, you still need to hire people with IT skills. Many managers forget to do that. They focus on the sales and management department. When the tech issues occur, no one knows what to do.

You should invest in employee training. All your employees need basic IT skills, so they will know how to use the software you provide for the company. You can also collaborate with a good remote IT team, which will carry your brand through all common problems small businesses face.

Don't fall into a trap thinking that you can save money on tech training, software, and security for your brand . This is one of the most important investments you can make for your business. Small brands often face technology issues, which are easy to avoid. Now you know how to prevent them!

## AutoElevate for software additions and updates

"I tried to install software that my manager recommended, but then I had to wait half a day for the IT team to make sure it's safe and install it for me. What a waste of time."

Have you heard similar complaints from your employees?

Managers and employees shouldn't have to worry about cybersecurity and keeping their computers safe. That's what you hired the IT team for, right? At the opposite end of the spectrum, there are managers and employees who are, themselves, very familiar with the complications of IT and shouldn't have to wait for the IT technician to install approved software.

So how does the IT security team keep end users protected without annoying those who can handle it themselves, and do this without wasting anyone's time?

The problem we're seeking to resolve is what IT professionals refer to as Project Access Management, or PAM: the determination of how much access is granted to individuals, processes, and technology. It's generally accepted that the safest practice is to close off all user access and just let the IT team handle everything, but this causes frustration to the end user who must wait on the IT technician. Additionally, this takes more time for the IT staff, which means they'll be slower in getting help to other customers.

The solution we are working with is CyberFox's AutoElevate, a PAM-solution software: a way to improve IT security and make the support team more efficient in answering service requests.

IT support can now approve access in real time. When a request is made to install or update a program, the IT techs receive the request and can quickly grant permission for the end user to perform the needed action.

If the software you're trying to update is a standard change within your company, a rule will already be in place allowing you to install the software, so no interruptions will occur. But if the software is unknown to the local computer system, your IT team will evaluate it to ensure its safety to your company's IT. Still the interruption will be short and require little effort on your part.

Let's look at an example:



You want to install a program on your work computer called YabbaDabbaDo. When you start installing it, a service timer will show up along with a friendly message from DanTech Services saying,

"We've noticed you're trying to run: YabbaDabbaDo.exe. We just need a little time to review your request. A service ticket has been sent. Feel free to continue your work, and we'll get back to you as soon as possible."

During this time, DTS technicians will research and monitor the software to ensure it doesn't pose any security risks for your company.

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If your software is approved, you'll receive another notice, "You may now proceed with Admin privileges!" And you just click the OK button to proceed from where you left off in the installation process or click LATER to install the software at your preferred time.

If the software is disapproved, a notification will show up to inform you that this installation was denied. You can then get back to your own work or consult your manager or coworker to find an approved software to accomplish the needed task.

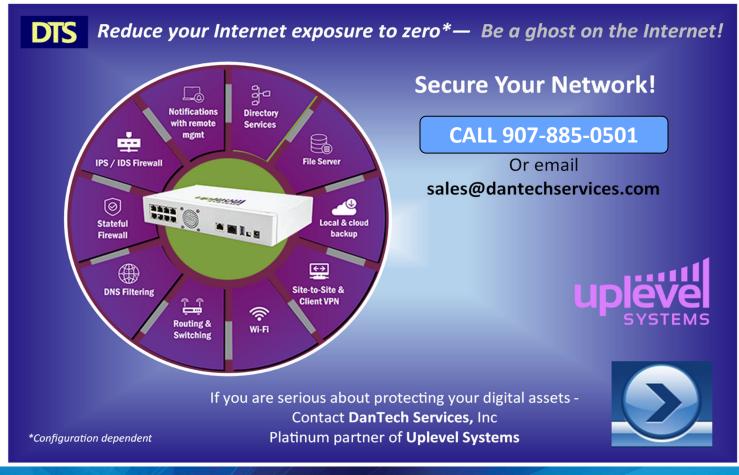
CyberFox , the makers of AutoElevate, also offers a password protection software called Password Boss, a highly secure and easy-to-use password manager.

In addition to generating and remembering passwords, it easily logs you in to each website. Password Boss includes awardwinning features such as Dark Web scanning, multi-device support, and remote delete feature that lets you wipe your password database if your device gets lost or stolen.

More intuitive features include password inheritance, secure sharing, and a security dashboard with well-thought-out categories for organizing your passwords. Password Boss keeps a history of notes and passwords and supports many platforms and browsers.

Password Boss Creates a default identity based on the information you entered during installation that you can edit, and additional identities can be created.

Together these two Identity Access Management (IAM) security services – AutoElevate and Password Boss – offer best-inclass security to keep you safe, while ensuring your workflow runs efficiently. DanTech Services is proud to include both in our cybersecurity suite, keeping your Computers Under Control!



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