DTS DanTech Services
Computers under control!™

Technology Times March 2024 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. "

What's Inside:

Got IT Problem? - Click Here!

Policies & Compliance

Cyber liability insurance is **an insurance policy that provides businesses with a combination of coverage options to help protect the company from data breaches and other cyber security issues**. It's not a question of if your organization will suffer a breach, but when.

Here is what you need to know:

Risk Management: Policies and procedures help create a framework that reduces risk and keeps everyone compliant. They protect businesses, employees, and customers from potential risks.

Regulatory Adherence: In today's complex regulatory environment, compliance policies ensure that companies adhere to laws, regulations, and administrative provisions pertaining to their operations. This helps avoid legal or regulatory sanctions, financial losses, and damage to the company's reputation.

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First remote surgery performed in space from Earth

Surgeons in Nebraska successfully completed the first remote surgical procedure aboard the International Space Station from earth, using a small robotic arm they call “spaceMIRA.”

The operation, which took place during a “proof-of-concept” demonstration in mid -February, was performed on rubber bands used to imitate human skin. The spaceMIRA is a miniaturized robotic assistant designed by Virtual Incision, a startup that develops remote-controlled medical tools for use in remote locations. SpaceMIRA weighs two pounds and takes up about as much room as a toaster oven.

During this remote surgery, the robot gripped a mock tissue sample with one pronglike arm, and it used scissors to dissect portions of the rubber bands with the other arm.

Although the surgery was ultimately a success, the lag time proved to be insurmountable. Communications between the Earth and the ISS are delayed about 0.85 seconds, which can ultimately mean life or death in certain emergencies. For the time being, devices like spaceMIRA won’t be able to help in split second medical operations. But for smaller procedures, such as stitching up a wound, these medical tools could prove invaluable.

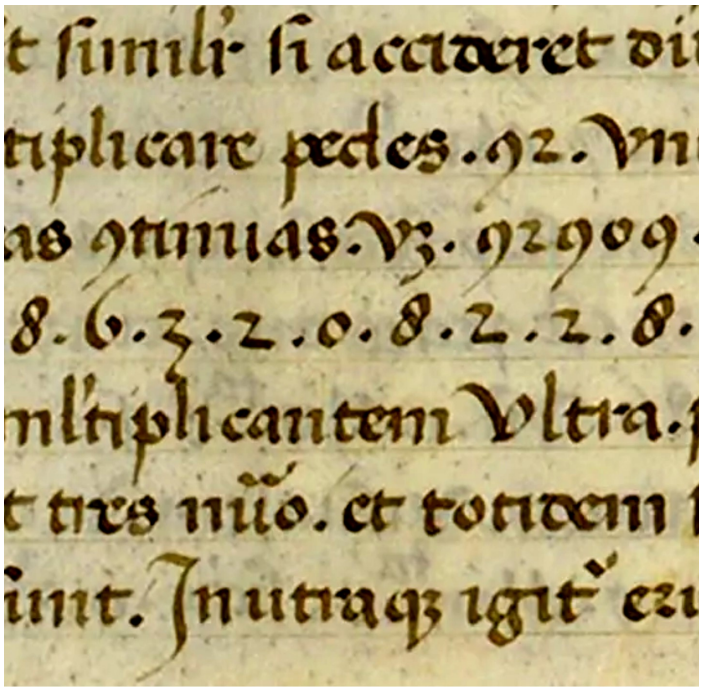
As researchers continue to work toward providing faster medical assistance to teams in space, Virtual Incision’s remote-controlled equipment still has plenty of uses here on Earth.

History of Math Shaken Up As Fundamental Point 150 Years Older Than Thought

The origins of the decimal point, something millions of people use daily, may be much older than we first thought.

It was initially considered to have originated in 1593, having been used by German mathematician Christopher Clavius in his creation of astronomical tables.

Now, however, the decimal point has been discovered to have been used 150 years prior, by a Venetian merchant, according to a new paper in the journal Historia Mathematica.



Excerpt from Bianchini's "Compositio Instrumenti" in the Biblioteca Estense in Modena, Italy. This is the first time a decimal point is recorded being used in history.

According to the paper, a man named Giovanni Bianchini invented a system of decimal fractions in the 1440s, which he used in metrology and spherical astronomy.

"We trace Clavius' use of decimal fractional numeration and the decimal point back to the work of Giovanni Bianchini (1440s), whose decimal system was a distinguishing feature of his calculations in spherical astronomy and metrology," the paper reads.

This implies that decimal points were first used to represent non-whole numbers a century and a half earlier than we first thought.

Bianchini was a merchant who took on an administrative role with the d'Este family, where he managed assets and investments. He also published astronomy texts, plotting planetary motion and predicting when an eclipse would occur. It was in his astronomical texts that the decimal point first appeared.

Van Brummelen theorizes that Clavius likely got the idea to use the decimal point from viewing one of Bianchini's texts, which is why he never used it again.

"Clavius's introduction of the decimal point in the curious context of an interpolation column in a Sine table, and the fact that he never used it again, is simply explained: he had access to Bianchini's Sine table (or to someone who himself had borrowed from Bianchini), and he copied the structure of that table in his own work," he writes.

Bianchini himself is suggested to have come up with the decimal point as a result of his travels, as he is likely to have passed through the Islamic world multiple times. This is where many math concepts were being developed, and it is possible that this influenced Bianchini to develop a way of representing non-whole numbers.

Shiny New Gadget Of The Month

We Are Rewind Tape Cassette Player

French Design: Designed in France, We Are Rewind is a brand by audio enthusiasts for audio enthusiasts. Our mission is to create beautiful, high-quality products that combine vintage design with modern technology.

Stereo Recording: Record and listen to your favorite songs on the go with We Are Rewind's portable cassette player and recorder. Use the included 3.5mm audio cable to connect any audio source and create your best mix tape.

Bluetooth Connectivity: Play your favorite cassettes wirelessly through any Bluetooth-enabled speaker, headphones, or car stereo. The We Are Rewind cassette player supports Bluetooth 5.0 for a stable connection up to 33 feet away.

Premium Build: The We Are Rewind cassette player and recorder is made with high-quality materials for a premium feel and lasting durability. The heavy-duty aluminum casing and built-in rechargeable battery add to the overall quality and portability of the device.

Vintage Design: Take a trip down memory lane with We Are Rewind's portable cassette player and recorder. The cassette tape recorder features a tape exhibition window, so you can see your tapes as you play them. The device has a classic design that will appeal to music lovers of all ages.

An understanding of Cybersecurity Compliance

Cybersecurity compliance is the act of complying with a command or given rules and standards for the security of your IT network. The guidelines are developed by different governing bodies, and they may apply on the local, national, or international level.

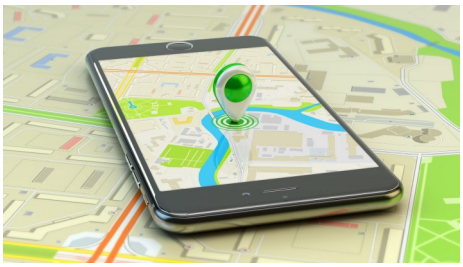
Compliance can be achieved by establishing risk-based controls that protect the confidentiality, integrity and availability of information. Cybersecurity compliance for a business involves undertaking measures across the following disciplines:

- **Risk assessment and management:** By recognizing risks and system vulnerabilities, you can develop strategies to address them.
- **Security controls:** You can better minimize your risks by maintaining firewalls, encryptions, and antivirus software, as well as securing your physical premises.
- **Data encryption and privacy:** By encrypting data that comes into and leaves your organization, you'll be ensuring confidentiality and security for your employees and customers.
- **Employee awareness training:** To help your workforce be vigilant and cautious, educate them about cybersecurity risks and best practices.
- **Incident Response and recovery planning:** Developing steps to minimize downtime can help achieve containment.
- **Vendor and third-party management:** Include steps to ensure your supply chain and other business partners also follow appropriate cybersecurity standards.
- **Regular monitoring and auditing:** Since cybersecurity is not a one-time event, but rather an ongoing process, developing a practice of regularly observing and assessing your IT system will enable you to Identify any anomalies and breaches as soon as they occur.

Ultimately, the goal of managing cybersecurity compliance is to build a strong security structure that aligns with industry standards, company rules, and regulatory mandates.

Geofencing and its many uses

Geofencing is a location-based technology that uses radio-frequency identification (RFID), Wi-Fi, and cellular data to establish virtual boundaries around a specific area.



These areas could range from a single shop to an entire neighborhood. When devices cross these boundaries, certain actions are triggered. This technology also tracks radio-frequency identification (RFID) tags, such as those found in contactless car keys.
This technology proves beneficial in various sectors. In marketing, it enables brands to track consumer behavior and intensify advertising to targeted areas. In agriculture, geofencing can alert a rancher if a livestock herd strays beyond a predefined boundary.

For security purposes, geofencing can trigger alerts when a device enters or exits a specified region. It can notify you when your child leaves school or when your teen drives outside a given area. It can even communicate with your smart home systems to perform tasks like locking the doors or closing the blinds when you leave home.

The tracking device that's associated with this geofencing can be integrated into a number of different devices, such as smartphones, computers, or watches. For pet owners, even a dog collar can be equipped with a built-in GPS tracker.

Geofencing technology is expected to evolve significantly, driven by advancements in vehicles, home appliances, and many other items embedded with electronics, software, sensors and connectivity.

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Operational Efficiency: Compliance functions can help identify unusual business patterns or better-than-expected performance levels, which can inform business decisions. They also help maintain high standards in company governance.

Strategic Planning: Compliance leaders, with their high-level view of the balance sheet, operations, and emerging trends, can provide strategic advice to support growth and change.

Customer Confidence: Compliance policies help maintain customer confidence by ensuring the optimum safety of their interests.

In the context of Alaska and the United States, the **Alaska Division of Insurance** is a regulatory agency that oversees the financial conditions of insurers. They participate in drafting insurance laws and regulations, analyze market data to develop more effective insurance regulation in Alaska, and ensure consumers have the tools to evaluate and purchase insurance products that are appropriate for their needs. They also monitor the policy forms that insurers use for conformity with statutory standards, to confirm that policy language properly reflects the benefits under the policy and is not deceptive or misleading.

In summary, having robust compliance policies and procedures in place is essential for minimizing potential loss, avoiding liability and fines, and ensuring operational resilience.

With the increase in insurance rates, ever increasing cyber security needs, and how readily insurers are denying claims, having and maintaining policies has become crucial. **Protect your business!**

The use of multiple USB microphones, simultaneously, as one device, is possible, for Zoom meetings.

Zoom does, in fact, support this. To some extent, one's operating system may lend more or less support to this. For example, MacOS allows one to create what Apple describes as an Aggregate Audio Device (multiple USB microphones combined together to be one sound source):

https://support.apple.com/en-us/102171

A Windows PC can make use of special applications to achieve this as described by MXL Microphones on this support page:

https://support.mxlmics.com/support/solutions/articles/66000492476-can-i-connect-multiple-usb-microphones-

Linux will likely support this in the future, at some point, if not already. MXL Microphones offer special USB microphones for Zoom Rooms that a Zoom Room can natively combine together as one as described on this Zoom technical support page:

https://mxlmics.com/products/ac360-z-v2-white/