



# Innovations

Review Twice, Implement Once. Doing IT Right the First Time. • December 2016



Scott Bernstein, CPA President  
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## The Lighter Side....

T'was the night before Christmas  
and all through the house,  
Not a creature was stirring, not  
even a mouse.

The stockings were hung by the  
chimney with care.  
They'd been worn all week and  
needed the air.

Question: What's the most  
popular Christmas wine?

Answer: "I don't like Brussels  
sprouts."

Question: What's  
a parents favorite Christmas  
carol?

Answer: Silent night.

Question: When does New Year's  
Day come before Christmas Day?

Answer: Every year.

Holidays are a time when people  
get emotional over family ties,  
particularly if they have to wear  
them.

If Christmas, Father's Day, and  
birthdays did not exist, then  
aftershave would not exist.

Most Texans think Hanukkah is  
some sort of duck call. —Richard  
Lewis

Christmas is a time when people  
of all religions come together to  
worship Jesus Christ. —Bart  
Simpson in The Simpsons

The worst gift is a fruitcake.  
There is only one fruitcake in the  
entire world, and people keep  
sending it to each other. —  
Johnny Carson

## SECURITY FOR YOUR IPHONE/IPAD DEVICE

BY NICK ESPINOSA

So the Apple App Store is kind of slim pickings when it comes to antivirus and defense. In 2015, Apple "cracked down" on antivirus and anti-malware apps in their store killing off some of the best apps out there for this. You can read all about it here:  
<https://9to5mac.com/2015/03/19/apple-app-store-antivirus/>

Apple's logic was that because apps wanting to be published to their App Store had to pass such rigorous checks and tests before being accepted Apple was effectively ensuring that no apps whatsoever could ever be published that were bad or malicious. Sadly Apple was horribly wrong and several apps that shouldn't have slipped through Apple's testing and validating process (<https://www.wired.com/2015/09/apple-removes-300-infected-apps-app-store/>).

So here is what I have on my Apple devices:

1. Trend Micro Mobile Security (<https://itunes.apple.com/us/app/trend-micro-mobile-security/id630442428?mt=8>) As mentioned above there are not many apps and no real antivirus options for iPhone/iPad. This app is the closest thing to that. It acts like a

web filter so it should stop the user from going to sites that are fake, phishing or otherwise malicious.

2. Lookout - Security, Backup and Missing Device (<https://itunes.apple.com/us/app/lookout-security-backup-missing/id434893913?mt=8>) This app is good for locating a lost or stolen Apple device. It will lockdown the device, show you it's location via GPS and even sound an alarm on the device for you to locate it or annoy the thief. It also has some basic security functions built in so it somewhat overlaps with Trend Micro but you can never have enough protection!
3. Duet Display (<https://itunes.apple.com/us/app/duet-display/id935754064?mt=8>) so this isn't a security app however I've found it to be essential for when I travel with my iPad. This app allows me to use my iPad as a second display for my laptop using the standard iPad USB cable. It works remarkably well and comes in handy since I'm used to multitasking with two or more monitors when I'm in my office or home. It's a road warrior's best friend!

# Should your website use HTTPS?

By Pete Salerno

If your site collects any kind of data through a form or an account login, then the short answer is “Yes”. Before I discuss why, it is important to know what HTTPS does for you.

HTTPS is the secure version of HTTP, the protocol that is used to move data between your user's browsers and your website server. HTTP is an open text protocol. In other words, when you fill out a form in your browser, that information is sent as readable text to the web server. Using HTTPS the browser will encrypt the form data and the web server will decrypt the data. This protects the data from being read anywhere between those 2 points.

For HTTPS to work properly, it relies on SSL Certificates. Like Domain Authorities that issue the domain names you use for your website, there is a known set of trusted Certificate Authorities that issue SSL certificates. The SSL Certificate can be authenticated by a Certificate Authority; this ensures that the browser is not connecting with a fake version of your website.

Because of the privacy that HTTPS offers, Google's Chrome, Apple's Safari and Mozilla's Firefox browsers have been encouraging website owners to move to this encrypted protocol. However, Google has announced (<https://security.googleblog.com/2016/09/moving-towards-more-secure-web.html>) that, in January, **Chrome will take this "HTTPS everywhere" concept to the next step by not just identifying sites with HTTPS as secure, but it will mark a site without HTTPS as "Not Secure" if the site has any input fields.**

This means **that visitors to your website may be told by their browser that your site is not a secure site.** Many visitors may not feel comfortable providing information to a website that is labeled “Not Secure”. Your best choice is to switch to the secure protocol for your website.

To convert a website from HTTP to HTTPS you need to add an SSL certificate and tell the web server to use the new protocol. The seemingly straight forward task of switching your site to HTTPS with an SSL certificate can easily be mismanaged. Some of the challenges you will need to address are:

- What kind of certificate do you get?
- Is the certificate installed properly?
- Does the content on your pages need adjusted?

There are a various levels of SSL validations used and SSL certificates run in price from under ten dollars per year to hundreds of dollars per year. Choosing the right level of validation can save you money, or prevent you from having to redo the process.

Your website pages may reference internal content in a non-secure way. This is a typical problem found on sites that were converted from HTTP to HTTPS after being deployed. Links to internal content may still be coded to use HTTP. While easily fixed, this will block the browser from displaying the secure page indicator.

Should your website use HTTPS? In the long view, all websites will have HTTPS, you just need to decide when you want to make the change.



Pete Salerno is a PMI certified PMP and an IEEE Senior Member with over 30 years of experience in computer systems & software, telecommunications, and avionics. He has performed a broad range of roles from design engineer and project manager to product marketing and business development. He is the Founder & Principal Consultant of Stratus Concept LLC and SVP of Technical Services at MobiKite Inc.



## Technology Tidbits

**With Google's new Daydream VR platform, reality will never be the same.**

While it isn't as pixel-rich as PC-tethered systems like Oculus Rift, Daydream is fully mobile. That means, for instance, you could navigate through a museum and get way more interactive with the exhibits. Google's "View" headset with clickable touchpad controller is just the first of many to come, as other developers jump into mobile VR. As for apps, Google says there will be at least 50 in the Play Store

by the end of December. Daydream has been deeply integrated into the new Android Nougat OS. If Nougat isn't on your phone yet, be patient – or buy a phone, such as Google's Pixel, that already has it installed.

*-TechRadar.com*

**"Smart Cities" are adding a whole new layer of complexity to data protection.**

Driverless cars, cloud-based services and networks of sensors are driving rapid change... Yet along with great benefits, the smart city revolution adds new threats.

For instance, since it relies heavily

on interconnectivity, weak links make the whole system vulnerable to cyber-attack. Yet a study by Kaspersky Labs estimates that 57% of smaller companies underinvest in security. With deeper connectivity to these "weak links," encryption of your own data becomes more critical than ever. Using secured websites (the "https" vs. "http" protocol), for example, not only secures data, it also creates trust among your customers and vendors. Clearly, the smart thing to do is to be ready for smart city challenges.

*-HarvardKennedySchoolReview.com*



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Shiny New Gadget of the Month

## ***Your Desk Is Killing You: Do This Instead***

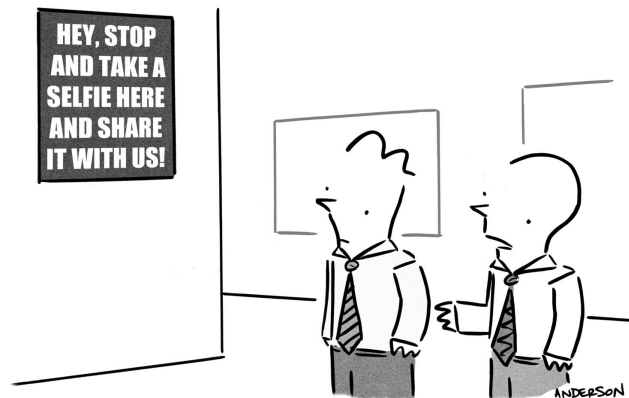


The evidence is piling up that sitting all day is bad for your health. Though not perfect, Varidesk offers a compelling solution.

On the plus side, The Varidesk sets up right out of the box – no assembly required. With its weight-balancing system, you don't need any hardware to fasten it to your desk. And it features an attractive, sturdy design. You can lean on it and your monitor won't go crashing to the floor. Springs and levers make it easy to raise or lower it to one of 11 preset levels.

The main flaw is that when you raise it, it also moves forward – a problem if you're in a tight space. All in all, though, it's worth looking at, especially if you have a wireless keyboard and mouse – and enough space in your office or cubicle to back up a bit.

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"It's cheaper than a security cam."

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