



Innovations

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



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WHAT'S IN YOUR PHONE?

BY NICK ESPINOSA

Often times I am asked "What do you do to secure your mobile phone or mobile device from threats?" This is an excellent question! With mobile infections and malware on the rise, 2.3 million new variants discovered in 2015 alone, having a good mobile policy for security and protection is a must!

If your company does not have a mobile policy that includes data, threat and theft protection it should! This article will cover, though, what an individual can do without a comprehensive corporate infrastructure behind them. A little knowledge can go a very long way!

In no particular order this is how I secure my devices.

Overall Policies

1. I never use public Wi-Fi. Yes, it may cost me a bit more in carrier charges but it's way more secure. Public Wi-Fi, like the local coffee shop, is a hacker's best friend. Your mobile device can be attacked and possibly breached across a public network. I even carry a MiFi wireless device for my laptop and other Wi-Fi only (no carrier service) devices and laptops.
2. I use a VPN on my phone at all times. This encrypts all data as I send and receive it so I can not only maintain the various government compliances I adhere too but also ensure that no one can capture and read my sensitive data in transit. VPNs based on IPSec are the best option for this. Ideally your VPN connection is connecting to your company's Next Generation Firewall that is running full threat detection so it helps to ensure that your mobile device is just as secure as an office computer sitting behind it.
3. I encrypt all of my devices so if they're ever stolen or lost I do not have to worry about anyone reading my data. Both Android and iPhone/iPad have the ability to natively encrypt themselves however in Android you must enable this option as it's not on by default.
4. I use full passwords and not PIN numbers. This way, combined with the encryption from tip #3, my device cannot be easily cracked. I usually pair the full password with an integrated fingerprint scanner so it's quick and secure to lock and unlock
5. Never open anything on your mobile device you're unsure of. We all see posts on Facebook or other social media leading to sites that may sound like they have interesting articles (Top 10 some, celebrity death etc.) but many of these sites are malicious and can potentially infect your device. If you really want to read about a celebrity death do so on a known good website such as a major news organization. If you really want to read that Top 10 article then checking a site's reputation is quick and easy. I use Sucuri Site Check. There is no app I install. I just copy/paste the link into their site at <https://sitecheck.sucuri.net/> and get near instant results.
6. Don't install apps that you absolutely don't need. This will help improve performance of the battery as well as help to ensure your device runs faster. Apps love to start up and run in the background so they can suck up memory fairly quickly. From the security standpoint you have less of a chance of installing a malicious app if you keep some vigilance as to what you do and do not install. Check the reviews on the app as well. Those are great indicators for problems and issues.

In November's newsletter we'll focus on how to keep your Android devices secure and then Apple devices in the December newsletter.

9 ways increasing page speed can help your business

PART 2

SEE PART 1 IN SEPTEMBER'S NEWSLETTER
<http://www.bssi2.com/free-stuff/newsletter-archive/>

Better search ranking

Google is notorious for keeping its search ranking formula secret, but back in 2010, it announced that page speed would affect where sites rank in search results. While it's unclear exactly which aspects of site speed Google is using to determine rank, it appears that at the very least the time to first byte affects search rank. Time to first byte is the amount of time it takes a browser to receive the first byte of information from your server, a.k.a. how long it takes your server to receive, process and respond to a request.

Usability is also a factor in Google's search ranking, though again the company won't reveal specifics. Just know that if your site is fast, your users will like that, and Google will rank you higher because of it.

A leg up on your competitors

Speed reduces alternatives. It's not just that a better user experience will make users prefer your product or make Google rank your product higher, though both are true. It's that a fast site won't encourage your users to turn to a competitor. If Netflix takes five minutes to load or is buffering, what are you going to do? You're not going to watch Netflix, you're going to pull up cable. A fast site reduces the alternatives to your service.

This is how Amazon has succeeded. Amazon's speed and performance are why I keep purchasing with Amazon instead of a competitor. If it takes me two minutes to add something to my cart on an e-commerce site, I'm going to get bored and just go to Amazon, because I know I'll be able to check out in 10 seconds. Sites that can't quickly get me to my goal can't compete. Fourteen percent of online shoppers surveyed by Akamai and Forrester said they would begin shopping at another site if pages took too long to load. To prevent that from happening, every page in your sales funnel needs to be quick.

Fewer outages

A more efficient infrastructure can save you from your site going down. By optimizing everything on the frontend and streamlining everything on the backend, you'll reduce server load for your site or app. With less stress on the system, you won't have to worry about

outages happening as often, and you won't have to pay to get them fixed as frequently, meaning you get to sleep at night.

More opportunities to earn money from advertising

If your business is ad-supported, site speed is even more crucial to your success. Ad units can be one of the biggest elements your product needs to render, and one of the last to load. Try to run them on a weak infrastructure, and ads can drag down your load time significantly. So much so that 36 percent of people who use ad blockers do so to improve page-load time and reduce bandwidth usage.

Without the full ad loading and the tracker firing, your company won't be paid for the view. Your infrastructure needs to be capable of loading the entire site or app — with ads — before your users move on.

Lower costs for hosting and storage

A high-performing site can also save you money. If you have an efficient site, generally you'll end up paying less for hosting and storage. Amazon Web Services has made storage pretty cheap, but saving one million five-megabyte photos requires an order of magnitude more storage space than saving one million optimized images. Optimizing your assets will also save you on the fees AWS charges for data transfers.

An efficient site also means lower infrastructure costs. If you have a high-performing site, you'll likely have low server utilization. Say a company with three servers makes infrastructure improvements. Now it can process site activity so much faster that it suddenly only takes two servers to handle all of the traffic. Being able to cut a server saves the company a third or more of its hosting costs.

Think of a thousand people trying to move through a single door at the same time. To get everyone through the door quickly, you can either increase the size of the door — in this case by adding more servers — or you can have them go through the door faster. If we can make each action on the site as quick and efficient as possible, we can get people through the door faster, so we don't have to add additional servers to handle the load.

A more scalable future

The storage and infrastructure savings above become especially important as your company starts to grow.

You may not notice huge cost savings when you have 200 people using your site, but you definitely will when that number grows to 2,000 or 20,000. An efficient site makes growth possible by reducing the waste in your infrastructure. Inefficiencies multiply, and they can completely take down a system when the number of users reaches a tipping point. It's important to optimize the site at the beginning, so you can enjoy all the other benefits of a fast site as your company grows. An efficient site will handle growth.

What you can do to improve your site speed

Amazon founder Jeff Bezos advises companies to look at what's not going to change in 10 years. For Amazon, he says, "It's impossible to imagine a future 10 years from now where a customer comes up and says, 'Jeff I love Amazon, I just wish the prices were a little higher [or] I love Amazon, I just wish you'd deliver a little more slowly.'" I'd add that it's impossible to imagine 10 years from now people will want a slower application or

website. The time you spend on site speed improvements now will only help your business going forward.

If you're ready to improve your site speed, start by looking into where your site is lacking now. Google's PageSpeed tool is a great way to see how fast your site is and what you can do to improve your site speed. Here's full documentation of the rules PageSpeed uses to determine whether your site is fast enough.

If the fixes look like they might be too much to tackle on your own — or if you want to make improvements to your backend infrastructure — email me and I'll see how we can help.



Written by **Stephen Puiszis** of Table XI Partners, LLC. Table XI is a full-service strategy, UX, design and development firm in Chicago. They are a team of big thinkers and problem solvers with the tools to bring your ideas to life. Find additional content from Table XI at www.tablexi.com/blog/

The Lighter Side....

These are actual complaints received from dissatisfied customers of Thomas Cook Vacations : (based on a Thomas Cook/ABTA survey)

1. "I think it should be explained in the brochure that the local convenience store does not sell proper biscuits like custard creams or ginger nuts."
2. "It's lazy of the local shopkeepers in Puerto Vallarta to close in the afternoons. I often needed to buy things during 'siesta' time — this should be banned."
3. "On my holiday to Goa in India, I was disgusted to find that almost every restaurant served curry. I don't like spicy food."
4. "We booked an excursion to a water park but no-one told us we had to bring our own swimsuits and towels. We assumed it would be included in the price."
5. "The beach was too sandy. We had to clean everything when we returned to our room."
6. "We found the sand was not like the sand in the brochure. Your brochure shows the sand as white but it was more yellow."
7. "They should not allow topless sunbathing on the beach. It was very distracting for my husband who just wanted to relax."
8. "No one told us there would be fish in the water. The children were scared."
9. "Although the brochure said that there was a fully equipped kitchen, there was no egg-slicer in the drawers."
10. "We went on holiday to Spain and had a problem with the taxi drivers as they were all Spanish."
11. "The roads were uneven and bumpy, so we could not read the local guide book during the bus ride to the resort. Because of this, we were unaware of many things that would have made our holiday more fun."
12. "It took us nine hours to fly home from Jamaica to England. It took the Americans only three hours to get home. This seems unfair."
13. "I compared the size of our one-bedroom suite to our friends' three-bedroom and ours was significantly smaller."
14. "The brochure stated: 'No hairdressers at the resort'. We're trainee hairdressers and we think they knew and made us wait longer for service."
15. "There were too many Spanish people there. The receptionist spoke Spanish, the food was Spanish. No one told us that there would be so many foreigners."
16. "We had to line up outside to catch the boat and there was no air-conditioning."
17. "It is your duty as a tour operator to advise us of noisy or unruly guests before we travel."
18. "I was bitten by a mosquito. The brochure did not mention mosquitoes."
19. "My fiancé and I requested twin-beds when we booked, but instead we were placed in a room with a king bed. We now hold you responsible and want to be re-reimbursed for the fact that I became pregnant. This would not have happened if you had put us in the room that we booked."

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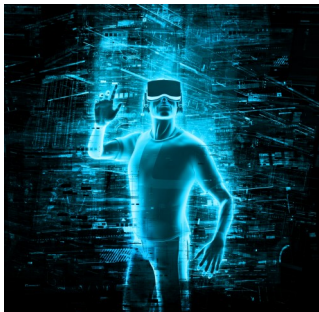
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Shiny New Gadget of the Month

Hololens: Your New Reality?



A game designer sees a moving 3-D image of a living, breathing, mace-wielding ogre – on her desk. She flicks a finger and he turns from side

to side, giving her a full view of his outfit and weapons belt.

An architect looks up at the ceiling in a building he’s just designed. He waves his hand and reshapes it, allowing more light through. All virtually.

A space scientist designing a Mars rover strolls through the landscape, noting from all sides the position, shape and size of rocks his vehicle must navigate.

Now it’s your turn. Put on the new HoloLens by Microsoft, and what do you see? How could you use this cool new augmented reality (AR) tool in your business?

At \$3,000 for the developer’s version, it may not be an impulse buy. But new AR tools like this will soon be part of your computing world.



Apparently Mac supports Windows now.

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