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RIP Passwords?

By Dan Ayars, Marketing Coordinator, TechSolutions

This week a group of Silicon Valley tech companies has initiated a campaign called Petition Against Passwords. Their goal is to get organizations to ditch the password because it is an outdated method of protection that can easily be compromised. In addition to the financial interest they have in making that happen, they have a point. In the role of controlling access, passwords have some shortcomings. It is a common practice among many to use ridiculously simple, easy to guess passwords. Even if you have come up with one that's hard to guess, hackers are becoming more skilled at deciphering complex passwords. Passwords are at risk of being stolen as well. There have been multiple cases where security weaknesses have been taken advantage of to obtain users passwords. Last week it happened to some users of the blogging site Tumblr and users of Yahoo and LinkedIn have recently been targets as well.



According to IBM the password will be obsolete within about 3 years. They predict the replacement will be facial definitions, iris scans, voice files and DNA. Work at University of California, Berkley is being conducted on the use of sensors that measure your brain waves as a form of authentication. Motorola disclosed last month that they are experimenting with tattoos containing flexible circuitry and pills powered by stomach acid as a method of verification. Motorola CEO Dennis Woodside said the tattoos and pills work; however they don't intend to make them available in the near future.

Information and Privacy Commissioner of Ontario, Dr. Ann Cavoukian has spoken out against this petition. Cavoukian is all for alternative methods of authentication, however thinks they should be an additional option as opposed to replacing the password outright. In her opinion, regardless of the authentication method used, passwords should remain part of the equation. She is also concerned that it sends the wrong message by encouraging people to stop using passwords. That, Cavoukian feels, is taking things in the wrong direction, citing that most people already don't use passwords to secure their smartphones.

I am not sure I agree with Dr. Cavoukian. People don't use passwords because they can be tough to remember and slow them down when trying to access something. In her example of smartphones, I bet far more people would secure them if they could do it with say fingerprint recognition. Besides if the password were to die off I could add that to my "You don't know how good you got it. I remember the time when" list I break out when I try to make younger people appreciate life and feel sorry for me.



7 Amazing Innovations of the Near Future

By Edan Barak

I think we can all agree that computers and the internet have had a huge impact on pretty much every industry, and are the cornerstones of our modern civilization. It's amazing to think that people once thought of computers as a huge waste of space, and that they would never become popular. The past decade has taken these innovations and brought them into the mainstream with technologies like social networking, GPS, smartphones, and a whole lot more. It truly is mind-blowing to see how far we've come in the past decade alone.

We live in a unique and interesting time in human history, where the sharing of ideas and information is done at lightning speed, and innovative research is at an all-time high. The next 10 years are going to be one hell of a ride, with so many problems still left to solve - from overpopulation to finding alternative energy sources, from ending illness to exploring space - and we're only just starting to understand this basic fact: for all we know, we know almost nothing.

With all the innovation taking place in the world, from tiny steps in existing technologies to new, industry-changing ideas, it's getting pretty hard to keep up to date on the latest discoveries. If you're interested in a small glimpse of what's in store for humanity in the near future (we limited our list to technologies we believe could be out in the next ten years), then this list is for you.

The Chemputer

This idea is still in the concept stage, but we foresee a bright, intoxicating future. Just as the 3D printer is able to take a 3D digital model, basically a file on your computer, and translate that into physical objects such as machine or gun parts, the Chemputer would take this concept to the molecular level and enable printing of pharmaceuticals. Instead of ink, this printer would use a mixture of carbon, hydrogen, and oxygen, the basic building blocks of most drugs, as well as certain agents such as vegetable oil and paraffin.

Imagine the uses: diabetics could print their own insulin at home, personal Chemputers could be used in third world countries to print out the exact needed drug at the right time to save lives. Obviously this would have a huge impact on the medical and pharmaceutical industry as well as drug research. With the chemputer, you would go online, download your medication and then print it out, all from the comfort of your home.

Next-generation biofuels

The world is coming to terms with the need to wean itself of fossil fuels, which are quickly getting depleted and becoming more expensive to extract from the earth. Biofuels can be used in the place of fossil fuels in certain cases as they're derived from biological matter like vegetable oils, animal fats and so on. Unfortunately current technology has created biofuels that rely mainly on food, causing an increase in global food prices.

Today scientists are focusing their research into next-generation biofuels which would be generated from non-edible sources such as corn stover, switch grass, woodchips, and miscanthus. In 2010 biofuels provided around 2.7% of the world's fuels for road transport, mainly through ethanol and biodiesel. It is believed that biofuels could help meet up to a quarter of the world's fuel needs by 2050.

Graphene

Graphene is basically a substance which is 300 times stronger than steel and made of only a thin layer of pure carbon, making it literally as light as a feather. Each sheet of graphene is only one atom thick, and one square meter weighs just 0.77 milligrams. In 2010 the Nobel Prize for Physics went to scientists researching this super film, and in 2013 a 1 billion dollar grant was awarded by the EU to researchers in the field.

The uses of this technology could be revolutionary: Space exploration and the aviation industry would benefit from the extremely light and strong material that could be used in aircraft construction. Graphene could revolutionize electronic devices by enabling lightweight, thin, flexible, yet durable display screens, cellphones, and much more. Graphene would also revolutionize transistor componentry and solar pane construction.

Photovoltaic Glass

This highly durable, efficient optical grade glass will be used in the future to allow any flat surface, from the mirror in your bathroom, to a picture hanging from the wall in your bedroom, to be used as an integrated computer screen. Together with a household computer system you will be able to access the internet, control your "smart" house, and get instant information about your fridge temperature or anything else, at the touch of a surface/screen.

Imagine brushing your teeth in the morning and simultaneously getting your news from the bathroom mirror. Your refrigerator would have touch capabilities, enabling you to continue with the news, display favorite family photos or even video chat with grandma from your fridge door. Then move it all to the kitchen table with just a touch. Photovoltaic glass can also house solar cells laminated between glass layers, meaning that soon every window will become an energy generating solar panel.

DNA Data Storage

The discovery of DNA has led to humanity's deeper understanding of living organisms and viruses, as it's basically a set of instructions and information encoded into molecules. Just as mother nature uses DNA to store biological information, so too have scientists discovered a way to store and encode digital information into DNA, enabling storage of massive amounts of data in a very small space. In fact, one gram of DNA can store at least 2.2 million gigabits of information, which is over 450,000 DVDs worth of storage space.

Using this new method of storing data, it will now be possible to store all the data that has been accumulating during the digital age, and much more. Written, audio and visual information have all already been uploaded into DNA then retrieved by DNA sequencing. The future of bio-computing is here.

Driverless Cars

When you just start out, it's exciting and fresh. As the years go by, it becomes habit and loses its luster. Driving is a part of life for millions around the world, enabling fast and east transportation of people and goods, but also leading to many yearly fatalities from reckless driving. Imagine getting into your car, talking to the voice-activated computer and telling it where you'd like to go, then nodding off to sleep, secure in the idea that your car will be able to drive you to your destination without your help.

Well, not only is this going to be a reality in the coming years, Google is already deep into the advanced stages of research, and driverless cars have already logged thousands of miles, having traversed the windy hills of San Francisco, cruised over the Golden Gate Bridge and even run laps around Lake Tahoe. The cars navigate using advanced GPS technology as well as special laser sensors mounted on the roof to help "map out" the area around the vehicle. They know to stop when there's a pedestrian on the road, and to drive when the traffic light turns green. Say goodbye to your designated driver!

Visual prosthesis (Bionic Eye)

Just as technology has advanced to the point where the cochlear implant is helping deaf people to hear, the idea behind the bionic eye is to help the blind, or those with very poor eyesight, to see. Researchers are making fast advances in developing artificial eyes that would give sight to the blind, and prototypes are already available that provide grainy images. However, the eye is much more complex than a regular camera and complex software, such as missile tracking technology, must be employed in perfecting the technology.

We believe there will come a time when everyone will be able to see with perfect eyesight. That future is closer than you imagine.

Edan Barak is the founder of top10zen.com, a vibrant community of experts on nearly every subject you can imagine. He's fascinated with interesting and obscure facts, like these [accidental inventions](#) that immeasurably improved the world.

Article Source: http://EzineArticles.com/?expert=Edan_Barak

Protecting Your Cellphone Against Summer's Heightened Threat

([NewsUSA](#)) - It's summer. Do you know where your cellphone is?

That's not a silly question in light of new findings that more mobile phones are lost, stolen or damaged in June, July and August than any other months all year -- with July holding the dubious top honors.



"People are outdoors, active and so busy enjoying themselves that they're not always as careful as they should be," says Bettie Colombo of Asurion, the global leader in consumer technology protection services that spotted the spike in insurance claims.

And with the "stolen" category alone having convinced law enforcement officials that smartphones have become The New ATMs for criminals -- 30 to 40 percent of all robberies in major U.S. cities involved the often violent theft of phones, according to data released by the Federal Communications Commission last year -- you can see why you might want to check your beach bag right now.

Here are some worthwhile tips:

- Buy a waterproof case. Sure, people say the beach or pool should be pure downtime. But do they have friends who demand to see instant photos of you playing water volleyball? Just remember, per the tech site Cnet.com, that a case isn't waterproof unless it "can be fully submerged underwater for at least 30 minutes."
- Stay alert. Anyone can be a mark for thieves -- not just tourists -- and some of their operations have become "so sophisticated," says New York Attorney General Eric Schneiderman, that stolen smartphones are being "exported to other countries." So don't make it easier for the crooks by obliviously chatting on your phone in public places.
- Use a screen protector. One thin piece of film can save a large scratch, say, from hobbling your phone's touch screen.
- Enroll in cell phone protection from your wireless carrier. As many as 80 million phones are lost, stolen or damaged annually. For a low monthly insurance premium and a deductible should you file a claim, not only would you avoid the sticker shock that comes with learning what your smartphone really costs -- more on that in a minute -- but you'd get a replacement as soon as the next day.
- Use a password. Barely one in three people use one to lock their phones. "If it is stolen," says Colombo, "that's at least your first defense against identity theft."

One final caution about that aforementioned "sticker shock." Wireless carriers heavily subsidize smartphones when you sign a contract. So unless you insured yours with a reputable firm like Asurion (www.asurion.com), that Apple iPhone 5 with 64 gigabytes of memory you paid about \$400 for -- without insuring -- would cost around \$850 if you had to replace it before your contract expired.



The first ever HGTV Smart Home

5 Reasons to Go Smart in Your Home

([NewsUSA](#)) - Remember the 1999 Disney Channel original movie "Smart House," where current "Sons of Anarchy" queen Katey Sagal plays the computerized personality of a highly technical smart home? Sure, Sagal's cyborg-esque character, Pat, goes overboard and winds up trying to parent the motherless household -- but winning a technologically advanced house that eases chores and offers topnotch security was nothing short of out-of-this-world awesome.

Fast-forward 14 years, professional house planner and HGTV design expert Jack Thomasson designed the first-ever HGTV Smart Home in Jacksonville Beach, Fla. Complete with the latest technology, energy-saving features and green living. A sweepstakes was conducted this spring and a lady from Minnesota won the house.

For those who weren't lucky enough to win the house, Thomasson shares his top five tips to go "smart" with your home technology.

1. Find a system that speaks your language. Technology can be intimidating, and if it can't be explained within your comfort zone, don't do it. It's so frustrating to invest in something that doesn't offer a return. When you invest in technology for your home, take care to find the right system.
2. Maximize security options. This can make your life easier and more secure and bring you peace of mind. For example, a front door that you can lock and unlock from a smart phone can free you of giving precious house keys away that can be duplicated at any hardware store. Or, discreet security cameras can alert you when someone is approaching your home.
3. Enjoy the luxury of remote function. That same technology that brings you security can bring you luxury. When you can control your home remotely, you eliminate everyday worries. If you become distracted while filling the bathtub, you're covered -- a Smart Home will shut it off automatically at a pre-designated fill level.
4. Embrace "smart" technology. The right tech choices -- from energy efficiency to better use of your time -- will make you more effective. There is no need to walk from room to room turning off lights, because you can adjust lights with an app that controls them inside and outside the home. Or control the temperature in your home with a smart thermostat that you can adjust from anywhere.
5. Have fun. Technology can and should be fun. As you incorporate technology into your home and connect appliances and devices electronically, you'll marvel at the newfound freedoms you didn't even realize you'd lost and the functionality you didn't know you were missing. Wireless advancements have made technology more available, more affordable and more user-friendly than ever.

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