LISTENING TO BUSINESS, APPLYING TECHNOLOGY

GALAXY

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Verizon Buys Yahoo for $4.83 Billion

After a months-long bidding process and many layoffs, Yahoo has finally found a buyer. Verizon (which owns AOL, which owns TechCrunch) is officially acquiring Yahoo's core business for $4.83 billion in cash, which includes Yahoo's advertising, content, search and mobile activities.

Just over a year ago we acquired AOL to enhance our strategy of providing a cross-screen connection for consumers, creators and advertisers," Verizon Chairman and CEO Lowell McAdam said in the release. "The acquisition of Yahoo will put Verizon in a highly competitive position as a top global mobile media company, and help accelerate our revenue stream in digital advertising."

Yahoo's stakes in Alibaba and Yahoo Japan aren't part of the acquisition. These stakes are worth tens of billions of dollars alone. As of Friday, July 22nd, Yahoo's 15 percent stake of Alibaba represented $31.2 billion, and its 34 percent of Yahoo Japan was worth $8.3 billion. Yahoo's patent portfolio, which is worth around $1 billion, isn't part of the sale either. Yahoo's Sunnyvale headquarters are part of the acquisition.

Yahoo will be integrated with AOL, and Verizon EVP and President of the Product Innovation and New Businesses organization Marni Walden is going to lead the process. AOL CEO Tim Armstrong also mentions Marissa Mayer in his memo though. "For me personally, I'm planning to stay. I love Yahoo, and I believe in all of you. It's important to me to see Yahoo into its next chapter," Mayer wrote in an internal Yahoo memo. The transaction is expected to close in Q1 2017.

"Yahoo is a company that has changed the world, and will continue to do so through this combination with Verizon and AOL. The sale of our operating business, which effectively separates our Asian asset equity stakes, is an important step in our plan to unlock shareholder value for Yahoo," Marissa Mayer said in the release. "This transaction also sets up a great opportunity for Yahoo to build further distribution and accelerate our work in mobile, video, native advertising and social. Yahoo and AOL popularized the Internet, email, search and real-time media. It's poetic to be joining forces with AOL and Verizon as we enter our next chapter focused on achieving scale on mobile. We have a terrific, loyal, experienced and quality team, and I couldn't be prouder of our achievements to date, including building our new lines of business to $1.6 billion in GAAP revenue in 2015. I'm excited to extend our momentum through this transaction."

The Lenovo Air 13 Pro is Lenovo's Answer to the Mac

Lenovo, the Chinese tech giant, has shifted gears significantly with the arrival of their new "Lenovo Air 13", which is being likened to Apple products due to naming and design similarities. The Lenovo Air 13 Pro has a 13'3-inch IPS display powered by an Intel i5 6200U processor, 4GB of RAM and 256GB of SSD storage. At $750 the laptop sits favorably. The largest difference is arguably the addition of a fingerprint reader on the Lenovo notebook, a useful feature that may be the tipping point for unsure customers.

What are your thoughts on this modern day tech battle? Which of these notebooks would you introduce into your setup and why?

The Future is Now

World's First 3D-Printed Office Building Completed in Dubai

The basic building took 17 days to print, but then needed to be finished both internally and externally (Credit: Government of Dubai)

3D printing technology promises to revolutionize architecture in the near-future, allowing designers to literally click-and-print complex buildings at a lower cost and faster speed than traditional construction methods allow. Another step forward in the field comes via Dubai, where what's hailed as the world's first 3D-printed office was recently completed.
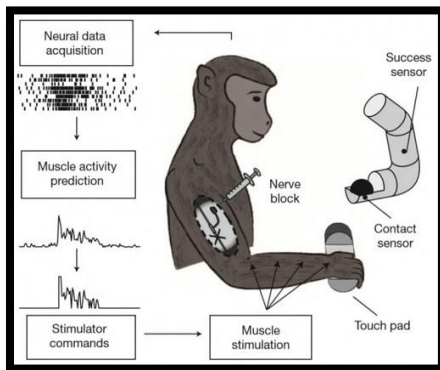
Taking up a footprint of 250 sq m (2,690 sq ft), the building is located within Dubai's Emirates Towers complex and will serve as a fully-functional office. A very large 3D printer, measuring 20 x 120 x 40 ft (6 x 36 x 12 m) did most of the work, printing the building by extruding a cement mixture layer by layer, in a similar method by which WinSun's 3D-printed homes were made (WinSun is involved in this project too). There were also some additional smaller mobile 3D-printers used too, however.

It took 17 days to print the basic building, but it then required finishing both internally and externally. Though not detailed by the source, it seems that, like Win Sun's 3D-printed homes, the building was printed in sections elsewhere before being assembled over two days on-site. We don't know the budget for the project, but the Dubai government says that the labor cost came in at half of what it would be for a building of similar size made using traditional methods.

The workforce included a single staff member monitoring the printer's progress, seven people to install the building components, and 10 electricians and other specialists to handle more technical issues, such as installing the building's electrical systems, for example.

The Office of the Future project is part of a wider push to make Dubai and the United Arab Emirates a world leader in 3D-printing. The scheme is focusing on construction, medical products, and consumer products.

Spinal Cord Substitute: Second Life to Paralyzed Limbs

For the first time ever, a paralyzed man can move his fingers and hand with his own thoughts thanks to an innovative partnership between The Ohio State University Wexner Medical Center and Battelle. Ian Burkhart, a 23-year-old quadriplegic from Dublin, Ohio, is the first patient to use BATTELLE NeuroLife™, an electronic neural bypass for spinal cord injuries that reconnects the brain directly to the muscles, allowing voluntary and functional control of a paralyzed limb. Burkhart is the first of a potential five participants in a clinical study.

"It's much like a heart bypass, but instead of bypassing blood, we're actually bypassing electrical signals," said Chad Bouton, research leader at Battelle. "We're taking those signals from the brain, going around the injury, and actually going directly to the muscles."

The NeuroLife technology combines algorithms that learn and decode the user's brain activity and a high-definition muscle stimulation sleeve that translates neural impulses from the brain and transmits new signals to the paralyzed limb. In this case, Ian's brain signals bypass his injured spinal cord and move his hand, hence the name NeuroLife.

Burkhart, who was paralyzed four years ago during a driving accident, viewed the opportunity to participate in the six-month, FDA-approved clinical trial at Ohio State's Wexner Medical Center as a chance to help others with spinal cord injuries. "Initially, it piqued my interested because I like science, and it's pretty interesting," Burkhart said. "I've realized, 'You know what? This is the way it is. You're going to have to make the best out of it.' You can sit and complain about it, but that's not going to help you at all. So, you might as well work hard, do what you can and keep going on with life."

This technology has been a long time in the making. Working on the internally-funded project for nearly a decade to develop the algorithms, software and stimulation sleeve, Battelle scientists first recorded neural impulses from an electrode array implanted in a paralyzed person's brain. They used that data to illustrate the device's effect on the patient and prove the concept. Two years ago, Bouton and his team began collaborating with Ohio State neuroscience researchers and clinicians Dr. Ali Rezai and Dr. Jerry Mysiwto design the clinical trials and validate the feasibility of using the NeuroLife technology in patients. During a three-hour surgery on April 22, Rezai implanted a chip smaller than a pea onto the motor cortex of Burkhart's brain. The tiny chip interprets brain signals and sends them to a computer, which recodes and sends them to the high-definition electrode stimulation sleeve that stimulates the proper muscles to execute his desired movements. Within a tenth of a second, Burkhart's thoughts are translated into action.

"The surgery required the precise implantation of the micro-chip sensor in the area of Ian's brain that controls his arm and hand movements," Rezai said. He said this technology may one day help patients affected by various brain and spinal cord injuries such as strokes and traumatic brain injury.

Battelle also developed a non-invasive neurostimulation technology in the form of a wearable sleeve that allows for precise activation of small muscle segments in the arm to enable individual finger movement, along with software that forms a 'virtual spinal cord' to allow for coordination of dynamic hand and wrist movements.

Technology Focus
What's the Best Way to Communicate about Advanced Persistent Threats?

Advanced persistent threats are a constant risk for enterprises, so the board needs to know about them.

Fear, uncertainty and doubt seem to be crude methods of communication when there are risks to an enterprise. With a growing trend of advanced persistent threats, I want to make sure I'm communicating with the board in the most effective way, instead of relying on FUD. What's the best way to communicate with the board specifically about advanced persistent threats? Or should I just stick to the basics and avoid going too deep into specifics about advanced persistent threats?

APTs and the Enterprise

Board members are extremely smart individuals. One does not get to that level by chance. That said, the board's primary objective is to maximize shareholder wealth. That is why they rely on subject matter experts. Some may be members of the board, but most are company employees who provide the board with the necessary information to make informed decisions.

An advanced persistent threat (APT) is an attack in which an unauthorized party gain entry into an IT environment and remains there undetected for an extended period of time to do more damage. Its mission is to exfiltration of data, rather than to cause damage to the network or organization. To maintain access without discovery, the intruder must continuously rewrite code and employ sophisticated evasion techniques. They typically gain access through a spear-phishing emails, where an unsuspecting employee is asked to log into a bogus page that requests the employee's username and password, or they're prompted to click on a link that will download spyware or other malicious programming.

With a growing trend of advanced persistent threats, the most effective way to communicate with the board is to deliver the message in terms they understand. FUD is a good attention-getter, but it's short-lived. It is not enough to share the risks of advanced persistent threats. They want to hear that the enterprise will not be the next casualty, and, if they are unfortunate enough to experience a breach due to an APT, the enterprise is in a position to minimize the exposure and able to readily bounce back to business as usual.

Security experts say any effective approach to defending against advanced persistent threats must include defense in depth, a detection capability, and an APT incident response plan -- fully vetted and tested -- a recovery plan and security-awareness training. Share this approach with the board. Put it in simple terms and make sure they understand. Map this approach with a security framework and use graphical icons to portray the information security posture of the enterprise. Do not overwhelm them with technical minutiae. That will only cloud the message and marginalize its importance, but be ready to answer any question that might arise.

Remember, they hired you as an expert in your field. They would expect nothing less than to rely on your expert advice. Be confident, aplomb, resolute and informed. Share how advanced persistent threats affect other businesses in your industry, how others have deployed protection and detection measures, and how your enterprise compares with those successful in dealing with the APT. Share your plan in dealing with advanced persistent threats, and at subsequent board meetings, demonstrate its progress. Whatever you do, do not leave the impression the enterprise will never be hit with an APT breach. Instead, assure them that even if it does occur, the damage will be minimal and recovery will be swift.

What Keeps Security Professionals Up at Night? Their Users

You might believe that the expensive network security hardware you installed will protect you from bad actors — until a single employee undoes all that good work when he doesn't realize the attachment he just opened carries dangerous malware. It's hard keeping criminals from infiltrating networks, much less worrying that users will simply open the door to bad guys by letting their guard down.

Endpoints are the biggest source of security risk: In line with concerns about users, security professionals are also worried about endpoint security: After all, this is where concerns about protecting entry points and user behavior intersect. Forty-nine percent of security professionals, we surveyed said endpoints are the source of their greatest security risk, followed by insider threats (21 percent), networks (16 percent), and the cloud (14 percent). This fear is borne out by research: Verizon's 2015 Data Breach Investigations Report says that end-user devices were a factor in 82 percent of security incidents.

Delays in patching zero-day vulnerabilities: Patching for known vulnerabilities is part of a "low hanging fruit" approach to security – in other words, it's a straightforward way to prevent threats using zero-day vulnerabilities. When asked how quickly their organizations patched for zero-day vulnerabilities, 50 percent of security professionals said they did so in the first week. However, 24 percent said they waited a month, and 26 percent said more than a month. A delayed approach to patching leaves dangerous windows open to bad actors.

Ransomware, a rising threat, is coming onto to the radar in the security world: 49 percent of security professionals, we surveyed said they or someone they knew had been infected with ransomware.

Prevention, not remediation, is key to cyber security: Stopping attackers before they can wreak havoc – not after – is the smartest security posture, according to RSA attendees. Sixty-four percent said prevention is the most effective aspect of a cyber security architecture, followed by detection (17 percent) and prediction (17). Only 2 percent said remediation is most effective.

When we flipped the question around, remediation wasn't shown much love: 47 percent of security professionals said remediation is the least effective aspect of cyber security architecture; 36 percent said the prediction was least effective.

Tech News

WhatsApp Chats Leave a Record Even After Deletion, Says Security Researcher

If you're a WhatsApp user with an iPhone, your chats might not be as secure as you think.

Despite the popular messaging app's announcement earlier this year that it would encrypt all user data, a security researcher said that the latest version of WhatsApp for Apple's iOS software for iPhones leaves some information vulnerable. The researcher, Jonathan Zdziarski, found traces of deleted chats, which can be pieced together into conversations, he said, and that's even if you've cleared or archived them.

Zdziarski wrote in a blog post that such traces can linger "for months." And he also said it looks like the only way to truly shred the chats is to delete WhatsApp from your phone. Zdziarski added that Apple's iMessage software also suffers from the problem, something he wrote about in March.

Neither Facebook-owned WhatsApp nor Apple immediately responded to a request for comment.
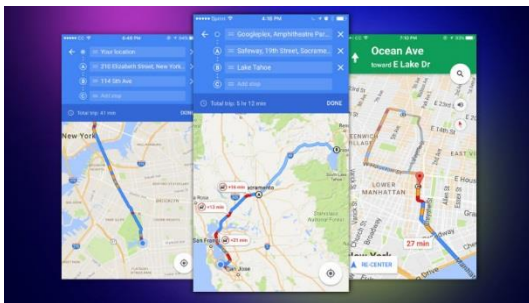
The issue of privacy and encryption -- coding messages so they can be read only by the intended recipient -- came to the fore in 2013 after Edward Snowden leaked secret documents about the US National Security Agency's appetite for gathering people's digital data.

It's since fueled spats between the tech industry and governments around the world. One in particular involved an FBI demand that Apple helps hack into the iPhone of a terrorist. Another involved Brazilian law enforcement's desire to have access to WhatsApp users' chats.

Zdziarski said there's no need for WhatsApp users to panic about the deleted-chats issue, but that they should be aware that law enforcement and others could potentially access supposedly trashed conversations.

WhatsApp said in February that 1 billion people were using the app, on various devices.

Google Maps for iOS Can Now Navigate to Multiple Destinations

iOS: As the saying goes, not all who wander are lost, and if your journey is more complicated than point A to point B, you can finally add more than one destination in Google Maps for iOS when you're trying to get directions.

Multiple en route destinations have been available on other platforms for a while and now the feature has finally arrived in the iOS app. It works as you'd expect: You simply enter your first destination as you normally would, and then you can tap the corner menu and add additional stops on your trip. You can also drag and drop the stops to rearrange them into a logical trip order as you go.

The update is currently rolling out to all current iOS users or you can grab it in the App Store for free.

Now you can build multi-stop road trips on Google Maps for iOS | Google Lat Long

UIDAI May Soon Enable Aadhaar on Smartphones

The country's public policy and governance is heading towards a progressive step by incorporating technology and UIDAI (Unique Identification Authority of India) has decided to make smartphone Aadhaar enabled.

According to report, published by Economic Times, Ajay Bhushan Pandey, CEO of UIDAI is said have had discussions with senior executives of smartphone-makers Apple, Samsung, Google, Microsoft and Miramax as well as iSPIRT to help enable smartphones as one-stop instrument for instant identity authentication to avail government services linked to Aadhaar.

As per the reports, the UIDAI initiative has been well received by the smartphone makers who are yet to have internal discussions within their respective companies to further this initiative.

UIDAI plans to have encrypted UIDAI keys on smartphones, which will be connected to the Aadhaar server. This would enable secure transaction, eliminating the possibility of a data breach. The server connection will then process the instant fingerprint and iris authentication. Most smartphones have inbuilt fingerprint and iris recognition features to ensure the security of personal data.

UIDAI Chief Operating Officer Pandey has said that the biometric information can be encrypted by a UIDAI key at the chip level in smartphones, therefore securing it from being accessed to decrypt and reuse the information, by anyone apart from the Aadhaar server to monitor the data. This has been a key point in the discussion which was held on the 27th of July.

"Nearly 104 crore Indians have Aadhaar and almost 40 crore have smartphones. Every agency requires authentication via Aadhaar. If people don't need to go to any office to authenticate their identity and get government services, and if they are able to do so through their mobile phones, this can be the big game changer," said Pandey according to the Economic Times.

Special Focus

Ipswitch WhatsUp® Gold 2017 Reimagines IT and Network Monitoring with Interactive Visualization, Dynamic Mapping and Flexible TotalView Licensing

Powerful and intuitive visualization and dynamic mapping technology provides IT teams with new levels of visibility, control and troubleshooting for today's complex IT environments. Ipswitch, the leader in easy to try, buy and use IT and network management software, recently announced the launch of Ipswitch WhatsUp Gold 2017. WhatsUp Gold 2017 reimagines how IT teams discover, visualize, troubleshoot and monitor networks, servers, virtual machines and applications. WhatsUp Gold 2017 with TotalView enables IT teams to monitor everything with one cost-effective license, delivering the best value and most flexibility in the industry. Ipswitch WhatsUp Gold 2017 helps IT teams control the increasing complexity of today's hybrid environment with a single flexible software solution that provides a comprehensive and interactive view of the entire network. This enables IT teams to:

- **Discover, visualize and interact with their IT environment via advanced visualization technology**

- **Troubleshoot faster with intuitive maps, workflows and dashboards**

- **Monitor their entire environment with one flexible Ipswitch software license**

Ensuring that network operations teams identify and use a flexible, fully-integrated and multifunctional network management tool is becoming increasingly important for business success," said Shamus McGillicuddy, Senior Analyst Network Management at Enterprise Management Associates. "EMA research shows that organizations that use fewer, but more integrated tools perform better than companies that use many different point solutions. A truly integrated solution provides end-to-end visibility, more efficient troubleshooting features and a unified interface giving a single and comprehensive view of the network health and performance."

Discover, visualize and interact with your IT environment: WhatsUp Gold 2017 provides a new way of visualizing and interacting with the entire IT environment. It introduces a faster, simpler and more intuitive user experience (UX) that puts users in control. Interacting with WhatsUp Gold 2017 is like interacting directly with your network. WhatsUp Gold 2017 provides immediate value by automatically discovering your end-to-end IT environment and features a unique and an interactive network map that quickly shows the status of every device and interconnection. The visualization can be dynamically filtered to gain real-time insight into physical, virtual and wireless networks as well as their dependencies. WhatsUp Gold offers a unique mapping functionality and visual linking of sites and objects while requiring very few resources both on the network and on the server where it is installed," said JR., Network Administrator at Community Hospital. "This new release adds unequalled network discovery, flexibility and new functionality that allows our team to focus on performance rather than fighting fires."

Troubleshoot faster with intuitive maps, workflows and dashboards: WhatsUp Gold 2017 streamlines troubleshooting by letting IT teams interact directly from an intuitive network map. With the dynamic map, IT teams can see the big picture of their entire environment and zoom in to focus on details, such as Windows, Linux, virtual or wireless resources. By clicking on any device, IT teams gain immediate visibility to critical network, server and application health information. The result is simpler, more intuitive troubleshooting that lets IT teams find and fix problems faster. Workflows are optimized and intuitive whether initiated from the network map or from a vast array of easily-customizable dashboards and reports. The innovative network mapping technology gives users the flexibility to filter and optimize views of their networks. It starts with advanced discovery capabilities that automatically identify everything connected to the network and automatically apply device roles and monitors to dramatically accelerate the monitoring setup. This dynamic mapping capability supports both physical and virtual devices, including VMware and Hyper-V. Network managers, system administrators and IT operation leaders know that network visibility and performance is key to their business health and success. "The new map has an organic feel that comes alive as it discovers your network. Watching the map build as your network is discovered can bring insights instantly," said Tim Walsh, senior IT architect. "Once built, the map almost feels like it knows what you are going to do next, showing connected devices as you move around the intuitive visualization of your IT environment."

Monitor your entire environment with one flexible license: Ipswitch WhatsUp Gold 2017 delivers the industry's best monitoring value with its unique TotalView licensing. TotalView allows teams to monitor any mix of network devices, servers, virtual machines, applications, traffic flows and configurations with one flexible license – to simplify purchasing, increase monitoring flexibility and streamline scaling. There's no need to purchase separate licenses for applications, network devices or network flow sources – they're all included. Furthermore, TotalView allows reallocation of those licenses wherever and whenever needed without additional cost – eliminating wasted, unused licenses caused by artificial license limitations.

With unprecedented freedom to adapt to changing monitoring needs, WhatsUp Gold 2017 is available in four editions:

- **BasicView – Entry-level network monitoring software for IT environments of all sizes.**
- **ProView – More advanced monitoring capabilities, including server and wireless monitoring.**
- **TotalView – All of the features in ProView plus VMWare monitoring, Hyper-V monitoring, and application performance monitoring and network traffic analysis.**
- **TotalView Plus – The highest-value edition that includes all the functionality of TotalView as well as configuration management and additional pollers for scalability.**

"WhatsUp Gold 2017 leverages advanced visualization technology to intuitively map the user experience directly to the environment that the IT team created. The interface will be immediately familiar, allowing team members to easily understand irregularities at a high level and then drill down immediately to detailed device information keeping them in front of potential issues," said Austin O'Malley, chief product officer at Ipswitch.

About Galaxy

- One of the most respected Information Technology integrator of the best of breed products and solutions for Enterprise Computing, Storage, Networking, Security, Automation, Application Delivery, ERP and Business Intelligence.
- An ISO 9001:2008 organization, founded in 1987.
- Committed team of over 200 skilled professionals.
- PAN India presence.
- Trusted IT services provider to more than a 1000 companies.
- Experienced consultants certified on a wide spectrum of technologies.
- The Galaxy Technology Innovation Centre, a state-of-the-art integrated hardware and software laboratory, allows customers a hands-on look at the latest storage, backup, security, application delivery and virtualization technologies.
- Customer list includes many of India's leading corporations, banks and government agencies.
- Four business units collaborate to provide a full spectrum of services and ensure smooth projects. Together, they provide our customers with truly end to end professional IT Services.

Galaxy Business Solutions	**Galaxy Technology Services**
System integrators of best of breed technologies to deliver solutions to the problems and challenges that confront enterprises	Skilled pool of resources consistently maintains and delivers enterprise class service levels
Galaxy Network Solutions	**Galaxy BI Consulting Services**
One of India's most trusted active and passive networking specialists	Helps organizations to deliver and leverage business intelligence to create substantial business impact

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VISION

"*To become the most preferred technology solution partner by listening to our customers, anticipating their needs and providing reliability, flexibility, responsiveness and innovative products and services. Achieving market leadership and operating excellence in every segment of our company.*"

MISSION

"*Total customer satisfaction; through innovative insights, quality service and excellence in technology deployment.*"

VALUE PROPOSITION

"*We understand the need of a common vendor for all your IT needs. Hence, we are committed to long-term partnerships by delivering on our commitments.*"

MD Speaks

"*Dear Readers,*

How the mighty have fallen! Last month Verizon acquired Yahoo for a mere USD 4.83 billion. Mere, because at one time in the late 1990s, Yahoo was valued at over USD 125 billion. In 2002, Yahoo had an opportunity to buy Google for USD 5 billion but did not do so, instead offering USD 3 billion which was turned down by Google. Now, Google is worth almost USD 200 billion. In 2008, Yahoo rejected a \$47 billion buyout bid from Microsoft, with the company's board saying the offer substantially undervalued Yahoo. This is yet another example that shows us how transient valuations are in today's day and age.

Pokemon Go has captured the imagination of the young and old across the world. It has caused more buzz than any other game or app in the recent past. By adding Augmented Reality to the game, Nintendo has upped the ante. Time will tell how safe or successful Pokemon Go will be in the long run but they have definitely won the first round hands down!

Happy Reading."