



TechTalk

Issue 35

MAY 2015

LISTENING TO BUSINESS, APPLYING TECHNOLOGY

Internet.org is now a Platform, open for all developers to build and integrate their apps

Internet.org is a coalition of Facebook, Samsung, Opera, Nokia, Qualcomm and MediaTek and a few other large technology companies that are attempting to bring low-cost Internet access to the next five billion people in underserved parts of the world. After the heated Zero Rating and Net neutrality debate that engulfed India's internet world – some of the partners, mainly Cleartrip and NDTV pulled out of the program.

Mark Zuckerberg said, "Our goal with Internet.org is to work with as many developers and entrepreneurs as possible to extend the benefits of connectivity to diverse, local communities. To do this, we're going to offer services through Internet.org in a way that's more transparent and inclusive." Before this announcement, Facebook vetted and handpicked its partners; and not many people knew how the process worked. But now every developer, by virtue of submitting their app to Internet.org will be a part of the new Internet.org platform. A few restrictions — Apps and sites that are bandwidth intensive aren't welcomed. No skype kind VoIP. No Drop Box kind of file transfer. No high resolution photos like Flickr. No YouTube like video platform. Internet.org will not display video files and will also truncate resources larger than 1 MB.

At present Internet.org is available in Zambia, Tanzania, Kenya, Colombia, Ghana, and India. More than a billion people in India don't have access to the internet and this is a mouthwatering opportunity that Zuckerberg and team cannot afford to pass. Facebook has invited developers to optimize their apps that are in communication, education, employment, finance, government, health, news, reference, sports, weather, women and maternal health. As of now, users don't have to be signed up via Facebook to access content on Internet.org. But will this be enough? Do you think this is a step in a right direction? Is some access better than no access? How we go from "some access to 'access', in order for the internet to be truly inclusive?

IN THIS ISSUE

The Future is Now	2
<i>This is The Future of Shopping - Get Ready</i>	
<i>Paper Turned Into an Eco-Friendly Light-Emitting Display</i>	
Technology Focus	3
<i>Process Real Time Data Analytic Options</i>	
Tech News	3, 4 & 5
<i>Salesforce Takeover Rumors: Oracle Hailed As Most Likely Suitor</i>	
<i>Apple And IBM Team Up To Deliver 5 Million iPods to Japanese Seniors</i>	
<i>Flipkart's Dabbawala Tie-Up For Last-Mile Delivery</i>	
<i>Apple Watch Could Be a Password Alternative</i>	
Special Focus	5
<i>EMC Enhances All Flash Beast And Hyperscale Products</i>	

Lenovo's super-light LaVie Z laptop is now available



If you are badly craving for a featherweight laptop but feel that Apple's MacBook rubs you the wrong way, you're in luck: as promised, Lenovo is now selling the LaVie Z and LaVie Z 360 in the US. Both 13-inch systems largely resemble what you saw in January, and strike a careful balance between brisk performance and a light design that won't strain your shoulder when it's in your bag. They share Quad HD screens, fifth-generation Core i7 processors, 8GB of RAM and a 256GB solid-state drive. The only big difference is the 360's namesake convertible touchscreen, which turns your PC into a makeshift tablet.

Lenovo may have been optimistic about what it could deliver this month, though. The standard Z is ever-so-slightly heavier than claimed at 1.87 pounds, and the models available now are significantly more expensive than what we were quoted a few months ago. You're looking at \$1,700 (\$1,500 after a discount) for the regular LaVie Z, and \$1,850 (\$1,699 on sale) for the 360 -- that's at least \$200 higher than expected. It's entirely possible that lower-end versions are coming, but you'll have to pay a premium if you simply can't wait.

The Future is Now

This Is The Future of Shopping - Get Ready!

We've all been there. You're in the perfect little boutique, on the hunt for the perfect little outfit. All the mixing, matching and accessorizing that happens is enough to leave you exhausted. And, perhaps momentarily, never wanting to step foot in a store again. But consider this: a shopping platform where you can try as many outfits and accessories you want... Without ever kicking off your shoes. Thanks to entrepreneur Linda Smith and her startup FaceCake Marketing. Technologies, that possibility is now reality.

Meet FaceCake.

Based in Calabasas, California, FaceCake has found a powerful way to try on clothes in the digital era. The result, around 8 years in the making, is Swivel – a technology for trying on clothing and much more.

"We've been working on it for a long time doing all kinds of visualization software. Through all that work and hardcore development, we've come up with a really good system. It's instant, it's easy, you can play around without taking any risks, combine products, get advice from friends and buy it," says Smith.

How Does It Work?

Swivel employs the Kinect camera, a motion sensing technology used by Microsoft's Xbox gaming system. The camera can track a shopper's body movements as they stand before a display. Then, Swivel's visualization software allows them to try on entire wardrobe with incredible realism.

"We're always looking at making it more realistic. To make necklaces fall more realistically, try on different lengths."

But beyond making shopping just easier, Swivel also goes one step beyond and allows you to do things simply not possible in the physical shopping world.

"My favorite thing to do is to compare any product in real time. When you can see yourself in real time, holding a different handbag, with the same dress, you can say there's a winner."

The full-length version of the technology is augmented by Swivel Close-Up, which focuses on the face using an ordinary webcam to capture a person's image. Then, proprietary software creates virtual version of practically anything on the market from scarves to sunglasses to jewelry. Swivel also allows shoppers to take on more risks and experiment more. After all, when the makeup is virtual, you don't need cold cream.

What's Next?

Smith is beginning to partner with some of the country's biggest retailers and believes FaceCake's try-on technology is that revolutionary. She believes there can be multiple applications for Swivel ranging from traditional stores, malls, online boutiques and even home closets.

For example, similar to popular music apps nowadays, Swivel will eventually allow you to upload your own wardrobe to the platform so you can mix and match your favorite blue jeans with a new sweater you're considering for purchase. Ultimately, says Smith, it's about making shopping fun again.

"I see [the] FaceCake/Swivel shopping platform as being ubiquitous. Get the items you want, receive personalized advice. I think of it dream closet you always thought about and the best shopping experience you could ever imagine."



Paper Turned Into an Eco-Friendly Light-Emitting Display



PAPER, light thyself. A light-emitting display has been created out of ordinary paper. It could one day make disposable displays for packaging or newspapers, using cheap and environmentally friendly materials.

Ludvig Edman from Umeå University in Sweden and his team sprayed six layers of different materials onto a piece of paper: an adhesive, four layers that carry current and turn electricity into light and a capping layer to keep it all in place. When juiced with 11 volts, the paper glows as bright as many computer displays.

Edman says it could be a low-cost alternative to LEDs, which are usually used for illumination, and OLEDs, which are used for high-end displays. LEDs are efficient but expensive, so a cheap, eco-friendly version could have traction. The light can be printed in the same way as a newspaper, is highly flexible and, unlike glass displays, doesn't break into dangerous shards.

Other uses for light-emitting paper could include tagging goods so that they automatically light up when close to their expiry date, notifying a patient who has forgotten to take their medication, or easily tracking and identifying packages in a big pile.

Technology Focus

Process Real-Time Data Analytics Options

Now is the time to process all that enterprise data. With the need for speed and agility, here are some options to process your data in real-time.



You can never have enough data and process it too quickly.

That's the essence of the drive toward real-time data analytics and the use of event processing and event-driven architecture. The data center is experiencing a mass amount of data and some of it must be analyzed immediately.

Most businesses try to improve cycle times to be more responsive to catching problems and spotting opportunities quicker, said IDC analyst, Maureen Fleming. Shifting to a faster, event-driven approach often makes sense.

There are numerous approaches to real-time data analytics, and many definitions of what constitutes real-time, said ESG analyst Nik Rouda. "We conducted a survey and found most respondents thought data must be updated in seconds for it to be considered real-time, while smaller groups preferred different sub-second times," Rouda said. No matter the specifics, faster always seems to be better.

In the last year, popular traditional relational databases, like Microsoft SQL Server, IBM DB2 Blue Acceleration, and Oracle 12c Database, have acquired in. This typically provides an order of magnitude or more performance improvement, Rouda said. "Some would argue that their approaches are retrofits that don't properly design for this use case," he said. The alternative would be younger NoSQL databases that are reputedly better suited to in-memory analytics, such as Datastax's Apache Cassandra.

In the Hadoop ecosystem, the transition from batch to real-time is evidenced by the fact that Apache Spark, a fast and general purpose engine for large-scale data processing, is challenging Map Reduce for in-memory data analytics, thanks to its ability to use data on the Hadoop distributed file system and other data platforms, like Cassandra or Amazon S3. "This space is still maturing, but there is a lot of development, momentum, and interest," Rouda said.

Of course, for real-time performance, data must be captured at the speed in which it is generated. Depending on the data type, streaming the data can be accomplished with data pipes that use tools like Apache Flume or Apache Kafka, or even Amazon Kinesis.

Amazon Kinesis is important because it is cloud based, said Eric Dynowski, the CEO of Turing Group, an infrastructure as a service provider. However, it is more of an intermediary, enabling more and better processing on-demand. For Dynowski, Amazon Lambda is changing the data game. "Lambda provides a framework for analytics that is the first opportunity for an organization to simply implement a little bit of code or a whole neural network with Java Script and artificial intelligence completely on demand. You can have an application program interface and a real-time response without having a big application infrastructure," he said.

Lambda is even more radical because it is completely scalable and demand-driven, Dynowski said. "IT has always been about systems of consuming -- something processes data and then waits for more data," he said. "Lambda is a quick flash of code that adds a new layer to how you analyze data when needed." Now, analytics can scale more realistically, based on events and what is happening.

Tech News

Salesforce Takeover Rumors: Oracle Hailed As Most Likely Suitor

The news that Salesforce might be on the verge of being bought has sent the rumor mill into overdrive about who the suitor might be.

According to a Bloomberg report, an unknown company views the cloud-based customer-relationship management (CRM) company as a takeover target. The report said Salesforce is working with a team of financial advisors to field offers. The report cites unnamed sources, who went on to say there is no guarantee anything will come of the approach, but – since the news broke – speculation about who might be in the running to acquire Salesforce has been rife.

The only comment Salesforce has made in response to the report so far is that it does not comment on rumor or speculation.

That price tag rules a large swath of technology suppliers out of the running. Based on the likely value of the deal, the obvious candidates are Microsoft, Oracle and IBM.



Tech News

Apple And IBM Team Up To Deliver 5 Million iPads to Japanese Seniors



At an event in New York City, Apple CEO Tim Cook, IBM CEO Ginni Rometty, and Japan Post CEO Taizo announced all three companies will come together to launch a new initiative that will give 5 million iPads to Japanese seniors over the next five years.

The iPads will be pre-loaded with software that is geared towards the elderly. Among the included apps are ones that will remind and alert the elderly about medications, exercise, and diet, as well as other apps that help access community events, grocery shopping, and job matching. Japan Post, a company that handles postal, banking, and insurance services in the country, will be in charge of distributing the iPads through its Watch Over service.

The company hopes to reach 4 to 5 million customers by 2020.

The main driver behind this initiative is Japan's rapidly increasing aging population. Currently, 25 percent of Japan's population, or 33 million people, are senior citizens. The percentage is expected to rise to 40 percent in the next 40 years. With the new iPad initiative, Cook said, senior citizens' quality of life should see an increase.

"We will dramatically improve the lives of millions of people," said Cook during the event. "Sooner or later, almost every country on the face of the Earth will encounter this same issue."

Even though the pilot program will start in Japan in the second half of 2015, Cook said the possibility for it to extend into other countries, such as the United States does exist. In order for that to happen, however, Apple and IBM will need to bring together a collection of regional companies.

The initiative itself is a promising and optimistic one, but it's no surprise that Apple and IBM are the ones to spearhead it. The two companies entered a business agreement last July that will help Apple enter the enterprise sector, while also optimizing 100 iOS apps for business use and offering enhanced cloud computing services. With Apple recently reporting a drop in iPad sales, this initiative is also sure to help the company's bottom line.

Flipkart's Dabbawala Tie-Up for Last-Mile Delivery

Tapping on the country's renowned supply chain, online marketplace Flipkart said it has tied-up with the 'Dabbawalas' of Mumbai to ensure last mile delivery to consumers.



Flipkart, India's leading e-commerce marketplace, has tied up with the Dabbawalas of Mumbai for last-mile delivery to customers. The partnership is an effort to explore newer delivery channels and opportunities by partnering with this unique community of experts.

"The Dabbawalas of Mumbai are one of the most reliable and trusted brands in the city. Their unique delivery system has been smooth, reliable and has survived the test of time, even under extreme conditions that are typical of a city like Mumbai.

"We are partnering with them and leveraging this unique expertise to enhance our last mile delivery capabilities" said Neeraj Aggarwal, Senior Director – Last Mile Delivery, Flipkart.

In the initial stage of association, the Dabbawalas (with one union at this stage) will collect Flipkart marketplace shipments from the delivery hubs and deliver it to the customers -- while picking their dabbas. Currently, a partner just for last mile deliveries, the Dabbawalas will not be interacting with the sellers at this stage.

The initial pilot will be for prepaid orders -- rolled out for cash-on-delivery orders as the association expands. The first batch of Dabbawalas has undergone training at Flipkart's delivery centers. At this stage, they will be using a paper-based tracking system with the idea being to gradually train them on the usage of apps and other wearable tech. In another attempt to break-away from the traditional operations-heavy logistic method, Flipkart recently launched a crowd-sourced delivery option which aims to connect local sellers and buyers with the help of voluntary delivery personnel, reducing the order to delivery timeline drastically. These delivery personnel are on-boarded onto a specialized Flipkart delivery program post extensive background verifications and are free to take up Flipkart deliveries as per their convenience.

This process helps reduce the delivery process checks by enabling these delivery personnel to directly collect the package from the local seller and deliver it to the buyer, managing to reduce the order to delivery time to as little as three to four hours.

This pilot project, currently operational only for Bangalore sellers and customers, should ideally see higher conversions for sellers as well. The service is currently available for shipments of less than ₹5,000 value in Bangalore.

Tech News

Apple Watch Could Be a Password Alternative

With password tolerance levels at an all-time low, alternatives to the pesky and insecure authenticators are beginning to abound. One of those alternatives could be the Apple Watch.

Even before Apple's latest gadget began shipping last week, MicroStrategy announced it was extending its Usher enterprise security solution to the Apple Watch.

Usher, launched earlier this year, lets an enterprise use smartphones to authenticate its users and eschew user names, passwords and tokens. The solution has two parts: a back end that runs in the cloud, and an app that runs on mobile phones. Usher on the Apple Watch allows it to act as a digital key that employees can use to log in to business systems, unlock devices, validate an identity and open entryways.

The Usher app uses all of the Apple Watch's repertoire -- glances, notifications and force touch -- to perform its functions. It is designed to detect a variety of business systems through a wireless connection as users approach.

For example, as a user walks up to a workstation, a notification will appear on the watch to unlock the hardware, which can be done with a tap of the timepiece. With Usher, an enterprise can remove the need for user names, passwords, physical IDs and badges, and replace them with a software key that can reside on a smartphone or the Apple Watch.

"That can be a transformational and important application for the enterprise, because it rids it of one of the real weaknesses in enterprise security," said Paul Zolfaghari, president of MicroStrategy.



Special Focus

EMC Enhances All Flash Beast And Hyperscale Products

At the EMC World in Las Vegas EMC made significant product and initiative introductions to support digital storage requirements in modern data centers. EMC is a market leader in shared storage products and it is making a major move to support private clouds. This event is their major partner and customer event with over 40,000 attendees from 99 countries with numerous related events including 400+ breakout sessions.

EMC introduced its XtremIO 4.0. The company refers to this product as "The Beast." Since its introduction 18 months ago, XtremIO has been the fastest selling product in EMC history and, according to IDC, the top-selling all-flash storage array.

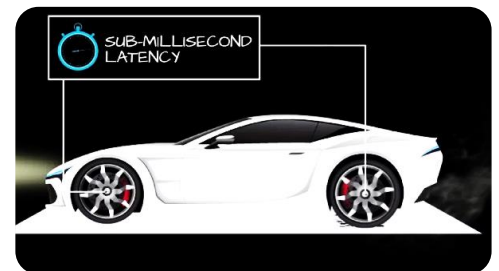
Version 4.0 provides significant multiples compared to the prior generation. The new 40 TB X-Brick building blocks double the density of the prior generation product. It also provides up to 33% higher performance and supports multi-Petabyte configurations. The company is offering configurations of up to 8 of these X-Bricks with non-disruptive performance and capacity expansions with 16-way active controllers (up from 12).

XtremIO 4.0 also includes enhanced support for hybrid cloud and private cloud storage services that it says allows scale-out storage consolidation across all workloads. Free software updates to existing XtremIO customers helps them boost their workloads, consolidation and performance. XtremIO 4.0 offers in-memory copy services, enabling entire workflows to be streamlined and automated from the storage through the hypervisor and into the application. The company is targeting software development operations, real-time analytics, production and non-production database acceleration, SAP consolidation, private/hybrid clouds, enterprise-wide messaging and collaboration as well as electronic medical records for this product. XtremIO and the Federation Enterprise Hybrid Cloud 3.0 allow consolidation of mission-critical workloads and non-production copies into their Hybrid Cloud with Tier 0 Storage and Copy services.

VCE (EMC is a member and supplier to the VCE Foundation for Federation Enterprise Hybrid Cloud) introduced its VxRACK hyper-converged rackscale storage system. This scalable product enables to scale to many thousands of servers and tens of petabytes of storage capacity, while delivering high performance and value per IOP. The VxRack systems are said to complement VCE's flagship Vblock and VxBlock converged infrastructure platforms for mission critical Tier 1 workloads.

The VxRack systems leverage EMC ScaleIO software-defined storage with built in networking to allow independent scaling of computer and storage to construct a hyper-converged architecture. Software stacks bring various EMC technologies together and allow a choice of hypervisor, including a fully integrated VMware stack based upon VMware's EVO: RACK technology and VMware Virtual SAN.

The combination of Blocks, Racks and Appliances shown at the EMC World offer a comprehensive converged infrastructure to enable private cloud environments and hybrid private and public cloud storage. EMC has successfully adjusted itself to keep its products current and attractive even as the market has moved towards hyper-converged architectures in order to support the growing applications in the cloud, powering today's economy.



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

System integrators of best of breed technologies to deliver solutions to the problems and challenges that confront enterprises

Galaxy Technology Services

Skilled pool of resources consistently maintains and delivers enterprise class service levels

Galaxy Network Solutions

One of India's most trusted active and passive networking specialists

Galaxy BI Consulting Services

Helps organizations to deliver and leverage business intelligence to create substantial business impact

NEWSLETTER COMPILED BY

Galaxy Office Automation Pvt. Ltd.

A-23/24, Ambika Towers, Ground Floor, Off Jijamata Road, Nr. Pump House, Andheri (E), Mumbai – 400093, India.



Phone: 91-22-42187777

Fax: 91-22-42187760

E-mail: galaxyinfo@goapl.com

www.goapl.com

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

"The phrase 'Net Neutrality' has been buzzing around a lot over the past month or so. Everyone seems to have an opinion on this - many more for than against. But what is net neutrality? Is it the same as internet for all as some claim it to be? Is it better for the consumer or the supplier? Who is the supplier - the carrier or the owner of the website/app that the consumer wants to access?"

Let me try and deconstruct this using an example of a search engine. In the mid to late 90s, Yahoo! had a popular search engine much before Google was even formed. What if Yahoo! had tied up with some ISPs to offer searching on it's search engine to be free whereas searching on any other search engine would incur carrier fees? What if the carrier deliberately slowed down the transfer speeds from other search engines? Would that have deterred competition enough to prevent Google from coming into existence? Would that have lulled Yahoo! into a sense of security that all the research that went into making search engines better would not have happened? There was a good change that it would and the whole internet community would have been poorer for that. Now, extend this example to all the other wonderful innovations on the internet. Could they have happened in a restrictive monopolistic environment? Same answer!

But, is net neutrality the be all and end all of equality on the internet. What happens when an online retailer offers deep discounts to drive traffic towards itself? What happens when taxi aggregators offer free rides? Is that not stifling innovation and new competition?

On a lighter note, imagine driving on a toll road, reaching the toll booth and then seeing a sign that says "if you are driving a Honda or BMW then you don't have to pay any toll, but if you are driving anything else then you do have to pay". Oops! Wrong analogy - as you approach the toll booth, you see a long list of not car makes or models but categories of people who are exempted. So much for equality"