

TechTalk



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Galaxy Helps Global Leader in Printing Solutions get Business Value through Backup Redesign

Galaxy recently worked with a global leader offering world-class solutions in commercial printing, custom labelling and business documents, with services ranging from design and content management, to fulfillment and distribution. The IT staffing of this company is structured in such that it maximizes support across all its distributed locations. Their backup infrastructure was based on tape, but managing tape was labor intensive and prone to errors. Moreover, a full back up of Servers & NAS data took around 40 to 48 hours to complete. Many of these challenges are common to users of legacy tape backup. Their manual process resulted in human errors such as incorrect labeling of tapes. Full backups were completed only once every week. It required an additional manpower and cost to extract, package, transport, and house the backup tapes. Finally, recovery process was too laborious due to organizational complexities such as distributed locations.

Galaxy engaged with this organization to know their IT environment, assess their data, and finally suggest a solution to integrate Data Domain as a backup appliance. We helped them initiate a project to gradually replace legacy tape libraries with EMC Data Domain (Disk based in line De-Dupe Backup Appliance) and to eliminate the use of tape for the backup of virtualized / Physical servers & NAS data with EMC Data Domain. To date, virtualized/physical servers and NAS data no longer use tape to back up. They have set up the replication of the backed-up data between all four locations for disaster Recovery purpose.

As of March 2017, the company covered 90% of its goal of complete tape elimination. Looking at the business benefits, client has seen increased efficiencies; faster backup and significantly faster recoveries. Moreover, data domain improved recovery and disaster recovery speed by 30%; disk utilization was reduced; cost savings were realized on bandwidth; reduced administrative costs. Now, the client can absorb growth in the business with the same number of technicians. The process of managing tape has been automated, saving labor, time and money.

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MD Speaks



"Dear Readers,

Last week, while discussing the quarterly results, Apple CEO Tim Cook mentioned that the 4G roll-out in India is the fastest that he has ever seen. Coming from a person who has seen and knows practically everything to do with mobile devices and networks, these are very significant words for no mean achievement. Please note that this has been achieved purely due to healthy competition between a new player and the incumbents - Free enterprise at its best! No doubt, the consumer has emerged a winner. With data costs at their all-time low, smart phones and rich data apps have now become the flavor of the season. A lot of enterprises across the spectrum are now seriously looking at converting their in-office apps into user friendly mobile apps, thus offering their employees the freedom of carrying their office work with them everywhere they go. However, this freedom is fraught with danger of data theft and espionage. We, at Galaxy, are proud to bring to you, a range of solutions that eliminate this danger and allow your employees to enjoy the freedom of using both their personal as well as enterprise apps on their own mobile devices. Please get in touch with our experts who will be happy to advise you on this journey to a mobile enterprise.

Happy Reading."

AP Dhungat

The Future is Now

Google Earth Virtual Reality Will Take You to Any Address in the World



The new Google Earth Virtual Reality (VR) feature allows users to enter any address — whether it's your grandma's house or a 19th-century castle in Germany — and fly over it in 3D with a VR headset.

When Google Earth VR came into being, people could virtually visit several popular tourist destinations, including the Hoover Dam in Nevada and the Matterhorn in Switzerland. They could even gaze at the nooks and crannies of the Colosseum in Rome, an archaeological marvel.

But now, people can choose their own destinations, if they know the address or name of the location

"People want to quickly find and revisit the places that mean the most to them, whether it's a childhood home or a favorite vacation spot," Joanna Kim, product manager at Google Earth

VR, wrote in a blog post on April 18. Now, users can type an address or the name of a location, and visit it in 3D with a 3D headset system, Kim wrote.

Sightseers can also visit 27 handpicked locations that are now available on Google Earth VR, including Neuschwanstein Castle (the inspiration for the castle in Disney's "Sleeping Beauty"), Table Mountain in South Africa and the Perito Moreno Glacier (Glaciar Perito Moreno) in Argentina.

Google Earth VR is now available for Oculus Rift users who have Oculus Touch controllers. The application is free of cost.

Previous 3D maps created by Google Earth included street views of the Amazon rainforest; the 18,192-foot-high (5,545 meters) high Mount Everest base camp; and Rio de Janeiro, the city that hosted the 2016 Summer Olympics.

MIT Built a Robot That Can 3D Print an Entire Building in About 14 Hours



Researchers from the Massachusetts Institute of Technology have created a robotic system that built the basic structure of a building in less than 14 hours. The dome-like structure is 50 feet in diameter and 12 feet high.

The prototype is essentially a vehicle with a large industrial robotic arm for reach, and a smaller arm for dexterity. Different tools can be attached to the smaller arm, such as a welding system or a spray head that shoots out building materials like foam.

"With this process, we can replace one of the key parts of making a building, right now. It could be integrated into a building site tomorrow," said Steven Keating, co-author of a paper published in the journal "Science Robotics."

The technology could allow faster, cheaper and more adaptable building construction compared to traditional methods, As Per the researchers. Unlike other 3D printing systems, their free-moving design can create an object of any size.

MIT's system -- called "Digital Construction Platform" -- is intended to be self-sufficient, but right now it requires humans to monitor it for safety reasons. In the test, the researchers programmed the prototype to create a dome and used a spray foam commonly used in buildings and homes. The whole system can be powered electrically or with solar panels.

The 3D printing industry has been growing in recent years. In February, startup Apis Cor announced it built a 400-square-foot house in Russia, using about \$10,000 worth of materials and a 3D-printing robot. In 2015, Oak Ridge National Laboratory 3D printed a mobile home, and a 3D-printed backyard castle was built in Minnesota the prior year.

The MIT researchers want to deploy their system in remote regions, such as in the developing nations or in disaster relief areas, for example after a major earthquake, to provide shelter quickly. But that will be possible 5 to 10 years from now.

The long-term vision is for the system to work in places such as Antarctica, the moon and Mars to make buildings out of local materials like ice or moon dust. Keating declined to give a specific timeline, but he said technology like this could be ready in 50 years or sooner.

Technology Focus

Take it Slow When Planning a Move to Cloud-Based ERP Software

Cloud ERP can be running in a fraction of time of on-premises ERP, which makes it tempting to skip the careful early planning that can make business processes more efficient.



Everyone is doing it, or at least thinking about doing it -- migrating to cloud-based ERP software, that is. According to preliminary survey, results from market research firm Mint Jutras, 67% of respondents from manufacturing, distribution and service companies of all sizes said they would consider cloud software-as-a-service ERP in an option for a new deployment. And more than half -- 51% -- said SaaS ERP was their first choice. But moving your enterprise applications to the cloud doesn't automatically simplify ERP, especially in the case of a hybrid cloud and on-premises architecture, which is an increasingly common setup. But, simplicity can be deceptive.

Cindy Jutras, president of Mint Jutras, based in Windham, N.H., recently heard a manufacturer lament a whirlwind six-week implementation of cloud-based ERP software that ended with problems. "He said, 'We did it too fast. We didn't understand all that we were doing.' You can't just jump-in blindly," Jutras cautioned.

The cloud equivalent of "slamming in" a system, such ultra-fast migrations don't allow time to evaluate business processes to see what could be done better under the new system. A shortened time frame also does not leave time for other critical project steps, including gathering requirements and ensuring user buy-in.

The truth is, preparing for a migration to cloud-based ERP software is very much like preparing for an on-premises ERP implementation. As much as some people may not want to hear it, the prep work is very

much the same, according to Frank Scavo, president of Strativa Inc., a management consulting firm based in Irvine, Calif. "You don't have to size and buy hardware. Otherwise, the steps for implementation are the same," Scavo said. The most important preparatory step, he added, is to map business processes via storyboarding or some other visual tool to identify where improvements are needed and can be implemented in the cloud system.

"It is likely that your current business processes were constrained by the [on-premises] system you use now," he said. "Cloud is more flexible and enables more advanced ways of doing things." Making sure you understand all the advanced capabilities of the new system is an important step.

Most companies need to do significant process improvement before, during and after implementing cloud-based ERP software, just as they would with any ERP rollout, he added. Business process re-engineering can be painful and time-consuming, but if you skip it, you'll lose out on the biggest benefits of the cloud application. Many companies move to the cloud without understanding what the new system makes possible.

Even at the early planning stages, you'll need to keep an eye on the future, Jutras said. You want to make sure you implement cloud capabilities that provide maximum flexibility. Ideally, the cloud platform will enable easy integration with add-in capabilities from third parties, should you need them. Work with the cloud provider to identify possible integration points.

"Agility is very important," Jutras said. "All you know about tomorrow is that it will be different: [It] could be a little different, could be a lot different." Your products, services, clients, industry and even business model all may change down the road. You want to ensure you are not casting your processes in concrete.

Shoring up data quality and defining relevant terminology across data systems -- master data management -- are two activities that should always precede a move to cloud-based ERP software. Here, too, many organizations might prefer not to give them their full attention. "If you don't do them, your implementation will fail," Scavo said.

When it comes to selecting which processes and data to move first, a good rule of thumb, Jutras said, is to pick areas that would experience quick improvement -- the proverbial low-hanging fruit. For example, if operations are suffering due to a bad warehouse management system or manual warehouse processes, that would be a likely place to begin.

"Look for where you can get the most value with the least disruption to your business," Jutras said. The temptation is to address longstanding pain points, but those tend to be complex. A modular approach can work well, she added, using your business objectives to guide the order of functions to move to the cloud.

Tech News

Indian Outsourcing Firm Infosys Commits to Create 10,000 US Jobs



Infosys is joining a growing list of international firms that are pledging their support for American jobs.

The Indian outsourcing firm announced recently it is creating 10,000 jobs in America over the next two years.

Infosys, India's iconic outsourcing firm, is also opening four new technology and innovation hubs across the U.S. that will train American workers in areas like cloud, artificial intelligence and big data. The first hub will launch in August 2017 in Indiana, which alone will create 2,000 U.S. jobs by 2021.

"Learning and education, along with cultivating top local and global talent, have always been the core of what Infosys brings to clients; it is what makes us a leader in times of great change. In helping our clients improve their businesses and pursue new kinds of opportunities, we are excited to bring innovation and education in a fundamental and massive way to American workers," Infosys CEO Vishal Sikka said in the announcement.

"It's so good to welcome Infosys to Indiana, and to expand our growing tech ecosystem with the addition of their estimated 2,000 Hoosier jobs," Indiana Gov. Eric Holcomb said in the release. The announcement follows President Donald Trump's "Buy American, Hire American" executive order, which called for the H-1B visa program to be reviewed. Any changes to the H-1B program could hurt Infosys, which has benefited from the specialized worker non-immigrant visa. Wall Street analysts have already warned that any changes or restrictions to the H-1B program would hurt India's outsourcing sector, which relies on business from the U.S.

In fact, more than half of Infosys's sales comes from the U.S., and Lockheed Martin, U.S. Army, U.S. Navy and IBM are just some of the clients it has served.

Infosys's plan to bring jobs to America marks a turn in the company's growth strategy, which has primarily been centered around offering outsourcing and consulting services to U.S. clients at a lower rate by leveraging Indian talent. Infosys's expansion in the U.S. does raise questions as to whether jobs will be cut in India. The firm has been under pressure as of late to accelerate earnings growth as it faces fierce competition from its Indian peers, rising wages in India which have made it more challenging to keep costs down and broader commoditization of some of its services.

Nonetheless, the news about its ambitious plan in the U.S. will likely set an encouraging backdrop for Indian Prime Minister Narendra Modi's upcoming trip to Washington D.C. — which sources close to the Indian government say may happen sometime this summer. While Trump and Modi have spoken on the phone, the leaders of the two largest democracies in the world have yet to meet in person.

"It's important for Modi to be part of a small grouping of foreign leaders that have been early visitors of Trump. It shows that India is part of an important cluster of countries," said Shailesh Kumar, a senior analyst at consultancy Eurasia Group and a former India economist at the U.S. Department of Treasury.

The Digital Waves Hit India's Pharma Industry



Pharmaceutical companies in India, that were slower than their peers in technology adoption are bracing for a digital disruption in recent times. There has been a drastic change in the marketing trends and research with companies exploring viable and innovative tools to engage doctors, patients and field force.

A new industry survey by Veeva Systems reveals that pharmaceutical companies in India will leverage digital as a part of their strategy to achieve greater commercial effectiveness. The Veeva 2016 Digital in Indian Pharma Survey shows a significant shift in customers' expectations to use new digital channels, with 93% focused on increased multichannel interactions and customer engagement (79%). With new opportunities in digital engagement, pharma companies are making digital core to their strategy with multichannel CRM. The lack of a digital strategy is one of the major challenges in adoption, along with organizational readiness. As digital teams work with the business units to understand digital requirements, there is a fragmented view of who should drive this transformation with 21% believing management must lead the way.

"The current approach to digital is incremental in nature and includes processes for e-detailing and field reporting for example. The survey reveals that with a digital strategy in place, technology can enhance the customer relationship management, enable newer engagement models, and improve execution," said Sudhir Kandarth, country manager, Veeva Systems in India.

The Veeva 2016 Digital in Indian Pharma Survey explores the state of digital in the Indian pharmaceutical industry. The report draws on inputs from industry executives across the domains of sales, marketing, sales force and commercial excellence, digital marketing, information technology, and management.

According to the researchers, most pharma companies have started to build some digital capabilities, but talent and resources for their efforts can be fragmented, often across hundreds of small initiatives. They need to leverage digital innovation to make products and services more personalized, physicians and patients more engaged, decisions and product evidence more data driven, and business processes more immediate.

Tech News

Google Begins Offering Rides in Self-Driving Cars



Fiat Chrysler and Google for the first time will offer rides to the public in the self-driving automobiles they are building under an expanding partnership. The companies announced in the spring of last year that they would build 100 self-driving Chrysler Pacifica hybrids minivans. Those vehicles have been tested in Arizona, California and Michigan.

Waymo, Google's self-driving care project, said that it will allow hundreds of people in Phoenix to take rides in the vehicles so that it can get feedback on the experience. People can apply on Waymo's website. The company also said that it's expanding its fleet to 500 Pacifica hybrids.

Waymo — created by Google in 2009 — has given rides to the public before in its hometown of Mountain View, California. In 2015, it let a blind man ride around Austin, Texas, in one of its completely self-driving pods. The Phoenix program will be much larger in scale, and it will be the first to use the Pacifica minivans.

Others in the race to develop self-driving vehicles have been putting people in their cars since last fall. Uber has had self-driving Volvos on the road in Pittsburgh for some time. Boston startup nuTonomy is giving taxi rides to passengers in Singapore and Boston. In all cases, there is a backup driver behind the wheel.

Waymo said it wants to learn where people want to go in a self-driving vehicle, how they communicate with it and what kinds of information and controls they want. Fiat Chrysler builds the Pacifica minivan in Windsor, Canada, just across the border from Detroit. It adds Waymo's self-driving software and hardware, including sensors and cameras, at a facility in Michigan. Fiat Chrysler's U.S. headquarters is in Auburn Hills, Michigan.

"This collaboration is helping both companies learn how to bring self-driving cars to market, and realize the safety and mobility benefits of this technology," said Waymo chief John Krafcik in a company release. Our early riders will play an important role in shaping the way we bring self-driving technology into the world through personal cars, public transportation, ride-hailing, logistics and more. Self-driving cars have the potential to reshape every one of these areas, transforming our lives and our cities by making them safer, more convenient and more accessible. Waymo has made clear that it intends to form partnerships with automakers and not build its own self-driving cars. It's also in talks with Honda Motor Co. about a potential collaboration.

Special Focus

Lenovo Expands Commitment to Open Source



Lenovo is a \$45 billion global Fortune 500 company and a leader in providing innovative consumer, commercial, and enterprise technology. Their portfolio of high-quality, secure products and services covers PCs (including the legendary Think and multimode Yoga brands), workstations, servers, storage, smart TVs and a family of mobile products like smartphones (including the Moto brand), tablets and apps.

Expanding its commitment to open source communities and the development of Telco-focused solutions, Lenovo announced, at Red Hat Summit 2017, a new version of its open source platform, Open Platform @ Lenovo (OP@L), and the opening of an advanced cloud technology center. Building on these cutting-edge initiatives, the company pledged to continue developing powerful integrated solutions that provide the backbone for rich mobile content, 5G networks, and Internet of Things (IoT) workloads. The company also reinforced its commitment to help clients in this sector build out next-generation data centers, using open source technologies, to address the growing demand for agile, cost-effective, and flexible architectures.

Since joining several open source organizations and forums over the past two years, Lenovo has significantly increased its presence and contributions in these communities. The company's commitment to open standards across its data center solutions portfolio is a critical element in addressing the challenges of the IoT space and the exponential growth in today's Internet connections. These moves underscore its commitment that these challenges can only be addressed by leveraging the open source communities and open standards.

First announced at last year's Red Hat Summit 2016, the company also unveiled the latest iteration of its OP@L OCP-based infrastructure, powered by Red Hat's software stack, for Network Function Virtualization (NFV). Network Function Virtualization is an emerging cloud architecture that virtualizes network services that are now being carried out by proprietary, dedicated hardware. Leveraging OP@L, Lenovo plans to advance open NFV architectures that can be customized and highly-secured to address the demanding needs of today's service providers. This emerging architecture is designed to decrease the latency and cost needed to launch and operate 5G network services and improve throughput for telco/NFV workloads.

The integration of Red Hat's NFV solution with Lenovo's OP@L is the latest development in an expanding strategic collaboration, between the companies, to develop and deliver open, robust and flexible solutions for service provider clients, as well as those in other industries. Building on this momentum, Lenovo also recently opened its advanced Cloud Technology Center located on its Morrisville, NC campus. The center is focused on the development of leading-edge solutions in the areas of hybrid cloud management, OpenStack offerings, and software defined storage. The new center is staffed by engineers, from around the globe, and is focused on open source contributions from various communities. The new center will allow customers worldwide to access the latest hyper converged and converged solutions and conduct proof of concept demonstrations.



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- ✚ 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.

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