Union Budget 2015-16: Focus on IP innovation & securing digital infrastructure

http://www.businessinsider.in/Union-Budget-2015-16-Focus-on-IP-innovation-securing-digital-infrastructure/articleshow/46257962.cms

Through its landmark initiatives such as 'Digital India' and 'make in India', the current government has demonstrated its commitment to not only sustain the growth of India's ICT industry, but also leverage technology across various aspects of the national development agenda. In the Union budget 2015-16, we expect the finance minister to go a step ahead, and introduce measures that will enable entrepreneurs to sustain long-term innovations within the Indian economy.

The digital medium and platforms on which the implementation of many new policies and initiatives is dependent, are under attack by hackers, fraudsters and other malicious elements. The cyber security scenario is more severe today, driven by rapid evolution of new-age technology and hyper-connectedness, impacting businesses, individuals and governments.

As a company leading the charge in India's cyber-security industry, we expect the government to act urgently and allocate more monies for cyber security in this budget. It will also be an essential precedent to businesses operating in India to tighten their security framework before offering their services online.

Encourage IP creation to emerge as a hub for innovation

The talent for innovation has found inadequate support, given India's extreme focus on providing IT service. The previous budget made an important point in emphasizing R&D efforts on technologies and start-ups that are relevant to India. But while Indian-made security products are seeing an upswing, sustaining innovation in India is a task in itself. One of the major issues is that financing models are still centered on grants and are not ready around innovation. We believe that the next wave of growth will be led by small

enterprises, provided a sustainable business ecosystem for long-term innovation is created. Accordingly, the upcoming union budget should deliver measures for India to move forward from being an outsourcing hub to an innovation hub. It should leverage our global competency in IT to create an economy that can retain, consume, and export its IP led products and services.

Help Start-ups 'Make-in-India'

Make-in-India is an important government initiative, leading the shift from an outsourcing destination to being a recognized innovation hub. However, if the government plans to invest in initiatives under the Make in India umbrella, then fundamental issues in the ecosystem need to be addressed.

We recommend that the Union Budget 2015-16 should provision investments under the 'Make-in-India' initiative that are focused on creating a nationwide incubation and acceleration infrastructure for tech entrepreneurs, start-ups, and SMEs. Government should incentivize investment in start-ups. But we also recommend provisioning funds for skill development in knowledge-intensive sectors, in order to nurture the skill base and enhance competitiveness.

We also look forward to a generous increase in public sector expenditure to help create new opportunities for smaller players, and a reduction in MAT (minimum alternate tax) that could spur growth in some industries. Easier taxation norms and tariff structures are also expected from this budget to create a smoother business ecosystem.

Aid Transformation to Digital Economy

We also look forward to more initiatives around Digital India. The government should commit itself towards upgrading the legal framework for digital transactions, and bring it up to

global standards. This would lead to greater adoption of tech-driven business models, thereby, promoting industries such as eCommerce. The government has been proactive in terms of technology adoption for eGovernance initiatives, which has also contributed towards expanding eGovernance projects. However, introduction of hassle-free policies to enhance speed-of-implementation is a key deliverable we expect from the next budget.

Build a Robust & Secure IT Ecosystem

The surge in cyber-crimes and recorded enterprise breaches in India can dent consumer confidence in the digital medium. In addition to a better legal framework, government efforts to secure state-owned infrastructure such as SDCs will prompt India Inc. to follow suit. We recommend increased grants/ investment in bodies such as CERT that are working towards enhancing security standards of Indian ICT.

About the author: This article has been written by Sanjay Deshpande, Co-founder & CEO of Uniken India

A Simple Technology That Can Solve India's Clean Water Problem For Just Rs 3,000

http://www.huffingtonpost.in/the-better-india/a-simple-technology-that-_b_6578478.html

By: Shreya Pareek

Water borne diseases are the number one cause of deaths worldwide, with WHO and CDC estimates pinning 3.5 million deaths every year to contaminated drinking water. In India alone, around 2,000 people die every day due to lack of clean drinking water, and out of these, children under the age of five are most vulnerable.

Most villagers consume unsafe drinking water on a daily basis. Some of these families opt for boiling the water prior to drinking which can be costly. Those who can afford it, buy bottled water to reduce the risks of such diseases, while economically and financially weaker people continue to consume impure water which eventually causes disease and death.

A Canadian scientist, Dr. David Manz, invented and designed an amazing tool that could solve this problem. He developed a low cost Bio-sand Water

Water before and after purification by a bio-sand filter

Filter that effectively removes all the dissolved particles and pathogens from the water. This slow purifying process manages to remove up to 98% of bacteria, 100% of viruses, 99% of parasites, protozoa, amoebae, and worms, 95% of heavy metals, and with a slight modification, 93% of arsenic. It manages to eliminate illnesses such as Typhoid, Cholera, Hepatitis A, Rotavirus, E-coli bacteria, and other dysentery causing organisms.

Tested and approved by various governments, healthcare institutions, and research departments, the bio-sand technology has effectively been introduced in over 66 countries. The low cost Bio-sand filter costs about Rs.3,000 and works for 30 years. It is easy to maintain and filters 84 litres of water daily, enough for 10-12 people, or 70 school children. There are no ongoing costs, no maintenance costs, and no electricity costs.

The technology was exactly what the country needed. Till date, South Asia Pure Water Initiative, Inc. (SAPWII), an NGO has distributed 12,000 filters, positively impacting 1,50,000 villagers. They run 5-day professional training programmes for NGOs and have developed a network across the country consisting of 90 NGOs in 22 states. Through the network, 25,000 filters have been distributed.

How does it work?

The Bio-sand filter is made of locally available cement, sand and pebbles. It consists of various layers of sand and pebbles, and a 2-inch standing water layer known as the "bio-layer". The dirty water is poured on top, and meets with the bio-layer where bacterial predation occurs. Then the water moves through the filtration sand and, because of an electrostatic charge, viruses adhere to the fine sand and are trapped within. This is known as adsorption. Furthermore, because there's no food, no light, and no oxygen, further pathogen die-off takes place. The water then flows down into the pebbles and comes back up in an outlet tube, and is stored in a clean water container with a lid to protect it from re-contamination.

NGOs work in different ways. Sometimes they sell the filter to an individual user who then maintains it. Sometimes a villager can receive microfinancing, while others are subsidized from their local NGO. It depends on which model works in a particular village. The idea is to inculcate the sense of ownership amongst villagers. It should not be treated as charity. When villagers contribute even Rs. 500 towards their filter, they are more likely to value it.

The challenge

The biggest challenge has been to spread awareness among people about the importance of clean drinking water. They are accustomed to their lifestyle - even though they spend a lot of sick days, yet there's a resistance to something new. But we are trying to change that through more awareness campaigns and with the help of media. SAPWII also

conducts sanitation and hygiene education since it is closely related to clean drinking water.

The low cost filter can solve one of the biggest problems of rural India

Another challenge of the Bio-sand filter is the heavy weight, especially in mountainous regions. However, mobile units can help address this issue. Plastic versions have their own limitations and don't last as long, so concrete filters are still preferable.
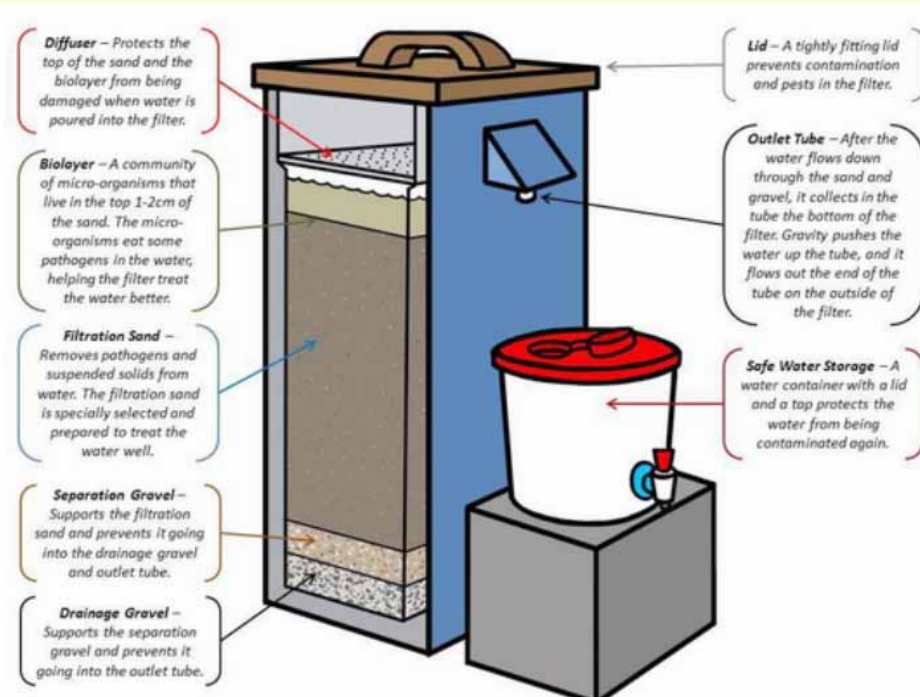
Scaling up

SAPWII has shown a 300 percent growth this year alone, and demand for these filters is rising. They need more volunteers and training programmes to engage more people. They are also open to suitable partnerships which could help them leave a bigger impact.

No one person or NGO can bring a change alone. We need to work collectively for the clean water cause, while keeping in mind the revival and sustenance of livelihoods of rural people. SAPWII has invited professional trainers from Friendly Water for the World (FWFW) to train the NGO's of India. They are also looking at fundraising to sustain their model.

How you can help?

Water is a basic necessity and everyone has the right to access clean drinking water. You can help the initiative by being a part of their training programmes, donating filters to a village through their Adopt-A-Village program, or just spreading awareness about the amazing technology that can change the lives of thousands of people in the country.

Diffuser – Protects the top of the sand and the biolayer from being damaged when water is poured into the filter.

Biolayer – A community of micro-organisms that live in the top 1-2cm of the sand. The micro-organisms eat some pathogens in the water, helping the filter treat the water better.

Filtration Sand – Removes pathogens and suspended solids from water. The filtration sand is specially selected and prepared to treat the water well.

Separation Gravel – Supports the filtration sand and prevents it going into the drainage gravel and outlet tube.

Drainage Gravel – Supports the separation gravel and prevents it going into the outlet tube.

Lid – A tightly fitting lid prevents contamination and pests in the filter.

Outlet Tube – After the water flows down through the sand and gravel, it collects in the tube the bottom of the filter. Gravity pushes the water up the tube, and it flows out the end of the tube on the outside of the filter.

Safe Water Storage – A water container with a lid and a tap protects the water from being contaminated again.

Gizmo Talk
Eye tracking technology detects brain disease

The startup Saccadous has tapped into 10 years of research out of Barrow's Neurological Institute. Using a brain camera, a doctor or football coach can scan someone's eyes and analyze the tiny movements to diagnose a brain injury or even Alzheimer's in real time.

What if you could diagnose Alzheimer's or a traumatic brain injury just by looking at someone's eyes. Scottsdale startup Saccadous has developed technology to do just that.

"We run some software on this tablet that will capture the eye movements, and then we will send that data to the cloud where it is analyzed using big data type technologies," said Craif Caffarelli, co-founder of Saccadous.

The company uses a high speed camera to capture tiny, jerky eye movements called "microsaccades." These movements form patterns that correlate with certain neurological disorders.

"Researchers have found that Parkinson's patients, their eyes drift kind of down and to the right, with Alzheimer's there's a lot more vertical movement in the drift and the correction," said Wiley Larsen the company CEO.

The eye tracking process takes just 3-5 minutes, since the camera can attach to any mobile device, the technology is extremely portable.

"Imagine like high school football, if we baseline every player on the team during the off season when we know they were in a healthy state, when they get hit in a football game you can take an instant scan and compare it to the baseline," said Caffarelli.

Coaches, trainers, and doctors can see test results in real time anywhere in the world, making early diagnosis and proper treatment easier.

"We're trying to simplify this so that anybody can administer this test or mobilize it so it can be done on a battlefield, or on the sideline of a football game, or anywhere really," he said.

The founders say this kind of technology is a great alternative to other diagnostics like MRI's that obviously take much longer and cost a lot more. The device isn't on the market yet, but eventually should sell for around $1,000.

Startup pitch: Alice wants to answer your hotel stay needs

http://www.tnooz.com/article/startup-pitch-Alice/#sthash.qL6Cx-lsh.dpuf

The idea for Alice service came to life through the frustration of not being able to connect with a hotel unless you're on the spot or by telephone. The founders conducted research with hotel managers, employees and guests to reveal that the process falls down because of the different internal systems hotels use to manage operators. From this Alice was conceived as a guest facing mobile application helping connect guests to hotel services while simultaneously enabling the hotel to manage requests efficiently. The team currently has a headcount of 25 including its three founders: chief executive Justin Effron, president Alex Shashou and chief technology officer Dmitry Koltunov. Funding so far has amounted to $500,000 almost two years ago from family and friends plus a seed round of $3 million in January 2015. The startup is participating in a hotels and resorts industry worth $717 billion according to IBIS World and will draw revenue based on monthly subscriptions based on property size. The team also says it has no direct competitor and focuses on both guest and staff needs while others just focus on one part of the equation.
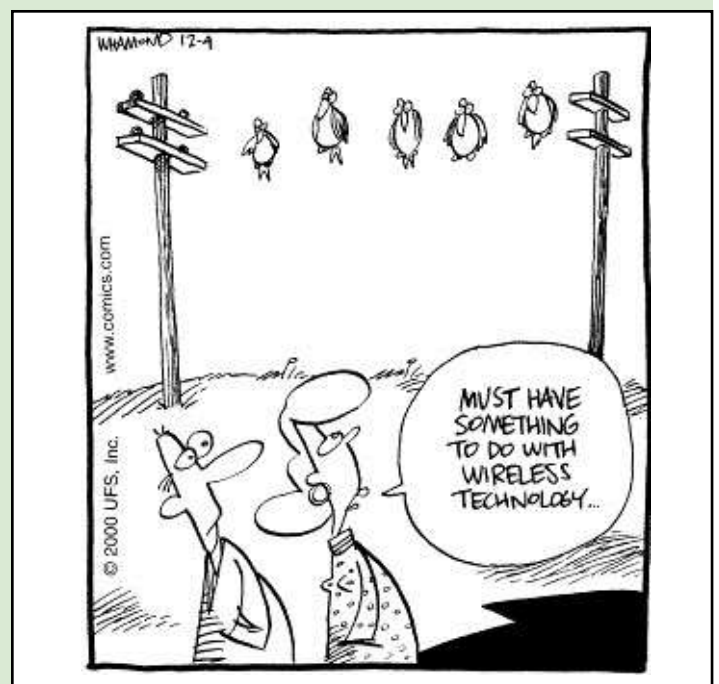
Q&A with president Alex Shashou:

What problem does the business solve?

On the guest side, we provide a mobile channel to connect with the property anywhere, any time, on any device. Every industry has leveraged mobile and platform solutions to provide a better consumer experience and connectivity. The modern day consumer uses Uber for cars, Seamless to order food, Open Table for reservations, and so many others. Alice is just that for the hospitality industry. We are a way for hotel guests to manage their own stay immediately after booking all the way until they check out. On the staff side, we empower our hotels and their staff to drive deeper, sustainable connections with their guests using mobile technology, while increasing operational efficiency through a robust back-end task management and analytics platform. Our hotels are able to connect with their guests as soon as a booking is made, right through to checkout. For the first time our groups can track and analyze every service that is happening inside their hotels within one platform.
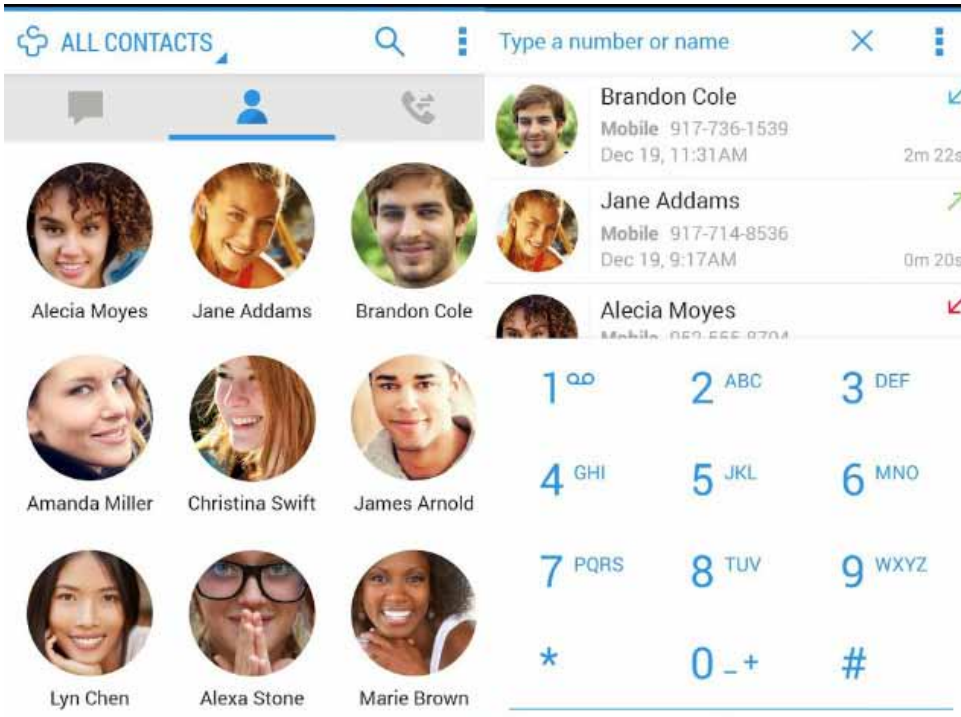
What other technology company (in or outside of travel) would you consider yourselves most closely aligned to in terms of culture and style… and why?

On the positioning side we find ourselves in a similar position to Salesforce when it came out, since it entered an established industry with a very different way to solve the existing problem. It upgrades locally installed solutions to a centralized cloud infrastructure allowing for a new level of enterprise control and efficiency. On the design side we are very drawn to the simplicity and elegance that Apple puts into its products. There is a revolution in design, and we are constantly thinking about the user experience. We have a very rigorous process to develop our interactions, and every single detail gets scrutinized. On the algorithmic side we try to model our approach after Google. Its products are in a class of their own because they are the perfect combination of simple and intelligent. The fact that the Google search bar does not need more than one field to remain extremely accurate is inspiring. We constantly try to pre-empt what someone is going to do, and use their previous history to provide a more familiar experience. There is a lot left in this part of our plans, but we are eager to start applying some of the more advanced learning techniques to this domain. In terms of culture, we are huge fans of the way that Zappos operates, The general kinship in the teams, the way that it empowers staff, and the positive outlook it has on clients and supporting them is something we aspire to. At the end of the day, we are helping people connect to services, and we care deeply about those that request the services as well as those that provide them.

How to Backup Contacts on Your Smartphone

http://gadgets.ndtv.com/mobiles/features/how-to-backup-contacts-on-your-smartphone-628122

"I lost all of my contacts" is such a common complaint even in the age of smartphones that you have to sometimes wonder if people are faking it. But while it sounds silly and even unbelievable at times, the fact is that if you - or even your kid - accidentally hit the wrong buttons on the screen, you can accidentally deleting all your contacts.

If you've switched to a new phone, or lost your phone, or it stops working suddenly, you face the same problem. It has happened to almost all of us and it will continue to happen to others. The best you can do is ensure that all your contacts are backed up so that you can quickly get your life back on track. Here's how to do that on any smartphone.

iPhone

You can backup your iPhone contacts to iCloud or on your computer via iTunes. The iCloud method is simpler, but needs Internet access.
1. Go to Settings > iCloud.
2. The switch next to contacts should be in the green on position.

This single step will ensure that all your contacts are constantly backed up to iCloud. If you format your phone, just signing in to the iCloud account will restore all contacts.

If you don't have Internet access, you can still backup contacts via iTunes.
1. Download and install the latest version of iTunes.
2. Connect your iPhone to the computer via USB.
3. Open iTunes.
4. Tap the iPhone icon on the top-left, just below the menu bar.
5. Tap Info on the left sidebar.
6. Check Sync Contacts.
7. Select the service you'd like to sync contacts with from the drop-down menu. On a Windows machine, we were allowed to sync with Outlook or Windows Contacts. The latter takes a local backup on your Windows machine.
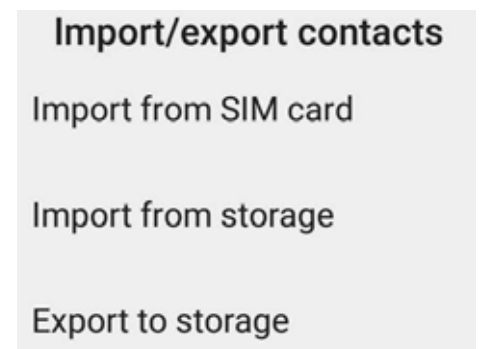8. After selecting Windows Contacts, click Switch in the pop-up to start a backup.

This will backup your iPhone contacts to your computer. Windows Contacts isn't available on Windows 7, but you can install it via Windows Live Essentials. If you want to backup all that is there in your iPhone, follow the steps described here.

Android

If you have an Internet connection, follow these steps to backup your contacts on Android.
1. Go to Settings > Accounts > Google.
2. Tap the account name at the top.
3. Make sure there is a check mark for Contacts.
All your contacts will be backed up to your Google account continuously. Note that the exact names of menus

can vary between different manufacturers and Android versions. If you don't have Internet access on your phone, follow these steps.
1. Open Contacts.
2. Tap the three vertical dots on the top-right.
3. Select Import/export.
4. Tap Export to storage.
5. A pop-up will tell you where your contacts will be exported. Tap OK.
6. Open the file manager app on your phone. If you don't have one, you can download ES File Explorer.
7. In the file manager, navigate to the folder where the contacts are stored. If you aren't sure, search for vcf and the contacts file will show up.
Copy this file and store it somewhere safe. If you ever want to get this set of contacts back then you'll need to use the import function in contacts, to import the data from this file.

India's MBD Group Develops 3D Printing K-12 Education Program

http://3dprint.com/44728/mbd-3d-printing-education/

We've reported that 3D printing and education are developing a symbiotic relationship as the technology becomes more attractive to educators who acknowledge its integral use of social, scientific, design, computer, mathematical, technical, and crafting skills. As more educators become seasoned in the 3D printing technology, and more tech-minded people understand what works in young and older students' classrooms, everyone seeks reliable and effective curricula that can help introduce this multi-faceted technology to students. This is as true in the United States and Western Europe as it is in developing nations that want to incorporate 3D printing into their schools. The idea is that students will be ahead of the technological curve as the 3D printing industry grows.

India has a growing tech sector that welcomes 3D printing as one among many significant and changing aspects of its developing economy. Nonepop-3 other than MBD Group, India's six decades long top publishing house that also serves hospitality, real estate, mall manufacturing and management, and paper sectors, has now introduced a 3D printing K-12 education program. MBD's "3D Learning Solutions for K-12 Sector" shows just how serious India's business and technology sectors are about investing in 3D printing education. In fact, the program, which provides 3D printers and compatible curricula, was introduced today at the New Delhi World Book Fair 2015, and people are excited about the potential that 3D printing has as it applies to almost every academic subject.

Monica Malhotra Kandhari, Senior Director of the MBD Group, says MBD is the first company to address 3D printing in India's K-12 student demographic:

"MBD is the first publishing house to bring progressive education technology solutions to students in India. We are committed in creating powerful and innovative learning

environments in schools. This is for the first time that 3D printers will be introduced to the K-12 education system. We would be engaging with schools to bring this technology to their doorstep; initially we would be reaching out to schools in metros and then will take our initiative to other cities".

For anyone familiar with MBD Group's 4reach, it makes sense that it is the first company to address India's 3D printing education market. They already supply traditional text, work, and reference books, as well as teachers' manuals, and they also lead in the digital education arena. MBD Group has developed education apps, digital content, e-Books, notebooks, and tablets. The company's Nytra is an augmented reality app that is extremely innovative in its classroom applications since it brings textbook material to life, and today's introduction of 3D Learning Solutions places MBD on the cutting edge of new education technologies in India and beyond.

It is MBD Group's belief that almost every school subject benefits from 3D printing technology. They will provide printers and software to integrate 3D printing technology into already adopted K-12 curricula. The group also plans to offer higher education institutes 3D curricula and software in the STEAM fields.

Where MBD Group is involved, other countries will likely follow since MBD has international offices in Africa and the Middle East, and is the only Indian publishing company included in South Africa's national catalog, having expanded to three continents, thirty countries, and five thousand cities while carrying over eight-thousand titles. This expansive market reach positions MBD Group to have a major influence on 3D printing related education materials globally, and their roll out of 3D Learning Solutions is likely to be just the beginning of the company's engagement with 3D technology education.

We know the future is in our students' hands, and this development is yet another event pointing to 3D printing's likely prominence in developed and developing nations' economies and schools in the not too distant future. Let us know your thoughts on this education initiative in India. Discuss in the MBD 3D Printing Program forum thread on 3DPB.com.

HTTP/2: New infrastructure for the internet is ready, and could speed up the web for everyone

http://www.independent.co.uk/life-style/gadgets-and-tech/news/http2-new-infrastructure-for-the-internet-is-ready-and-could-speed-up-the-web-for-every-one-10054170.html

HTTP/2, a new version of the protocol that lets computers download information from the internet, has been formally approved and could speed up the web for everyone.

The group behind the protocol announced this morning that work on the specification is done, and that it will now be checked over and published. It is based on a protocol made by Google, called SPDY and pronounced "speedy", which has already been speeding up the internet for many users without them knowing it.

HTTP/2 and SPDY both help browsing move quicker by streamlining the way that browsers make requests to servers, allowing them to ask for a number of things at once. The Verge compared the advance with the ability to put a number of things in one envelope, rather than being forced to send a separate envelope each time.

SPDY is already integrated into Chrome, Internet Explorer and Firefox. Big websites including Google itself, along with Twitter and Facebook, use the protocol to speed up connections on compatible browsers.

HTTP/2 will bring the technologies that allow the protocol to work to everyone, over time.

It will also introduce safer ways of browsing. While the group behind the protocol said that it couldn't build encryption into the protocol, Firefox and Chrome have already said that in order to use it, websites will have to make sure that their sites are properly encrypted anyway.

HTTP was introduced in the 1990s as a way of allowing browsers to request information from the servers that host websites. It has been steadily improved since then, but HTTP/2 introduces perhaps the biggest changes since it was first introduced.

Kwiz

Q1 What is "Opera" associated with in Information Technology?
1. Email
2. Mp3
3. A web browser
4. Sound

Q2. Which among these is a founder of youtube?
1. Stevie Case
2. Steve Chen
3. Steve Ballmer
4. Steve Jobs

Q3. Which image editing software was created by Lifescape Inc and later acquired by Google in 2004?
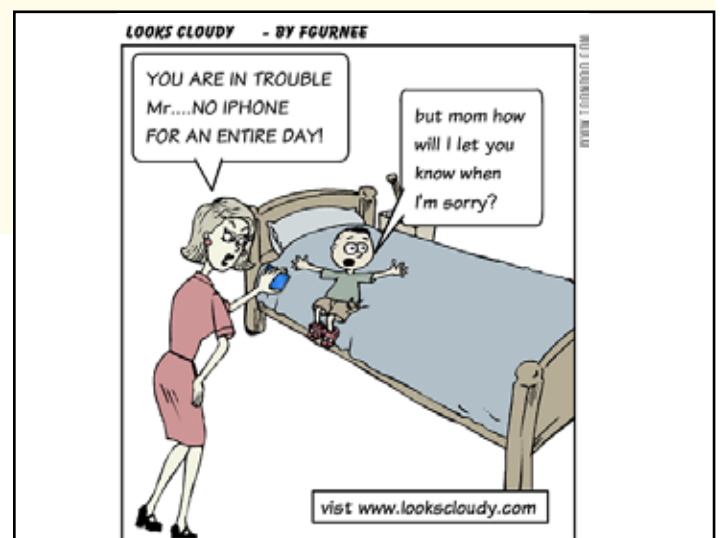1. Picasa
2. Flickr
3. Photoscape
4. Imgur

Q4. Galaxy Gear is a wearable what?
1. Shoe
2. Cap
3. Watch
4. Spectacles

Q5. John Warnock co-founded Adobe Systems, having solved the hidden surface problem clearing the way for what kind of software?
1. Spreadsheets
2. Internet
3. Word Processing
4. Computer graphics

Answers of February issue
Q 1. A web browser
Q 2. Steve Chen
Q 3. Picasa
Q 4. Watch
Q 5. Computer graphics

Tech trivia

- Quora was started by former Facebook employees Adam D'Angelo and Charlie Cheever.
- Send or read e-mail is the most popular internet activity.
- CTRL+ALT+Delete is termed as "3 finger salute" on the keyboard.
- Tim Berners-Lee made the first web browser in the year 1990.
- Wrigley's Chewing gum was the first ever product to have a barcode.

Please send in your articles and feedback to
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