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Tweet OF THE DAY



HAREESH CHAWLA
@HCHAWLAH

Point: Some founders (via secondary or M&A) only stakeholders with gains - VCs and staff losers. Timing, as they say, is everything.

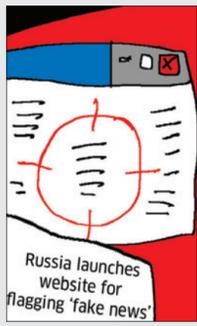
Tech Buzz

Tesla Plans to Build 5 more Gigafactories



Tesla is considering building up to five Gigafactories, the company said. Tesla is currently building Gigafactory 1 in Sparks, Nevada, that is slated to operate in full capacity in 2018. The Gigafactory is Tesla's massive battery cell production facility. The firm said it is currently finalising locations for two additional Gigafactories, potentially three. -BI

Quick Byte ANIRBAN BORA



\$23 million
The final price Fitbit paid to acquire smartwatch maker Pebble

Wix.com Buys DeviantArt for \$36 million



Israel-based Wix.com said it acquired DeviantArt, an online community for artists and designers, for \$36 million in cash and raised its revenue outlook for 2017. Wix, which helps small businesses build and operate websites, will have access to Los Angeles-based DeviantArt's more than 40 million registered members and over 325 million pieces of original art. As a result of the deal, Wix raised its 2017 revenue outlook by \$8 million to \$417-\$419 million. -Reuters

Jargon Buster
Managed Cloud
It helps firms manage its cloud experience, while the organisation can focus on their core expertise.

Infy Seeks Shareholders' Nod for Change in Articles

Our Bureau

Bengaluru: Infosys is asking shareholders to approve an amendment to its articles of association allowing it to repurchase shares, a change that would help the IT company mimic the moves of its larger rivals.

The company will also ask shareholders to approve independent director DN Prahlad's appointment to the board and the revision to chief operating officer UB Pravin Rao's compensation, it said in a filing to the Bombay Stock Exchange.

Infosys' current articles of association do not explicitly mention share repurchases. The amendment would set the stage for a buyback, allowing the board to consider such a proposal. The results of the shareholder

vote would be announced in April, the company said.

Infosys' founders, who own close to 13% of the company's shares, would not object to such a move, a source with knowledge of the matter told ET. The company is under significant pressure to initiate a buyback after larger rivals Cognizant and Tata Consultancy Services announced multi-billion-dollar buybacks.

Earlier this month, Cognizant said it would return \$3.4 billion to shareholders in the form of buybacks and dividend repurchases. TCS announced a \$16,000-crore buyback this week. ET had earlier reported that following activist hedge fund Elliott's letter to Cognizant in November, investors had begun to ask Indian IT companies to boost their buyback as well to compensate shareholders as

Paying it Forward

To initiate a buyback, Infy needs to amend its articles of association

In 2014, co was asked to institute a buyback but did not go through with the request

INFY NEEDS SHAREHOLDERS' APPROVAL FOR...
• Independent director DN Prahlad's appointment to board
• Revision to COO UB Pravin Rao's compensation



industry growth slows. Infosys has said it looks at its capital allocation plan periodically and has been increasing its dividend payout. But investors have been asking for more.

"Higher taxes on dividends and easier process for a share buyback (eg:

can now be done over exchange) have increased the attractiveness of share buyback over dividends. We had pointed out that Cognizant's announcements would likely result in its peers becoming more disciplined about their cash pay-out," Sagar Rastogi,

analyst with Ambit Capital, had told ET. He pointed out that Infosys has one of the highest cash holdings as a percentage of market capitalisation among Indian-listed companies.

At the end of December, Infosys had \$4.48 billion in cash, cash equivalents and investments. Analysts say Infosys' buyback would be limited given the company's aggressive growth plans. "I don't think Infosys will be able to do a mega-buyback unless they reduce their growth targets. If you want to reach \$20 billion in revenue by 2020 and you have said that \$1.5 billion of that will come from acquisitions, you have to hold cash on the balance sheet," a second analyst, who declined to be identified, told ET. Infosys has already been at the receiving end of calls asking it to buyback shares.

In 2014, the company was asked to institute a buyback but did not go through with the request.

At that time, two of the company's former chief financial officers, V Balakrishnan and TV Mohandas Pai, and current Infosys board member Prahlad wrote a letter to the company's board asking them to begin a ₹11,000-crore buyback.

Last week, Rao said the company was looking at all options and buybacks could happen at the appropriate time. Infosys also amended Article 106 to specify that the company may appoint 15 directors and any increase would require a special resolution in line with the Companies Act of 2013.

The current version says the company can appoint a maximum of 18 directors. The Infosys board currently has 10 directors.

THEY SPEAK YOUR TONGUE

Just say the Words and these Startups will Connect You

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Bengaluru: When someone who doesn't understand English relies on translation services for using smartphones, there are multiple challenges. A word like player, for instance, could mean different things: a sports player, a music instrument, even a brand name like John Players.

And, even as the Indian economy increasingly moves to online transactions, this smartphone user still finds himself baffled at the host of consumer apps waiting for him to come on board and transact.

A bunch of startups in the field of linguistics, which have acquired a strong user base by hooking these users to consume online content, is now focusing on the transition of these users to transacting online.

Companies like Indus OS, Reverie Language Technologies and Liv.ai are enabling a large ecosystem of Internet companies, mobile app makers and manufacturers to target non-English-speaking Indian consumers by connecting with them through regional languages. These startups have seen a significant spike in demand of their services in the last one year.

"About 60% of queries in local languages cannot be interpreted by the current search engines of the world," said Arvind Pani, chief executive of Reverie Language Technologies. It is one of the companies working to enable regional-langua-

GOING BY THE BOOK



WILLIAM MERRITT CHASE, *The Japanese Book*

Indus OS has also tied up with digital wallet providers such as FreeCharge to integrate their services with the OS and provide re-charge packages when a low balance alert is triggered.

Liv.ai

- A deep-learning startup
- Allows apps to be converted to regional languages through plugged in APIs
- Has found use cases across different verticals in India, including customer support, fintech and ecomm

ge support in the BHM app, the payment application launched by the government in its push towards a digital economy.

The startup has also got on board Internet companies such as Snapdeal, Practo and Ola, with the intent of increasing engagement with

consumers by enabling regional-language interaction.

"As consumers of regional content are moving from 'consumption to transaction' phase, there is a lot of demand from service providers and Internet companies on increasing engagement with consumers which has proven to enhance user experience," Pani said. In the past one year, the demand for platforms that enable regional content has increased sevenfold, he said.

The government mandate on providing support for Indian languages on all mobile phones sold in the country from July has also pushed business for these players.

Indus OS, a regional language operating system for smartphones, has in the past one year partnered with six large equipment manufacturers, including Celkon, Micromax, Intex, Karbonn and Swipe, to provide a local language ecosystem for smartphones.

"The transition for the first-time smartphone users is overwhelming," said chief executive Rakesh Deshmukh. "We have therefore focused on enhancing user experience by features that simplify usage in regional language."

The company has increased its user base to 7 million as of January from 1.2 million last year. On its mobile app store, called App Bazaar, Indus OS promotes regional content through developers while also providing discoverability for consumer Internet apps such as Flipkart and Snapdeal.

Sellers Now Snap Deal as Associations Talk of Default

Associations also write to commerce minister seeking intervention

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Bengaluru: Online marketplace Snapdeal, which is in the process of laying off hundreds of employees, is now also facing heat from online sellers, with hundreds having already pulled out while several more threaten to quit citing concerns of payment defaults.

The All India Online Vendors Association (AIOVA), a body of over 2,000 online merchants, has cautioned all its members and requested them to stop selling on the platform citing credit risk to the tune of ₹300-400 crore that the company owes all its sellers as payments collected for the sale of goods.

Another seller body, the eCommerce Sellers Association of India, has also cautioned its 1,500 members to either stop selling on Snapde-

al, or to ensure that their dues from the company don't run high. "There is absolutely no connect between the steps taken to rationalise the team and routine business operations, including regular payment of seller dues. All dues, including towards sellers, continue to be settled as per established processes and timelines without any change. Any apprehension in this regard is

without basis. Business at Snapdeal continues to grow steadily towards profitability and all sellers' dues continue to remain fully secure, as at all times. In case of any query, sellers' partners are advised to connect with the company directly and not pay heed to baseless rumours, including unverified media reports," said a Snapdeal spokesman.

AIOVA on Tuesday also sent a formal mail to Commerce minister Nirmala Sitharaman.

"Our organisation estimates that on any given month, this company (Snapdeal) holds ₹300-400 crore in the form of outstanding dues, and goods in transit or refunds. Our constituents are now having a sense of credit risk while dealing with this company due to the past experience in losing money and no immediate relief in case of AskmeBazaar and other marketplaces. We are looking forward to your intervention or assurance from you in this matter. Until then, we have requested our constituents to immediately stop sales on this platform," AIOVA wrote in its letter, seen by ET.



You've Been Warned

AIOVA mails Commerce minister seeking intervention, citing losses sellers reportedly faced with shutdown of AskMeBazaar

AIOVA says over 300 members have stopped selling on Snapdeal completely over the past year due to payment risks

Ventureast Heads Out in Search of Deals

Venture capital firm looks to make angel and seed investments through its new \$4-million fund

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Hyderabad: Venture capital firm Ventureast is looking to make angel and seed investments through its new \$4-million fund, which is expected to be up and running by mid-2017.

Bobba Venkatadri, general partner at Ventureast, said the company is primarily looking to co-invest in six to eight digital health startups, and that the first deal could be finalised in the second quarter. "We have spoken to enough investors who have expressed interest," Venkatadri told ET.

"If you look at our history, we have co-invested with Accel Partners, Peepul Capital, Eight Roads Ventures and Endiya Partners." While half of the \$4-million corpus is being brought in by Ventureast, the other half is going to be contributed by a

few high net-worth individuals, said Venkatadri. Ventureast recently co-invested in a seed round for Celes Care, a virtual clinic for women, and that was one of the factors that prompted the firm to start a fund dedicated to angel and seed investments. Over the last six months, Ventureast was also approached by at least 20 digital health startups to

raise angel or seed rounds.

"Our premise is that digital health is going to be a dominant factor in healthcare, just like biotechnology was several years ago. It's a new space and seed fund is the kind of bet it

requires," said Venkatadri. He pointed out that venture capitalists' investment in an angel or seed round is beneficial to the startup because it assures availability of funds through the business cycle of the entrepreneur.

Partners at the firm also think that their expertise in healthcare would benefit the early-stage digital health startups they invest in. They hope to make these bets early on through this fund and make Series A- or B-level investments in a few of those startups later on. "Some of the investments that we make through this angel fund will help us identify potential candidates for future investments that can be made through the fourth Ventureast Life Fund, which should be ready in about nine months from now," said Jagannath Samavedam, general partner, Ventureast.

VENTUREAST'S GENERAL PARTNER SAYS...

Half of the \$4m corpus is being brought in by Ventureast, the other half is going to be contributed by a few HNIs



Machines at the MALL Learn the Ways of the World

IISc Lab is working to give machines a worldview

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Bengaluru: In one corner of the sprawling Indian Institute of Science (IISc) campus lies the seemingly quiet Machine and Language Learning (MALL) Lab.

It's making a noise in the world of technology, with its grand mission of giving a "worldview" to machines that will enable them to make wider connections between various data and draw the necessary inferences to make decisions. Make no mistake, this is not a random academic pursuit. It is of utmost importance in an era where automation is the next big thing. Automating decisions could save companies huge amounts of money and reduce man power, which can be instead used for more critical tasks.

Recognising this, global technology giants such as IBM and others are funding and collaborating with the lab.

"We, as humans, aggregate a lot of knowledge about an entity and then use the knowledge to make decisions. Increasingly, we are asking machines to make non-trivial decisions on our behalf. But machines do not have the worldview that you and I have," said Partha Talukdar who is leading the team that works on this project.

"The thesis is that, if you can make that kind of knowledge available to these decision-making agents — to chatbots, robots, personal assistants — then their performance is going to significantly increase," said the 35-year-old professor.

The team consists of PhDs, master's students, research assistants and interns, who work on various aspects of this huge task.

The work done at the lab could potentially help in creating knowledgeable personal assistants who can carry out tasks with increased efficiency, come up with algorithms to fulfil task-specific needs and build programs that can scrounge through open forums to track feedback about products, among others. "IBM Research is looking at task directed knowledge graph," said Talukdar. The team uses core artificial intelligence (AI) areas such as natural language processing, machine learning and large-scale data analysis methods to build 'knowledge graphs'.

Knowledge graph, a term that Google made famous in 2012, basically tries to understand and learn facts about places, people and things and how these entities are all related. "You can think of that as a graph or a network where the nodes are of entities of interest," said Talukdar.

Sharmistha Jat, a PhD student who does relation extraction at the lab, gave a peep into what they are doing. "There are different relations, phrases like 'located in', 'prime minister of', etc. We

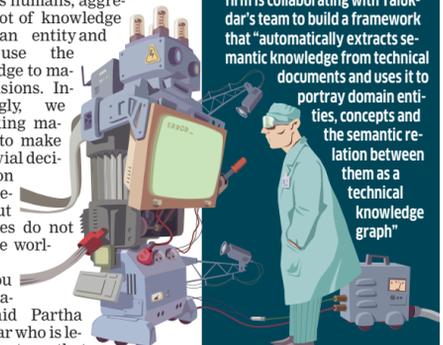
On Track of Language of Machines

MALL Lab actively collaborates with Carnegie Mellon University

We want to connect with neuroscience. Bringing in text and brain imaging together could help in answering questions

PARTHA TALUKDAR, Professor, IISc

SRIRAM RAGHAVAN, director, IBM India Research Labs, said his firm is collaborating with Talukdar's team to build a framework that "automatically extracts semantic knowledge from technical documents and uses it to portray domain entities, concepts and the semantic relation between them as a technical knowledge graph"



want to understand how entities are connected. I look at patterns. For example, if there is a statement saying Narendra Modi was born in Gujarat. The machine needs to know that Gujarat is in India and so Narendra Modi was born in India," she said.

The knowledge to 'teach' machines is gathered mostly through the internet. The internet, with its many social networking sites, blogs and websites, is a repository of information.

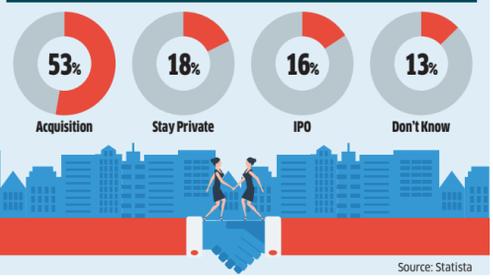
Though there are certainly labs working on various subsets of the same problem, the 'comprehensive outlook' is what makes MALL special, Talukdar said. "The area that we are working in is unique in the Indian context. There are different pieces of it that are studied in other groups. But the collective view is unique. I do not know any other lab in India and a few globally, that has this comprehensive view," he said.

Though these are still early days for the lab that began in late 2014, it has already seen varying degrees of success with its collaborations. "There are prototypes that have been developed. Some of the algorithms that we have developed have been implemented on our partner's data. They have seen different degrees of success," said Talukdar.

Cos Want to Sell, Not IPO!

Snap is about to have what should be the biggest tech IPO of the year. But their move to the public market is an outlier among startups. Instead, the majority see an acquisition as their end-game. While getting bought out isn't most idealistic route, it's the most straightforward.

LONG-TERM GOAL OF TECH AND HEALTHCARE STARTUPS AS OF NOVEMBER 2016



Source: Statista