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**Tweet OF THE DAY**



**SUMANTH RAGHAVENDRA**  
@sumanthr

Looks like the number of startup accelerators in Bangalore will soon outnumber the number of startups in Bangalore

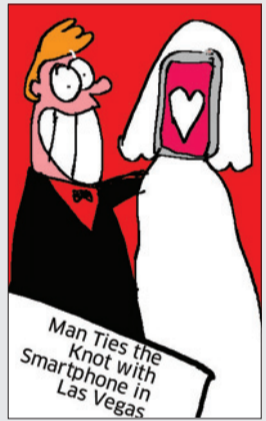
**Tech Buzz**

**Android N is now Android Nougat**



For a few months now, Android N has been the name of next version of Google's mobile operating system. But on Thursday, the internet giant revealed that the official name will be Android Nougat, which will be released later this year. Nougat will have new features like an improved notification shade and split-screen multitasking.

**Quick Byte** ANIRBAN BORA



**\$10 billion**  
Investments that the VR Venture Capital Alliance, will make in VR startups

**Smart Material Changes Shape with Light**



Scientists have developed a new smart material that can heal itself and change shape when exposed to heat and light, which may be used in drug delivery systems and self-assembling devices. This is the first time researchers have been able to combine several smart abilities, including shape memory behaviour, light-activated movement and self-healing behaviour, into one material. - PTI

**Jargon Buster**  
**NewsGroup**

A newsgroup is an internet-based discussion about something between users around the world, sharing views about the topic via digital content

**Piggybank**

Though VC investments have started to dry up, two companies, Razorpay and Kolkata's EFRAC, managed to bag some good money

**Talk of Startup Town: Honey, they Shrunk the VC Funds**

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**Bengaluru:** In a precipitous drop, venture capital investments in Indian startups have shrunk both in value and volume in the first half of this year, a decline that experts reckon reflects the new reality for an industry that experienced a huge boom in funding last year.

The number of venture deals fell by 35% to 183, as compared to 278 in the same period a year ago, while the total value of funds fell to \$1 billion from \$2.85 billion in 2015 according to risk capital data monitoring service Newscorp VCCEdge. The dry run was exacerbated by the withdrawal of hedge funds and strategic investors which had invested humongous sums of money in the Indian startup industry beginning from mid-2014 onwards. VC funding hit a peak in 2015, as 473 deals were registered during the year against 307 deals recorded in 2014. Deal value too more than doubled, shooting up to \$5.4 billion during the year.

"Last year was an anomaly, and that money was not VC capital but large international corporations and hedge funds driving up the deal value and velocity," said Tarun Davda, MD at Matrix Partners India, who said his firm has continued a similar pace of investments as last year. Consumer internet companies which received the bulk of the funding in the boom years have now turned from spending aggressively to acquire customers building more sustainable businesses

at lower cost.

Attention has now turned to unit economics, cash conservation and customer satisfaction for later stage companies. "GMV (gross merchandise value) based investment has now been replaced by unit economics," said Hari Menon, CEO of grocery retailer BigBasket, which closed a \$150-million round in March this year.

"Investors are worried about what the consumer sentiment will be and are wondering if projections given by the companies will only hold because of discounts," he said. But even as late stage investments have been hit, early stage dealmaking has continued in areas like financial technology, healthcare and software as a service (SaaS). A slew of venture capital firms like Sequoia Capital India, Kalaari Capital, Nexus Venture Partners and Maturing

Partners have announced a new corpus in the last one year and will continue to deploy capital. Along with lesser cash, investors are also now expecting a change in the approach to business. "Investors are now asking is if you can make money from the customer on the first transaction including marketing costs, rather than wait for a payback of two years from a customer. This is very difficult in consumer internet sector," said Anubhab Goel, cofounder of hyper-local services company Zimmbor.

**DO WE HAVE A DEAL?**



Year	Deals	Value
2014	167 deals	\$863 m
2015	278 deals	\$2.8 b
2016	183 deals	\$2.8 b

Year	Deals
2014	172 deals
2015	317 deals
2016	368 deals

Data courtesy: Newscorp VCCEdge

- Investments by VCs are back to their pre-boom levels of 2014, as startups go back to basics of business building
- Funds like Tiger Global and SoftBank along with overseas hedge funds which led the boom last year have stopped cutting cheques
- This has led to slowdown in late stage deals, which is leading to companies like Snapdeal and Grofers to cut costs and lay off employees

**For Everything Else, there's MasterCard for Razorpay**

This is MasterCard's second investment after Chicago's Mu Sigma

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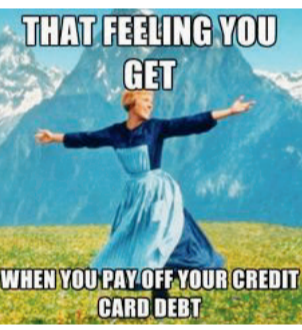
**Bengaluru:** American payments and financial services company MasterCard has invested an undisclosed amount in Razorpay, an online payment gateway solution for small and medium enterprises and platforms.

The equity-based investment in the company backed by Tiger Global is MasterCard's second investment. In 2013, it had invested in Chicago-headquartered analytics company Mu Sigma.

Bengaluru-headquartered Razorpay, which works with online product and technology businesses such as cloud telephony company Knowlarity and lifestyle ecommerce portal Nykaa, will be part of a six-month long MasterCard Start Path programme for startups targeted at technology development. "The association with MasterCard opens up the network of banks it works with. As our product focuses on reducing the failure rate of transaction, this will help us bring down the number of hops," said Harshil Mathur, cofounder of Razorpay.

The company had raised \$64 crore from Tiger Global in Series A and Matrix Partners along with multiple angel investors in the seed round. The 33 angel investors include Jeff Huber, senior vice president at Google X, Snapdeal cofounders Kunal Bahl and Rohit Bansal; InMobi cofounders; and former Flipkart chief product officer Punit Soni.

The company incorporated in 2013 works with 8,000 merchants at present. "We are developing new products, especially in the space of Unified Payment Interface and EMI-based payments. In these scenarios the partnership with banks are pivotal," Mathur said. "India is helping to shape the future of e-commerce through strategic collaborations and innovative technology. The work that Razorpay is doing in India complements existing MasterCard solutions that are helping merchants of all sizes and grow their business," said Stephane Wyper, global lead for MasterCard Start Path programme.



**The Next Step**

Razorpay will be part of a six-month long MasterCard Start Path programme for startups targeted at technology development

**\$64 crore** Amount Razorpay raised from Tiger Global in Series A and Matrix Partners, among others  
**8,000** Merchants it works with at present

**Mandala Feeds \$10 million to Kolkata's EFRAC**

**Anuradha Himatsingka**  
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**Kolkata:** Mauritius-based PE firm Mandala Capital has invested \$10 million (approximately ₹67 crore) in an integrated food testing lab startup in Kolkata EFRAC founded by a clutch of city-based angel investors. The PE firm has agreed to commit another \$10 million into the startup after three years provided the facility achieves 100% capacity utilisation and clocks an annual turnover of \$40 million. The PE firm is picking up a majority stake of 51% in the startup, which Nestle had used to test Maggi instant noodles during the controversy last year.

Elaborating on the deal, Mandala Capital founder Uday Garg said: "About 60% of the total \$10 million invested will be ploughed back into the startup." The fund will be used to set up a US Food and Drug Administration (USFDA) certified new pharma testing line adjoining the existing ones at Barasat, Kolkata. The new line will become operational over the next 18 months from now.

The company currently employs 8500 people, and plans to take this up to 10,000 globally by the end of this year. The company may look at setting up other similar facilities or expanding this in the future. According to Harris, outsourcing the design and development process helps the OEMs (original equipment manufacturers) save up to 25% in costs, while maintain the same level of quality.

**Tata Tech R&D Centre Logs in @ Pune**

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**Pune:** Global engineering services provider Tata Technologies has expanded its existing engineering research and development centre with the launch of Axia, VAVE Centre of Excellence at its facility in Pune.

The 8,700 sq ft facility will allow the company to offer end-to-end product development capabilities to its clients, primarily in the automotive, aerospace and industrial space. Warren Harris, MD, Tata Technologies said that the new centre was the first step towards a company that would be more ba-

lanced between the virtual and physical world. "Going ahead we will bring in prototype testing and validation capabilities. This will enable us to take responsibility for innovation and development from concept to launch," he said.

As a part of their global strategy, the company was looking at leveraging its presence in Silicon Valley to build relationships with local startups and technology companies which it could then use towards supporting ANIMISHA

lanced between the virtual and physical world. "We may look at partnering with or investing in venture capital firms such that we can influence their investments into areas like electric and connected cars and alternate propulsion technologies. If this model works, then we may look at taking it elsewhere," he ad-



**WARREN HARRIS** MD, Tata Technologies

Going ahead we will bring in prototype testing and validation capabilities

**PwC India Charts a Road to Digital Business Via PMO**

**ET Q&A** **Deepankar Sanwalka**, leader, advisory services,

PwC India, spoke to **Neha Alawadhi** on how the consultancy is looking at expanding its niche vertical expertise. PwC India says it has the biggest government practice among the big four in India. Edited excerpts:

**How do you look at the digital space?**  
Digital for us is different from Digital India, which means different things to different people, and also includes rebranding of several schemes. For the tech companies, a lot of 'digital' is around analytics. A lot is around some implementation itself which is now rebranding as digital. Digital for PwC is how we leverage the digital channels - social media, e-commerce, or anything where tech-

nology becomes the catalyst for the interaction between two parties.

**How do you leverage the digital technology, especially in the government practice?**

We look at digital as a channel, as a way of doing business. What we do at MyGov.in is a great example. We are managing that platform for interaction of the citizen with the Prime Minister's Office. If you transpose that into a private sector scenario, let's take any large conglomerate which has got 5,00,000 employees, we can replicate that model for interacting with employees and clients and so on. The government is very open to using consultants, more so than ever, and is not shy of paying good fees for the best

experience across verticals.

**How are you looking at the cybersecurity piece?**

One of the key reasons we believe cyber is very big is because there's a huge government initiative on cybersecurity. We are helping UIDAI (Aadhaar) on cybersecurity, and also working with Mumbai administration on the Crime and Criminal Tracking Network and Systems. We also work a lot in the private sector. We now have a team of over 500 people, from over 100 people three years ago.

**WHAT CYBER MEANS TO US**

One of the key reasons we believe cyber is very big is because there's a huge govt initiative on cybersecurity  
**DEEPANKAR SANWALKA** Leader, Advisory Services, PwC India

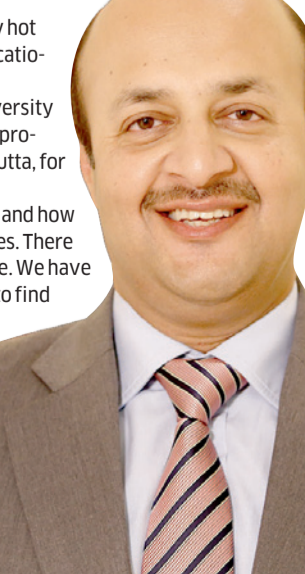
**How does India compare to other parts of the world, in terms of your experience in other geographies?**

The key difference is scale, very few countries have this scale. It even baffles our global experts but the advantage is that they've done things in a smaller way, and we can leverage that. A lot of companies in many ways are looking at China, because there the scale has been done and adopted.

**How are talent demographics changing with the changing nature of business?**

That is a big challenge. In really hot areas, we're tying up with educational institutions now.

We just tied up with IIT University for cyber talent, and are in the process of tying up with ISI in Calcutta, for our analytics practice. The other one is senior talent and how we bring them into white spaces. There are no easy answers to that one. We have to accept that we're not going to find the perfect candidate in the given market. So we focus on finding a candidate who is willing to take on a challenge.



**It's Free-for-all Over Free Data Platform to Netizens**

**Our Bureau**

**New Delhi:** On the last day of submission of the telecom regulator's consultation paper on free data, the submissions by prominent Internet activists varied on the question of having a telecom service provider (TSP) agnostic platform to provide free data to users.

The Internet Freedom Foundation, which includes members of the volunteer driven savetheinternet coalition, said there is no need to have a TSP agnostic platform for free data.

"Because when users start deciding which sites to visit based on which sites are willing to subsidise them, we are enabling established or large companies to indirectly choke competition using money power. The Internet should exist as an equal platform where the most innovative succeed, not the richest," IFF said in its submission.

On the other hand, Member of Parliament Rajeev Chandrasekhar said there was a need to have TSP agnostic platforms. He said there was "a need to have TSP agnostic platforms that can provide a service of Reimbursement to users by websites/apps". IFF argued that such a model violates the regulator's February decision to ban differential pricing models on the Internet.

**INTERNET FREEDOM FOUNDATION**

The models suggested in the present consultation paper require further scrutiny and regulatory intervention

Trai issued the consultation paper on May 19 exploring ways of providing mobile internet access to consumers for free, without violating a ban on discriminatory pricing of data services. The paper came under criticism from several quarters, as it appears to violate the landmark decision on differential pricing by Trai in February.

Chandrasekhar added that, "to ensure net neutrality, these platforms should be permitted to enter into commercial agreements with only websites that are being pro-

**Equal Rights**

The Internet Freedom Foundation said there is no need to have a TSP-agnostic platform for free data

**IFF** said the most suitable model to create equal access was equal rating

**MODELS SUGGESTED BY CONSULTATION PAPER FOR PROVIDING FREE DATA**

- Toll-free platform for users where browsing will be free
- Consumers paying upfront and subsequently reimbursed
- Applications that reward users with incentives such as recharge for data or voice usage



moted and/or consumers, and are expressly prohibited from doing so directly with Telcos/TSPs."

The paper asked four questions about offering free data to consumers, and had suggested three models for providing free data — one, a toll-free platform for users where browsing will be free; two, consumers paying upfront and subsequently reimbursed; and three, applications that reward users with incentives such as recharge for data or voice usage.

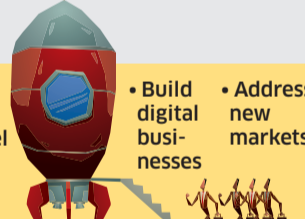
In response to the question on regulating such TSP platforms, Chandrasekhar submitted that "collaborative regulation with other regulators that must be explored and developed", while IFF said "regulatory intervention is needed to further augment the existing regulations on discriminatory pricing of data".

IFF said the most suitable model to create equal access was equal rating. "The models suggested in the present consultation paper require further scrutiny and regulatory intervention," it said.

**Now, Cisco has a LaunchPad for Startup Innovation**

**The Initiative**

**LaunchPad** An open innovation initiative to accelerate startups



IT IS DESIGNED TO HELP STARTUPS...  
• Authorise channel partners and developers to scale their solutions

- Build digital new businesses
- Address new markets

**Our Bureau**

**Bengaluru:** Networking company Cisco has inaugurated LaunchPad, an open innovation initiative to accelerate startups.

This is designed to help startups, authorise channel partners and developers to scale their solutions, address new markets, and build digital businesses. Cisco will provide a space at its Bengaluru campus with access to its technology suite and grants to startups chosen to work at its campus. "We will be selecting startups based on the founding team, its capability, how that fits into the larger ecosystem and their willingness to work with an ecosystem," said Amit Phadnis, president, engineering.

Through LaunchPad, the startups will get to work on solving business relevant problems by catering to use cases that are identified and validated by Cisco go-to-market teams.

The company will concentrate on manufacturing, retail, education,

healthcare, IoT, transportation, analytics, cloud and agriculture sectors, among others, and will not be taking any stake in the startups.

As a part of the programme, the company will attach a senior-level sponsor to carry forward the process. "There is a governance board and an internal technology team. We have about 28 global technology leaders. When we select a startup, a (channel) partner and find a use case, we will be attaching a sponsor from Cisco. They will take the whole process through from Cisco and the startup's perspective," said Phadnis.

Cisco will collaborate with Tech Mahindra to develop digital solutions for Indian electric utilities. The companies will work with select startups and developers to accelerate digitisation of the power sector.