

# IT in the Year 2016

It is often asked “Does IT matter?” Yes - being the largest creator of jobs in the organized sector for the past 15 years with 4.4 Million direct jobs and annual revenue of \$ 220 Billion that accounts for 7.8% of GDP – IT matters a lot for India. A lot has happened in the year 2016 in IT. Here is quick take on what are perhaps the most important developments in IT, particularly from an India perspective. Happy reading!

## General

- AADHAR enrolment and mobile phone subscriber base crossing 1 Billion mark (in January and March respectively) are truly defining moments for India. The historic **GST legislation** getting 430 (Yes) and 0 (No) in Parliament on September 23, 2016 Prime Minister Modi getting recognized (by popular vote) as the **Time Magazine Person of the Year 2016** in December 2016 and being invited to address both the **US Houses** (Congress & Senate) in May 2016, Modi announcing **de-monetization** on November 8, 2016, India’s “**surgical strike**” in Pakistan, Tata Sons sacking Chairman Mistry on Sep 23, 2016 and Brexit (Britain exiting European Union) in June, US Presidential Elections deciding in favour of **Donald Trump** on November 8, 2016 are truly the major events that shaped the world in the year 2016. Many of them including Brexit, de-monetization and US Presidential Elections have direct impact on Indian IT.

## Technology

- **ISRO** (Indian Space Research Organization) had a spectacular year in 2016; successful launch of 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> of the seven-part “**Indian GPS**” (January to April, **re-usable launch vehicle** test (May), launch of **8 weather satellites** (June), launch of **22 multi-country satellites** (July) and **ScramJet** test in (August) are the notable ones. Discovery of “**gravitational waves**” in February may well be the discovery of the century. **Nokia** succeeds in **1 TBPS fiber-optic communication** trial (September). Chinese **TaichuLight** with 93 peta-flops is the new world record in **super computing** (June). **Solar plane** completes the global tour (July). **Hyper Loop** CEO visits Bangalore and talks of such service for commercial deployment in India!

## Markets

- With **Quess** (Bangalore headquartered IT and HR services), **TeamLease** (Bangalore-based staff augmentation services) IPO getting oversubscribed 144 times and 65 times respectively; **QuickHeal** (Virus software), **InfiBeam** (e-com) having a good IPO, it was an interesting year for Indian **IPO story**. **De-monetization** helping e-wallets companies including **PayTM**, the year 2017 will be even more interesting. **IBM** buying **Sanovi**, **Intel** buying **SoftMachines** and **Nervana**, the Indian tech start-ups and start-ups by Indians in USA continue to excite. Globally, **Microsoft** acquiring **LinkedIn** for \$ 26 Billion, **Softbank** buying **ARM Holdings**, - the global

semiconductor leader - for \$ 31 Billion, **Siemens** buying **Mentor Graphics** and **Verizon** buying **Yahoo** for \$ 4.8 Billion are the major global acquisitions. **Wipro** creates a record with its acquisition of xxx for \$ 500 Million in September 2016

### Products

- **Microsoft** launching **Surface 4 Notebook** (January) and **Surface All-In-One Desktop** (October), **Google** launching **Pixel** phone targeting Apple iPhones, video-conferencing software **Duo** (September) and AI-based Assistant **Allo** (October), **Apple** launching **iPhone 7** and **7Plus** along with **Apple Watch 2**, **MacBook Pro** and **OS 10** were the major product launches globally. **BlackBerry OS** becomes history. **Samsung** Note 7 crash causes a lot of misery to Samsung in the year 2016.

### Indian IT companies

- With IT services industry landscape changing in a major way these are difficult times for the Indian IT services majors – TCS, Cognizant, Infosys, Wipro, Tech Mahindra and HCL with recruitment of fresh university graduates significantly down and growth rates and profitability declining; yet, **TCS** with \$ 16.54 Billion turnover (on March 31, 2016) did the country proud with declaring TCS as the most valuable IT Services company in the globe (January). **HCL** acquired Volvo's IT Arm (February). E-commerce major **Flipkart** crossed 100-Million user base. Accounting software **TALLY** crossed one million user licenses. Online travel startup **Yatra** got listed on NASDAQ (December). **PayTM** adds 2,00,000 subscribers a day (post November 8, 2016). Reliance thru their **Jio** service creates several world records; acquires 50 million customers in the shortest time (83 days), carries the highest Internet traffic of 16,000 TB in a day. **Jio** announces free voice and data for the first 90 days (extends by another 90 days).

### MNC IT companies in India

- **Amazon** starting 6 data centers and 5 fulfillment centers in India, **QUALCOMM** signing up for 500,000 sq-ft space in Bangalore, **Uber** taking up 200,000 sq-ft space in Bangalore, **Apple** announcing tech campuses in Hyderabad and Bangalore, **Wal-Mart Lab** starting Bangalore operations, the Indian IT talent story continues to be exciting from a global perspective in the year 2016. **Netflix** starting their services in India, **Cisco** deciding on Pune for manufacturing and **Huawei**, **LeEco**, **Xiaomi** deciding to manufacture phones in India the Indian market is becoming attractive to global majors too, Make in India, Digital India, Smart Cities and other Mission-mode projects of the government are getting their due global attention too.

### Infrastructure

- **Auction** for **4G Telecom licenses** concluded in a transparent manner (unlike the scam dominated 2G / 3G spectrum auctions earlier) in 2016, though the yields to the government fell way short (mere 4%) of the target. The new generation telecom operator Reliance **Jio** creating several world records is truly the “talk of the town”

globally in the year 2016. **Ooty** became the **100<sup>th</sup> Railway Station** to get **free Wi-Fi** in December 2016; this is through a partnership between Railtel and Google that plan to roll out free Wi-Fi in 400 Railway stations by 2018.

### Interesting Applications & Mobile Apps

- De-monetization announcement of November 8, 2016 took e-wallet Apps like **PayTM** to dizzy heights; suddenly every Bank started aggressively marketing their mobile App; **PayTM App** could convert any mobile phone into **PoS** too; government launched **AADHAR Pay App** on December 25, 2016 that enabled any merchant with smart phone and finger-pint reader (costing just over Rs 5,000) to accept payments from anyone direct from their bank accounts and authenticated through biometric signature (needing no credit / debit card, phone, password or MPIN). NPCI-designed **UPI** (Unified Payment Interface) launched in September is set to change the landscape of mobile payments. Ola / Uber, SBI, Indian Post and many others are launching many creative solutions too in the payment space. **GSTN** (GST Network) is being built, that too on new architectures, at record speed. Government is giving a major push to make government purchases transparent and efficient through Government's internal e-com platform **GEM** (Government e-Marketplace) that is available for all Central / State Governments / Public Sector corporations. Reliance **Jio** is the most downloaded App in the planet in November 2016. Even telecom regulator TRAI launched an App that helps end users to monitor Internet speed!

### Startup scene

- Starting with the start-up policy of the Government in January with Rs. 10,000 Crore fund, the year saw many interesting developments! For the first time in India, Apple acquires Hyderabad-based AI Company "**TupleJump**". Companies started by first generation Indians get acquired for large sums by global leaders (Intel acquiring "**Nervana**" for \$ 400 Million and "**SoftMachines**" for \$ 300 Million, IBM acquiring "**Sanovi**", for example). **FlipKart** reaches 100 Million users. Facebook Founder **Zuckerberg Foundation** invests in tutoring startup "**Baijus**"; **PayTM**, **Freecharge** and other e-Wallet companies making it big. It was truly a Startup year!

### People

- TCS veteran **Abidali Neemuchwala** moves to Wipro as CEO in 2016; with **Kritika Reddy** of Facebook moving back to US, **Umang Bedi** takes charge as Facebook India **Head**; CEO's of **Apple**, **Google**, **IBM**, **LinkedIn**, **Microsoft**, **Oracle** and **Uber** visit India in the year 2016. **India-born Nikesh Arora steps down as President of SoftBank in June 2016**. **French President Hollande** was the Republic Day Chief guest in Jan 2016. **UK Prime Minister Theresa May** visits India in November.

### Some interesting numbers

- The year saw many interesting milestones getting crossed; notable among them include Indian mobile phone customer base and **AADHAR** enrolment crossing the

billion mark. **TrueCaller** user base in India crossed 100 million. **LinkedIn** Indian user base crossed 100 million. **Flipkart** user base crossed 100 million and its Day 1 of Billion Sales Day crossed Rs. 1,400 Crores on October 4. *Globally*, **Apple** sold its billionth iPhone in this year. **WhatsApp** user base crossed 1 Billion. **Uber** rides crossed 2 billion in the year 2016

Truly, the year 2016 was exciting for India and IT. The next year may well turn out to be a watershed year for India!

Happy holidays

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