# 16 Things that matter - IT in the Year 2016

It is often asked "Does IT matter?" Yes, very much for India. A lot has happened in the year 2016 in IT. Here is quick take on what are perhaps the most important sixteen developments in IT, particularly from an India perspective. Happy reading!

1 *Shift to digital*: The year started with major initiatives under "Digital India" in the country. It culminated in the November 8 announcement by none other than the Prime Minister Modi about the "demonetization" program. Suddenly banks started promoting USSD for feature phones, Apps for smartphones, credit & debit cards, ATM usage, POS usage etc. A whole new players in the form of e-wallets and Payment Banks started operation. UPI (Unified Payment Interface) from NPCI (National Payment Corporation of India) launched in April 2016 that makes wallets redundant and permits payment from the users' bank account to another user's' bank account - that too without knowing all account details, but just with the "virtual address" of the receiver - is perhaps the defining moment for the country. It will unfold fully in the year 2017. The entrepreneurial energy of PayTM that caught the attention of Indians in every nook & corner of the country is yet another defining moment; PayTM is just not an App, not even a noun, but truly a verb brilliantly articulated by "*PayTM karo*!"

2 *AADHAR* enrolments crossing one billion mark in March 2016 is another defining moment. Jio (Reliance telecom service) started service in October 2016 enrolling millions of new subscribers would not have been possible without eKYC enabled by AADHAR linking; a potential customer walks into any Jio counter, keys in his/her AADHAR number on Jio low-cost terminal, authenticates thru biometric (finger print) and walks away with a SIM card - practically in less than 30 seconds! No paper work at all! AADHAR will create many more such "magic" opportunities in the upcoming years.

3 **Indian *Telecom*** continues to be exciting; Mobile subscriber population in India crossed the magical 1 Billion mark in January 2016; from 46 million landline subscribers in 1995 - created over a century - to 1 Billion in 20 years is indeed remarkable. 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). TRAI (Telecom Regulator) releases an App that the user can use to independently verify the Upload / Download speed of the network and optionally pass on this info to TRAI to create a transparent environment to monitor network speed. Government's ambitious scheme to auction Telecom spectrum was a mixed success; while the auction happened transparently (particularly in the backdrop of 2G Spectrum scam that most Indians vividly recollect), the revenue realization was just 4% of the target!

4 *Startup scene:* Government announces Startup Policy 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 investing in tutoring startup "**Baijus**"; **PayTM**, **Freecharge** and other e-Wallet companies making it big. It was truly a Startup year!

5 *India rising:* **TCS** rated as the "Most powerful brand" in IT services globally in January 2016 by Brand Finance, is truly India rising; **Wipro** takes a bold step of acquiring "**Appirio**" for $ 500 Million demonstrates the fact that Indian IT companies have arrived in the global scene, both in scope and in scale. **TALLY** having more than "one million paid customer base" is proof that Indian software products are real and Indian retail users are ready to pay for software products! **FreshDesk** and **Zoho** are truly software products / services "Made in India" for global customers

6 *Bharat rising:* Often one gets across the feeling that IT revolution is limited to Metros, more specifically, Bangalore, Hyderabad, Chennai and NCR; while it continues to be true, Tier II and Tier III cities are catching up; **Quess** Corp. that saw phenomenal IPO in this year operates out of many Tier II Towns includig **Hubli** in Karnataka! **Zoho** that is a world leader in CRM space for SME sector is made completely in **Tirunelveli**, a Tier III city in Tamil Nadu

7 *Indian Government starts to consume IT:* Some key applications like Passport Applications, MCA 21 and Income Tax applications have been stellar successes over the years, but the speed at which GSTN (GST Network) is being built that too on new architectures and Government's internal e-com platform GEM (Government e-Marketplace) that is available for all Central / State Governments / Public Sector demonstrates the fact that government is going beyond playing an enabling role (policy, infra, tax benefits) to directly benefiting through IT in a large scale, once again a game changer move of the year 2016

8 *India's e-commerce story continues to be exciting:* The e-commerce story started with FlipKart, Snapdeal and Infibeam continues to grow. Flipkart user base crossed 100 Million in June 2016. Global leader Amazon is growing healthily in India; together with Flipkart they shipped more than 15 million items each on October 4 (Big Billion Day 2016) sale (with no technical glitches like "server down"). LeEco sold 70,000 phones in 2 seconds over Flipkart on Feb 3! Amazon invested in new fulfillment centers in Coimbatore, Chennai, Delhi, Jaipur and Mumbai in the year 2016

9 *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; 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.

10 *India continues to attract investment & attention:* India continues to get significant investment from global IT majors; **Amazon** and **Apple** announced the setting up of their development centers in India in the year. **Uber** and **QUALCOMM** take up 2,00,000 sft / 50,000 sft space respectively in 2016 in Bangalore for their development center; **Huawei**, **Xiaomi** and **LeEco** start manufacturing their mobile phones in India; **Wal-Mart Labs** starts their India operations in 2016; CEO's of **Apple**, **IBM**, **Google**, **Oracle**, **LinkedIn** and **Uber** visited India in 2016

Globally,

11 *Mergers & Acquisitions in IT:* High-impact mergers and acquisitions of 2016 among IT companies include **Microsoft** acquiring **LinkedIn** for $ 26 Billion; financial entity **SoftBank** acquiring **ARM** - the global leader in semiconductors -  $ 31 Billion; **Verizon** buying **Yahoo** for $ 4.8 Billion (in the backdrop of Yahoo turning down an offer of more than $ 44.6 Billion by Microsoft in 2008!)

12 **Iconic HP and unusual re-organization**: **H**P has been an iconic company; over the past 77 years, it is credited with the creation of Silicon Valley and its culture; the contributions of its founders Bill Hewlett and Dave Packard are legendary; many other iconic companies were started by former HP employees. Since late nineties, with its acquisition of **Compaq** (that in turn acquired another iconic company **DEC**) HP became the largest IT company surpassing IBM in the past decade. In the recent past however, HP has been following a strategy of downsizing - splitting the company into **HPE** focusing on high end servers, storage, network and services and **HP Inc.** focusing on PCs and printers in the year 2015; in this year HPE further split with its software division merging with **Micro Focus** and Services division merging with **CSC**. Only time will tell as to what this impact will be. Interesting time indeed!

13 *Mobile devices:* Mobile phones continue to evolve; **Apple** announced **iPhone 7** and **iPhone 7Plus** in September;  **Google** announced its **Pixel** phone practically at the same time and with features more similar to iPhone than Android phone, forcing many analysts to talk of Pixel phone as Google's iPhone! In fact, with **Huawei**, **LG**, **Xiaomi** and **Asus** announcing phones in the similar price range ($ 600), the year 2016 may well turn out to be the year of high-end phones! Unfortunately, **Blackberry** formally announced the stoppage of phones powered by its own O/S, though Blackberry will continue its Android phones. **Nokia** is said to be entering the market with its Android phones in Jan 2017 CES (Consumer Electronics Show)! **Samsung** had its "cup of woes" in the year 2016 due to multiple "explosions" of its iconic **Galaxy Note 7** phone handsets, leading to its market value going down by billions of dollars in just days!

14 *Apple & Google continue to dominate the IT scene*: In the year 2016, Google became the "most valued" company (in terms of market capitalization), taking the mantle from Apple! Both the companies' products, particularly Apple iPhone and Google Pixel are doing extremely well, particularly in India. Apple has its iPhone sales down everywhere, except India! Excellent sales of iPhone in India got a mention in Apple Keynote speeches! Apple announced its plans for India development center during Apple CEO Tim Cook's visit; Apple made an application for starting **Apple Store** in India and talked of local manufacturing of iPhones (though all such issues are only making rounds in "Delhi's Bhawans" and no way close to reality). With Google CEO Sundar Pichai personally championing free Wi-Fi at 400 Railway Stations (about 100 stations already have this facility in place) by end 2017, Google is clearly visible in the Indian scene!

15 *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 crossing 100 million, **LinkedIn**

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

16 ***Will Trump stump Indian IT?*** As the year 2016 comes to a close, the constant worry for Indian IT industry (and in turn Academia, Government and Civil Society) is the strategy that the incoming US President Donald Trump who takes charge on January 20, 2017 (after his historic win on November 9, 2016) will follow; it is particularly worrisome as he keeps talking of "American jobs in America"! Being a businessperson with even personal investments in India, he is unlikely to hurt business sentiments too! The next year may well turn out to be a water-shed year for India!

Happy holidays

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