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Future of IT industry:
Top Trends for 2019-20

A decade ago, many companies could achieve competitive advantage by being a late follower in adopting digital innovations and trends that were well on their way to being mainstream. In the digital era, there is a possibility that the late followers often tend to miss out most of the upsides from a digital trend that could impact their industry. How can an organisation sense and act upon such trends?

Deloitte has identified 10 trends that are expected to, over the next 18 to 24 months, likely offer new avenues for organisations to pursue their strategic ambitions. They cover a wide gamut of trends ranging from AI-fuelled organisations, intelligent interfaces to digital reality, DevSecOPS and the cyber imperative, to name a few.

Indian organisations are seen to have been relatively slowerat embracing these emerging technologies in the past. In the digital era, the recentspate of investments in AI, intelligent interfacesand personalised marketing by major Indian companies are an indicator that many of them are exploring these emerging technology use cases to seize the first mover advantage. Some of the use-cases have so far been in the areas of customer service, sales, marketing campaigns, supply chain, risk mitigation and data security. TheBanking & Financial Services Institutions (BFSI), Retail, Manufacturing, Healthcare and Logistics sectors are leading the way by investing in emerging technologies such as Cognitive/Artificial Intelligence (AI), Augmented Reality (AR)/Virtual Reality (VR), Internet of Things (IoT), Voice User Interface (VUI), Facial Recognition etc.

Recognising the global trends, in the Interim Union budget 2019-2020, the Government of India has outlined a National AI program. The finance minister highlighted government's plan to develop skills in areas of AI, AR/VR, Robotics and Big Data.We believe that this is a step in the right direction, as this would help in building capacity and uncovering significant growth across sectors.

In this article, we intend to examine 3 trends by defining it, providing a global perspective and then connecting it to its applications in the India context. The three trends are:

- **AI-Fuelled Organisations will Get Mainstream:** Organisationshave embarked on their journeytotransform their business processes or operations leveraging AI, thereby elevating AI strategy to the centerpiece of their corporate strategy. AI-fuelled organisations leverage AI, machine learning and other cognitive technologies to drive automation thereby increasing productivity and improving regulatory compliance.

Globally, one of the largest pharmaceutical organisation has embarked on a journey to transform into an AI-fueled organisation. It has deployed AI to speed the innovation process, deepen understanding patient's diseases and accelerate the process of drug discovery in the organisation. AI/Cognitive technology adoption has enabled automation of 30,000 man-hours each month.

In the Indian scenario, B2C organisations have got off to the races to scale AI in their organisations to gain competitive edge. Few retailers and telecom organisations are increasingly exploring applications of machine learning and AI in the areas of assortment planning, supply chain optimisation, business forecasting and inventory planning. A logistic technology organisation in India is using AI and IoT solutions to provide shipping solution provider with cost effective transport solutions through optimum capacity utilisation and fleet management. A financial services firm is using an AI solution to reengineer the cheque processing lifecycle, where the solution scans the hard copies of cheques and cross matches the signature on the cheque with the customer signature in the database and processes the transaction. This solution has led to a significant reduction in cheque processing time and helped the organisation in preventing cheque frauds.

> THE URGENCY TO FOCUS ON IMMEDIATE VALUE REALISATION, LIMITS THE OPENNESS TO EXPERIMENT WITH CUTTING EDGE TECHNOLOGY SINCE FAILURE IS NOT AN OPTION. WHILE THIS TREND IS CHANGING, WE CAN DO A LOT MORE TO ADOPT THESE TECHNOLOGIES BY TRANSFORMING OUR MINDSET

— Rakesh Barik, Partner, Deloitte India

- **Intelligent Interfaces to Elevate the Human Experience:** Globally organisations are investing in intelligent interfaces that are transforming the way customers interact with their brands. These interfaces use a host of technologies, including computer vision, AR/VR/IoT, contextual awareness, to capture customer data and predict a need based on their subconscious behavior.

  Globally organisations are using sensors, camera and computer vision for facial recognition of their customers to provide targeted promotions. Voice User Interfaces (VUI) are currently proliferating in the warehouse operations, customer service, maintenance and field operations where technicians could interact with the system or staff to resolve technical issues.

  In India, a large hospitality organisation has deployed VUI based technologies in their customer support operations to improve customer experience. A leading online property marketplace in India has built an experience center for its property buyers where a homebuyer can get an immersive experience and see an aerial view of the property.

- **From Digital Marketing to Marketing Digitally:** Traditional digital marketing channels such as websites, social media, mobile platforms and Search Engine Optimisation (SEOs) are fast becoming must haves rather than a differentiator for organisations. As the marketing technology evolves, organisations are finding new tools to deliver unprecedented levels of personalised promotions/services to the customers. This emerging trend represents a tectonic shift in the seller's marketing strategy as the brands are focusing more on customising their services/offerings based on customer needs rather than focusing on bending consumer's will.

Globally, one of the largest foods and beverages organisation is using demographic, drive preferences and consumption pattern data to predict consumer's diet preferences. Leveraging this preference data, the brand offered personalised promotions to the consumers. A customer data platform is the basic building block to achieve these outcomes.

An Indian e-commerce organisation has used marketing technology to understand their customers' journeys. Data elements such as browsing behavior, purchase history and demographics are being used to provide personalised promotions. This has led to an increase in sales revenue. Similar model has been adopted in other sectors such as education and e-learning to elevate customer experience.

Challenges on the Horizon

While there are numerous areas for organisations to work upon, we have encapsulated two challenges.

One of the issues is the unavailability of micro level data around credit, consumption patterns. This adds an extra dimension of complications when we include the data quality. A significant number of Indian businesses are at the initial stages of their journey to digitise their core business processes and hence there is a shortage of data. Even if the data is available, the quality of the data leaves much to be desired.

In conclusion, these technology trends present immense opportunities to those organisations who have the right digital mindset to embrace them and work with the broader ecosystems of technology product companies and other specialists to solve problems at scale.
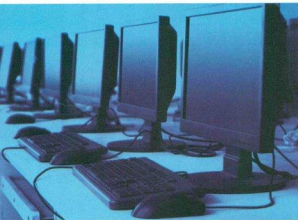
(The author is Partner, Deloitte India)
(Source: https://www2.deloitte.com/insights/us/en/focus/tech-trends.html)

DQ TOP 20

Life is Still There...

This year, the commercial shipments declined by 4%, recording a total volume of 4.76 million units, as the year did not see any large-scale special projects

The overall market saw good momentum in Q1-2018 due to stable consumer spending and the execution of special projects. However, the market witnessed challenges in the subsequent quarters in both consumer and commercial segment owing to the aggressive stocking of inventory, drop in demand and impact of processor shortages, says IDC. "All-in-One, Ultrasmall and small desktops saw a combined growth of 23% YoY, while convertibles and ultraslim notebooks observed a cumulative growth of 75% YoY. Traction towards exciting new categories such as branded gaming notebooks continued clocking a growth of 123% YoY. Gaming and new form factors have been driving the growth of the premium market

segment in this year," says Research Manager, IPDS & PCCI, IDC India.

Consumer Notebook shipments saw a growth of 0.7% over last year owing to increase in demand for growing categories like gaming and ultraslim notebooks, thereby commanding a share of 82% out of the overall consumer PC market while Consumer desktops saw an annual decline of 10.2% due to the weakening contribution of the unbranded desktops.

This year, the commercial shipments declined by 4%, recording a total volume of 4.76 million units, as the year did not see any large-scale special projects in the education segment. Large and Very Large businesses saw a total growth of 17.6% YoY. Companies in IT/ITES and BFSI have been driving the spending in the Enterprise segment.

Quarter Highlights

Consumer PC market registered an overall shipment of 0.91 million units in 2018Q4, which is a 25.7 % decline over last year, according to IDC. The decline in the segment was a result of the excess inventory being carried forward from 2018Q3 owing to a drop in festive buying from consumers, aggravated further by channel partner issues across the country.

The overall commercial PC market recorded a total shipment of 1.08 million units in 2018Q4, a decline of 22.1 % over last year. The drop is largely attributed to the sluggish demand from the SMB segment

Performance of Top 5 PC companies in 2018
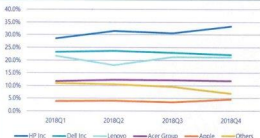
Source: IDC Asia Pacific Quarterly Personal Computing Devices Tracker, February 2019

Shipment Volume and Market Share of Top 5 PC Companies in FY 2017-2019

Company	2018 Shipment Volumes	2018 Market Share	2017 Shipment Volumes	2017 Market Share	Year-on-Year Unit Change (2018 over 2017)
HP Inc.	2.9	31.0%	2.8	29.9%	0.6%
Dell Inc.	2.1	23.0%	2.1	22.4%	-0.2%
Lenovo	1.9	20.6%	1.9	20.3%	-1.3%
Acer	1.1	12.0%	1.2	12.2%	-4.1%
Apple	0.4	3.9%	0.3	3.6%	6.8%
Others	1.0	9.5%	1.1	11.7%	-20.5%
Total	**9.3**	**100.0%**	**9.5**	**100%**	**-2.8%**

Source: IDC Asia Pacific Quarterly Personal Computing Devices Tracker, February 2019

owing to credit uncertainty and lack of execution of large special projects. Moreover, challenges in fulfilling enterprise orders due to processor shortages also accounted for the drop in commercial volumes.

Top 3 Company Highlights:

HP Inc.

HP Inc. led the overall Indian traditional PC market with a 31.0% share in 2018 and recorded a YoY shipment growth of 0.6%. The vendor has maintained its dominance in the consumer PC segment in 2018, growing 5.6% YoY

due to continuous engagement with channel community and penetration

The market witnessed challenges owing to the aggressive stocking of inventory, drop in demand and impact of processor shortages, says IDC

across Tier 2 and Tier 3 states to increase footprint and build brand awareness. The vendor led the commercial segment in 2018 with key strategic wins in enterprise accounts in IT/ITES vertical but registered a decline of 3.9% in shipments YoY as the vendor was not able to execute high-volume special projects in the public sector segment.

Dell Inc.

Dell remained second with a 23% share in 2018 but witnessed a soft decline YoY in shipments by 0.2% in the overall traditional PC market. In the consumer market, Dell Inc. was down by 11.5% YoY owing to challenges within the channel towards Q2 and Q3 in 2018. The vendor recorded a growth of 10.6% YoY in the commercial segment, driven by the refresh in enterprise demand and strong positioning within global accounts across the large and very large business.

Lenovo

Lenovo held the third position with a 20.6% market share in the overall India traditional PC market in 2018, which is a marginal decline of 1.3% in shipments YoY. The consumer PC business grew by 17.0% YoY in 2018 as the company aggressively captured consumer mindshare in the ultraslim notebook category and continued with online channel focus and regional exclusive store penetration. Lenovo's commercial segment dropped by 13.3 % YoY in the year as the company did not witness the execution of large mashups projects. However, the company saw strong growth in the Enterprise and SMB segments.