

IOT, Big Data and Advanced Analytics

As companies have access to increasing amounts of data (IoT sensors, social databases) which can be used to generate useful insights through forecasting, diagnosis and optimization, companies are increasingly deploying advanced analytics platforms. It is expected that by 2020, >75 percent of companies will use these platforms to improve their business decision-making. *(Source)*

Impact: The convergence of IOT, Big Data and Analytics will allow organizations to have greater visibility into their supply chains. The insights from advanced analytics can be used to improve spend management, detect potential frauds, mitigate risks, drive savings through better negotiations and optimize the supply base.

Improving User Experience

Traditional Business Intelligence (BI) platforms requires skilled personnel to effectively utilize them. Vendors have focused on offering solutions that are intuitive and enable self-service. Data is being utilized to offer an intuitive experience, where the interface can anticipate the users' requirements and behaviour.

Impact: By 2018, 50% of large enterprise infrastructure and operations organizations will offer walk-up service support, up from 30% today based on Gartner's estimates. Initially the cost of this will be premium but will come down in the next 3 years. *(Source)*

SaaS or Subscription-based Models

SaaS, a sub segment of the public cloud-services market, is expected to grow by ~20% in 2017. As a result, more buyers are adopting subscription-based models which means increased flexibility, faster deployment times, scalability and reduced upfront capital requirements.

Impact: A number of traditional applications like Microsoft Office (Office 365), graphic editors and CRM tools etc. now have cloud based alternatives, and the shift is expected to continue. It is estimated that by 2019, the cost of subscription for a function will be cheaper than a perpetual software license alternative.

Increasing Spend on Cloud-services

As market penetration of cloud-first strategies increase, it will affect an organization's IT spend both directly and indirectly. Gartner estimates that USD ~1 trillion of IT spend will be affected due to the shift from traditional IT to cloud by 2020. The cloud shift rates are expected to be the highest in the business process outsourcing and application software categories at 43% and 37% respectively.

Impact: As organizations adapt to the market dynamics, they are making their IT architectures more agile. Cloud-based solutions enable cost optimization and increased competitiveness. According to Gartner, by 2019, Amazon Web Services (AWS)-Microsoft will form a duopoly, forcing ~90% of native cloud IaaS providers out of the market. *(Source)*

Increased Focus on Security

As organizations continue to adopt cloud based solutions, they will have a mix of public cloud, private cloud and on-premise solutions. The combination of these will bring about new challenges to security. Companies are looking for sophisticated security systems that can offer greater security and comply with regulatory requirements.

Impact: The way organizations store their data is becoming more distributed. There is an increasing focus on data security due to regulatory, privacy and risk concerns. The increasing adoption of IoT enabled devices will further drive the demand for security solutions. According to Gartner, by 2020, autonomous software agents will participate in 5% of all economic transactions. *(Source)*

Automation, Machine-learning and Real-time Intelligence

As machine-learning algorithms become more advanced, manual analysis and intervention can be eliminated. Software can be used to analyse real time data to identify patterns, trends and irregularities. Alerts are generated in real time and can be utilized to mitigate risks or identify opportunities.

Impact: While true artificial intelligence is yet to arrive, end-users and vendors are using cognitive computing applications to improve their services and internal processes. It is estimated that procurement automation will eliminate human intervention in 15% of digital technology spending by 2019. *(Source)*

