## NASSCOM®

# NEWSLINE

READYING INDIA FOR A USD 1 TRILLION OPPORTUNITY THROUGH DIGITAL



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To contact Newsline Editorial team, write to newsline@nasscom.in

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## Looking towards the USD 1 trillion Digital opportunity

With the year coming to a close, it is a time for the IT-BPM industry to look ahead and examine its path forward. As the chamber of commerce spearheading this sector, NASSCOM is constantly sharing with its member companies insights that point to future growth opportunities and untapped potential markets.

This in the reason why Newsline has for you an article on the USD 1 trillion opportunity that is expected to open up for Indian industry owing to the Digital wave. According to analyst organizations (such as McKinsey and the McKinsey Global Institute), Digital Transformation is projected to create USD 1 trillion in value and sustain 55-60 million jobs by 2025! Realizing this potential however, will be a challenge and it has been suggested that India will need to build on 30 themes to achieve these ambitious Digital revenue figures and meet its development goals. Among the 30 themes are issues like infrastructure creation, reskilling in Digital technologies, establishing e-governance of the future, focusing on education, providing tech-enabled health delivery, Next Generation financial services, precision agriculture knowhow, among others.

In the overseas markets meanwhile, NASSCOM is seeing tremendous partnership opportunities with nations like China in cutting-edge domains such as Internet of Things (IoT) and Artificial Intelligence. It is NASSCOM's view that Indian tech companies need to make greater headway in China, engaging actively with companies in that geo. In this context, NASSCOM's agreement with the Dalian Municipal People's Government to co-develop a collaborative technology platform christened 'Sino-Indian Digital Collaboration Plaza' (SIDCOP), is expected to prove significant. By encouraging IoT collaboration between Chinese and Indian IT companies, NASSCOM expects to help the sector grow its presence in the market, overcoming existing barriers to penetration.

In Newsline, we also have some clarifications for you on the issue of service tax notifications which were issued to certain IT companies and had caused concern within the market. NASSCOM, which had taken up the matter with several government committees and councils, drew a notification from the Ministry of Information Technology which states that there is no negative effects of tax demands on software industry.

In the Research section, Newsline brings you an overview of the Augmented Reality/Virtual Reality markets, which are being spoken of as the next big things. A White Paper on the subject created by Deloitte and NASSCOM indicates that the two technologies will greatly benefit a host of segments such as the government, learning and development, Aerospace, Oil and Gas, and Heavy machinery.

Finally, we have for you an article on DSCI's 'Digital Payments Suraksha Campaign' which has been launched to create awareness about how organizations can securely accept payments Digitally from their customers.

Wishing you all a very Happy New Year and successful 2018!

Sangeeta Gupta EDITOR sangeeta@nasscom.in

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**COVER STORY** 

# Readying India for a USD 1 trillion opportunity through Digital

hile India has made significant strides in its Digital journey, embracing Digital on almost all fronts, there are still gaps and challenges that need to be plugged and overcome before the vision of Digital India set for the country by the current government can be achieved.

The nation in fact, remains one of the fastest growing in terms of Digital adoption. According to McKinsey Global Institute (MGI), India's Digital Index rose by 56 percent during 2014-2017, from 18 to 29 on a scale of 1-100. This placed the country second in terms of growth among 17 emerging and mature Digital economies. In the lift off phase of its Digital journey, India has already built a strong foundation of Digital infrastructure and expanded its base of Internet subscribers to 431 million. Based on the number of India's Digital identity holders, Internet subscribers, smartphone and social media users and Android app downloads, as well as Digital initiatives such as Aadhaar, it has become apparent that the focus of the nation has been on building a more equitable society where the underserved are addressed and empowered.

The bigger news however, is that the Digital Transformation is projected to create USD1 trillion in value and sustain 55-60 million jobs by 2025. While Digital sectors such as IT-BPM industry, telecom, electronics manufacturing, e-commerce and Digital payments are expected to grow by 2-3x in terms of economic value by 2025, it is the Digital eco-systems in other verticals such



as financial services, education, health, a griculture, manufacturing, transportation and logistics, etc., that are expected to help India reach the ambitious USD1trillion mark.

Clearly, in order to unleash this Digital potential, the industry, the government and all other stakeholders will need to come together and launch initiatives speedily and decisively and play a critical role in investment and innovation. In the absence of such an effort, the value potential can plunge to USD 500-650 billion. Also, it is a fact that India's Digital Index score still has to catch up with that of the other advanced economies.

According to McKinsey & Co. and MGI (in their study titled 'India's trillion dollar Digital opportunity), 30 Digital themes will need to be executed to ensure that India creates up to USD 1 trillion of Digital revenue by 2022 and USD 1 trillion of economic value from the Digital economy by 2025. The global management consulting firm has stated that achieving these goals will require Team India to step



## Digital adoption could result in more than \$ 0.5 trillion of economic value by 2022, going up to a \$ 1 trillion by 2025 (in the full potential case)

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According to McKinsey & Co. and MGI study titled 'India's trillion dollar Digital opportunity', 30 **Digital themes** will need to be executed to ensure that India creates up to USD 1 trillion of **Digital revenue** by 2022 and USD 1 trillion of economic value from the Digital economy by 2025.

up and launch Digital initiatives that support inclusive growth that draws into the mainstream the country's marginalized and underserved communities such as micro, small and semi-urban enterprises, farmers, unorganized workers and rural and semiurban households. If India meets its development goals, then these sections of society can expect to receive more credit, better healthcare, online skills training, advisory services and market connectivity.

The 30 Digital themes recommended by the study include:

- The creation of a 21st century IT infrastructure and software capabilities with a focus on reskilling the workforce of the IT-BPM sector in Digital technologies, setting up cutting-edge cyber security infrastructure, adoption of real time data visualization and analytics, and providing affordable, high-speed Internet connectivity
- Establishing e-governance of the future where all governments adopt e-Marketplaces, use Digital technologies for land transfers, data exchanges, smart cities, direct benefit transfers, e-Trade, etc.
- Providing tech-enabled health delivery, including electronic health records for all citizens and universal health insurance

- Providing quality education for the future by creating an India Education Stack, an open societal platform for learners, teachers and other stakeholders in the system and offering Digital content delivery
- Providing Digitally-enabled power distribution and affordable power for the poor, automating the grid and optimally using Digital technologies
- Rolling out Next Generation financial services including Digital payment solutions, Digital farmer financing, and insurance payouts, etc.
- Doubling the income of farmers by providing them precision agriculture knowhow, and creating a Universal Agricultural Marketplace that integrates wholesale markets
- Making in India, Making for India and Making for the world by building an endto-end Digital supply chain, providing efficient transportation and logistics, deploying IoT-based advanced analytics and automation and boosting electronic manufacturing in India

Building skills for the future, providing online talent marketplaces for employers, and creating Digitally enabled jobs through investment in the next wave of BPO in tier 2 and 3 townships.



#### In the full potential case, there could be \$1 trillion of revenues for digitally enabled businesses by 2022, and up to \$ 1.8 trillion by 2025

## Promoting IoT and AI cooperation between Indian and Chinese companies



hile several Indian IT-BPM companies, especially the leading organizations have established a presence in China, the industry has not managed to make much headway in the country. It was for one been hindered by factors such as slow growth, low returns and lack of scale. These have been the result of an unstructured approach to the Chinese domestic market and the absence of platforms using which companies from both sides can engage with each other. Clearly then, both large and SME technology organizations have been unable to leverage the big business opportunity in China.

In December, 2017, NASSCOM joined hands with the Dalian Municipal People's Government with the aim of codeveloping a collaborative technology platform.

Recognizing the problems that exist, NASSCOM has been working to facilitate collaboration between the technology sectors of both the nations. In December, 2017, NASSCOM joined hands with the Dalian Municipal People's Government with the aim of co-developing a collaborative technology platform. The platform, christened Sino-Indian Digital Collaboration Plaza (SIDCOP), will:

- Be powered by Artificial Intelligence (AI) and Internet of Things (IoT)
- Operate in both online and offline modes

- Enable matchmaking between the Indian and Chinese eco-systems, helping them to leverage each other's strengths in technology
- Automate the requirement to realization (R2R) process, minimizing the RFP process at the customer-end by a significant margin
- Include services such as a B2B Intelligent Marketplace, Rule Based e-Procurement and Shared Services Command Center

Digital orchestration company Zeta-V Technology Solutions Ltd., a start-up with a local presence in Dalian, will be the operator of the SIDCOP platform. Supported by NASSCOM and the Dalian government, Zeta-V will:

- Harness the power of an intelligent ecosystem to minimize the gap between idea-generation and value-realization
- Onboard like-minded Indian and Chinese companies willing to invest in the "co-create" and "co-develop" agenda

- Support the SIDCOP platform with an onground team due to language and cultural issues, and take matchmaking to its intended closure
- Develop the platform and open a local office in Dalian
- Provide offline project management services as well as bootstrapping services for budding Indian start-ups and SMEs, helping them to enter the Chinese market

The idea of facilitating interactions between

Indian and Chinese companies had germinated in early 2017, when NASSCOM had signed an MoU with the Dalian government. The focus was on encouraging IoT collaboration between Chinese and Indian IT companies. It was also at this time that the idea of setting up the first NASSCOM IT park within Dalian BEST City, came up. The IT park, it was decided, would promote IoT and AI cooperation between the two nations. It would be an exclusive place for interested Indian IT providers of all sizes to begin operations and avail of special policy benefits and incentives provided by Dalian BEST City administration.



## No impact of service tax notification on software industry, says government

few weeks ago, media had carried news about service tax notices being issued to certain IT companies, which had created panic within the IT-BPM industry.

It was reported in certain sections of the press that the tax officials had raised tax demands with respect to the export of IT/IT-enabled services to overseas clients. The news reports had stated that this had been done on the basis of place of supply rules which indicated that since these services were provided in India, they were liable to be taxed.

NASSCOM had immediately responded to these reports, taking up the matter at almost all possible fora, including the GST Law Review Committee, the GST Council and at the pre-budget interaction with the Finance Minister.

In order to still speculation, address the concerns being felt by tech companies and take into account the requests made by NASSCOM, the Ministry of Finance, Government of India has recently issued a press release clarifying that the apprehensions about the negative effects of



certain tax demands on the software industry were without basis.

The Government statement said that the Commissioner (Appeals) had set aside the orders of the lower adjudicating authority where refunds were disallowed. The orders where refund had been granted had also been upheld. In this way, the government has set to rest the apprehensions of the industry about any negative effects of the policy on the software industry.

The Government statement said that the Commissioner (Appeals) had set aside the orders of the lower adjudicating authority where refunds were disallowed.



## Augmented Reality/Virtual Reality: Digital's new playthings?



ver the last year or more, there has been growing talk about the impact of Virtual Reality/ Augmented Reality – offspring of the Digital environment, that are expected to be the next big thing!

According to a White Paper on the subject created by Deloitte and NASSCOM, the two

#### Understanding VR/AR/MR

**Virtual Reality (VR)** creates a Digital environment that replaces the user's real-world environment. VR is primarily used in gaming and entertainment applications.

Augmented Reality (AR) overlays Digitally-created content into the user's real-world environment for instance, projecting sales and inventory data onto products on store shelves.

**Mixed Reality (MR)** is a blend of VR and AR creating an environment in which Digital and physical objects can interact. For example, MR will allow marketers to put virtual products in consumers' hands and gauge their responses. technologies are coming together, impacting businesses and enterprises. The Paper, titled 'Augmented/Virtual Reality: Next Big Thing of Digital environment, talks about how Digital Reality (of which AR/VR are a part) is disrupting marketing in a range of segments - from real estate to automotive, from consumer goods to retail. Other areas that are expected to embrace these technologies and derive benefits from them include implicit learning and development, Aerospace, Oil and Gas, Heavy machinery (where on-the-job training is conventionally difficult or dangerous, but can be transformed into an easier version through Virtual and Augmented Reality solutions).

The key catalysts of Digital Reality (which encompasses VR/AR, Mixed Reality, Natural Language Processing and Machine vision) include the following:

- Mobile-edge computing
- 24x7 mobile connectivity
- Artificial Intelligence
- Rise of a profitable AR/VR developer eco-system

RESEARCH

For India, AR/VR can prove to be very beneficial in the edutech realm where it could provide virtual teaching, Digital learning and other skills development techniques for school and college students.

- The availability of 4G and high speed data communications
- Higher processing speeds
  (Source: Google Trends, Industry Reports)

Even though the use and adoption of AR/VR in India has been a bit modest and restricted owing to low awareness of the technologies and paucity of content, thought leadership and training can help create greater visibility for these immensely useful tools.

Take the instance of the Indian government, which can leverage both AR and VR in the domain of customs and border protection by making it easier to simulate scenarios for virtual training.

VR based training can be used for disaster preparedness. Remote assistance can be coupled with Augmented Reality for maintenance of oilrigs, aircraft, pipelines and other machines, which humans find difficult to work on.

For India in particular, AR/VR can prove to be very beneficial in the edutech realm where it could provide virtual teaching, Digital learning and other skills development techniques for school and college students.

Clearly therefore, Digital reality, including AR/VR, has an important role to play in both consumer and enterprise spaces. Already investments in VR and AR are on the rise and the industry is beginning to view them as significant business opportunities going forward. AR/VR are transforming the way products and services are being developed and delivered, thereby improving productivity and operational efficiency. The technologies in fact have the potential to emerge as the foundation of Next Gen computing, provided they can be harnessed optimally.

#### SECURITY

DSCI launches campaign to promote 'safe' Digital Payments

> Data Security Council of India, a non-profit industry body on data protection set up by NASSCOM, has recently launched the longawaited 'Digital Payments Suraksha Campaign'. This is an endeavor to create awareness about how organizations can securely accept payments Digitally from their customers.

> The campaign incidentally has been conceptualized jointly by DSCI and Google and is supported by the Ministry of Electronics and Information Technology (MeitY).

> The initiative is also being backed by various institutions and enterprises promoting Financial Inclusion and Digital Payments. They include RBI's Financial Literacy Team, NABARD's FI Division, NPCI, State Governments, Airtel Payments Bank, Axis Bank, Master Card, PayPal, PayTM Payments Bank and Visa. Post the launch, more partners are expected to be onboarded.



The awareness campaign covers all popular modes of Digital Payment Instruments, and is provider agnostic. It encompasses videos and brochures that have been created in various Indian languages as well as in English. Currently the Campaign is running in Hindi, Telugu, Tamil, Gujarati and English.

The videos have been developed in a way that the common citizen can relate to them. They will be disseminated online and offline through DSCI and all its partner organizations.

