

A stylized map of India is depicted using a network of white dots connected by thin white lines. The map is set against a dark red background that features a faint, larger-scale network of grey dots and lines. Overlaid on the map is the word "INDIA" in large, bold, multi-colored letters. The letters are semi-transparent, allowing the network lines to be seen through them. The colors of the letters are: 'I' (orange), 'N' (green), 'D' (blue), and 'A' (yellow).

**INDIA**

**DIGITISING  
INDIA**

**NASSCOM<sup>®</sup>  
2016-17**

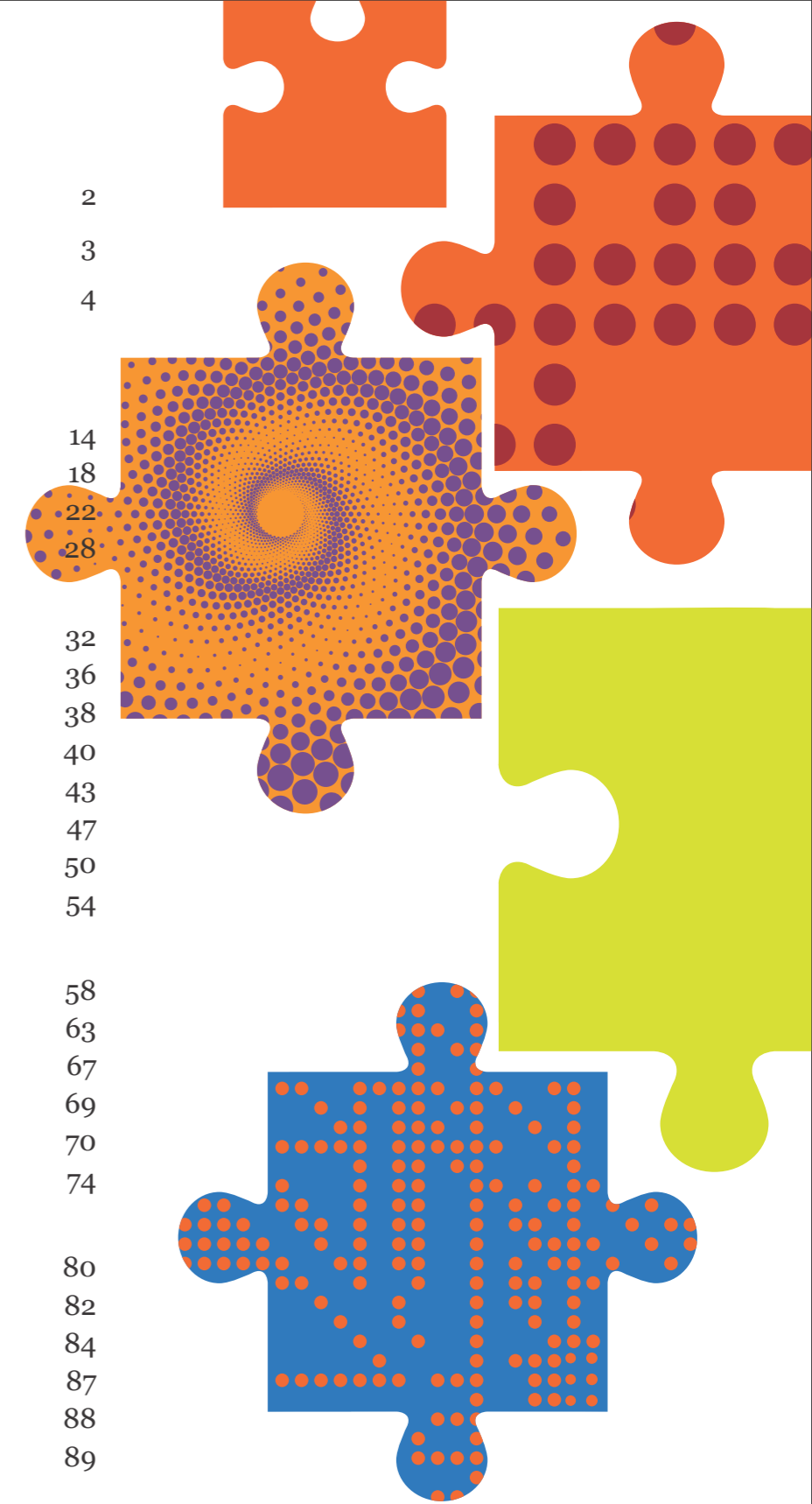
# ABOUT NASSCOM

The National Association of Software and Service Companies (NASSCOM) is the industry association for the IT-BPM sector in India. It was set up in 1988 and registered under the Indian Societies Act, 1860. A not-for-profit organisation funded by the industry, its objective is to build a growth-led, sustainable, technology and business services segment in the country. NASSCOM's membership has grown over the years and currently stands at over 2200. The member organisations represent 95 per cent of industry revenues and have enabled the association to spearhead initiatives and programmes to strengthen the sector in the country and globally.

NASSCOM has also contributed to the development of two organisations - the Data Security Council of India, which is focused on security and the NASSCOM Foundation, which helps drive Corporate Social Responsibility (CSR) initiatives. NASSCOM is headquartered in New Delhi, India, and has offices in eight other cities—Bengaluru, Chennai, Hyderabad, Kolkata, Mumbai, Pune, Thiruvananthapuram & Kochi.



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# Chairman's Message

Friends,

Year 2016 was one where change remained the only constant. From shifts in the geo-political landscape, to sweeping alterations in the tech climate to dynamic changes in the needs of customers—everything was in a state of flux. These rapid developments at the technological, economic, social and cultural levels meant that the Indian IT-BPM industry also had to align itself with the new and emerging environment. As the spearhead of the industry, NASSCOM maintained its position of leader and mentor, playing the eyes and ears of the sector, tuning itself to the needs of the user community and enabling member companies to be champions of change. Through myriads sessions involving exploration of new tech, workshops on business models and Best Practices, NASSCOM built awareness among member companies about how they could rethink and re-energize their businesses, innovate and embrace change.

In fact, NASSCOM, paid special attention to getting to know its member companies, both large and small, their requirements and challenges. The association rolled out member connect sessions in a few cities, a collaborative effort to increase proximity with those with critical requirements.

In an effort to spur Digital Transformation, especially among its smaller member companies, NASSCOM launched Techstart-up, an online platform that will serve as a centralized hub for the tech eco-system city-by-city. Introduced in Bengaluru and Delhi, the portal is aimed at providing information and resources to enable companies to turn their ideas into businesses. It is providing valuable tools for tech start-ups and connecting citizen entrepreneurs to opportunities in the



**C. P. Gurnani**  
Chairman, NASSCOM

tech eco-system. The initiative has democratized access to key resources and information across the country Digitally, connecting India's growing number of techpreneurs. The goal of the online strategy is also to increase jobs, train the workforce of the future, support new start-ups and ensure that India remains the hub of technology innovation.

Cyber security was the other important issue which remained on NASSCOM's radar through 2016, and its move to set up a Cyber Security Task Force to further improve the security climate, was a step in this direction.

Going forward, NASSCOM will continue to focus on equipping the IT-BPM talent pool with futuristic, new age Digital Transformation skills. It will focus on its leadership resource center, a resource for the employees of member organizations to learn and continuously skill and reskill themselves.

In June, 2017 NASSCOM will hold its first-ever event in New York, USA, as its effort to forge a deep connect between tech players and enterprise users in that nation and the IT-BPM industry in India.

This year, we have also rolled out our 25th India Leadership Forum, NILF 2017, which continues to be the country's premier global platform for the tech sector that sets the tone and tenor for ICT industry as it moves ahead.

# President's Message

Friends,

As we enter the new year and look back at the work NASSCOM has been involved in over the past 12 months, we are glad to share that it has been significant and transformational for the Indian IT-BPM industry.

And not merely for the sector. Rather, NASSCOM continued to sync its goals with that of the government of India and the latter's spate of IT-led Digital initiatives. The government of India's ambitious programs are expected to create huge opportunities for the Indian tech industry in the domestic market and during 2016, NASSCOM raised awareness about the many possibilities of 'Digital India' and 'Skilling India' among its member companies.

2016 also saw NASSCOM get firmly behind the start-up community, building and strengthening the eco-system, setting expectations for the sector and outlining strategies that would drive its future growth. In order to catalyze the expansion of the start-up segment, NASSCOM opened Warehouses across India, providing resource-strapped young companies with the infrastructure and facilities they needed to get started on their journeys.

NASSCOM's agenda for the year was also defined by the changing geo-political global climate. At least two key markets of the Indian IT-BPM industry—the USA and UK—went through political and economic churn, creating deep impact for Indian tech sector. The election of Donald Trump as the next President of America and the exit of Britain from EU, are both moves that are expected to scale rhetoric around issues like immigration and visas. NASSCOM continued to lobby for more liberal and barrier free trade policies with the USA and UK and



**R. CHANDRASHEKHAR**  
President, NASSCOM

made recommendations to the governments of both countries, either directly or through the government of India.

In 2016, NASSCOM continued to push the Digital lever, recognizing that Digital impact was being felt more than ever before. As businesses sought to go Digital and partner with organizations that could help them get on this path, NASSCOM helped member companies to gear up and play the role of facilitators for customers. NASSCOM's TechNgage program served as the platform for IT-BPM companies to learn about new tech and prepare themselves for the future.

NASSCOM additionally reached new markets, leading delegations to the Nordics, for instance, to expand the footprint of the Indian IT-BPM industry.

Setting up a Center of Excellence for the Internet of Things (CoE-IoT) enabling closer cooperation between the industry, academia, government and enterprise users, were some of the other high points for NASSCOM in 2016.

NASSCOM also crossed a major milestone in its own timeline by moving into a brand new Campus in Noida. The facility now houses all the different departments and arms of the association under one roof, ensuring greater synergies between its varied initiatives.

The annual report will provide you with a birds-eye-view on NASSCOM's key engagements in 2016 and the goals it achieved during the year.

# ASSOCIATION OVERVIEW



# WHAT



# WE DO...



## OFFICE BEARERS



**Mr. C P Gurnani**  
Chairman, NASSCOM  
Tech Mahindra Ltd.



**Mr. Raman Roy**  
Vice Chairman, NASSCOM  
Quattro Global Services Pvt. Ltd.



**Mr. R Chandrashekhar**  
President, NASSCOM



**Mr. Mohit Thukral**  
SVP – Banking, Financial  
Services, Insurance & Healthcare  
GENPACT India



**Mr. Manu Parpia**  
(Chairman, Engineering Council)  
CEO  
Geometric Limited



**Mr. Rajan Anandan**  
Vice President &  
Managing Director  
Google India Pvt. Ltd.



**Ms. Neelam Dhawan**  
(Chair, Domestic Council)  
Managing Director  
Hewlett-Packard India Sales Pvt. Ltd.



**Mr. Rajesh Nambiar**  
General Manager,  
Global Delivery, India  
IBM India Pvt. Ltd.



**Mr. Sanjiv Bhikchandani**  
(Chair, Internet Council)  
Executive Vice Chairman  
InfoEdge India Limited



**Mr. Pravin Rao**  
COO & Member of the Board  
Infosys Technologies Ltd



**Ms. Debjani Ghosh**  
Vice President Sales and  
Marketing group and Managing  
Director, Intel South Asia  
Intel Technology India Pvt. Ltd.

## EXECUTIVE COUNCIL MEMBERS



**Ms. Rekha Menon**  
Chairman  
Accenture Services Pvt Ltd



**Ms. Aruna Jayanthi**  
Member, Capgemini Group  
Executive Committee and CEO  
Capgemini India Pvt Ltd



**Mr. Dinesh Malkani**  
President – INDIA & SAARC  
Cisco Systems (India) Pvt Ltd



**Mr. Debashis Chatterjee**  
President, Technology Solutions  
Cognizant Technology Solutions  
India Pvt Ltd.



**Ms Sushma Rajagopalan**  
(Chair, IT Services Council)  
ITC Infotech Ltd



**Mr. Ambarish Gupta**  
(Co-Chair, Product Council)  
Founder & CEO  
Knowlarity



**Mr. Bhaskar Pramanik**  
Chairman  
Microsoft Corporation (I) Pvt Ltd.



**Mr. Arvind Thakur**  
CEO & Joint Managing Director  
NIIT Technologies Ltd.



**Mr. Ashutosh Vaidya**  
Vice President and Chief  
Delivery & Operations Officer  
Dell International Services  
India Pvt Ltd.



**Mr. Jaimin Shah**  
Co-Founder & MD  
DEV Information Technology Pvt Ltd



**Mr. Nitin Seth**  
(Chairman, GIC Council)  
Managing Director  
Fidelity Worldwide Investment



**Mr. Ravi Gururaj**  
(Chairman, Product Council)  
Chairman  
Frictionless Ventures Pvt. Ltd.



**Mr. Ravi Viswanathan**  
President-Growth Markets  
Tata Consultancy Services Ltd.

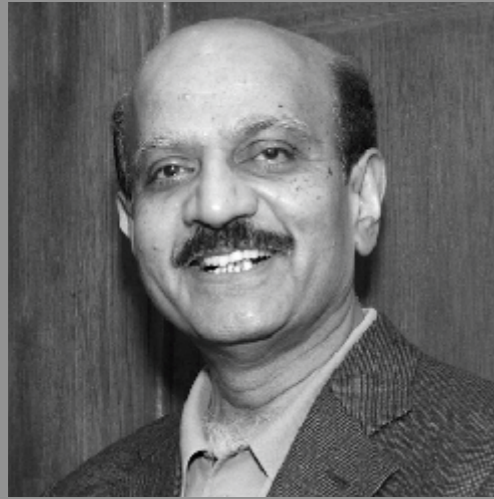


**Mr. Rishad Premji**  
Chief Strategy Officer  
Wipro Technologies (Wipro Ltd)



**Mr. Keshav Murugesh**  
(Chairman, BPM Council)  
Group CEO  
WNS Global Services

## IMMEDIATE PAST CHAIRMEN



**Dr. B V R Mohan Reddy**  
Executive Chairman, Cyient Limited  
(2015-16)



**Mr. R Chandrasekaran**  
Executive Vice Chairman  
Cognizant India (2014-2015)



**Dr. Ganesh Natarajan**  
Vice Chairman and CEO  
Zensar Technologies  
(2008-2009)



**Mr. Lakshmi Narayanan**  
Vice Chairman  
Cognizant Technology Solutions  
(2007-2008)



**Mr. S Ramadorai**  
Former CEO  
Tata Consultancy Services Ltd.  
(2005-2006)



**Mr. Jerry Rao**  
Founder  
MphasiS Ltd.  
(2004-2005)



**Late Mr. Arun Kumar**  
Managing Director  
Flextronics Software Systems Ltd  
(2002-2003)



**Mr. Kiran Karnik**  
Former President  
NASSCOM  
(2001-2007)



**Mr. Phiroz Vandrevala**  
Vice Chairman  
Diligenta  
(2000-2002)



**Mr. Atul K. Nishar**  
Founder  
Hexaware Technologies Ltd.  
(1999-2000)

## PAST CHAIRMEN



**Mr. Krishnakumar Natarajan**  
CEO & Managing Director  
MindTree Ltd. (2013-2014)



**Mr. Natarajan Chandrasekaran**  
CEO & Managing Director  
Tata Consultancy Services Ltd.  
(2012-2013)



**Mr. Rajendra Singh Pawar**  
Chairman & Co-founder  
NIIT Group  
(2011-2012)



**Mr. Raj Jain**  
Chairman & Managing Director  
RS Software (India) Ltd.  
(1998-1999)



**Mr. Saurabh Srivastava**  
Chairman  
Steria (India) Ltd.  
(1997-1998)



**Mr. K V Ramani**  
Founder  
Future Software Ltd.  
(1996-1997)



**Mr. Ashank Desai**  
Founder  
Mastek Ltd.  
(1995-1996)



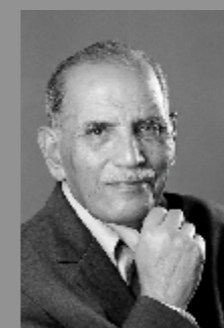
**Mr. Harsh Manglik**  
Former Chairman  
Accenture (India)  
(2010-2011)



**Mr. Pramod Bhasin**  
Non-Executive Vice Chairman  
Genpact India Pvt. Ltd.  
(2009-2010)



**Mr. Som Mittal**  
NASSCOM President (2008 - 2013)  
Chairman,  
(2003-04)



**Dr. F C Kohli**  
Former Deputy Chairman  
Tata Consultancy Services Ltd.  
(1994-1995)



**Dr. N. R. Narayana Murthy**  
Founder  
Infosys Ltd.  
(1992-1994)



**Mr. Harish Mehta**  
Chairman & Managing Director  
Onward Technologies Ltd.  
(1990-1992)

# THE YEAR IN REVIEW





# Government Policy

NASSCOM continues to engage proactively with the government, (supported by experts and the industry) both at the State and Center, to create a policy and regulatory climate that is conducive to the growth of the IT-BPM industry in the country.

Several announcements and clarifications related to existing policies were made in 2016, that took into account the issues raised and associated recommendations made by NASSCOM.

## Making recommendations on the Goods and Service Tax (GST) regime:

The landmark GST reform is relying on the technology backbone for a simple and efficient system that ushers in unprecedented transparency. Continuing from the previous year, NASSCOM worked very closely with the government at both the central and state levels, sharing industry concerns about the draft Model GST law and its impact on the Technology (IT and e-commerce) sectors. Detailed submissions and representations were made to the Finance Minister, GST Council, Empowered Committee of State finance ministers, the Revenue secretary, CBEC officials and state government officials, proposing solutions to the issues that the IT sector was likely to encounter during the roll out of the law.

Several consultations with members were held across regions to prepare a detailed response to the draft Model GST Law.

## Making recommendations for Budget 2017:

The focus of NASSCOM's 2017 Budget recommendations was on legislative changes and clarifications to ensure ease-of-business, and growth and sustenance of the sector's export competitiveness. Specific recommendations were made in the following areas:

The growth of start-ups and the SMB eco-system:

Specific suggestions were made to enable continuity and sustenance of the start-up community and build investor confidence. Targeted interventions were also recommended to address the constraints related to availability of funding, taxation and the compliance burden.

## Sustenance of the sector's global competitiveness:

In order to counter rising global protectionist barriers, NASSCOM suggested that the government take policy measures that ensured that the Indian IT industry did not face difficulties on home ground. These included taking care of issues related to draft residency rules and the foreign tax credit mechanism which were leading to inefficiencies; putting in place a mechanism to offset the Equalization levy introduced in Budget 2016 to balance tax liability; and revisiting the Safe harbor provision in light of its ineffectiveness for the IT sector.



## Improving ease-of-doing-business:

NASSCOM pointed to the need for necessary guidance in the conduct of proceedings of the LTU scheme to reinforce the objectives of tax facilitation as set out in the LTU charter. It asked the government for a clear roadmap on rationalization of the tax rate and clarifications on indirect taxes pertaining to refunds, CENVAT, etc., to help resolve existing litigation before the implementation of the GST regime.

## Rationalization of e-commerce taxation to address ambiguities:

NASSCOM suggested that as companies scaled up there was a need for carry forward of losses and clarifications on the dual levy of indirect taxes etc.

## Pushing for ease-of-doing-business:

During the year, the Ministry of Commerce allowed the provision of work from home for employees in IT Special Economic Zones (SEZs). This provision was earlier available only to employees who were incapacitated or

travelling. NASSCOM also helped the government in developing suitable safeguards to ensure that this provision was not misused by companies.

## Deferring the applicability of IN AS 115:

The implementation of a key revenue recognition standard IN AS 115 was deferred by the Ministry of Corporate Affairs. IN AS 115 was to be applicable for reporting information about the nature, amount, timing and uncertainty of revenue and cash flows in financial statements. NASSCOM meanwhile had shared specific concerns on the implementation of IN AS 115 both to the Ministry of Corporate Affairs (MCA) and apex accounting body NACAS. Considering the challenges and concerns highlighted by NASSCOM, the government deferred the applicability of IN AS 115 in line with the deferral of the corresponding global standard IFRS 15, which is expected to be enforced in 2018.

## The Software Product Policy:

NASSCOM welcomed the draft Software Product policy

and continued to interact with MEITY and the industry to offer suggestions on strengthening its provisions and strategies for implementation.

Based on extensive member interactions, NASSCOM made suggestions on various contours of the policy such as introducing a dedicated R&D scheme, Talent accelerator programs, setting up an exclusive fund for the software product industry and streamlining the public procurement process etc..

NASSCOM organized interactive sessions between the industry and MEITY to discuss the issues that the sector was facing.

**Taking up the IPR issue:**

NASSCOM continued to work with DIPP, IPO, MEITY and other government departments on various IP matters. It led and supported awareness building campaigns and provided inputs to create guidelines for the examination of computer related inventions (CRIs).

NASSCOM in association with intellectual property office also facilitated industry interactions on the new technology trends for the patent examiners at NIIPM Nagpur.

**Promoting the start-up eco-system:**

NASSCOM continued to actively engage with the start-up eco-system, and worked closely with the governments, both at the Center and states, to suggest changes in policy, regulations and the implementation of new ideas to promote the start-up eco-system in India.

Several suggestions were made by NASSCOM including the removal of the angel tax on innovative start-ups, ESOPs for promoters and directors, facilitation for IPR filing including fast tracking, encouraging participation in government procurement, etc.

**Strengthening the policy environment for the Digital economy:**

NASSCOM, along with its affiliate organization, the Data



Security Council of India, worked closely with the government to strengthen the policy environment for the Digital economy.

Furthermore, NASSCOM unequivocally vouched for 'Net neutrality, clearly identifying principles, and acknowledging the role of a regulator in the national and public interest. The association also engaged with the government on a policy related to the Internet of Things and worked with the Department of Telecom for the same. NASSCOM was the key stakeholder consulted by the government on issues related to Intermediary liability, Privacy, Encryption, and Data localization.

**Calling for labor reforms in the IT sector:**

The Government of India has undertaken several steps to modernize and introduce changes in labor legislation. The model shops and establishment act developed by the Ministry of labour, Government of India, enabling electronic records are some examples.

NASSCOM engaged with the central and state governments, presenting to them industry issues and also increase awareness among NASSCOM members to ensure compliance.

During the year, NASSCOM also organized several labor law sessions for the IT industry, across regions, to increase awareness and build their understanding on the applicability of various central and state labor laws.

# Global Trade

The Global trade initiative at NASSCOM aims to improve ICT trade relationships between India and other nations and establish the country as a preferred destination for IT-BPM investment. Under this umbrella, NASSCOM works closely with the governments of other countries to ease the entry of the Indian IT companies in these markets through policy advocacy and at the same time expose foreign companies to India's benefits as a hub for innovation, outsourcing and skills.



## Policy advocacy and dialogs

### USA



#### Addressing issues of skilled labour mobility:

NASSCOM continues to engage with key stakeholders to address the discriminatory issues of skilled labour mobility, H-1B visas, social security taxation etc.

#### Hosting the India-US Joint Working Group Meeting:

New Delhi was the venue for the India-US Joint Working Group meeting. At the meeting NASSCOM talked about how the ICT sector continued to be plagued by STEM skill shortages in the US. It added that there were several factors hampering ease-of-doing business for the IT industry in the US including worker mobility, discriminatory visa fee hikes, and social security and totalization treaty, among others.

#### Hosting a session with the Deputy USTR, Ambassador Robert Holleyman:

NASSCOM hosted an exclusive round table discussion with the Deputy USTR, Ambassador Robert Holleyman, and his team of delegates.

#### Participation in the PM's visit to the USA:

NASSCOM officials visited the US on June 7-8, 2016 during the State Visit of Prime Minister, Narendra Modi to Washington DC. The visit focused on meetings with key stakeholders, e.g., Members of Congress and key officials, media engagements, participation in RT, evening reception and joint session in honor of the PM. NASSCOM also met up with associations in the US to hold events jointly in the US.

### UK



#### Leading a high-level delegation to the UK:

NASSCOM visited London from October 19-21, 2016 in order to meet senior UK functionaries including the Prime Minister and key UK ministers covering FCO and trade and immigration.

NASSCOM and techUK signed a joint letter for the Indian Prime Minister Narendra Modi and UK PM Theresa May, requesting for a high-skilled worker mobility agreement between the two nations. NASSCOM also sought a commitment from the UK government on the issue of business stability, requesting that no more

changes be made to the ICT immigration system till 2020.

#### Meeting up with the UK Immigration Minister:

NASSCOM President met with the UK Immigration Minister and also held a separate meeting with senior Home Office officials, including a department of business representative, on May 19, 2016 in London. The meeting was organized post the announcement of a new visa regime in the UK.

### EU



#### Expressing concern to the European Commission (EC) on the ICT directive:

NASSCOM submitted a list of concerns to the EC, related to the adoption of the Directive on Intra-Corporate Transferees (ICT). The Directive introduced the first EU-wide rules that allowed companies in third-countries to temporarily send specialized non-EU staff to their subsidiaries within the different EU member states. The Directive had an adoption deadline set at November 29, 2016. As this was a Directive, Member States had a certain degree of flexibility when implementing these new rules in their national legislation. In this context, NASSCOM submitted the list of concerns at the meeting of EC's internal stakeholders.

#### Sharing feedback on the EU-India Joint Working Group Meeting:

NASSCOM attended the EU-India Joint Working Group Meeting held in Brussels in June, 2016. The subject of data adequacy was at the forefront of all discussions and NASSCOM shared its inputs on this key issue.

#### Presenting its issues before EFTA:

EFTA is a block of four European nations, led by Switzerland that are wanting to forge Foreign Trade Agreements (FTAs) with India. NASSCOM presented its list of issues before the EFTA.

### CANADA



#### Raising Visa issues with the Canadian minister:

NASSCOM met with John McCallum, Canadian

Immigration Minister and his delegation in New Delhi and raised the issue of skilled workers' mobility posed by the current visa regime.

#### Meeting with the Visa Operations head:

NASSCOM, with a small group of members, met Canada's Visa Operations Head in Ottawa, Robert Orr, the Deputy Minister who reports into Minister McCullum.

#### Submitting a Wish List to IRCC and responding to the migration policy:

NASSCOM submitted its suggestions for addressing the problem areas related to the short-term movement of skilled workers into Canada.

### CHINA



#### Leading a delegation to Guizhou, China:

NASSCOM led a delegation to China on December 19-23, 2016. The Indian delegation included three SMEs/ start-ups and the NASSCOM team. NASSCOM's visit led it to understand that it needed to engage with both Municipal and Provincial governments.

#### Negotiating free access of members to the Shanghai Outsourcing Promotion Center (OSPC):

NASSCOM engaged with the OSPC, a business connect platform supported by the Chinese Ministry of Commerce and the Shanghai government, to enable its members to access various services in the transaction process.

#### Making a presentation to the Joint Working Group on High-Tech:

NASSCOM made a presentation during the Joint Working Group meeting between the India-China SED on the importance of establishing technology cooperation between the two large Asian neighbors.

### JAPAN



#### Submitting a Wish List on the Japan-India FTA:

As part of the review of the existing FTA with Japan, NASSCOM put forward its Wish List to the government.

**SINGAPORE**



**Raising mobility issues during the Deputy PM of Japan's visit to India:**

Indian companies have been facing restrictions while transferring skilled resources to Singapore in the past few years. NASSCOM collected information in this regard, and decided to take up the issue with authorities under the review of the India Singapore CECA.

**Raising mobility issues with Singapore under the FTA review:**

NASSCOM presented the case of mobility of skilled resources before Singapore authorities in the Joint Working Group meeting.

**AUSTRALIA**



**Dealing with Tax issues:**

During 2016, the Australian court rejected the arguments made by an Indian company that offshore services attributed to an Australian customer should not be taxed in Australia. NASSCOM took up the issue with the GoI very strongly. The Indian government indicated that it would support the NASSCOM delegation's meeting with ATO.

**SOUTH AFRICA**



**Submitting a response to the Green Paper on the Immigration policy:**

NASSCOM submitted its suggestions for addressing problem areas regarding the short-term movement of skilled workers into South Africa.

**MEXICO**



**Sharing suggestions improve trade relations:**

Prior to the visit of the Commerce Secretary of Mexico's visit, NASSCOM submitted a suggestion list to address issues related to the region.

**Market development and partnership building programs**

**Israel delegation:**

With an aim to imbibe Best Practices in innovation and explore potential business opportunities, Indian companies met local government officials, hi tech companies, Cyber Security solutions provider and the Office of the Chief Scientist in Israel. The Indian Embassy organized an Israel-India seminar for the visiting NASSCOM delegation. The seminar was attended by over 100 Israeli companies, academicians, consultants, etc. B2B meetings were planned for Indian companies.

**Spearheading a delegation to the UK:**

A business delegation of 16 companies visited the UK at the same time as the Annual National Outsourcing Symposium and London Technology Week. The delegation's four-day comprehensive program included an Exclusive Customer Roundtable session with end users, interactions with outsourcers at the annual symposium, and sessions on "how to set up" in London.

**Hosting an IoT event in Japan:**

NASSCOM, in partnership with JETRO and ICIJ IT Forum, Tokyo, hosted a joint event, for promoting Indian capabilities in IoT. Attended by more than 230 Japanese visitors, 20 shortlisted Indian companies had the chance to interact with local industry and showcase their offerings in the exhibition area.

**Participating in the CEATEC event in Tokyo:**

Ten IoT start-ups from the NASSCOM COE spent a week in Tokyo participating in the largest electronics show that had IoT as its theme. Innovative start-ups from Israel, Vietnam and India were promoted at the show. An 'India Day' was also organized to focus on Japan's partnership with the Indian IT industry.

**Participating in the 2nd Indo-Africa ICT Expo in Kenya:**

The 2nd Indo-Africa ICT Expo held in Kenya, was organized in association with the Telecom association, Department of Telecom and Department of Commerce, government of India. Held in September, 2016. The Indian delegation included more than 80 IT and

Telecom companies (IT and Telecom companies). Over 120 technology companies (including Indian organizations) displayed their products and solutions at the Indo-Africa ICT Expo cum Conference. The event saw over 20 MoUs being signed, approximately 35 partnership deals being sealed.

**Leading a delegation to Australia:**

NASSCOM led a 14-member delegation (a mix of large, medium and SME companies) to Australia and visited the Gold Coast and Melbourne. The delegation participated in the Gartner Symposium in Gold Coast (October 24-27, 2016). Gartner invited 18 CIOs for a luncheon session with the NASSCOM delegation.

**Leading a delegation to the Nordics (Denmark-Sweden-Finland):**

NASSCOM led a four-day business delegation in

association with Invest in Denmark, Business Sweden and Finpro. The aim of the visit was to cover the high potential, under penetrated markets of Denmark, Sweden and Finland. The delegates also had a chance to network with end users including government procurers, CXOs, and local ICT service providers open to the idea of outsourcing.

**Organizing member outreach programs:**

NASSCOM conducted nine city outreach programs covering locations like Ahmedabad, Chandigarh, Chennai, Delhi, Hyderabad, Indore, Jaipur, Pune and Vadodara. The programs were primarily aimed at engaging SME members and understanding their geographies of interest and challenges. The sessions also delved into the activities of the GTD team such as policy intervention and advocacy and market development initiatives in the form of focused business delegations.





# Research

## **The IT-BPM SECTOR IN INDIA—Strategic Review 2016:**

The report analyses the performance of the Indian IT-BPM industry, traces its continual evolution and highlights key trends that are influencing and driving this sector forward. The overriding theme for this year showcases how Indian service providers are enabling customers to transform themselves into a smart enterprise through adoption of various new and emerging technologies.

Horizontal: Indian IT-BPM industry

## **Indian Start-up Ecosystem Maturing – Edition 2016:**

In the midst of several debates and contentions over the start-up environment, the Indian entrepreneurial spirit is ever rising, with the landscape evolving in a way like never before. India harbors 4750+ start-ups, 140+ incubators/accelerators, and is expected to witness 80+ M&As this year. As investor's funding strategies change, the ecosystem sees growth in B2B start-ups, specialized core technologies, and emerging verticals (such as FinTech, EduTech, and HealthTech). The 2016 edition of our start-up report goes into the length and breadth of the Indian tech start-up landscape – covering funding scenario, geographical clusters, market developments, trends and best practices.

Horizontal: Start-ups

## **Reinventing to Disrupt:**

Shaping a New Identity for the Indian IT Industry: This report made in partnership with Accenture covers the

latest developments in five major global technology shifts: cloud computing; automation & robotics; artificial intelligence & cognitive computing; the Internet of Things & virtual and augmented reality. Each section explains how the corresponding technology is affecting various industries; offers recommendations for Indian IT-BPM companies to capture the new opportunities, surmount challenges and an action plan to embrace disruptive change.

Horizontal: Indian IT-BPM industry

## **The Future of the Internet in India:**

India today has the second largest internet user base. The internet is driving technology adoption across India, and creating new business opportunities across sectors. This report not only analyses the current impact of the internet on various sectors, but also presents a 2020 scenario for internet driven businesses.

Horizontal: Indian IT-BPM industry

## **AI, Beyond the Myth & the Hype:**

Artificial intelligence or AI has in the recent times emerged from the confines of scientific labs and found various uses that impact everyday life. It has found applications across industries – financial services, automotive, healthcare, retail. This technology is also transforming the IT-BPM industry - AI-led automation is likely to deliver USD 100-120 billion in net productivity-led gains for IT-BPM service providers by 2025.

Horizontal: Digital technology > AI

## **Indian Health-tech Products – Scripting a Promising Future:**

A detailed overview of the Health-tech software products landscape in India and discusses key business and technology trends, drivers, and enabling ecosystem for health-tech and its sub segments.

Horizontal: Start-ups

## **IoT: Revolution in the Making:**

The Internet of Things (IoT) has been gaining significant traction among consumers and businesses. For businesses, this disruptive technology is also opening up new revenue streams. While consumer IoT is driven by volume, industrial IoT (IIoT) is driven by value. This report highlights the global and India market size (current & 2020), show cases opportunity by verticals with use cases, highlights challenges to be overcome, and the roadmap to higher adoption.

Horizontal: Digital technology > IoT

## **GICs in India: Demonstrating leadership in the digital era:**

Traces growth of the GIC industry in India – from delivering cost arbitrage to business value and further, maturing into CoEs for parent organisation.

Horizontal: GICs

## **The GIC Cookbook: A guide to establishing a new Global In-house Centre (GIC) in India:**

The GIC Cookbook succinctly provides an exhaustive overview of the GIC establishment process in India. In addition, the Cookbook also highlights the key strategic levers that contribute to GIC success, as well as, some best practices from high-performing GICs. It will also serve as a ready reckoner to any global enterprise who are considering to establish a GIC in India, as well as established GICs that are looking to scale / optimize their presence in India.

Horizontal: GICs

## **Indian IT-BPM: Redefining the Manufacturing Enterprise:**

Explores the opportunity that digital technologies are enabling for the manufacturing industry in India.

Vertical: Manufacturing

## **Indian SaaS - The Next Big Thing:**

A detailed overview of the SaaS products landscape in India and discusses key business and technology trends, drivers, and enabling ecosystem for SaaS and its sub segments. The report also highlights and profiles cutting edge SaaS solutions and products developed by 63 Indian companies.

Horizontal: Digital technology > SaaS

## **Domestic BPM Market 2016: On the Cusp of Transformation:**

The BPM industry is undergoing fundamental changes, brought on by uncertain macro-economic conditions, regulatory requirements, emerging as well as disruptive technologies, and evolving customer requirements. In such a scenario NASSCOM conducted a qualitative research among CEOs of some of the leading BPM firms in India, aimed at understanding the strategic imperatives of the CEOs in the near term to align their business goals.

Horizontal: BPM

## **Indian Fin-tech Products - Innovation Driving Growth:**

Overview of the Fintech software products landscape in India and discusses key business and technology trends, drivers, and enabling ecosystem for analytics and its sub segments. The report also highlights and profiles cutting edge fintech solutions and products developed by ~110 Indian companies.

Horizontal: Start-ups





**Indian Analytics Sector - Data to Decisions:**

The report covers insights and recent trends in the Indian Big Data/Analytics sector

Horizontal: Digital technology > Analytics

**Fintech in India A Global Growth Story:**

This report outlines the Indian fintech ecosystem with its stakeholders, growth levers and their impact against global benchmarks, key insights & actionable recommendations

Horizontal: Start-ups

**Making the Leap from Effective to Strategic BPM:**

The report produced by HFS Research and NASSCOM discusses how the latest business drivers are impacting the market for BPM services. It examines the business and sourcing priorities for today's business leaders, their advisors and services providers, focusing on how the change in emphasis towards a more digital world is impacting the way BPM and related services are procured and consumed.

Horizontal: BPM

**IoT in India - The Next Big Wave:**

This report outlines the Indian IoT landscape with its market size (global & India), key segments, drivers, trends, prominent verticals, start-up scenario, and key product profiles.

Horizontal: Digital technology > IoT

**FinTech Deconstructed –Disruptors or Enablers?:**

The report studies the FinTech landscape to understand how FinTech firms are using technology to disrupt the financial services industry.

Horizontal: Start-ups

**Digitizing Transaction Banking:**

The Next Frontier: This report, a joint initiative between NASSCOM and Yes Bank, seeks to highlight the growing digitization of transaction banking services, key drivers and barriers for the same and explores resultant innovation opportunities. It intends to provide the roadmap for triggering innovative products and services, and stirring the entrepreneurial spirit of the Indian youth.

Vertical: Banking

**Indian IT-BPM: HR best practices compendium:**

This report, a compendium of case studies, represents industry-wide best practices in HR, which sets directions for others to follow suit.

Horizontal: HR

**Payments Landscape in India - Solidifying the financial transaction process:**

This report highlights the need for payments, global market size, landscape evolution in India, key drivers, emerging trends, challenges, future outlook and key product profiles.

Vertical: Finance

**Technology Shifts and Workforce Priorities:**

The report discusses the forces disrupting the current work environment, the changing nature of jobs, the effect of automation on work and workforce, and what lies ahead for the IT-BPM industry.

Horizontal: HR

**Human Capital Trends Study 2016 - Application of technology in Talent Acquisition:**

This report aims to understand the level of adoption and maturity of talent acquisition technologies within companies across verticals. Covers topics on recruitment budget & team size, effectiveness.

Horizontal: HR

**Applied Games in India: The Fun Begins:**

The Applied gaming market in India which is currently at a nascent stage is expected to grow at a CAGR of 14-16 per cent to reach USD 66-69 million by 2020. This report covers in detail the key drivers, trends and elements that need to be focused upon for India to emerge as the next hub for gamification and applied game.

Horizontal: Gaming industry

**Mobile Gaming on the Rise in India:**

India presents a ripe opportunity for local and foreign mobile game publishers and investors, as it is poised for stellar growth in the coming years. The report in partnership with App Annie covers the key characteristics and growth opportunities for India's mobile gaming market.

Horizontal: Mobile gaming industry

**Inside India's Gamers:**

White paper on trends emerging within the Indian gaming ecosystem: The report based on a survey in partnership with gamesbond and mauj, examines Indian gamers' behaviour, their preferences, devices used and trends in the mobile gaming segment.

Horizontal: Gaming industry

**Quarterly Industry Review - March / June / September / December 2016:**

A quarterly "Industry Insights" report covering key parameters and insights on Indian IT-BPM industry performance, and the global outsourcing landscape. This analysis is based on the quarterly results of the top 10-15 public listed companies. It also includes analysis of the key trends in the Domestic Indian IT-BPM industry.

Horizontal: Indian IT-BPM industry

**Defence Electronics and System Design Policy – Policy Recommendations:**

The report highlights the opportunity from India's Aerospace & Defence industry (USD 70-72 billion by 2030), incl. analysis of defence electronics. The core focus on this report is on policy recommendations across six major issues – visibility, structural, policy, industrial, program award, DPSU related.

Vertical: Defence

**Consumer Interest Protection Task Force (CIPTF):**

The recommendations produced by NASSCOM discusses the issue of cross-border frauds misusing technology and recommended steps to prevent, detect, and investigate such cases including establishing an whistle blowing mechanism and coordinated investigation mechanism.

Horizontal: Cyber Security

**Making Diversity Work:**

Key trends and practices in the Indian IT-BPM industry: This report highlights the emerging trends of D&I that IT-BPM organisations have adopted in India. A further value add is detailed case studies of some of the organisations.

Horizontal: Diversity & Inclusivity, HR

**Maternity benefits and facilitating return to work: IT-BPM Industry's Experience:**

A major limb of an inclusive and diverse workplace movement is the drive towards creating policies that encourage more women to enter and continue to be a part of the workforce. The measures taken by some employers to create well-thought out policies and government proposals in the pipeline are a testament to the increasing importance of maternity benefit as a workplace policy.

Horizontal: Diversity & Inclusivity, HR

**Women 'in'Equality-Not Anymore!: Gender Diversity & Inclusivity trends in the IT-BPM sector:**

One of the key pillars of any diversity & inclusivity project is women. Gender diversity (esp. increasing women representation in the industry workforce) is now a strategic topic in the boardrooms of both global Indian firms. This insights paper analyses the survey findings of ~31 firms (25% of industry workforce) to present the standing and the emerging role of women in the Indian IT-BPM industry.

Horizontal: Diversity & Inclusivity, HR



# NASSCOM® EVENTS

NASSCOM®  
**BigData & Analytics  
SUMMIT 2016**  
Rise of Algorithms and AI: Complexity to Competitive Advantage  
JUNE 23<sup>RD</sup> & 24<sup>TH</sup> 2016 | HICC, HYDERABAD

**850+ Delegates**  
**35+ Speakers**

NASSCOM®  
**Design & Engineering  
Summit 2016**  
Imagineering for the Digital Future  
October 5<sup>TH</sup> & 6<sup>TH</sup>, 2016 | Leela Hotel, Bangalore

**400+ Delegates**  
**40+ Speakers**

NASSCOM®  
**game  
developer  
conference 2016**  
10<sup>TH</sup> -12<sup>TH</sup> NOVEMBER  
HICC, HYDERABAD - INDIA

**2000+ school children**  
**600+ school teams**  
**175+ school**

NASSCOM®  
**BPM Strategy  
Summit 2016**  
From Effective to Strategic: Thriving in the Maturing Era of BPM  
22<sup>ND</sup> - 23<sup>RD</sup> SEPTEMBER, 2016 | HOTEL LEELA, BANGALORE

**450+ Delegates**  
**40+ Speakers**

NASSCOM®  
**ANNUAL  
TECHNOLOGY  
CONFERENCE 2016** | NATIONAL CAPITAL REGION  
PREPARING TO DISRUPT  
27<sup>TH</sup> - 29<sup>TH</sup> DECEMBER 2016

**250+ Delegates**  
**25+ Speakers**

**Global  
In-house Centres  
Conclave 2016**  
Transforming the Global Enterprise  
21<sup>ST</sup> - 22<sup>ND</sup> APRIL, 2016 | HICC, HYDERABAD

**650+ Delegates**  
**55+ International Delegates**  
**45 Speakers, 18 Sessions**

NASSCOM®  
**MarTECH  
CONFLUENCE 2016**  
Marketing Technology: Innovation which drives ROI  
1<sup>ST</sup> September, 2016 | Hyatt Regency Hotel - Mumbai

**250+ Delegates**  
**30+ Speakers**

NASSCOM®  
**DIVERSITY AND  
INCLUSION**  
SUMMIT 2016  
"Diversity to Inclusion-  
What's next?"  
550+ Delegates  
50+ Speakers

NASSCOM®  
**HR SUMMIT**  
NAVIGATING UNCERTAIN WATERS  
Industry to HR: HR can deliver a success story  
21<sup>ST</sup> - 22<sup>ND</sup> JULY, 2016 | ITC Grand Chola, CHENNAI

**800+ Delegates**  
**60+ Speakers**

NASSCOM®  
**PRODUCT  
CONCLAVE**  
26th-27th October 2016  
Bengaluru

**2000+ Delegates**  
**150+ Industry Influencers**



# SECTORAL COUNCILS





# BPM Council

Maintain India's leadership position in the BPM Sector

• Revenue Share –  
USD 28 billion  
in FY 2016

• 1.1 million export  
employees

• 38 percent share  
of the global  
sourcing market

### **Rebranding the BPM Industry:**

The Forum helped build the right perception about the sector and showcased the transformation from BPO to BPM. The talent pool, the supply side of the industry was selected as the first target segment. 'Become World Worthy', a student connect program was launched in Bengaluru and Chandigarh, which reached out to more than 50,000 students. Phase II of the program will be launched pan-India, targeting ~250,000 students to enhance the supply of talent to the industry.

### **Enhancing and developing skills and talent:**

NASSCOM SSC launched the F&A 'Intermediate' and 'Complex' Courseware and 'entry-level' Analytics qualification pack to make students industry ready. Approximately 1,800 students are being trained using the analytics courseware and over 1,000 students are being trained on the 'transactional' F&A courseware.

### **Investing into Centers of Excellence:**

NASSCOM signed Letters of Intent with the governments of Telangana and Karnataka to establish Centers of Excellence in Data Sciences based on a Public-Private Partnership model. The CoEs will develop the Data Sciences eco-system in the country by investing into analytical competencies including Artificial Intelligence, Machine Learning, and Deep Learning.

### **Protecting Consumer Interests:**

NASSCOM set up a Consumer Interest Protection Task Force to study and recommend steps to protect industry

clients and their customers from tele-marketing and similar frauds. Meetings were held with law enforcement agencies and officials to present the Task Force recommendations and seek coordinated action against these fraudsters.

### **Managing the restrictions on diesel commercial cabs:**

The ban on commercial diesel cabs in the NCR region seriously impacted the operations of the IT-BPM industry. A well thought out, multi-pronged approach involving industry, media, and government was conceptualized and executed, including a reach out to the Supreme Court, praying relief which was favourably considered.

### **Enabling the creation of a BPM eco-system:**

In order to create a strong connect, understand the key issues from a regional perspective and involve BPM players from all geographies, the BPM Council hosted Regional Meetings in Kolkata, Chennai, Delhi NCR, and Bengaluru.

### **Hosting the Analytics Hackathon/Business Challenge:**

NASSCOM Analytics Challenge, a first-of-its-kind event was held to discover academic excellence in Analytics. The programs drew over 750 teams from more than 200 colleges including the IITs, IIITs, ISI, IIMs, and many Tier2 and 3 institutions. The Top five teams were recognized by NASSCOM.



### Launching the Industry-Start-up connect program:

A curated program connecting industry with start-ups with innovative solutions helped create complementary and strategic capabilities. The program connected 27 such start-ups in areas of Analytics, CRM, Fintech and Telecom.

### Understanding the domestic BPM opportunity:

NASSCOM undertook a study to understand domestic BPM opportunities, identify the key drivers to capitalize on the growth potential, and create employment in emerging locations.

### Making recommendations on ISO standards for 'ITeS-BPO':

The World ISO Standards body has adopted India's inputs for ISO 30105 as the International standard for the BPM Industry. The initiative was led by BIS and supported by NASSCOM.

### BPM Partnership Awards

NASSCOM's BPM Partnership Awards recognized customer organizations instrumental in the development and growth of the BPM Industry in India.

### Knowledge Sharing and Capability Showcasing:

In March 2016, NASSCOM partnered with IACC to roll out the 1st Indo-US BPO Summit with the theme of "Leveraging the Power of Partnerships, in the New Digital Age" in Orlando, USA. This first-ever summit was organized in the client market and drew a fair representation from the customer side, dignitaries from the Indian government and BPM companies.

### Council Members

- Keshav Muruges, Global Chief Executive Officer, WNS Global Services (P) Ltd . (Council Chair)
- Srikanth Velamakanni, Group Chief Executive and Vice Chairman, Fractal Analytics Pvt. Ltd. (Co-Chair)
- Anantha Radhakrishnan, CEO and Managing Director, Infosys BPO
- Riju Vashisht, Chief Operating Officer–CG, Retail and LS and HC, Genpact
- Rohitash Gupta, Chief Finance Officer, eClerx Services Ltd.
- Rohit Kapoor, Vice Chairman and CEO, EXL Service.com
- Sandip Sen, Global Chief Executive Officer, Aegis Ltd.
- Srinivas Koppolu, Managing Director and CEO, Tata Business Support Services Ltd.
- Subir Mehra, Head-Global Service Centers, HSBC Electronic Data Processing India Pvt. Ltd.



## BPM SUMMIT 2016

450+ Delegates

40+ Speakers

### Key Takeaways

- Understanding the business context to reimagine processes
- Embracing automation to augment human performance
- Managing Digital data across the service chain
- Applying insights from integrated data in real-time with meaningful business context

### Related Reports

**Making the Leap from Effective to Strategic BPM**  
The report produced by HFS Research and NASSCOM discusses how the latest business drivers are impacting the market for BPM services.

### AI Beyond Myth and Hype

Artificial intelligence or AI has in the recent times emerged from the confines of scientific labs and found various uses that impact everyday life. It has found

## BIG DATA & ANALYTICS SUMMIT 2016

850+ Delegates

35+ Speakers

### Key Takeaways

- Understanding Business transformation through AI
- Focusing on Design thinking and analytics
- Exploring Customer Intelligence, the next frontier for customer experience
- Reducing complexity of Big Data for business use
- Understanding Unstructured data and Natural Language Processing

applications across industries—financial services, automotive, healthcare, and retail.

### On the Cusp of Transformation

The detailed study ascertains the domestic demand for BPM services across segments and verticals in the country. It gauges the domestic BPM opportunity as of 2020 and identifies growth areas.



# IT Services Council

• Annual platform to celebrate technology and technologists

The platform aims to further enhance technology skills available within the country. Its goal is also to build an eco-system that will enable emerging skills to become mainstream. Additionally, TechNgage aims to help IT services companies to position themselves as providers of technology solutions and not arbitrage players.

- IoT,
- Mobile
- Machine learning
- Analytics
- Social

## Hackathons

Offline Hackathons were held across the country in May and June, 2016. They were rolled out in cities such as Bengaluru, Hyderabad, Pune, Chennai, NCR and Kolkata. The teams had to build applications on the themes/problem statements presented to them on D-day. Each team was given 10-12 minutes to make its presentation and awards were presented to the winners at each of the locations. The final was held at VIT Vellore, where 3 winners were felicitated and titled 'NASSCOM Technology Adopter'.

During the first year of the launch of TechNgage, the focus was on the theme, 'Your city— smart and secure'. Under its umbrella, participants in the program were asked to solve certain use cases that were provided to them using the following technologies in their submissions:

## NASSCOM Leadership Academy

NASSCOM launched Leadership Academy in association with IIM-B (The Centre for Software and IT Management) to improve future readiness of the IT industry by building tomorrow's leaders through a globally recognized leadership building program. The NASSCOM Leadership Academy is a global collaborative learning community which aims at building differentiated leadership competencies in future leaders of the industry. The initiative will have a Leadership Resource Centre (LRC), an online collaboration platform, which will serve as the backbone of the NASSCOM Leadership Academy. The platform will enable aspiring leaders to collaborate with industry leaders, and learn from experience sharing and co-created conversations.

The LRC will be supplemented by leadership development programs custom built by IIM-B for NASSCOM members and would be delivered at IIM-B and across large cities. A number of large IT companies

have volunteered to loan their physical infrastructure free of cost as their additional contribution to the initiative. NLA will focus on all segments of Indian IT companies and non-NASSCOM members would also be able to leverage the services. Through such initiatives NASSCOM aims at championing the cause of redefining skilling for the IT industry, enabling companies to find a direction through which they can improve their overall competitiveness.



# Domestic Market Initiatives

To “Accelerate India’s Transformation through increased adoption of technology”.

## Priority Areas

- To improve ease of doing business with government/PSB
  - Procurement Policies/ Model RFP/DPP/Contract
  - E-Governance
  - To evangelize Technology for Financial Services: Platform for Fin-tech companies
  - Emerging technologies for financial inclusion
  - To develop a marketplace for Digital Transformation
  - SMB market development
  - Cloud adoption for accelerated growth
- NASSCOM was associated, for the third year running, with the Department of Administrative Reforms and Public Grievances, Government of India for its 19th National Conference on e-governance at Nagpur, Maharashtra. This flagship event, jointly organized by DARPG and MeitY, was attended by a wide spectrum of industry leaders as well as senior officials from the government.
  - NASSCOM partnered with several city and state governments in organizing Smart Solutions workshops across the country. These workshops brought together various technology solution providers, and hand-holding agencies like DFID, consulting firms and decision makers in the city and state administration.
  - NASSCOM partnered with the city of Indore for its Smart City Project Launch. It organized a series of presentations by industry members on their Smart City capabilities. NASSCOM also collaborated with Indore

City for a Smart City Solutions Exhibition that drew overwhelming participation from IT Solution Providers.

- NASSCOM, in partnership with various associations representing the SME community, hosted a couple of SME workshops in Hyderabad and Visakhapatnam. These workshops were attended by technology service providers and end users from the SME community. The workshops were designed around promoting the use of technology by Small and Medium businesses to improve their productivity and operating efficiencies.
- NASSCOM raised the vital issue of industry outstandings at the highest levels in the government. Owing to NASSCOM’s escalation of the matter, it was referred to various line ministries and departments by the Ministry of Finance. NASSCOM also facilitated several rounds of discussion on outstandings with AS (DoT), senior executives of BSNL, MTNL, ITI and industry members.
- NASSCOM led an industry delegation of service providers involved with the CCTNS project, for a meeting with the Joint Secretary (Police Modernization), MHA and Joint Director, NCRB. The aim was to discuss the various issues facing the industry as well as the challenge of mounting outstanding payments in the CCTNS project. Several such meetings were held during the course of the year. As a result, a state-wise review of the project, which was attended by the respective state nodal officers, was conducted by MHA later in the year. Its goal was to review the progress that the critical initiative had made on all fronts. NASSCOM worked closely with MHA to resolve the problems being dealt with by the industry in the roll out of CCTNS nationally.
- NASSCOM engaged with MeitY, the Department of Expenditure, Ministry of Finance and industry members to provide inputs and expedite the finalizing

of the Model RFP for procurement of SI services by the government. This Model RFP is now in an advanced stage of finalization and is expected to be released in the next few months.

- NASSCOM a member of the Defence Information Technology Consultative Committee (DITCC), was invited to attend the 11th DITCC meeting hosted by the Headquarters Integrated Defence Services (HQ IDS) in New Delhi. The meeting was presided over by the Raksha Rajya Mantri (RRM). NASSCOM reiterated the need for early finalization of fast track procedures for ICT projects in the Ministry of Defence. It also suggested that the ICT procurement norms followed by the Defence forces be streamlined in accordance with the available best practices. The Minister took cognizance of the issue brought forward and promised that necessary action would be taken by the government.
- NASSCOM organized a number of industry consultations for DGS&D, the Ministry of Commerce, to help finalize the technical and operational requirements as well as the business model for implementation of Project GeM (Government eMarket Place).
- NASSCOM launched the NASSCOM Digital India Awards 2016 to recognize the most disruptive Digital ideas that could transform India’s Education, Healthcare and Tourism sectors. This was part of an initiative led by the Digital India Task Force of NASSCOM. Initially perceived as a challenge, the objective of the awards was to recognize Digital projects that were focused on priority sectors such as Education, Healthcare and Tourism and showcased a distinctive potential to deliver high impact at scale in India.

## Council Members

- Arvind Thakur, CEO & Jt MD, NIIT Technologies (Chair)
- Ravi Viswanathan, President - Growth Markets, Tata Consultancy Services (Co-Chair)
- Soumitro Ghosh, President India and Middle East, Wipro Infotech
- Diwakar Nigam, Managing Director, Newgen Software Technologies
- Som Prakash Satsangi, India Leader-Enterprise Group, Hewlett Packard Enterprise
- Meetul Patel, General Manager (Marketing & Operations), Microsoft
- Daisy Chittilapilly, Director Partner Organization, Cisco

## Related Report

### Transforming Governance:

A decade of e-governance and the next wave of Governance Reforms”. The report analyzed the role of e-governance in transforming the governance landscape in India in the past decade. It also provided a roadmap for technology-led governance transformation that suggested a leveraging of the changes in the technology landscape.



# ER&D Council

To enable India to emerge as the top destination for Digital Engineering Solutions by 2020

## ER&D Hubs

- Bengaluru • Baroda • Chennai • Hyderabad
- NCR
- Pune

## Revenue Share

USD 20 billion – 45 percent ESOs and 55 percent GICs

## 11 Sub Verticals

- Automotive
- Aerospace
- Computing Systems
- Consumer Electronics
- Construction and Heavy Engineering
- Energy
- Industrial Automation
- Machinery
- Medical Devices
- Semiconductor
- Telecom

### Setting up the Center of Excellence for the Internet of Things:

A part of the Digital India Initiative of the government of India, the CoE was aimed at triggering and developing the IoT product eco-system including start-ups and SMEs. Its goals was also to convert innovative ideas and research in the public and private sectors into viable and competitive products for both the domestic and international markets. The CoE-IoT was inaugurated on July 7, 2016 by the Minister of Electronics and IT, Ravi Shankar Prasad. The CoE-IoT provides a platform for the government, Innovators, academia and enterprises to take advantage of the convergence of hardware and software and enhance the collective capacity of ER&D capability from India.

### Developing the eco-system:

NASSCOM drew tremendous interest from the ER&D community for the Software led Manufacturing road shows held in Chennai, Pune and Hyderabad. NASSCOM helped build connects between enterprises and innovators (start-ups/entrepreneurs). It collaborated with other partner associations like SAE India, IACC, ACMA, BCIC, IGCC, and EEPC India to strengthen the ER&D eco-system

### Exploring the Domestic Market:

As part of its effort to showcase the capabilities of Engineering Design and Service organizations, a report titled “Realizing India’s vision towards indigenization in Defence Electronics”, was unveiled at a meeting chaired by Rajya Raksha Mantri. Based on the recommendations made in the study, work began on the preparation of a detailed project report on ‘An electronics testing and certification facility’.

### Hosting Deftronics 2016:

Continuing with its efforts to grow the Electronics System Design and Manufacturing (ESDM) industry, NASSCOM and IESA organized the Deftronics Summit . The goal was also to provide a fillip to the Aerospace and Defence segments and offer a platform for DPSUs and

Private Industries to explore business engagements.

### Developing skills and talent:

In order to provide the industry with relevant skills in the emerging technology space, the ER&D council launched IoT innovation in colleges. The aim was also to understand the existing skills gaps based on student feedback and formulate appropriate content for the IoT curriculum.

A Task force was formed to revalidate the FSIPD courseware and suggest modifications to it along with the addition of newer skills which were aligned to emerging technologies and were Industry relevant.

Additionally, courseware for Product Design Engineers (Mechanical, Construction and Heavy Engineering segments ) was launched.

Formulation of courseware on IoT also began, with the Council engaging with Industry members.

### Improving International Market Access:

The Council worked to connect NASSCOM’s ER&D members with organizations in Japan. The member companies interacted with Japanese peers at the IT/IoT Summit and at multiple sessions hosted by NASSCOM during the visits of Japanese delegations. The delegations were in India to understand the capabilities of Indian companies in the domain of ER&D. NASSCOM also participated in the Hannover Messe fair to showcase India’s ER&D prowess and build a broad engagement with Germany

### Ensuring industry engagement:

Multiple open innovation sessions were organized by NASSCOM for members to support the exchange of ideas on best practices, and assist Industry members in finding solutions to their problem statements by leveraging the CoE-IoT.

## Council Members

- Samir Yajnik, President Sales and COO Asia-Pacific, Tata Technologies (Council Chair)
- Karthikeyan Natarajan, Global Head Integrated Engineering Solutions, Tech Mahindra (Council Co-Chair)
- Manu Parpia, Managing Director and CEO, Geometric
- Vijay Ratnaparkhe, Managing Director and President, Robert Bosch
- Anup Sable, SVP-Automotive and Engineering, KPIT
- Balaji Rajagopalan, Vice President, Cyient
- Madhavan Satagopan, Chief Technology Officer, Altimetrik
- Manu Saale, Managing Director and CEO, Daimler Benz
- Rabindra Srikantan, Managing Director, ASM Technologies
- Rajiv Nair, Managing Director, Mentor Graphics
- T.C. Ramesh, Associate Vice President, Quest Global
- Kedarnath Bharadwaj, Vice President, HCL Technology
- Raghav Gulur, Head-Technical Center India, Continental Auto
- Regu Ayyaswamy, VP and Global Head - Engineering and Industries Services, TCS
- Ashwin Ramachandra, VP, Sasken



# DESIGN & ENGINEERING SUMMIT 2016

400+ Delegates

40+ Speakers

## Key Takeaways

- Creating a buzz around Digital Transformation by inviting world renowned speakers to share their views on the phenomenon and how it was impacting businesses
- Enabling ESO, GIC and Manufacturing organizations to gather under the same roof and exchange best practices
- Rolling out four deep dive sessions to drive the content
- Providing attendees with access to innovative solutions through an experience zone and start-up pavilions

### Related Report

#### IoT: Revolution in the Making:

The Internet of Things (IoT) has been gaining significant traction among consumers and businesses. For businesses, this disruptive technology is also opening up new revenue streams. While consumer IoT is driven by volumes, industrial IoT (IIoT) is driven by value. This report highlights the global and Indian market size (current and that in 2020), show cases opportunity by verticals with use cases, focuses on the challenges to be overcome, and the roadmap to higher adoption of IoT.

#### Defence Electronics and System Design Policy—Key Recommendations:

The report highlights the opportunity from India's Aerospace and Defence industry (USD 70-72 billion by 2030), including analysis of defence electronics. The core focus of this report is on recommendations across six major areas—visibility, structure, policy, industrial, program awards, and DPSU related. Suggestions.

#### Detailed Project Report for Electronic Testing and Certification Facility:

The report details the anticipated demand for electronics testing and existing testing infrastructure available in India. It proposes the setting up of a new facility based on a PPP model with testing equipment and systems to be utilized by sector players for testing of electronic components.

# Gaming Forum

NASSCOM Gaming Forum is committed to promote the Digital games eco-system (including interactive entertainment games and the application of games in education, industry and skill development) building skills and attracting investments into India.

• 200 Gaming Companies in India

• Revenue Share – USD 300 million in FY2016

NASSCOM Gaming Forum- Special Interest Group—Applied Games NGF launched its special interest group on Applied Games in April, 2016 with the support of the Embassy of the Royal Kingdom of the Netherlands and Dutch Culture.

It was established with the goal of building enterprise connects and growing the serious games vertical in the country. The Special Interest Group released a White paper on the scope of the Applied Games segment, highlighting user case studies. During the

year, it also organized Game Jams, as well as government. advocacy and knowledge sharing sessions.

#### Global Access- Dutch Partnership

- Following a one-year long engagement with Dutch Culture and Embassy of the Netherlands, NASSCOM Gaming Forum launched the Special Interest Group on Applied Games.
- A delegation of Serious gaming companies visited India for a roadshow, which was followed by a tour of the NGF group to Holland.

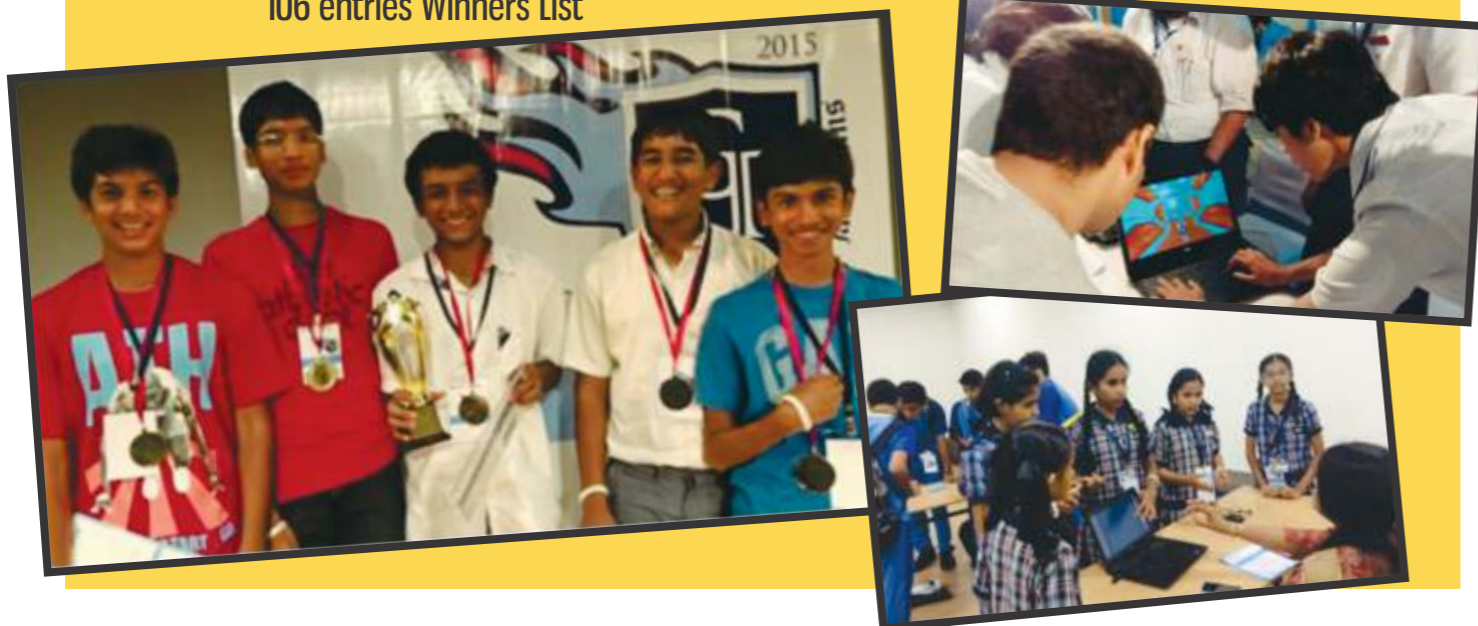




**GAMING FORUM AWARDS**

Fourth edition in 2016 received 106 entries Winners List

	<b>Game of the Year Winner</b> Maskgun Multiplayer FPS (June Software)
	<b>Student Game of the Year Winner</b> Proximity
	<b>Indies Game of the Year Winner</b> Missing - (Leena kejriwal)
	<b>Upcoming Game of the Year Winner</b> Ultimate Parking Simulator (Underdogs Studio)



### Council Members

- Rajesh Rao, CEO, Dhruva Interactive (Chair)
- Manvendra Shukul, CEO, Lakshya Digital
- Sumit Mehra, Studio Head, Hike
- Hrishi Oberoi, Founder, PhotonTadpol
- Anando Banerjee, Head Production, Lakshya Digital
- Pratik Murarka, Idea Guy, Idealabs Interactive
- Sridhar Muppidi, Co-Founder, YesGnome
- Joel Johnson
- Kinshuk Sunil, Founder, Hashstash Studios

NGDC 2016

1800 Delegates

130 Speakers

Key Highlights

- **Eight Tracks:** These covered Indies, Game Design, Game Art, Production, Marketing, VR ,Tech and Applied Games
- **VR Showcase:** There were nine VR Showcases which catered to consumer and industrial applications
- **Board Games Showcase:** This was based on a new concept of showcasing Board games. There were a total of seven engaging Board games that were displayed
- **Publisher Meetups:** The event featured a strong publisher line up which included Konami, GalacaticThumb, Qamez, WWE, Airbus, Mauj, PayTM , Nazara, Games2Win and Hoolai Games
- **Investor Meetups:** There were 16 start-ups pitching to 20 Angles and VCs including Accel Partners, Blume Ventures, Saif Partners, Kae Capital,50K Ventures, among others
- **Women In Games:** There was a panel discussion on the diversity in the gaming industry, and measures that could be taken to encourage more women to join the sector in India
- The event offered a platform for developers and studios to share their perspectives and showcase their best work. The response to the conference was most heartening and the feedback very positive.



# GAME JAM TITANS 2016

2,000+  
school children

600 school teams

175 schools

made in Game Maker,  
Scratch and  
Unity



## Related Reports

### Applied Games in India:

The Fun Begins: The Applied Gaming market in India which is currently at a nascent stage is expected to grow at a CAGR of 14-16 percent to reach USD 66-69 million by 2020. This report covers in detail the key drivers, trends and elements that need to be focused on for India to emerge as the next hub for gamification and Applied Games.

### Mobile Gaming on the Rise in India:

India presents a ripe opportunity for local and foreign mobile game publishers and investors, as it is poised for stellar growth in the coming years. The report, rolled out in partnership with App Annie covers the key characteristics and growth opportunities for India's mobile gaming market.

### Inside India's Gamers:

*White paper on trends emerging within the Indian gaming eco-system:*

The report based on a survey conducted by NASSCOM in partnership with gamesbond and mauj, examines the behavior, preferences, and devices used by India gamers and the trends in the mobile gaming segment.

# GIC Council

## India, the #1 location for GICs

- Increase the GIC footprint with Digital capabilities beyond cost and talent arbitrage.
- Serve as a platform that helps new entrants to set up their centers in India.
- Help the broader eco-system to develop and mature to support GICs in India. This implies building capabilities around leadership, Digital, automation, talent, and a government eco-system.
- Position India as a preferred destination for setting up GICs by sharing case studies, White Papers and success stories. The goal is also to establish the country as the future of global business services.
- Ensure that GICs lead in Innovation, and engage and work closely with the start-up community.

• 800,000  
direct  
employees

• 1050 GICs

• USD 21 billion

### Facilitating external acceleration through Start-up Connect Programs:

NASSCOM GICs Forum initiated Start-up Connects for various organizations and many of the leading GICs have signed up for NIPP. NASSCOM hosted various Start-up Connect programs in Bengaluru, Delhi, Mumbai and Hyderabad to facilitate partnerships and collaborations between the GIC Community and Start-ups.

### Driving the Change in GICs through RPA, Agile, DevOps and Digital:

In the shifting world order, Agile, DevOps, Digital and Robotic Process Automation (RPA) have emerged as the key levers to create best-in-class business outcomes by GICs for their enterprises. While these have been part of the strategy of GICs for some time, their broad-based emergence in the past few years is offering a new and powerful tool to these organizations to create compelling avenues for the next wave of productivity and value addition. NASSCOM GIC Forum is driving Best Practice sharing sessions, activities and initiatives to educate and encourage GICs to and learn from companies that have achieved maturity and success.

### Hosting learning sessions (Leadership Series):

NASSCOM GIC Forum brought together GICs from various regions under one roof to share Best Practices and learn from the achievers and leaders in the market. NASSCOM hosted over 25 Leadership Talks under its Leadership Series, discussing topics related to talent development, cyber security, Agile, Dev Ops, RPA, and Digital, to name a few.



**Forming GIC Country Councils:**

Over 100 GICs from Germany, Japan and Korea have set up their centers in India and hence there was need to form the GIC Country Councils in 2015. Initiatives focused on government policies, regulations and compliance, Start-up Connect programs, etc. were rolled out under the umbrella of the Country Councils.

**Focusing on Cyber Security:**

The GIC Council identified Cyber/ Data Security as one of the areas of focus and importance. The Forum held several sessions and roadshows in partnership with DSCI to propagate and share Best Practices in concern areas, as well as issues and threats related to Data/Cyber security.

**Rolling out GIC Regional Council engagements:**

Working groups were created in every region which were led by the Regional Chair. Active Regional Council engagements were organized in Bengaluru, Chennai, Pune, Hyderabad, Mumbai and the Delhi/Northern Region. The aim of the working group was to develop an understanding of the specific needs, requirements and focus areas for the regions, which differed in many ways. Mumbai it was felt for instance, needed to focus more on BFSI GICs and drive Cyber Security, DevOps, RPA and CSR. Pune and Bengaluru on the other hand, it was decided, needed to concentrate on BFSI and Product/Engineering GICs. Some of the common threads and areas of interest were DevOps, Agility, RPA, Digital, Cyber Security, Regulations, Compliance and Talent to name a few.

**Special Interest Groups (SIGs)**

• **Ops and Tech for BFSI GiCs:**

The SIG will focus on Building entry level talent, on innovation in the Fintech segment, discuss why the Fintech platform makes sense the challenges confronting Fintech firms would be needed to run such a platform (mentors like lawyers/tech experts, VCs and GIC investment vehicles). The group has additionally agreed to align its RPA initiatives under

NASSCOM, which is running a three-part series on RPA across sectors.

• **Corporate Social Responsibility (CSR):**

To enable GICs to share Best Practices and experiences related to their CSR and philanthropy efforts. It was also to explore areas of collaboration between GICs and specific nonprofits or NF (NASSCOM Foundation) and

evaluate what could enable this group to stay connected: and work on joint initiatives with support from NF.

• **DevOps and RPA:**

The objective was to focus on how to drive initiatives under RPA going forward. A 3-4 part RPA series was rolled out and implemented in a phased manner in Bengaluru.

**Council Members**

- Navneet Kapoor, President and Managing Director, Target (Council Chair)
- Deepak Mangla, CEO and Global Head Of GSCs, JPMC (Council Co-Chair)
- Ankur Dhingra, VP and General Manager, American Express
- Giada Bono, Director, Banca Sella Chennai, Banca Sella
- Gautam Gulati, Director-Business Systems, Schlumberger
- Gerd Hoefner, Managing Director and CEO, Siemens Technology and Services Pvt. Ltd.
- Jasjit Singh Kang, EVP and India MD, AON Hewitt
- Pankaj Patharphod, Managing Director-Country Head of Services-India, RBS
- Surekha Shenoy, Executive Director-Chief Operating Officer, India GICs, Morgan Stanley
- T Mohandoss, Senior Vice President -Strategy and Chennai Site Head, Fidelity
- Usha Sri, Senior Vice President and General Manager, Manhattan Associates
- V. Laxmikanth, Managing Director, Broadridge
- Yukio Takeyari, Chairman, Sony India Software Center Pvt. Ltd.

**Related Reports**

**The GIC Cookbook: A guide to establishing a new Global In-house Center (GIC) in India:**

The GIC Cookbook provides an exhaustive overview of the GIC establishment process in India. In addition, the Cookbook also highlights the key strategic levers that contribute to GIC success, as well as some Best Practices deployed by high-performing GICs. It will serve as a ready reckoner to any global enterprise that is looking to establish a GIC in India, as well as established GICs that are keen to scale/optimize their presence in India.

**NASSCOM- KPMG Industry Maturity Study for Banking GICs:**

The key objective of the study was to check out the maturity levels of various GICs in India and understand how they were leveraging cutting-edge technologies to provide services. The research additionally focused on how GICs were training employees and retaining talent to cater to their changing requirements and customer needs.

**GICs in India- Demonstrating leadership in the Digital era:**

The report traces the growth of the GIC industry in India-from when it was delivering cost arbitrage to now when it provides business value to clients. The study also focused on how GICs were maturing into CoEs for their parent organizations.

**GIC CONCLAVE 2016**

650+ Delegates

55+ International Delegates

45 Speakers

18 Sessions

**Key Highlights**

- GICs from all verticals, including BFSI, Product, Engineering, Electronics, Automobile, telecom and Healthcare attended the meet
- A Master Class and Deep Learning sessions held on the sidelines of the conclave were well attended and appreciated
- The GIC conclave served as an excellent platform for sharing Best Practices, discuss, debate and deliberate on emerging business models, the impact of Digital, and capabilities around Leadership, Automation and talent.



# Product Council

To establish the Indian software product eco-system as a world-class source of high value, innovative, next generation products which are enjoying robust sales traction and are establishing category/IP leadership in both domestic and international markets

• 154 Product Companies are registered

• Revenue Share – USD 6.9 billion in FY2016

**Skill enablement:**

As part of its skilling initiatives, NASSCOM launched:

**Introducing Design Next:**

The workshop aimed to help product designers enhance their thinking and skills. It drew 50 participants,

including entrepreneurs, developers and designers (from NASSCOM member as well as non-member organizations) at Delhi NCR. Some attendees even came from Chandigarh, Ludhiana, and other nearby towns for this session.

**Conducting a workshop on Product Management:**

This was a focused event on software products that was held in New Delhi in August, 2016. Experienced speakers addressed the audience and there was a panel discussion which was followed by training on Product Management.

**Partnering with IPL:**

NASSCOM collaborated with the Indian Product Leadership Institute to enable training by IPL faculty for Product entrepreneurs and their teams on various topical subjects across four Indian cities.

**Hosting a workshop for product companies:**

NASSCOM held a workshop on ‘How to Pitch Your Idea with five slides in under 5 minutes’, as part of the IPL partnership. A business education endeavor was made to help entrepreneurs gain access to investors, clients etc.

**Design CoE:**

NASSCOM partnered with Facebook to launch a ‘product design initiative’. The aim was to evangelize the product design eco-system in India. The goal was also to support more than 500 product start-ups on product design and train more than 5,000 product designers over a period of two years. The initiative stemmed from the need to build design skills to spur innovative thinking and approaches to build solutions in key sectors where technology could play a transformational role.

**Building connects:**

NASSCOM facilitated connects between product start-ups and IT organizations to encourage business interactions between the two. A structured, specific engagement was organized for Amdocs and six product companies in the Cloud optimization and Digital Experiences arena and 11 product companies working in the Enterprise Software space. These initiatives were rolled out at Bengaluru and Hyderabad. The key purpose is to connect product companies with Corporates to explore M&A, vendor, OEM etc options between the two.

**Investor Connects at NPC:**

Connect sessions are held at both regional and national NASSCOM Product Conclaves which is a natural ground for networking and connecting. These connect sessions provide a platform to meet, discuss and take forward potential opportunities that may exist.

**RT with Karnataka IT minister:**

Karnataka based Emerge 50 companies were provided a platform to discuss and associate with the Karnataka minister for IT

**Conferring recognitions on emerging companies:**

NASSCOM hosted its annual Emerge 50 awards ceremony. The 2016 marathon search for India’s top 50 most innovative software product companies took place during the year, with a well-researched examination and diligence by NASSCOM’s consulting partner, Zinnov. Following this, there was an elimination round conducted through face-to-face jury evaluations. The top League of 10 companies were felicitated at NPC, Bengaluru.

**Making recommendations on policy issues:**

The Product Council chose to evangelize the Procurement Policy in five different states. A delegation by NASSCOM product companies also discussed the Software Product Policy with MeITY. NASSCOM additionally conducted sessions at the NPC on the Goods and Service Tax (GST) as well as an SIDBI Roundtable.

**Related Reports**

**Indian Fin-tech Products-Innovation Driving Growth:**

Overview of the Fintech software products landscape in India and discusses key business and technology trends, drivers, and enabling eco-system for analytics and its sub-segments. It highlights and profiles cutting edge fintech solutions and products developed by more than 110 Indian companies.

**Fintech in India—a Global Growth Story:**

The report talks about the Indian fintech eco-system with all its stakeholders and growth levers and discusses their impact against global benchmarks, while providing key insights and actionable recommendations

**Indian Health-tech Products –Scripting a Promising Future:**

An overview of the Health-tech software products landscape in India and discusses key business and technology trends, drivers, and enabling eco-system for health-tech and its sub-segments.

# PRODUCT CONCLAVE National

2000+ Delegates

150+ Industry  
Influencers

## Key Highlights

- Five Summits: Deep dive sessions on Sales and Marketing, Product Management, Design, DeepTech, and FinTech.
- Product Showcase: More than 140 product companies showcased their cutting-edge software products.
- NPC-IAN Business Plan Pitch Contest: Start-ups pitched their business plans for funding up to USD1 million from India's top angels in partnership with the Indian Angel Network. Three start-ups, including Hansel.io, tonetag and RepUp were chosen in the final round.
- NPC-IVCA Investors Connect: A connect session was organized by NASSCOM for product companies and VC firms in partnership with the Indian Venture Capital and Private Equity Association (IVCA). More than 50 companies met the representatives of over 20 VC firms and 300 connections were made.
- NIPP Business Connect: This was a curated business connect session organized under the banner of the NASSCOM Industry Partnership Program. Eighteen product companies explored a variety of business opportunities with 30 enterprises. More than 100 meetings were organized.
- TechMakers @Play: 30 makers including students displayed their innovative tech products that had been created either in their personal labs or homes.



## Council Members

- Ravi Gururaj, Chairman and Co-Founder, Qikpod (Chair)
- Krishnakumar Natarajan, Co-Founder, CEO and Managing Director, Mindtree (Chief Mentor)
- Ambarish Gupta, CEO and Founder, Knowlarity Communications
- Hanuman Tripathi, Entrepreneur
- CK Shastri, Founder and Managing Director, Intense Technologies Ltd.
- Vivek Subramanyam, CEO, Fintellix
- Rohith Bhat, Managing Director and CEO, Robosoft
- Kamal Agarwala, Founder and CEO, Exactly Group of Companies
- Subinder Khurana, Venture Partner, Siri Capital
- Nandkumar, President and CEO, SunTec Business Solutions
- Rivi Varghese, Co-Founder and CEO, Customer XPS
- Arun Seth, Angel Investor

# PRODUCT CONCLAVE Regional

- NPC Hyderabad ([www.nasscom.in/npc-hyderabad](http://www.nasscom.in/npc-hyderabad)), May 20, 2016: The third edition of NPC Hyderabad was attended by more than 350 delegates, and featured 20 speakers and panelists. The conclave featured workshops on Storytelling for Business Leaders, Pricing Strategies in the Digital Economy and IoT-hands on experience. There was a Product Showcase, a major attraction, for which over 50 applications were received. Finally, out of the 16 worthy shortlisted applicants, four pitched to the audience at the event. As part of the preparation for NPC Hyderabad, a Hackathon was also conducted on "Improving Quality of Life—the IoT way". The winner of the Hackathon was given a chance to make a pitch alongside the winners of the Product Showcase.
- NPC Kolkata ([www.nasscom.in/npc-kolkata](http://www.nasscom.in/npc-kolkata)), July 15, 2016: The day-long conclave, which drew more than 550 participants, focused on how technology

- could be leveraged to drive business momentum, and build an eco-system of sustainable growth for start-ups. CIOs from various industry sectors like Manufacturing, Retail, Healthcare, Financial Services and Real Estate participated in the event and discussed their IT needs. They also interacted with tech vendors to know more about their products. The key topics of discussion included disruptive technologies like SMAC opportunities, IoT trends, SaaS models and leadership strategies.
- NPC Cochin ([www.nasscom.in/npc-cochin](http://www.nasscom.in/npc-cochin)), December 18, 2016 –The third NPC Kochi drew 127 attendees who were extremely satisfied with the sessions and quality of speakers.
- NPC North ([www.nasscom.in/npc-north](http://www.nasscom.in/npc-north)) –Held on February 7, 2017 at India Habitat Center, Delhi.
- NPC Pune ([www.nasscom.in/npc-pune](http://www.nasscom.in/npc-pune)) – Planned for March 18, 2017

# Internet, Mobile & E-commerce Council

NASSCOM's Internet, Mobile and E-commerce Council (NIMEC) has Founders/CEOs of 10 leading Internet companies (including Amazon, Ola Cabs, MakeMyTrip, Matrimony.com, Snapdeal, Ebay, Jaypore, Google, Info Edge, PayTM, and PolicyBazaar). As the youngest of the Councils, its members were nominated in this first year, and will go into the election cycle and process next year. The Council is chaired by Sanjeev Bikhchandani of Info Edge, with Kunal Bahl of Snapdeal as Co-chair. NASSCOM appointed Prasanto Roy as the first full-time head of the Internet Council in July, 2016.

BPM industry, and Deloitte for project management) to put together a platform pro-bono in its initial four months, beginning end-December 2016. In January 2017, the helpline received about 25 lakh calls. Discussions are now on for the commercial phase 2 of the helpline, to be launched from April, 2017, with greater capacity to handle the high volumes of calls.

## Launching a report on 'The Future of the Internet in India':

NASSCOM launched a study managed by the Research division working with NIMEC, and executed by YourStory.in. The report, released by TRAI Chair, R.S. Sharma at a special event, projected a figure of 730 million Internet users in India by 2020, and looked deeper into key sectors in the Internet economy: E-commerce, Travel, Public Sector, Media, OTT, and Fintech.

## Presenting a Working Paper on the Future of E-commerce:

With inputs sought on the status and growth of E-commerce in India by several ministries and departments, NIMEC was asked to make a presentation on the subject to a group of secretaries and other senior officials. In a meeting chaired by the CEO of NITI Aayog, NIMEC shared information on the status and future of E-commerce in India. Subsequently, it prepared a working paper on the reasons for the gap between retail E-commerce in India (projected to touch USD 80 billion by 2020) and China (USD 1,100 billion) and on ways to accelerate growth.

## Seeking clarity on FDI and DIPP:

NASSCOM engaged closely with the DIPP, NITI Ayog and MeitY, to better understand the various regulations that E-commerce companies needed to comply with, including intermediary liabilities, RBI norms etc. NASSCOM shared industry views on different aspects of FDI norms for E-commerce, along with other stakeholders, that led to the issuance of clarifications. Issues addressed included the need for clarity on

whether FDI was allowed in the E-commerce marketplace and whether E-commerce had to be recognized as distinct from inventory-based models. NASSCOM's view was that E-commerce marketplaces were intermediaries, with consequential limitation of liability as per the IT Act. The clarifications served to remove uncertainty and enhance stability for businesses and investors.

## Sharing industry concerns regarding the Draft Model GSTL:

NASSCOM worked very closely with the government at both central and state levels sharing the concerns of the industry on the draft Model GST law and its impact on the Technology (IT and E-commerce) sector. Detailed submissions and representations were made to the Finance Minister, GST Council, Empowered committee of state finance ministers, revenue secretary, CBEC officials and state government officials, proposing solutions to the issues that the IT sector is likely to encounter not only during the roll out of the law and but also long term challenges that it can pose.

## Publishing its position on 'Net Neutrality':

NASSCOM published its position on the subject, unequivocally vouching for 'Net neutrality, and clearly identifying principles. It also acknowledged the role of the regulator in the national and public interest.

Many other engagements with TRAI (public WiFi, unlicensed spectrum), MeitY (IT Act Section 67C, Internet of Things, block chain technology, inter al), and other departments have happened and some are ongoing.

## Council Members

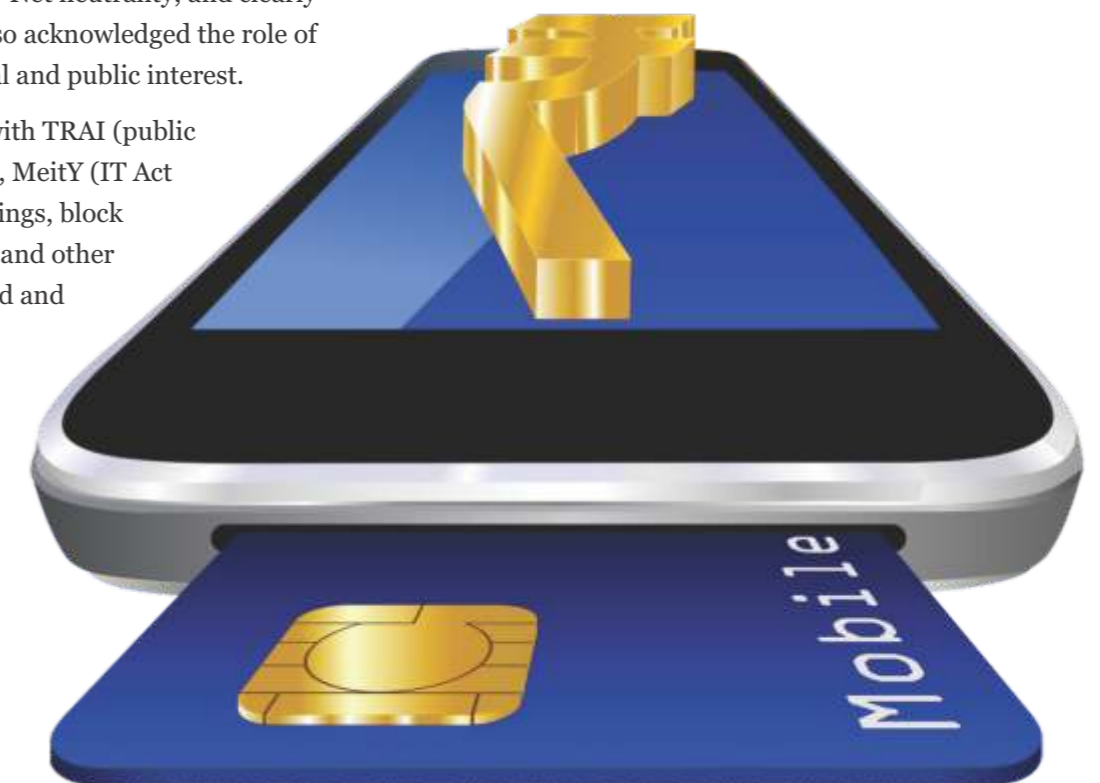
- Sanjeev Bikhchandani, Info Edge (Chair)
- Kunal Bahl, Snapdeal (Co-chair)
- Amit Agarwal, Amazon
- Bhavish Aggarwal, Ola Cabs
- Deep Kalra, Makemytrip
- Murugavel Janakiraman, Matrimony.com
- Latif Nathani, Ebay India
- Puneet Chawla, Jaypore
- Rajan Anandan, Google
- Vijay Shekhar Sharma, Paytm
- Yashish Dahiya, PolicyBazaar

## Helping promoting Digital Payments in India:

A Ministry of Finance Committee chaired by Ratan Watal of NITI Aayog was tasked with helping promote Digital Payments in India, where over 80 percent of total transactions by value are cash. NASSCOM's President was on this Committee, which was provided with supporting research by NIMEC. Members of the Council such as PayTM, Snapdeal and others also provided significant inputs. The landmark Watal report is driving a major change in Digital Payments in post-demonetization India, and a few key recommendations were taken into consideration in the Union Budget.

## Putting in place the Cash Mukh Bharat Abhiyan helpline:

NASSCOM was asked by NITI Aayog to put together a helpline to answer the questions of citizens grappling with Digital Payments, in the months post-demonetization. The DoT allotted 14444 as the dialing code, and NIMEC worked with the Payment Council of India (PCI) and seven NASSCOM members (six from the



**INITIATIVES**



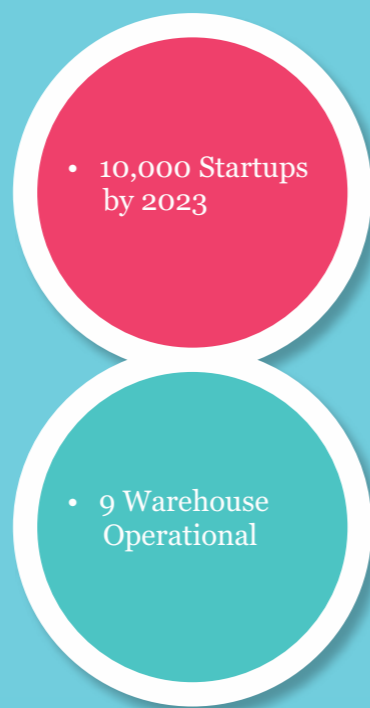
# 10,000 Start-ups

## Torchbearers of a young and confident new India

10,000 Start-ups is an initiative that aims to scale up the start-up eco-system in India by 10x. It intends to do this through incubation, funding and support for 10,000 technology start-ups in the country over the next ten years.

The Vision is also to:

- Foster entrepreneurship and build entrepreneurial capabilities at scale
- Strengthen the support system for tech start-ups
- Impact 10,000 start-ups through the F.A.M.E (Funding, Acceleration, Mentorship, Enterprise Konnect) model by 2023



### Ranking Number 1 in Google Play Editor's choice:

The Recipebook, Kochi warehouse start-up ranked #1 in Google Play Editor's choice (the first time for an Indian app developer) and shot up to #1 in USA Google Play placements. It is the first app from India to win the prestigious title.

### Signing an MoU with the Invest Ottawa team:

NASSCOM launched a start-up exchange program that was aimed at connecting Canadian entrepreneurs, innovators and investors with the emerging start-ups from India and vice versa.

### Partnering with Google for its Design Sprint:

NASSCOM tied-up with Google for its Design Sprint initiative which was rolled out at the Google office in Bengaluru. Six warehouse start-ups were nominated to participate for the program .

### Launching key initiatives:

Under the 10,000 start-ups program NASSCOM launched NIPP Enterprise Konnect at the GIC Conclave, the Societe Generale Catalyst Accelerator and the Accenture Open Innovation Session.

### Organizing Innotrek 2016:

NASSCOM organized a power-packed week-long visit to Silicon Valley for 39 start-ups who interacted with Google, IBM, Apple, Facebook, and Amazon during campus visits.

### Funding Ka Funda:

NASSCOM hosted a three-hour session on how funding had to be seen from the point of view of investors and entrepreneurs, and from the legal aspects of fundraising. The session was held for start-ups at the Bengaluru warehouse.

### Hosting Cross Border Angels:

NASSCOM organized an international investor networking event, at the Bengaluru warehouse for a session on the Right Time to Approach Investors .

## The following initiatives were additionally launched

- NASSCOM partnered with Storage Networking Industry Association India (SNIA) to organize the Storage Developer Conference (SDC) 2016 in Bengaluru.
- The Mumbai and Hyderabad editions of Techstartup.in (a hang-out place for start-ups on the web) were launched by NASSCOM under the umbrella of the 10,000 Start-ups program and in association with IBM. Over 50 start-ups attended the session in Mumbai.
- Code for Next Billion: A Demo Day was organized for the first batch of the Leadership program scheduled in June, 2016.
- NASSCOM 10,000 Start-ups and Truecaller jointly organized a half-day, hands-on session with selected App developers at the Bengaluru warehouse where selected mobile app start-ups engaged with Truecaller.
- NASSCOM felicitated 10 start-ups from Code For Next Billion (1st batch graduation ceremony) at the CNBC Young Turks Summit.
- The government of Karnataka conducted a Start-up Policy information session for Bengaluru start-ups to help them understand the benefits and incentives existing in the Karnataka Start-up Policy 2015-2020, and help avail of them.
- Amplifi conducted a reverse pitch and a pitch session at the Bengaluru warehouse for select start-ups as part of the second edition of their SaaS based Accelerator program, while Amazon conducted a session on 'Innovating on AWS'.
- NASSCOM partnered with NDTV for the Start-up Awards which felicitated innovative start-ups across domains.
- NASSCOM hosted the India Israel Exchange Program (a Healthcare hackathon) enabling innovators, entrepreneurs and healthcare professionals from India and Israel to come together to develop healthcare solutions for low and lower-middle income Indians.

- Med4Dev, an initiative by 10,000 Start-ups with The Pears Program for Global Innovation, successfully organized the first ever India-Israel Affordable Healthcare Hackathon tackling healthcare challenges of low-income communities in India.
- NASSCOM organized multiple sessions on UX/UI strategy; on IPR and its various aspects; and on business mentoring; on the Legal and Practical issues related to funding.
- NASSCOM partnered with St. Xavier's Kolkata for "Innovision" and organized a workshop with four start-ups from the warehouse for Young aspiring Entrepreneurs from the college. It also assisted Jadavpur University, Kolkata in launching an entrepreneurship cell and associated with the Founders Institute to Launch the Kolkata Chapter to support aspiring entrepreneurs.
- NASSCOM partnered with Cross Border Angels to host the Start-up India Rocks Kolkata event at the Kolkata warehouse. Out of 17 Pitches four start-ups were selected for the Global Finale scheduled in November, in Bengaluru.
- The 10,000 Start-up program partnered with TTF to organize Startup Knockdown, a travel start-up fest. TTF, India's leading travel trade show provided start-ups with an opportunity to interact with mentors on a one-on-one basis.
- Three Vizag start-ups met mentors at Hyderabad for a hand holding six months engagement.
- Societe Generale conducted Demo Day as the finale of its first 'Catalyst' accelerator batch of start-ups. Nine start-upss participated in the 10-week long program.
- NASSCOM held the Axilor Open House, an exclusive opportunity for Bengaluru start-ups to meet the Axilor Investment team. A set of 12 start-ups were selected for the initiative.
- Fantastic Friday, a brand new initiative designed to provide a platform to start-ups to present their progress before potential customers, ambassadors, investors, journalists and other start-ups, was hosted by NASSCOM.



- GIC- NIPP Konnect was rolled out in Mumbai with the objective of sharing Best Practices of open innovation. It also focused on how enterprises were identifying the right start-ups to work with and creating successful partnerships.
- NASSCOM partnered with WeTech (Women enhancing technology) in for its annual program to promote girl student entrepreneurs in Bengaluru. NIPP members, Societe Generale and Google representatives participated as panel speakers.
- A tourism challenge was organized by KBITS, Department of IT BT and the state government of Karnataka, where start-ups share ideas that could add value to tourism in Karnataka. The objective of the initiative was to outline ways in which the experience of tourists visiting the state could be enhanced and enriched.
- TechMarch, a one-of-its-kind initiative for smart hardware start-ups, received over 300 applications.

The committee selected 7-10 start-ups from different regions who then made a pitch to a jury at the TechMarch Roadshow.

- The Change Maker Summit, an event aimed at recognizing and showcasing women achievers across India, and supporting the community of women currently working in technology, was rolled out by NASSCOM.
- NASSCOM partnered with IBM SmartCamp 2016, India's biggest B2B start-up challenge, focusing on HealthTech.

## Our Partners

Google for Entrepreneurs  
Partner Network

amazon  
web services

Microsoft Ventures

DigitalOcean

kotak

IBM

facebook

## Key Events

- **Change Maker Summit:**  
52 women led start-ups were selected for acceleration by Zone Start-ups, Axilor, Tata Elxsi, Societe General, and Oracle 7 IIMB
- **TechMarch:**  
This event was focused on smart hardware start-ups. Three companies received on-the-spot funding; while two start-ups were absorbed by Bosch for acceleration
- **Startup Konnect:**  
479 startups were selected in 2016; there were over 250 investors / corporate / accelerators
- **Innotrek:**  
The conclave featured 39 start-ups, 46 speakers, and 19 sessions across seven days





## Start-ups in the spotlight

- Four startups—Zophop, Smart Driver, LykkePay, and ZeroMiles –were selected for the Mumbai Warehouse after the first steering committee meeting.
- Seen-It from Kolkata warehouse grabbed an online partner deal for the India tour of the Penn Masala Band.
- Kolkata warehouse start-up IManageMyHotel received funding from Cleartrip while Bengaluru warehouse start-up Urban Piper received funding as well.
- Shoppinpal, a Pune warehouse start-up, raised USD 1.07 million in its first equity round of funding, led by Plug and Play Tech Center and Steelhead Ventures.
- Applop raised its second round of funding from its existing investors along with new investors.
- Tripmamu.com launched a one-of-its-kind initiative, and penned a national tie-up with the Standard Chartered and ICICI banks.
- Seenit, a Kolkata warehouse start-up, showed promise and was featured as the fastest growing Fashion Discovery App in the country by LiveMint and TechCircle.
- In a Tourism challenge organized by KBITS, Department of IT BT and the state government of Karnataka , several start-ups received funding. These included AAO Hostels, Highway Delite, Highir Technologies, DigiTour Technologies, Aseuro Technologies, Trip Dairy, Moving Up Products, and Trip On Food.
- As part of the TechMarch initiative, Velmenni, IOT POT India Pvt. Ltd, ThingsCloud, Cyclops and Volta Motors Pvt. Ltd. pitched for funding. Of these however, three received on-the-spot funding for Kstart.
- Swym, a start-up from the Start-up warehouse in Bengaluru got selected for TechStars.
- AppZest, a start-up from the Start-up warehouse in Hyderabad got selected for Ycombinator.

## Related Reports

### Indian Start-up Ecosystem Maturing–Edition 2016:

In the midst of several debates and contentions over the start-up environment, the Indian entrepreneurial spirit is ever rising, with the landscape evolving in a way like never before. India harbors over 4750 start-ups, and 140+ incubators/accelerators, and is expected to witness over 80 M&As this year. As the funding strategies of investors change, the eco-system will witness growth in B2B start-ups, specialized core technologies, and emerging verticals (such as FinTech, EduTech, and HealthTech). The 2016 edition of NASSCOM's start-up report goes into the length and breadth of the Indian tech start-up scenario covering funding, geographical clusters, market developments, trends and Best Practices.

### FinTech Deconstructed–Disruptors or Enablers?:

The report studies the FinTech environment to understand how FinTech firms are using technology to disrupt the financial services industry



# Skills Development

The IT-ITeS SSC set up by NASSCOM in partnership with the National Skills Development Corporation (NSDC) aims to scale quality capacity, and build a ready deployable talent pool (certified Job Ready) with the support from the industry.

Keeping in mind its objective, NASSCOM IT-ITeS SSC launched several initiatives during 2016

### Initiating Research and Analysis

- SSC NASSCOM embarked on an ambitious research endeavor with Deloitte which addressed the issues of 'Talent Demand and Supply for the IT-BPM Industry', Emerging Hot Occupations, and Industry validation of related Qualification Packs/Job role Frameworks. It focused on building quality in the skilling eco-system,

identifying existing Certifying Bodies (CBs) and Personal Certifying Bodies (PCBs) and processes, exploring skilling partnerships, and making an impact on skilling through CSR.

SSC NASSCOM launched the research publications covering the above mentioned areas.

- SSC NASSCOM collaborated with NASSCOM to provide insights on the “Future of Skills”, keeping in view the fast approaching technology disruptions. One workshop was conducted at Genpact with the EC nominated team and BCG as part of the research project.

### Forging international collaborations

- NSDC hosted an event to 'Launch Transnational Standards' in the presence of the Ministry of Skill Development and Entrepreneurship. The objective of this program was to map and benchmark the Indian National Occupational Standards against the UK National Occupational Standards. The mapping efforts for the five identified IT-ITeS job roles, namely,



proposed a congruence between laws and the organization of vocational training. This, the Paper indicated, would promote mutual recognition and collaborative enrichment of India tech industry's skill standards and job role qualifications.

#### Developing courseware

- NASSCOM and Symantec signed an MoU to collaborate on the development of skilled and certified professionals, with an additional focus on increasing the participation of women in this space. The program also enabled capacity building through faculty training and train-the-trainer events, with pilots underway in the states of Telangana and Andhra Pradesh. Symantec also launched a scholarship program that set a goal of supporting 1,000 women to become cyber security professionals.

Ten new QPs and OBFs in Information/Cyber Security skills were readied for submission to QRC. These included the following:

- Analyst–Application Security
- Forensics Specialist
- Architect-IdAM
- Consultant–Network Security
- Analyst–Security Operations Center
- Analyst-IdAM
- Analyst-Endpoint Security
- Analyst–Compliance and Audit
- Penetration Tester
- Security Infrastructure Specialist

#### • BPM

- Domestic CRM Voice
- Domestic CRM Non-Voice
- F&A–Intermediate
- F&A–Complex
- Domestic Biometric Data Entry Operator

#### • ERD

- Courseware on Construction and Heavy Equipment was launched as a 'Facilitator Guide' and 'Participant Handbook' at the NASSCOM Engineering Summit in

Associate–Analytics, Software Developer, Test Engineer, Security Analyst and Infrastructure Engineer were successfully completed with 100 percent compliance.

- On June 1, 2016, NASSCOM signed an MoU with the ISACA and DSCI to deal with the cyber security skills shortage which was impacting organizations throughout India and around the globe. A recent study by ISACA and RSA found that it often took more than six months to fill a cyber security position—and even then, the majority of hiring managers (59 percent) said fewer than half of their cyber security candidates were sufficiently skilled at the time of hiring.
- The IT-ITeS Sector Skills Council NASSCOM and the International Institute of Business Analysis (IIBA) signed an MoU at the 4th annual BA Convention in Bengaluru. The new MoU forged a collaboration between the two organizations. It was aimed at expanding the community of relevant and skilled business analysis talent across India.
- NASSCOM presented a White Paper at the ASOCIO ICT Summit 2016, held in Myanmar on November 15, 2016. The White Paper on 'Skill standards with reference to job qualifications across select ASOCIO economies' focused on the free movement of the IT-BPM workforce across borders. Its aim was also to facilitate the acquisition of skills for transnational employment, through a user-oriented rather than legislative approach to mobility. Although ASOCIO member countries had their own specific national systems for defining vocational/skill competency-based qualifications, given the existing and expected shortage of such skilled workers, the White Paper

Bengaluru on October 6, 2016.

- Product Design Engineer

#### • ITS

- Domestic Data Entry Operator
- Domestic IT Helpdesk

#### Undertaking training and efficacy measures:

The focus during the year was on building scale across the country for qualification pack certified individuals by participating in various programs like Pradhan Mantri Kaushal Vikas Yojana (PMKVY), Community Colleges, Bachelors of Vocation (BVOC), Deen Dayal Kaushal Kendras, National Urban Livelihood Mission (NULM), NTPC-CSR, MECL-CSR, Powergrid-CSR and Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY), Third Party, State Missions and School assessments.

#### Developing Faculty:

SSC NASSCOM partnered with various skill development bodies and universities to enhance capability of faculty members and acquaint them with the new courseware and Qualification Packs. Various Master Trainer and Train-the-Trainer programs were completed in Andhra Pradesh, Maharashtra and Tamil Nadu on areas such as analytics and security analysts and Foundation Skills in IT (FSIT). The total assessments completed were 57,833.

#### Organizing a skilling program at the Rashtrapati Bhawan:

SSC NASSCOM got the opportunity to partner with NSDC to skill the staff at Rashtrapati Bhawan under the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) program across 18 job roles. The program was implemented by the Ministry of Skill Development and Entrepreneurship. President Pranab Mukherjee met 900 employees who completed their training at Rashtrapati Bhawan, on May 15, 2016. In all, 1,462 employees of Rashtrapati Bhawan decided to undergo training under the program.

#### Rolling out Promotion and Marketing efforts:

SSC NASSCOM launched an outreach effort to encourage the adoption of QPs in recruitment by NASSCOM member companies. To date, 52 NASSCOM members have signed the QP Adoption and Declaration Letters. The industry members who have signed the QP adoption declaration include:

## Hosting events

#### Skilling the Indian Navy:

Following the success of the tie up with the Indian Army, SSC NASSCOM partnered with NSDC to work on a similar skilling model with the Indian Navy. NSDC conducted an orientation workshop for Naval Schools to guide them on the engagements. The schools did an initial mapping for the courses offered. Subsequently, the SSC NASSCOM team visited the Naval Schools identified for the pilot on May 30, 2016, to interact with the officials. The broad outcome of the interaction was that SSC NASSCOM presented the skill development initiatives to the relevant stakeholders at the training facility. The heads of departments and trainers participated in this interaction with the representatives from the Navy Training Center.

#### Hosting a Training Partner meet:

In order to scale the efforts on multiple schemes and forge partnerships for the Master Trainer and Train-the-Trainer programs SSC NASSCOM held its first Training Partner Meet on June 9, 2016 in New Delhi. At the event, details were shared about SSC NASSCOM PMKVY and Non-PMKVY programs which were focused on building skills in individuals, enabling them to be industry ready (Foundation Programs) and job ready (Specialized Programs). 25 training partners participated in this event.

#### Rolling out the Analytics SIG meeting:

On June 25, 2016, a Special Interest Group was created for the Associate Analytics Qualification Pack (QP)/job role. It was launched on the sidelines of NASSCOM's Big Data and Analytics Summit in Hyderabad. The objective was to build a talent eco-system for the BPM sub-sector. The SSC NASSCOM team participated in the NASSCOM Big Data and Analytics Summit 2016 through a session focused on specific hot skills—namely Big Data and Analytics. SSC NASSCOM invited the SIG to partner with it in order to build a scalable talent pool skilled in Big Data and Analytics for the BPM industry.

#### Hosting the India Skills Competition 2016 and World Skills Competition 2017:

India Skills is an initiative of the National Skill

Development Corporation (NSDC) and the country's largest skills competition that identifies the best talent at the national level. This competition was held at the Pragati Maidan during Skill India Week. SSC NASSCOM and Project Board Members including Microsoft, IBM, Infosys and Mettl began building the ITSSB talent pool to represent India at the global platform in 2017.

After the preliminary screening and assessment of 379 candidates, 74 were assessed on their IT acumen via online and project-based assessments. 24 candidates were shortlisted for the regional assessment. Post the regional assessment, a Hackathon was conducted on July 8, 2016. Five candidates were selected for final round that was to be held in Delhi.

**Hosting the NASSCOM HR Forum in Chennai:** NASSCOM rolled out its HR Forum on October 21, 2016. The theme of the conference was 'Compliance Challenges facing the IT-BPM industry. SSC NASSCOM's skill development initiatives were discussed with leading HR professionals from various IT-BPM companies. Over 80 delegates participated in the Forum. NASSCOM conducted the College Connect Program in three institutions across the states of Tamil Nadu, Andhra Pradesh and Telangana.

**Supporting the Rozgar Mela organized by NSDC and MoSE: at Lucknow on November 28, 2016** NSDC and MoSE organized a job fair at Colvin Taluke Das College in Lucknow from November 28 to 30, 2016. SSC NASSCOM facilitated the interviews and placements for the IT-ITeS sector. Companies like Wipro and AGIES shortlisted around 80 students and provided them Letters of Intent at the venue itself.

NSDC and MoSE also organized a job fair at the Hi-Tech College in Ghaziabad on December 14-15, 2016. SSC NASSCOM facilitated interviews and placements for the IT-ITeS sector. Around 24 companies including Simply Recruit, Just Dial, Dish TV, etc. shortlisted around 80 students and provided them with Letters of Intent.

**Launched a Workforce Market Intelligence System (WFMIS):**

SSC NASSCOM took the following steps to introduce the WFMIS. It:

- Upgraded the Language translator for WFMIS with

- international languages
- Looked at the Market Indicators including 60 Dynamic Graphs for talent demand and supply assessment (2015-16)
- Upgraded the feedback modules on WFMIS for capturing the response of users
- Formalized and launched the online process flows and registrations for various SSC programs
- Updated news about its events on a regular basis on the events page of its website
- Updated news about its Flipbooks on the website
- Created a list of aligned course modules and uploaded 111 aligned courses
- Updated banners on a regular basis on the Home Page of the WFMIS
- Updated content on a regular basis on the pages as and when required
- Promoted the World Skills Competition on WFMIS and Newsletters

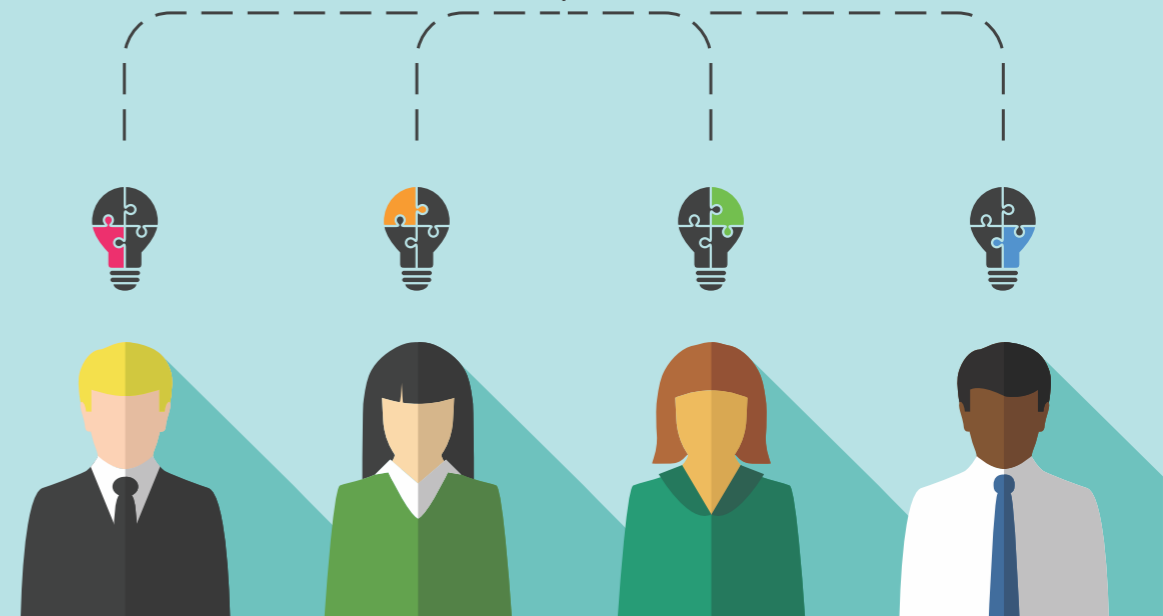
**Introducing an Internal Skill Development Management System (InSDMS):**

A paperless registration process was developed for:

- Non PMKVY
- DDUGKY
- Kaushal Kendra
- Community College
- NULM
- Third Party Assessments
- B.Voc
- Master Trainer
- Train the Trainer
- Trainer Licensing

A QP company validation module was developed for storing the feedback of industry members. SSC NASSCOM created Web services for getting results from assessment agencies and developed a payment tracker and payment acknowledgment module. It additionally developed a Cloud-based MoU upload repository and uploaded 300 MoUs and developed a Cloud-based certificate repository and uploaded 94,000 certificates.

# Diversity & Inclusion



The aim of the Forum is to enable IT-BPM organizations to build a work environment that embraces diversity and inclusion. Where employees, customers and other stakeholders thrive and succeed.

## Launching gender Initiatives

- NASSCOM, in association with Fintelligence, conducted a program that was focused on empowering women to manage their own money, and ask the right questions even where financial management was left to the men. The session was centered around women, professionals or otherwise, and helped enhance their financial awareness and empowerment in financial

## Key Priorities:

- Encourage member companies to create a cultural environment that supports diversity.
- Create platforms of knowledge exchange across various forms of inclusion and different cultural contexts for companies to share and learn Best Practices.
- Conduct and support research and create actionable data that indicates the trends in the industry and acts as a benchmark for companies.
- Work with the government and society to create a legal and commercial framework that supports initiatives promoting Diversity and Inclusion.
- Communicate the progress made in the Diversity and Inclusion space within the Indian IT-BPM industry to global corporations (within and outside the IT-BPM sector) and governments and be seen as the role model for inclusion efforts globally.

matters. The session was held at 18 locations across India over an eight month period.

- NASSCOM addressed the issue of creating a leadership pipeline by putting together case studies during its Annual D&I Summit 2017. It encouraged companies to share their process of engaging with employees on how they could skill themselves.
- NASSCOM worked together with the Open University, Milton Keynes, UK to come up with a study that will be released on February 27, 2017 at the NASSCOM D&I Summit in Bengaluru. NASSCOM also tabled the study's findings and recommendations before the Executive Council.
- NASSCOM, in association with Mercer and supported by IFC-World Bank, created a study on Childcare and Crèche facilities in the premises of member companies. NASSCOM led discussions on this issue across the country, and will release a detailed report on the subject on February 27, 2017 at the D&I Summit. A regulation is expected to provide for a shared services model as well as arrangements with third-party crèches, to help companies meet t compliance requirements.
- NASSCOM conducted discussions in Bengaluru and Mumbai to raise awareness on LGBT (from a legal and organizational standpoint).

## PWD Initiatives

- NASSCOM and NF are rolled out the endorsement from 100 CEOs in an electronic format.
- NASSCOM explored the idea of working with Amazon and Flipkart to see if they could source and supply disability aids as a separate category to make the equipment and enablers easily available in India.
- NASSCOM Foundation launched its first capability center in Bengaluru supported by Conduit. 100 Persons with Disabilities who were either graduates or diploma holders were skilled to be job ready in the IT/BPM sector to create a ready-to-hire talent pool. Persons with disabilities were skilled and up-skilled to ensure that they became economically independent.
- The 9th edition of the D&I Summit held in Bengaluru

on March 16, was centered around the theme:

'Diversity to Inclusion: What Next?' It was focused on how companies could strengthen their practices and make them sustainable. The aim was also to gain a perspective on new emerging trends in India and across the globe. The key issues that were discussed revolved around inclusion challenges beyond the entry level, building a leadership pipeline and measuring and managing business outcomes using realistic goals. The Summit was a huge success with over 550 delegates (including people with disabilities), more than 50 global leaders as speakers, 13 interactive sessions, 19 media houses covering the Summit, the release of three research papers and the announcement of NASSCOM's Corporate Awards for Excellence in Diversity and Inclusion Practices.

- PwC and NASSCOM jointly launched a study titled: 'Making Diversity Work: the IT-BPM Industry'.
- The first edition of NASSCOM's Diversity and Inclusion Summit was held in Mumbai on November 8, 2016 with over 50 companies participating. This increased the footprint of D&I especially in the Western region. The Summit focused on the theme of Gender Parity and People with Disabilities. It was decided that the 10th Edition of the NASSCOM D&I Summit would be held in Bengaluru on February 27-28, 2017.

## Council Members

- Ravi Raman, Infrahedge (Chair)
- Krishnakumar Natarajan, Mindtree
- Sandhya Vasudev, DBOI
- Partha DeSarkar, HGS
- Pankajam Sridevi, ANZ
- Noazer Dalal, TBSS
- Rama Sivaraman, Virtusa Polaris
- Lilly Prasad, BNY Mellon
- Lula Mohanty, IBM
- Yogen Karumbaya, Thomson Reuters.
- Meenakshi K.S, Credit suisse

# National Skills Registry

NSR aims to promote the interests of the IT-BPM industry by projecting India as a preferred off-shoring destination. It seeks to develop lifetime permanent profiles for all people working in the sector. Such profiles will be uniquely identified based on biometric and will hold credible data about employees including the results of background checks.

- Ensuring standardization of the BGC process in the industry.
- Ensuring regulation of BGC industries.
- Identifying new avenues for undertaking various background checks.
- Ensuring the adoption of NSR by other industries.

## Council Members

- C. Vasu, TCS
- Kumar Vishwanathan, Mindtree
- Abhay Tulapurkar, Infosys BPO
- Mathews Abraham, Wipro Technologies
- Syed Nizam, IBM India
- Dayanand Allapur, Capgemini
- Basawaraj, Infosys Technologies
- Nivedita, Infosys Technologies
- Jerry Marshall, CTS
- Lakshmi Arikere, HP
- J. Thomas, Franklin Templeton

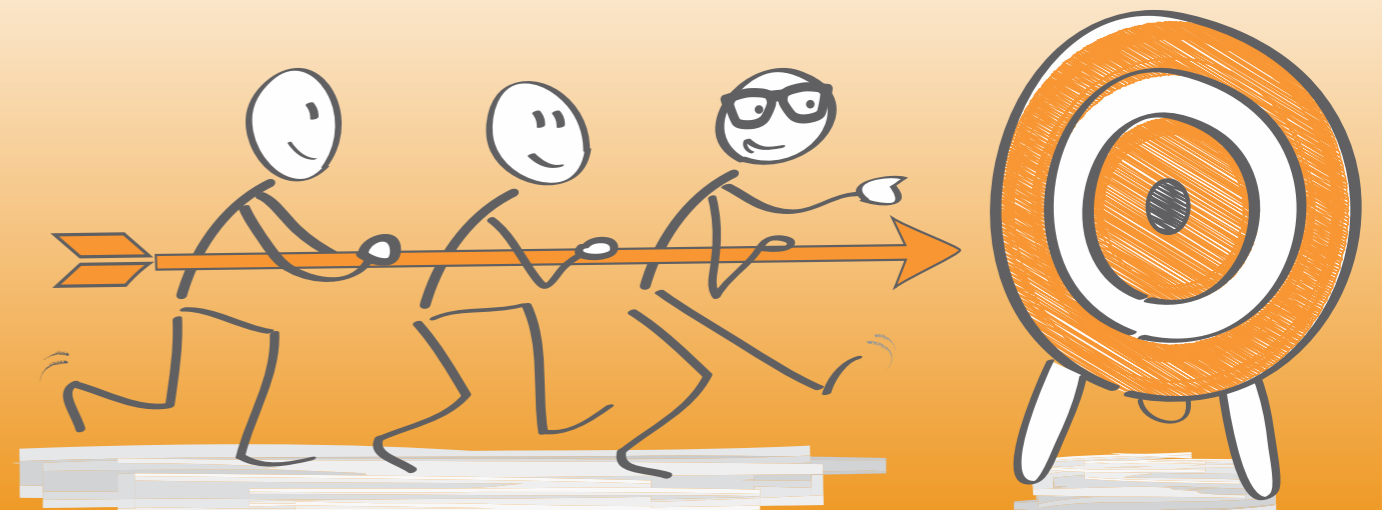
## Key statistics

Web Registrations in NSR: **21,72 L**

Biometrics submitted to NSR: **14,67 L**

Subscriber Companies enrolled: **215**

Background Checkers with NSR: **22**



# Data Security Council of India (DSCI)

To be the premier industry body for making cyberspace safe, secure and trusted.

## The DSCI's key focus areas:

- Engaging with governments, regulators, industry associations and think tanks on policy matters Establishing Thought Leadership through development of Best Practices, Standards and Frameworks and publication of Papers
- Building Capacity
  - in Security, Privacy and Cyber Forensics through training and certification of individuals and professionals
  - in Cybercrime investigations through training of law enforcement agencies and judiciary
- Engaging with stakeholders through various Outreach initiatives including events, awards, chapters, consultations and membership programs
- Developing and maintaining an Assurance ecosystem for validation of privacy and security practices implemented by organizations
- Increasing India's share in the global security product and services market through Global Trade Development initiatives
- Developing an Alternate Dispute Resolution system in data protection

## Organizing the visit of an Indian Cyber Security Delegation to Netherlands and UK:

The first Indian Cyber Security Delegation visited the Hague Security Delta (Netherlands) and Malvern Cyber Security Cluster (UK) during 2016. Led by the National Cyber Security Coordinator, GoI, the delegation included 40 representatives of the Indian tech industry, including small and large companies, user organizations, and government departments and academic institutions

## Launching a report on 'Growing the Cyber Security Industry-Roadmap for India':

The NASSCOM-DSCI Report titled 'Growing the Cyber Security Industry-Roadmap for India' was launched on the sidelines of AISS 2016. The report described how India could emerge as a global hub for Cyber Security, with the Indian Cyber Security Products and Services industry reaching revenues of USD 35 billion by 2025. The study provided a roadmap for the industry and made recommendations to the government on how it could establish the necessary eco-system to spur growth.

## Developing the Cyber Security Policy for the Andhra Pradesh and Telangana governments:

SCI worked with the Andhra Pradesh (AP) government to develop the state's Cyber Security Policy. The AP government is currently in the process of implementing a Cyber Security policy to build a safe cyber environment. DSCI signed an MoU with the Telangana government to help it develop the Cyber Security (CS) Policy for the state. DSCI additionally worked to develop cyber security skills through State Education Boards and Universities with a special focus on faculty development. DSCI and NASSCOM SSC partnered with Universities to adopt the Cyber Security skills program.

## Working with DoC on market access issues in the European Union:

DSCI continued working with the Department of Commerce on data transfer issues. It prepared a paper to support the meeting of India's chief negotiator with his



EU counterpart, highlighting the industry's position. It also provided inputs on data transfer issues from EFTA countries to India

## Leading government-Industry consultations on Privacy:

DSCI and NASSCOM participated and presented in a government-industry consultation on the globally changing privacy regime, and how it impacted the Indian industry.

## Responding to the TRAI consultation paper:

Network Neutrality and cloud computing are subjects of deliberation across developed and developing countries. NASSCOM and DSCI consulted member organizations and subject matter experts to draft joint comprehensive responses to the TRAI Consultation papers on cloud computing and Net Neutrality. All consultation pieces pertaining to cyber security and privacy were answered by DSCI.

## Building Cyber Security awareness among Small and medium Businesses:

With a growing need to bring the MSME sector online and inculcate safe and responsible behavior in cyberspace. In association with Google, NASSCOM and DSCI conducted workshops in Pune, Jaipur, Vadodara, Surat and Guwahati on Internet safety Best Practices and guidance.

To facilitate Digital Transformation and spread awareness on cyber security among SMBs and Vocational Training Institutes, DSCI in partnership with Lockheed Martin developed a comprehensive interactive online portal called 'CyberAware' with resources for businesses to safely and securely manage their Digital presence.

## Enabling Cyber Security Skill Development in India:

DSCI and NASSCOM have been developing a long-term road map for Cyber Security skills development in India.

Under this initiative, DSCI, along with NASSCOM SCC has developed National Occupational Standards for ten cyber security job roles with the corresponding Qualification Packs (QP), in line with the National Skills Qualifications Framework (NSQF). During the year, DSCI launched the Cyber Security Analyst–Application Security (courseware) and unveiled the Cyber Security Occupational/Career map, Qualification Packs for ten job roles and courseware (facilitator guide and student handbook) for five of these job roles. DSCI, SSC NASSCOM and ISACA also entered into an MOU with ISACA, which will lend its expertise in this area to achieve stated goals.

## Hosting Cyber Security workshops for Public Sector Enterprises:

DSCI, in collaboration with the Standing Conference of Public Enterprises (SCOPE), conducted a workshop for operation officers. It also hosted round table meetings with board members and senior management of PSUs to sensitize them about Cyber Security and Data Privacy challenges. Over 50 PSEs participated in these meetings.

Organizing meetings on In-Country Security Testing for Equipment used in Telecom Networks: DSCI, in collaboration with DoT, STQC and COAI hosted a workshop on 'In-Country Security Testing for Equipment Used' in Telecom Networks.

## Engaging with STQC on Common Criteria Standards:

DSCI, along with Indian start-ups was part of the workshop on Security of IT Products using Common Criteria standards. The workshop was in sync with the government's policy of 'Make in India' as it promoted IT start-ups, making them competitive through globally acceptable certifications.

## Consulting with the industry on an Encryption and Data Retention Policy:

DSCI and NASSCOM hosted an industry consultation workshop on two areas that have become the focal points of discussion in the Digital space—Encryption and Data Retention.

## Organizing a workshop on Cyber Security concerns for Big Data:

A workshop on 'Cyber Security Concerns for Big Data'



was conducted to seek inputs from stakeholders for the Technology Foresight Study on 'Information and Communication Security and the Financial Sector'.

**Hosting a workshop on IoT security:**

A workshop was organized on Cyber Security which focused on the Internet of Things (IoT). The goal of the workshop was to seek inputs from stakeholders for the Technology Forecasting Study on Information and Communication.

**Focusing on Community Development and Evangelization:**

DSCI launched its first global chapter in Singapore with the aim of encouraging the exchange of information, and sharing of knowledge and Best Practices on Cyber Security. DSCI's Singapore chapter will be engaged in building linkages with stakeholders in the government, industry, LEAs and academia. It will establish collaborations on policy deliberation, industry development, capacity building on Security, Privacy and Cybercrime investigation, among others. The chapter will additionally build a community to bridge the cyber security skills gap between India and Singapore, while exploring opportunities for developing niche capabilities in the Cyber Security product domain.

Overall, DSCI conducted several chapter meetings in various cities including Bengaluru, Pune and Hyderabad during the year.

**Organizing the BFSI Roundtable Meeting:**

The third BFSI Forum was convened in Mumbai and focused on Advanced Persistent Cyber threats. The discussions at the meet were centered around Digital Banking: Emerging Threats and Best Practices, Handling Cyber Security breach incident, and Building Next Generation SoC.

**Hosting the DSCI-SAP workshop on secure development of Cloud applications:**

The workshop was aimed at discussing the overall strategy of secure product development including the product lifecycle and its investment program.

Organizing a workshop on Privacy at PEC, Chandigarh: A workshop was held to on the current privacy landscape in India and data protection laws and regulations. It focused on various aspects of privacy in the Digitally connected world, through a panel discussion, expert talks and case studies.

**Hosting a knowledge session on Cyber Security challenges and response:**

The session highlighted the issues pertaining to cybercrimes, challenges in Cyber Security (both at the organizational and national level), and trends which included the technology eco-system and its implications.

**Hosting a DeitY workshop on engaging with ICANN:**

The workshop was aimed at create awareness and formulate an action plan-cum-strategy for greater engagement with ICANN, in addition to constituting an industry led Special Interest Group (SIG).

**Launching the DSCI Certified Privacy Lead Assessors (DCPLA) Training and Certificate Program:**

The DCPLA training program was launched with a view to equipping potential assessors with necessary knowledge and tools to assess the privacy implementations of organizations. The aim was to understand whether the privacy implementations were in accordance with the DSCI Assessment Framework for Privacy (DAF-P)©and theDSCI Privacy Framework (DPF©)..

**Organizing a FIDO Alliance Tour on Digital Banking:**

The workshops guided user organizations with enhanced/ application of Best Practices in online authentication processes.

**Introducing the DSCI Certified Privacy Lead Assessors (DCPLA) Training & Certificate Program:**

DSCI launched the DCPLA training program with the

aim to equip potential assessors with the necessary knowledge and tools to assess the privacy implementations of organizations.

**Launching the DSCI Certified Privacy Professional program:**

The credentialing program was launched in order to equip professionals with the knowledge and necessary skills to advance their careers in privacy.

Enabling Law Enforcement Agencies to build capacity: During the year over 2,000 officers were imparted training through the standardized sessions on Cyber Crimes and Cyber Forensics across DSCI Cyber Labs.

**Hosting a Cyber Crime awareness workshop for Law Enforcement Agencies:**

The 14th Awareness Workshop on Cyber Crime awareness was organized with the support of Jammu and Kashmir Police at Srinagar.

**DSCI Excellence Awards**

**Rolling out the DSCI Excellence Awards:**

The annual DSCI Excellence Awards 2016 felicitated the winners in the Corporate, Product and Law Enforcement categories. These companies were recognized for their Best Practices and exemplary work carried out in the field of security and privacy.

DSCI also hosted its 'Innovation Box', in order to identify the 'Most Innovative Security Product of the Year'.

**Hosting the Best Practices Meet:**

DSCI held the eighth edition of its Best Practices Meet in Bengaluru from June 23-24, 2016. With the theme of 'Security Data Science', the conference drew 47 speakers who discussed various aspects of security Best Practices. Over 300 security and privacy professionals from various industry verticals including IT-BPM, Banking, Telecom, and Security Products, etc., participated in the conference.



**NASSCOM DSCI  
Annual Information Security Summit**

790 Delegates

42 Speakers

**Key Highlights**

- A comprehensive study of the cluster eco-systems , their genesis, business models, enablers and key differentiators was undertaken
- The interactions provided a structured overview of the cyber security strategy and interrelationships between governments, industry and academia within the two geographies
- Interactions with key stakeholders were initiated to build a comprehensive understanding of the market
- Investment opportunities were identified for businesses through dedicated and focused matchmaking and networking sessions
- The delegation explored incubation competence, cutting-edge security solutions and research capabilities, leading to technical entrepreneurship
- The noteworthy role of academia in providing an impetus to the success of the clusters was discussed.
- The role of academic institutions in extensive research and industry collaboration, incubation capacities and in establishing Centers of Excellence on security was appraised

# NASSCOM Foundation

- Trained over 1,00,000 people on Digital Literacy

- Trained over 80,000 people on Employability driven skills

- Donated software worth INR 20 crore to 216 NGOs

To build an inclusive and sustainable India that leveraged the capacities and competencies of the eco-system of the IT-BPM industry.

#### Launching a Social Apps Hub in partnership with the Vodafone Foundation:

The Social Apps hub aims to be the single largest repository of mobile apps which will solve social issues. It is expected to have more than 1,000 apps.



#### Hosting the IFCCI Indo-French CSR Forum:

The platform focused on the success achieved by Digital Literacy, and how more and more companies needed to divert their CSR funds towards skilling and NDLM.

#### Rolling out the Amdocs leadership community event:

The leadership team was taken to the NDLM Center, where it heard about how the facility was providing Digital Literacy to the local underserved community.

#### Hosting the Skilling Haryana event:

The focus of the event was on NASSCOM Foundation's skills initiative and how it could benefit underserved youth in greater numbers across the state of Haryana.

#### Creating visibility for the 'Digital India Summit's' Panel discussion on building a skilled workforce:

The discussion received coverage on Times Now and ET Now and highlighted the importance of a skilled workforce in a Digital India. NF's NDLM and Skills Initiatives were also spotlighted.

#### Launching an NDLM center in partnership with Capgemini:

NF launched a NDLM Center in Hyderabad to train a minimum of 1,000 people across the local community on Digital Literacy.

#### Organizing a Global Accessibility Awareness Day Workshop:

The workshop made developers aware of accessibility standards and how easy it was to create w3c accessible applications.

#### Hosting a Round Table discussion on E-waste:

A panel discussion was organized to highlight the nuances of e-waste and how it could be kept in control through various interventions across different strata of society.

#### Organizing YouthSpark Live 2016 in partnership with Microsoft India:

As part of this initiative, young girls were engaged in coding basics and introduced to computer science as a career option. Code <A>, a future-focused curriculum developed by Edulevel in partnership with Microsoft and NASSCOM Foundation was launched at the event.

#### Airing an interview on E-waste on FM Rainbow:

The interview was aimed at educating listeners on the harmful effects of E-waste, and how it needed to be disposed off in a responsible manner.

#### Rolling an NSIF Mentorship Workshop:

The workshop trained social innovators on how they could scale for impact and higher profits, through various workshops and one-on-one sessions with business leaders in their respective domains.

#### Setting up the first NDLM Center in Mysore:

The center, just the third of its kind in India, was launched to cater to the needs of Persons with Disabilities. It was set up by NF in partnership with Infosys Foundation and the Helen Keller Institute for the Deaf and Deaf-blind.

#### Organizing a D&I Roundtable:

Through this discussion, NF attempted to sensitize participants about the basic requirements of Persons with Disabilities and how it was possible to create comfortable spaces for them in offices.

#### Hosting a meeting of the CSR Regional Forum:

The meeting highlighted the trends and challenges facing CSR initiatives being rolled out by IT-BPM organizations.

#### Launching Colruyt's First NDLM Center:

This was the first NDLM Center to be set up by a Belgian company in India.

#### Hosting India @ 75 Annual Volunteering week:

NF engaged with volunteers and volunteering organizations and took a step towards a NASSCOM Foundation Mykartavya and India @ 75 partnership agreement.

#### Organizing a Workability Asia Conference:

The conference focused on the real life challenges facing Persons with Disabilities, and how NASSCOM Foundation was trying to empower them with Digital Literacy and employability skills. It also sensitized corporates about how hiring PwDs was a win-win.

#### Hosting the D&I Roundtable:

NF made participants aware about the basic requirements of Persons with Disabilities, and how they could create comfortable spaces for such employees in offices.

**Launching the NASSCOM Social Innovation Forum 2017:**

NF set up the Forum to encourage companies to introduce innovative products and services that would leverage technology to drive social change across India.

**Partnering with UNICEF:**

NF joined hands with UNICEF to launch the 'Child Online Safety in India Report'.

**Hosting Placement Drives:**

NF rolled out Placement Drives for Genpact's Reach Higher and Aricent's Employability Programs. It placed more than 400 underserved graduates in different organizations.

**Discussing the importance of libraries for India:**

NF discussed the issue of the Indian Public Library Movement, focusing on how libraries across India could be made relevant. In addition, it launched the iplm website including the app and handed over its recommendations to MoC during the event.

**Organizing the Graduation ceremony of Barclays' Skills Program:**

Certificates were distributed to the 200 students who graduated from Barclays' employability driven skills course.

**Hosting Microsoft Sri Lanka's NGO Workshop:**

NF conducted a workshop on Office 365 and how NGOs could benefit from using the software.

**Council Members**

- Dr. Ganesh Natarajan (Chairman)
- R. Chandrashekhar
- Arun Seth
- Debjani Ghosh
- Sandhya Vasudevan
- Mohit Thukral
- Saurabh Srivastava
- Salil Parekh
- B. V. R. Mohan Reddy



**CSR Leadership Conference 2016-Bengaluru**

300+ Delegates

40+ Speakers

**Key Takeaways**

- Driving quality education and Lifelong Learning
- Making cities better: CSR in city improvement initiatives
- Spurring the Development agenda through CSR
- Exploring Newer Frontiers in CSR
- Highlighting the importance of CSR for Skilling India: strategizing for a sustainable model
- Driving inclusion for people with disabilities

**CSR Leadership Conference 2016-New Delhi**

250+ Delegates

40+ Speakers

**Key Takeaways**

- Understanding and assessing the present pulse of the CSR eco-system, the various stakeholders and their attached interests and priorities
- Encouraging discussions for possible future collaborations among functionaries aligned thematically and geographically.
- Making technology a seamless component in the execution of social impact across sectors of health, education and infrastructure.



# Member Outreach





# Northern Region

**NASSCOM engaged with member companies through:**

- Exclusive Meetings
  - Council Meetings
  - GIC NCR Meeting
- Focussed sessions
  - Talent Management
  - Sales and Marketing
  - Infrastructure and Administration
- CEO Interactions
- Tech workshops
- CFO Roundtables
- D&I Interventions
- HR Forum
- The NASSCOM Annual Technology Conference (NATC)
- Focused sessions with Lucknow, Chandigarh and Jaipur members
- Interactions with state governments on key issues facing the industry

## Outcomes

- Providing opportunities for NASSCOM member companies to connect discuss and deliberate on pertinent issues facing the industry and to come up with best case practises and solutions
- Facilitating proactive solutions to issues
- Knowledge sharing and skill upgradation through Tech Sessions
- Promoting awareness of Diversity and Inclusion at the workplace
- Facilitating companies to face challenges around talent and re-skilling
- Promoting exclusive C level interactions with leaders
- Addressing infrastructure issues in Gurugram and Noida
- Working closely with the state governments and local authorities



### NRC Gurgaon

- Manas Fuloria, CEO, Nagarro Software Pvt.Ltd.
- Aparna Gupta, MD, Firstrain Software Centre Pvt. Ltd.
- Mohit Thukral, Senior VP and Genpact Officer, Genpact India
- Deepak Ohlyan, VP, Dell
- Manu Dangi, Country Head, Evalueserve.com Pvt. Ltd.
- Rajesh Dhuddu, VP, Quattro Global Services Pvt. Ltd.
- Rakesh Kapoor, Director, Process Nine Technologies
- Vinod Sood, MD, Hughes Systeque Pvt. Ltd.
- Yuvaraj Srivastava, CHRO, Makemytrip (India) Pvt. Ltd.
- Subinder Khurana, Venture Partner, SRI Capital
- Sanjay Mehta, MD, Teleperformance India
- Ravi Tyagi, AVP, Snapdeal
- Rakesh Vij, Chief Business Officer, Aricent
- Sanjit Singh Bal, Director, Convergys
- Sandeep Bhatia, President andC OO, Annik Technology Services Pvt.Ltd.
- Pavan Tayla, CFO, Fidelity
- Harsh Vinayal, Sr VP, NTT Data
- Vaibhav Gaddodia, VP Nagarro, Software Pvt. Ltd.
- Sanjeev Gupta, Microsoft

### NRC Noida

- Maninder Grewal, Dion Global Solutions
- Sunil Goyal, COO, Sopra Steria
- Vineet Tyagi, CTO, Impetus Technologies
- Swati DE, Joint MD, Interra Information Technologies
- Satyajeet Pandey, MD, Integrated Information Services
- Rajeev Mehrotra, AVP, Iqor
- Ashok Saxena, MD, Kronos
- Manoj Saxena, MD, Netedge Computing Solutions Pvt. Ltd.
- Nikhil Bhargava, Director, Provana
- Abhay Kumar Vaish, Chief Technology Officer and Head- Service Delivery, Ericsson
- Dhiraj Sarin, SVP/Head: Process Excellence and Transformation, EXL
- A Nandini, VP Delivery, Globallogic India Ltd
- Shalini Mishra, Head Digital Transformation and Innovation, SopraSteria
- Sanjay Agarwala, MD, Eastern Software Systems
- Sameer Rekhi, VP Delivery, Metlife
- Dhruv Khanna, CEO, Data Resolve
- Vineet Dahiya, Director, InfoAxon Technologies
- Ajay Mian, CEO, All e technologies

# Eastern Region

- To engage with members through various sessions
- To brand NASSCOM East, creating an identity for the Region and establishing its capacity to offer the best of IT solutions and services
- To undertake Policy Advocacy with the state government, working actively with it at various levels to address mutual issues and concerns.
- To lobby with the state government on issues faced by member companies like government benefits, advocacy on public policy, etc.
- To forge tie-ups with other Industry Associations and Chambers, build bridges and leverage synergies between different sectors, all Industry Associations, the government, and other stakeholders
- To facilitate business opportunities for NASSCOM members through Business Connect sessions and various cross-sectoral activities
- To support and promote industry related research level work at academic institutions. The Council is looking to drive initiatives for creating IP/Patents
- To support industry-academia engagement with the aim of creating a wider scope of development of talent and skills
- To boost the process of innovation, process excellence and enhanced cyber security



- Knowledge Sharing Sessions
- Outreach events in Tier 2 cities
- Tying up with other Industry Associations and Chambers for promoting the State
- Strengthening the industry-academia connect for skill development
- Boosting the process of innovation, process excellence and enhanced cyber security
- Hosting the NASSCOM TechConclave 2016
- Organizing a workshop on HR effectiveness
- Launching NASSCOM's Apprenticeship Program
- Partnering in 'The Edutainment' show
- Hosting a knowledge-sharing session with STPI
- Rolling out a Workshop on the growth strategy for B2B sales and effective use of video marketing

- Hosting an interactive session with the government
- Promoting the IT Park in Durgapur
- Enabling an interaction between member companies and the government
- Rolling out TechNgage in Kolkata
- Hosting the NASSCOM Product Conclave in Kolkata
- Participating in a discussion on infrastructure development
- Outlining a market expansion strategy in the US for SME BPM service providers
- Spreading awareness about cloud computing
- Inducting new members and raising awareness about the SME e-marketplace
- Hosting the Eastern Regional Product Working Group meeting
- Conferring the Dewang Mehta IT awards 2016 on deserving students
- Focusing on compliance issues
- Hosting a session on Talent Acquisition and Transformation
- Hosting the Data Science Summit in Kolkata
- Holding the Eastern Regional Council meeting
- Focusing on the issue of Information Security
- Holding a workshop on POSH
- Organizing the DSCI-Google Internet Safety Program
- Hosting a session on Branding Essentials
- Holding a discussion on the Future of Indian IT
- Rolling out a Quality Assurance in Software workshop
- Hosting a meeting between the Eastern Regional Council and NASSCOM's Chairman
- Hosting a panel discussion on 'Future IT Skills'

## Council Members

- Kamal Agarwala, Founder & CEO, La Exactly Software Pvt. Ltd. (Council Chair)
- Atul Agarwal, Director, Apt Software Avenues Pvt. Ltd. (Council Co-Chair)
- Gautam Banerjee, Managing Director, Business Brio
- Somnath Chatterjee, Vice President, Capgemini India
- Arun Agrawal, CMD, Ebizindia Consulting Pvt. Ltd.
- Sanjoy Chatterjee, Director, Idealanalytics
- Atul Gupta, Managing Director, InSync Tech-Fin Solutions Ltd.
- Sandeep Sengupta, Managing Director, ISOAH Data Securities Pvt. Ltd.
- Bimal Patwari, CEO, Pinnacle Infotech Solutions
- Mandeep Singh, Center Director, HSBC GSC Kolkata
- Kaushik Bhattacharya, Location Head-Kolkata, IBM



# Western Region

## PUNE

- To promote a Start-up eco-system in Pune
- To create a consolidated directory of Pune Start-ups, incubation centers, accelerators and mentors
- Plan for a Forum/event for Start-ups to connect them with the eco-system
- Provide SMB businesses with business opportunities
- Enable Enterprise connects for SMBs
- Launch an SME eMarket Place
- Engage with member companies
- Host Knowledge sessions on Product Development, IoT, Cloud, Marketing and Design Thinking
- Roll out Focus Group Discussions on issues related to Automotive Electronics, Talent Management and ERP
- Organize industry events

### Setting up a Start-up Warehouse:

NASSCOM Start-up Warehouse was launched in May, 2016. It is the second largest NASSCOM Warehouse after Bengaluru, and a state-of-the-art facility accommodating around 80 seats.

### Launching the Start-up Master Class:

Seal The Deal, Interaction with Industry Stalwarts, Exposure to Customers and Investors – NASSCOM Pune and IIT Kanpur Alumni Association organized Start-up Master Class. Hon Min Shri Ravi Shankar Prasad was Chief Guest and Mr Narayana Murthy presented the keynote address.

### Reaching out to Tier III cities:

NASSCOM reached out to the Tier III cities and rural areas of Maharashtra, spreading awareness about the IT industry. It actively engaged with existing talent through various programs such as SSC Train-The-Trainers, DMFT events, and NASSCOM industry interaction.

### Celebrating Technologists:

Pune acknowledged the tech experts in the city through the TechNgage Hackathon in May, 2016. Over 100 participants from across the state of Maharashtra, (selected after a rigorous scrutiny), participated in the Hackathon and demonstrated their technical thought leadership.

## Council Members- Pune

- Ganesh Natarajan, Zensar (Chair)
- Vishwas Mahajan, Lifeline
- Vinit Teredesai, HSBC
- Kaushik Majumdar, Principal Global Services
- Debashish Pramanik, SysTools
- Govind Sandhu, Antworks
- Jitendra Tanna, Eternus Solutions
- Prashant Pansare, Inteliment
- Prateik Sanklecha, PS Studios



## MUMBAI

- NASSCOM D & I Forum, 'Session on Unconscious Bias', Mumbai
- Launch of Facility Management Forum
- Sales & Marketing Session on 'Is it prime time for Data?'
- Indian Applied Gaming Roadshow
- 10K Start-up Nurturing Session
- Train the Trainer (TTT) program on FSIT
- NASSCOM IOT Showcase
- Building IoT Ecosystem in Mumbai
- No Excuses! Recognizing and Preventing Sexual Harassment at Work
- Workshop on "WORKPLACE COMMUTING-Nuisances & Challenges in the IT-BPM INDUSTRY"
- "Key Emerging Issues in Direct and Indirect Tax Laws Impacting the IT & ITES sector"
- Facility Management forum meeting
- Key Emerging Issues in Direct and Indirect Tax Laws Impacting the IT & ITES sector.'
- Mumbai Police MoU Signing Ceremony 'Social Media Lab'
- NASSCOM – RAI hosted 'ReTechCon – 2016'
- NASSCOM e-Marketplace Lead Generation portal launch, Indore
- RIOT – Rendezvous of IOT StartUps, Mentors and Investors, NaviMumbai
- Passion Cannot be Outsourced'
- Fin-Tech Start-up Connect Session
- DMFT Dewang Mehta IT Awards - 2016, Ahmedabad
- SMB Connect - "Educating SMBs to 'BE AN INFORMED BUYER' for IT Adoption".
- How to leverage NASSCOM's Global Trade Efforts for business and spotlight on "Africa"
- Essentials of intellectual property for busy Start-ups & SME's
- One day workshop for University/Engineering Colleges and DTE Madhya Pradesh
- Nurturing Women Leaders in the Workplace - Moving from Good to Great
- Mentoring Session: Get Your DIGITAL WHEELS Rolling! Mumbai
- How to leverage NASSCOM's Global Trade Efforts for business and spotlight on "Australia & Nordics", VADODARA
- Facility Management Session: "Employee transportation services in the Indian IT-BPM INDUSTRY", Mumbai
- NATIONAL SUMMIT ON INNOVATIONS & TECHNOLOGY, GANDHINAGAR.
- COFFEE WITH SHARAD SANGHI "WHAT IT TAKES TO BE A SUCCESSFUL ENTREPRENEUR"
- Google Internet Safety Workshop for Small Medium Businesses (SMBs)
- NASSCOM Diversity & Inclusion Summit 2016, Mumbai
- Dewang Mehta Excellence Awards
- 10000 StartUpsKonnnect Session, Mumbai
- MAKERFEST 2017 supported by NASSCOM 10000 StartUps
- "Interactive Session between Telecom/ICT companies of Ontario, Canada",
- "RPA - Deployment to Scale", MUMBAI
- NASSCOM India Leadership Forum 2017, MUMBAI

## Council Members- Mumbai

- Prakash Rane, ABM Knowledgeware Ltd
- Ninad Karpe, Aptech Ltd
- Amit Sheth, AurionPro Solutions Ltd
- Rahul Kanodia, Datamatics Technologies Ltd
- Ashank Desai, Mastek Ltd.
- Punit Jain, Nelito Systems Ltd
- Sunil Gupta, Netmagic Solutions Pvt Ltd
- Mukesh Thumar, Paramatrix Technologies Pvt Ltd
- Naozer Dalal, Tata Business Support Services Limited
- Hanuman Tripathi, Techrumba Software Private Limited

## Council Members- Gujarat

- Biren Shukla, Anant Softtech Pvt Ltd
- Saurabh Mehta, AvaniCimcon Technologies Ltd
- Jaimin Shah, Dev Information Technology Pvt. Ltd.
- Nikhil Jain, Elitecore Technologies Ltd
- Pranit Banthia, Hi-Tech Outsourcing Services
- Kaushal Mehta, Motif India Infotech Pvt. Ltd
- Maulik Bhansali, NetWeb Software Pvt. Ltd.
- Raju Shah, Rishabh Software Pvt Ltd
- Asfaq Shiliwala, TransForm Solution Pvt Ltd
- Vivek Ogra, GESIA President

# Karnataka

- Government Engagement
- Session on investing in Karnataka
- Focusing on replicating the success achieved by Bengaluru
- Discussing STPI recommendations to the government
- Meeting up with member companies
- Partnering with Bengaluru's ITE.BIZ
- Focusing on the importance of communications when handling millennials
- Discovering the art of storytelling in Marcom
- Focusing on the issue of security in the IoT world
- Discussing the future of connected mobility
- A deep dive session on Healthcare
- Focusing on securing Iot
- Software Product Management Session at SAP Labs
- Round table to discuss the revised Civil Aviation Policy
- Understanding Direct and Indirect taxes
- Deciphering the TN Labor Act
- Discussing the role of CFOs in the new age:
- Helping member companies to deal with taxation issues
- Hosting a pre-Budget meet:

## Council Members

- Anilesh Seth, CEO, ANSR Consulting
- Chetan Garga, MD, Allstate
- George Mathew, Location Head, Fractal Analytics (Co - Chairperson)
- Hari Hegde, Global Head - delivery, Wipro
- Jayesh Chakravarthi, CIO, FMR
- Jitendra Chaddah, Director Strategy and Operations, Intel
- Joshua, Founder CEO, Bluechips
- Lalitha Indrakanti, Head Shared Services, Cargill
- Madhavan Satagopan, CTO, Altimetrik
- Meenakshi Dewan, Site Leader, HSBC
- Srikanth Reddy, CEO, Sonata-Software (Chairperson)
- Srinivas Prasad, MD, Philips
- Sunder, MD, L-Brands
- Vivek Subramaniam, Founder MD, Above & Beyond
- Avneesh Dubey, Qsometech



# Tamil Nadu & Kerala

- Hosting a Workshop on Design Thinking
- Organizing an HR Forum event on wellness
- Integrate emerging companies into BPM Council initiatives
- Session on Finance for CEOs
- Workshop on UX Design Solution Thinking
- Rolling out Reboot
- Helping tech enthusiasts get started on IoT
- Getting focused on Gender Diversity
- Rolling out the 87th Product Forum meet
- Session on Machine Learning
- Hackathon in Calicut
- Helping product companies to survive and thrive
- Sensitizing employers about gender needs
- Hosting a talk on TensorFlow
- Turning the spotlight on maternity benefits for CTS
- Master Class on B2B marketing
- Discussing the issue of moving beyond IT services
- Focusing on building Disability Confident Organizations
- Helping members focus on building robust product roadmaps
- Spot lighting Denmark and Australia
- Session on Big Data and Hadoop
- Making members aware of diversity issues
- Exploring the opportunities offered by Blockchain and Bitcoin
- Rolling out a Product Forum meet in Madurai
- Launching a Regional Council for Tamil Nadu
- Focusing on the Business Model Canvas
- Building awareness about the Model GST Law among CFOs
- Hosting a session on Compliance challenges for the IT-BPM industry
- Focusing on Test Automation and building tools and frameworks
- Examining the AI landscape
- Hosting a session on B2B markets
- Focusing on the role of Digital in the Healthcare sector
- Rolling out a NASSCOM Regional Council for Tamil Nadu meeting
- Spot lighting the entrepreneurial organization in a SMB Huddle
- Examining the trend of Cognitive Automation
- Holding a session on HR issues
- Hosting a meeting of the Regional Council for Tamil Nadu
- Covering matters related to the GIC market

## Council Members

- Sriram, MD & CEO, Integra Software Services Pvt Ltd.
- Sridharan, MD, S10 Healthcare Solutions
- Maran Nagarajan, Chairman & CEO, Kaar Technologies
- Raj Prakash G, CEO & MD, Zifo Technologies Pvt Ltd.
- Daniel Victor, MD, Vitae International Accounting Services Pvt Ltd.
- MV Subramanian, MD, Future Focus
- Sumitra Seshan, COO, Fifth Generation Technologies
- Ganesh Kumar, Director – Operations, Ajuba Solutions
- Ramakrishnamoorthy Venkatasubbu, Founder & Operations Head, Impiger Technologies
- George John, Founder & CEO, Kallos Solutions
- Madhavan P, Sr. VP, HCL Info Systems
- Mohan Krishna, President, e4e Healthcare Business Services
- Matthew Considine, MD, Athenahealth India
- Amit Chandra, MD, Williams Lea (India)

# Andhra Pradesh & Telangana

The region has over 250 members and a good ratio of active ones who participate in multiple sessions and workshops, apart from contributing to the growth of the eco-system.

The vision is to help in the creation of a positive, innovative and collaborative eco-system for the IT-BPM industry in the states of Andhra Pradesh and Telangana. The key objectives are to make the two states destinations of choice, especially in the area of new Digital Technologies and also establish them as aspirational start-up hubs in the country.

There are several Active Forums and Working Groups in the region besides the Regional Council for Telangana and AP. These include the:

- GIC Forum
- Product Working Group
- Engineering, R&D Forum
- HR Forum
- D&I Forum
- Sales and Marketing Special Interest Group (SIG)
- Business Excellence initiative

## Conducting events, sessions and workshops:

These initiatives are rolled out under four broad areas:

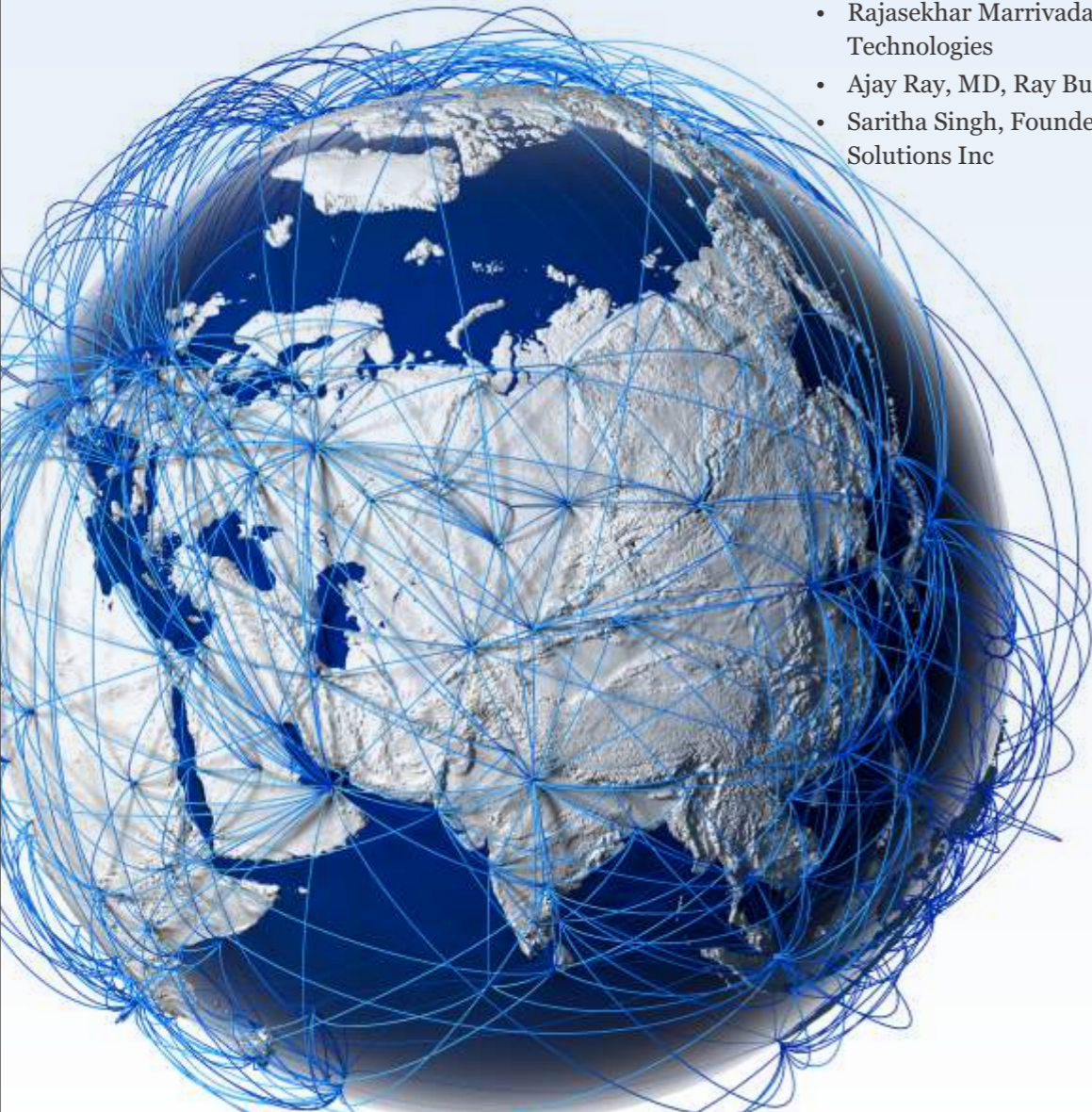
- Technology Series
- Operations Series
- Leadership Series
- Shared Services Series

In all, around 56 events (sessions/workshops/Forum meetings) were held from January to December, 2016, drawing a healthy participation from members across SMB and Enterprise categories as well as encouraging feedback from participants.

- Organizing a session on Design for Success
- Session on Data Analytics
- Launching an SIG on New Sales and Marketing
- Technology Workshops
- Discussing issues related to Budget 2016
- Hosting the IT Services Leadership Series Discovery workshop
- Organizing an IoT-CoE Connect Program
- One-day Product Connect workshop
- Rolling out a Hackathon
- Encouraging NASSCOM member companies to participate in tech events
- Hosting the TechNgage Challenge
- Holding an industry Engagement initiative in Vishakapatnam
- Exploring the issue of Performance Management
- Session on 'Design for success'
- Rolling out a Business Excellence Initiative
- Thought Leadership Series
- Spot lighting Denmark and Australia
- Organizing a Thought Leadership session with the Everest Group
- Facilitating a CEO Roundtable
- Webinar on Sales and Marketing
- Hosting a Master Class on Labor Laws
- Session on diversity
- Hosting the ICANN conference
- Hosting a session of the ER&D Forum
- A Risk Mitigation Series Session
- Organizing a GIC Leadership Talk session

## Council Members

- V Lakshmikanth, MD, Broadridge (Chair)
- Vijay Rangineni, Global Delivery Head, TechMahindra BSG (Co-Chair)
- Prakash Bodla, Executive Director & Head – HRDC, UTC
- Snigdha Ray, Head – Global Product & Technology, ADP
- Sessa Rao, MD – India Operations, Insideview Inc
- Sriram S R, Director - Human Capital, Arcesium India
- Bharani Aroll, Vice President, Butler America
- Nitya Nivali, Director – HR, Progress Software
- Sumesh Balakrishnan, Country Director – Finance India, Hitachi Consulting
- Darshana Pai, Sr VP – BFS, VirtusaPolaris
- Ramanand Puttige, Head – Business Fulfillment, Cyient Ltd.
- Rajasekhar Marrivada, AVP, Yash Technologies
- Ajay Ray, MD, Ray Business Technologies
- Saritha Singh, Founder & CEO, Inspire Solutions Inc







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