The NASSCOM-Infoholic Research report titled "Co-Innovation: Enterprise Start-up Collaboration" aims to highlight the key role that large corporations are playing in the current technological scenario to enable, promote and nurture tech startups in India. In this report, we have brought out the drivers in this collaborative landscape and suggested steps to accelerate them. We have also pointed out successful use cases across different industry verticals wherein enterprises have, in reality, have been collaborating with startups and generating innovative business ideas. Hope you enjoy reading this report.

Debjani Ghosh
President, NASSCOM

The NASSCOM-Infoholic Research report titled "Co-Innovation: Enterprise Start-up Collaboration" attempts to explore the collaborative efforts between enterprises and start-ups in the Indian technology landscape. The environment is writ with corporate initiatives and the need for startups to make a market entry with a well-established brand name. However, in the course of an engaging relationship, each step forward towards an innovation comes with its own set of challenges. How is it handled? This report helps to identify the individual role that enterprises and startups play to create a cohesive connect and nurture the technology start-up ecosystem in India.

KR Sreenivasan
CEO and Founder, Infoholic Research
Acknowledgement

This report has been co-developed by NASSCOM and Infoholic Research through a comprehensive three-month study to understand the Role of Enterprises Collaborating with Technology Start-ups in India.

The preparation of this report has been possible with information assistance from enterprises and Start-ups in India who have extended great help to the research team. We wish to sincerely thank all of them for their valuable contributions without which this report would not have been possible. Mentioned below are the names of the research team members that developed this report.

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Objective Of the Report

To explore:

- Collaboration modes of Enterprises and Start-ups
- Bottlenecks in collaboration; and suggested ways to overcome them
- Kind of support (in terms of mentorship, funding) rendered by Enterprises
- Industry verticals that are seeing more collaboration
- Technology areas that are witnessing enterprise – start-up collaboration
- How Start-ups perceive the process of collaboration, and underlying disconnect between Enterprises and Start-ups
- Interesting case studies of collaboration between Enterprises and Start-ups
Research Methodology

Sources Leveraged:
- Infoholic database of Enterprises and Start-ups across India
- NIPP Connect
- Media articles
- Global reports
- Inc42
- YourStory and other websites
Executive Summary

100% of surveyed Enterprises collaborate with Start-ups to create disruptive solutions and fuel innovation

20 Enterprises collaborated with 5-20 Start-ups each in the past 1 year

Artificial intelligence & Machine learning, IoT are the top technology focus areas for Enterprise Start-up collaboration

33% of surveyed Enterprises invest in Early stage and Growth stage Start-ups

70% of IT companies surveyed focus on Start-ups in the Validation and Scaling stage

More than 9 out of 10 surveyed Enterprises agree that senior management should overcome conventional ways of thinking and embrace open for a stronger Start-up ecosystem
Primary Findings – Collaborative Landscape
Enterprises collaborate with Start-ups for these benefits…

- 100% of surveyed Enterprises collaborate with Start-ups to create disruptive solutions and fuel innovation
- 94% of surveyed Enterprises have more openness to innovation and entrepreneurship
- 80% of surveyed Enterprises generate new revenue streams and business lines
- 76% of surveyed Enterprises have more focus on customers
- 59% of surveyed Enterprises have more innovative suppliers
- 55% of surveyed Enterprises stay on top of market developments

Illustrative logos: ABB, Bosch, CERIX, Qualcomm, REAP, Aerologiks, Oracle, Shell, Detect Technologies
Collaboration challenges faced by Enterprises

- Lack of maturity (business, way of doing business) - 69%
- Limited connect within the enterprise (internal collaboration) - 69%
- Uncertain outcomes - 62%
- Lost investment because of Start-up failure - 45%
- Leadership challenge - 45%
- Reputational damage - 34%

7 out of 10 Enterprises feel that ‘Ways of Doing business in Start-ups and Enterprises’ is a major collaboration challenge.

Disclaimer: Company logos are just illustrative, based on primary interviews and secondary research.
Enterprises usually invest extensively in promoting Tech Start-ups for…

- **Wipro's market reach and delivery capabilities with Evolven’s innovative technology enabled significant client satisfaction**
- **Enabling new customer experiences**
  - Wipro
  - Evolven

- **Co-innovating with customers on emerging themes**
  - Cisco
  - Evolven
  - Stride.ai

- **Providing the latest innovations to customers**
  - ABB
  - MineSense

- **Investing in MineSense, ABB is driving automation and productivity in the mining industry**

- **Enabling new customer experiences**
  - Siri
  - Teslon
  - Evolven

- **86%**
- **83%**
- **31%**

- **Shaping innovation culture by running several initiatives to support and fund ideas**
  - As a part of the Cisco LaunchPad, Cisco in its 1st cohort (Sep 2016-Jan 2017), supported Teslon, by finding the right product market fit and reach out to customers in a more streamlined approach

- **69%**

- **83%**
  - Co-innovating with customers on emerging themes

- **31%**
  - Building the in-house patent portfolio

- **90%**
  - Providing the latest innovations to customers

- **20 Enterprises collaborated with 5-20 Start-ups each in the past 1 year**

- **Stride.ai expects more financial services companies to be its clients**

- **Launched the beta phase of PayU Monedo to facilitate cardless EMI**

- **20 Enterprises collaborated with 5-20 Start-ups each in the past 1 year**
6 stage Start-up Development model…

<table>
<thead>
<tr>
<th>Stage</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideating</td>
<td>10%</td>
</tr>
<tr>
<td>Conceptualisation</td>
<td>14%</td>
</tr>
<tr>
<td>Committing</td>
<td>10%</td>
</tr>
<tr>
<td>Validation</td>
<td>41%</td>
</tr>
<tr>
<td>Scaling</td>
<td>62%</td>
</tr>
<tr>
<td>Established</td>
<td>34%</td>
</tr>
</tbody>
</table>

“We even help in the ‘Prototyping to Manufacturing’ stage” – pointed out Ashok Chandavarkar, Director - Strategic Initiatives, Intel Technology India Private Limited

70% of IT companies surveyed focus on startups in the Validation and Scaling stage
**Areas of Technology Focus**

- **Artificial Intelligence & Machine Learning**: 90%
- **IoT**: 72%
- **Big Data / Analytics**: 48%
- **AR & VR**: 48%
- **Cloud services**: 34%
- **Blockchain**: 38%
- **RPA**: 31%

- **Cisco**
- **ORACLE**
- **ABB**
- **INCREFF**
- **Imagin ate**
- **Squadcast**
- **xoxoday**

- **Amenity Analytics**

---

- **Most startups associated with Wipro** has some AI, ML, Cloud, Blockchain and RPA, Big data, AR&VR component to a varied extent.
- **Cisco** promoted at least 16 startups (AI, IoT, Big Data, AR&VR) as a part of Cisco LaunchPad in the past year.
- **Wipro and ABB** focuses on all 7 technology arms.
- **90% of Surveyed Enterprises** express the keenness to collaborate with Start-ups to provide latest innovations to customers in these 7 technology areas.

**Others**: Additive manufacturing, Cyber security, Edge/fog computing, Sensors, 3-D modelling, Energy.
Vertical Focus

Mahindra group promoted/encouraged/co-created 2 startups in the IT (Distilled Analytics) and BFSI (Rupee Circle) vertical in the past 1 year.

Other Emerging Verticals: Energy, Real estate, Transportation, Agriculture

Bosch focuses on IT, Manufacturing and Healthcare setting up collaborations AI & ML, IoT, and Blockchain.

ABB’s focus is mainly on IT, Manufacturing and Energy.

Target Corporation’s sole focus is Retail/Etail around AI & ML and RPA technology verticals.

Vodafone Idea is focusing on all 7 verticals, with specific focus on AI&ML, IoT, Big data, cloud Services and RPA.

SAP’s vertical focus is on IT, Healthcare and Education.

Cisco has been promoting healthcare startups right from their first cohort which started in Sep 2016; Teslon, Spectral Insights are few examples.
5 step mantra for a successful Enterprise Start-up collaboration…

The Team: Set-up for success – define the long term strategy, the team and KPIs

The Success Metrics: Jointly with the start-up define the success metrics and moving beyond POCs

The Skills: Build Open Innovation Skills – Senior Leadership to lead by example and sensitization programs across teams

The Alignment: Align Internal Units and define business outcomes for collaboration

The Business Model: Set the right expectation with the start-ups, the processes, the go to market plan. Trust and transparency is key

More than 9 out of 10 surveyed Enterprises agree that more support from senior management to embrace open innovation and let go conventional methods is essential for a stronger ecosystem.
Benefits for Start-ups collaborating with Enterprises

90% Success Story for Future Sales
- Introduction to Clients
- Mentorship
- Investment

77% Scalable Customer Base
- Uncanny Vision
- Technological collaborations
- Building new platforms

63% Revenue and Independence from External Capital
- Digital Agents Interactive
- Revenue Streams
- Knowledge of Business Problems

60% Market Knowledge and Mentoring
- Phrase Insights from data, in words.
- Genuine feedback
- Making product ready for market

50% Attractive Retail Sales Channel
- Artivatic
- Domain knowledge
- Go to market strategies
- Product completion / validation credibility

27% Riskless Internationalization
- Billion Loans
- Mentoring
- Innovative ideas
### Collaboration challenges faced by Start-ups and steps taken to overcome them…

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Percentage</th>
<th>Recommended Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Way of doing business</td>
<td>77%</td>
<td>Everyone in the collaborative landscape should be on the same page with regard to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the direction of the partnership</td>
</tr>
<tr>
<td>Limited connect within the</td>
<td>64%</td>
<td>Nurture digital transformation in the entire organisation in an end-to-end manner</td>
</tr>
<tr>
<td>enterprise (internal collaboration)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncertain outcomes</td>
<td>57%</td>
<td>Run pilot projects to promote innovation</td>
</tr>
<tr>
<td>Leadership challenge</td>
<td>47%</td>
<td>Blend of bottom-up leadership and top-down guidance</td>
</tr>
</tbody>
</table>
Steps to be adopted by Enterprises to successfully collaborate with Start-Ups

- **Collaborative innovation approach with robust senior management support**: 90%
- **Align individual business units with collaboration outcomes**: 97%
- **Readiness from senior management to overcome conventional and tested ways of thinking**: 90%
- **Trade-off between short-term interest and long-term benefits of an investment strategy**: 100%
- **Sensitize the organization to take collaborative approaches seriously and render adequate support to the projects**: 100%
Enterprises usually invest in these Start-up stages…

<table>
<thead>
<tr>
<th>Stage Description</th>
<th>17%</th>
<th>33%</th>
<th>33%</th>
<th>17%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seed Stage (less than USD 1 mn investment)</td>
<td>Intel</td>
<td>ABB (Stellapps, Softrobotics)</td>
<td>ABB (Minesense, Automata)</td>
<td>Accenture (Docker)</td>
</tr>
<tr>
<td>Early Stage (USD 1-5 mn investment)</td>
<td>Mphasis</td>
<td>Brigade REAP (QwikSpec, Snaptrude)</td>
<td>Accenture (Maana, Malong)</td>
<td>Mahindra Group (Zoomcar)</td>
</tr>
<tr>
<td>Growth Stage (USD 5-20 mn investment)</td>
<td>Philips</td>
<td>Mahindra Group (Distilled Analytics, Rupee Circle)</td>
<td>Mahindra Group (Porter)</td>
<td>Mphasis</td>
</tr>
<tr>
<td>Expansion Stage (greater than USD 20 mn investment)</td>
<td>Shell</td>
<td>Mphasis</td>
<td>Philips</td>
<td>Philips</td>
</tr>
<tr>
<td></td>
<td>PayU</td>
<td>Philips</td>
<td>Shell</td>
<td>Shell</td>
</tr>
<tr>
<td></td>
<td>Philips</td>
<td>Shell</td>
<td>Société Généralé</td>
<td>Times Internet (Byju’s)</td>
</tr>
<tr>
<td></td>
<td>Shell</td>
<td>Wockhardt</td>
<td>Wockhardt</td>
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<td></td>
<td>Wipro</td>
<td>Wipro</td>
<td>Wipro</td>
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<tr>
<td></td>
<td>Times Internet (inShorts, Happay, Datavewave, Partilipi)</td>
<td>Times Internet (Spoyl, Voonik, Vidooly)</td>
<td>Times Internet (Myra, Shuttl)</td>
<td></td>
</tr>
</tbody>
</table>
Collaboration modes that Enterprises adopt…

Corporate Ventures / Internal VC fund
- Qualcomm Ventures to drive innovation forward
- Shell Ventures to disrupting the global energy system
- ABB Technology Ventures $200 million investments till date in startups
- Philips Health Technology Ventures to improve health of 3 billion people by 2020

Accenture
- Accenture Digital Hackathon to create idea sharing platform and experiment with latest technologies, innovations
- The Axis Bank AI challenge to promote innovation through ideation, Prototyping, Finale

AXIS BANK
- Hackathons to reinvent banking relations for the digital age: Since 2014 – 15 hackathons, 6 Meetups, 13 communities, 10 Learning Experiences

SOCIETE GENERALE
- Hackathons & ideathons to create an open innovation scenario and address customer problems

BOSCH
- Bosch KitCat Hackathon launched in 2017 in Bangalore to explore new ways of training algorithms

PHILIPS
- Hackathons / Internal crowd sourcing

Co-Creation / work or partner with other GCC’s
- Capgemini
  - Leveraging technology leadership, it aligns with partner’s innovation addressing specific customer needs
- AXIS BANK
  - Collaborating with prominent technology leaders to build a growth facility, offering expert guidance
- PayU
  - Arranging series of events - Startup masterClass to reach out to start-ups and SMEs as part of its India Growth Drivers initiative
- PHILIPS
  - HealthSuite Labs co-creation center opened in 2015 to spur digital healthcare innovation

ABB Startup Programs
- Incubator program
- Startup showcase/pitch fest day for internal organization
- Partnered with ecosystem players such as university incubators, research parks, governmental organisations
Collaboration modes that Enterprises adopt...

**Incubators/Accelerators**

- **Societe Generale**
  - Launch of Global Markets Incubator on 1 Oct 2018 to strengthen Fintech ecosystem

- **Bosch**
  - Ready Start-up Kit launched by Vodafone India on September 2017 to assist Indian start-ups in their innovation journey

- **PHILIPS**
  - The 12-week ‘AI in Healthcare for Radiology, Ultrasound and Oncology’ programme launched by Philips in October 2018

**Capgemini**

- Capgemini and Startupbootcamp join forces in Innovation and Technology Program to provide consulting, mentoring and qualification guidance to startups; engagement with tech incubator T-Hub

**SAP**

- SAP Startup Focus merged with SAP PartnerEdge – the flagship partner engagement program of the company. Range of accelerators & incubators onboard

**Brigade Reap**

- Brigade Reap Accelerator Program inks partnerships with the academia and global technology companies to identify trends, issues and challenges

**AXIS BANK**

- Thought Factory - Innovation hub in Bengaluru works closely with the startup community to redefine banking in the digital era

**ABB**

- Heavy collaborations with global universities; global R&D lab has 9 programs focusing on control and communication technologies to switching technologies and power electronics

**Mindtree**

- Partnership with IIT Madras to establish an endowed faculty fellow position in Data Science and AI

**Mphasis**

- NEXTlabs collaborate with internal stakeholders, leading academia, start-ups, and technology partners to craft innovative client solutions

**Societe Generale**

- The 10-week global accelerator program – Catalyst showcased innovative creations from 20 startups in the 2018 program; the program initiated in 2015 spanning 16 countries

**Wipro**

- Partnership for joint research between Wipro and Ramot - the Business Engagement Center at Tel Aviv University to pursue core and applied research in the AI space

**Target**

- Target accelerator program designed to help Gen Z entrepreneurs nurture

**Ideations through external sources/academia/individuals**

- Start-up Day Events inviting partner start-ups to showcase capabilities to senior teams and few exclusive customers.
- Inviting start-ups in speaking events and hackathons.
- Working with academia incubators to encourage start-ups.
Collaboration modes that Enterprises adopt... (Illustrative)

**CoE Innovation**

A CoE comprises skilled resources in the specific domain and is aligned with the charter of driving innovation best practices.

- **ABB**
  - ABB Smart Grid Center of Excellence in Raleigh, NC launched in 2010 to demonstrate ABB’s technology and investment.

- **HPE and Intel**
  - HPE India and Intel launched a CoE in 2016 to demonstrate High Performance Computing (HPC)-as-a-service for customers; enable research institutions and academia to test their applications and accelerate HPC adoption in India.

- **Accenture**
  - Accenture Digital Center of Excellence provides an apt environment for clients to test real-world solutions and insight-driven strategies; possible to engage with industry experts, Accenture points of view and research materials.

- **Qualcomm**
  - Qualcomm Design in India Challenge started in 2016 to encourage design houses and product companies to invent useful and innovative hardware product designs; access to Qualcomm Innovation Labs in Bangalore and Hyderabad.

- **Kotak**
  - Hosts events like Start-up Day where it invites partner start-ups to showcase their capabilities to the senior teams and few exclusive customers.

- **Capgemini**
  - Launched Mobile Testing Center of Excellence in Mumbai; to operate as a hub for Mobile Testing services globally.

- **Societe Generale**
  - Societe Generale has held four editions of the Catalyst programme; 2018 witnessed the largest participation from areas such as AI & ML, BOTS, Augmented Reality, Virtual Reality, Compliance and Automation.

- **Thought Factory**
  - Thought Factory – the Axis Bank Innovation Lab launched in 2016 to drive FinTech innovation; helping start-ups to expand, opening up avenues with investors and companies; successfully mentored 6 start-ups - S2Pay, Pally, Perpule, FintechLabs, Paymatrix and Gieom.

**Mahindra Center for Emerging Technologies**

- Mahindra TERI CoE for Sustainable Habitats - a joint research initiative of Mahindra Lifespaces and TERI launched in June 2018; to develop science-based solutions to reduce energy footprint of the real estate industry.

- Launch Open Data Center – CoE with the theme Software Defined Infrastructure in 2015 to build, integrate, test and demonstrate customer aligned SDI solutions.

**Startup Programs**

- Mahindra Center for Emerging Technologies to track new technologies, help pilot with startups, invest in them. Runs several startup to fund growth stage startups.
Large organizations – Small Start-ups: The effective equation
First Collaboration with start-up
Since 2011, Wipro had enabled extensive collaboration with ‘Splunk’ which is now a leader in log analysis and machine data analysis. The focus was to have innovative partner who can do powerful log analysis to enable Wipro teams to provide robust IT infrastructure to its clients.

Earmarked investment amount for benefitting Start-ups
Through Wipro Ventures, which has a rolling fund of about 100 million USD, around 5-6 startups investments are made in any financial year. As part of Verticals and Practices engagements with various startup partners, there are experiments, POCs, Solution Integrations that consume parts of its R&D budgets. It is however not measured centrally, beyond the Business Unit funding level.

Legislative landscape and government support
Through the Open innovation initiative of Wipro, it worked with several international trade bodies, embassies and consulates, industry representations like NASSCOM, CII and investment firms globally. Location based start-up accelerators and funding initiatives were helpful in assessing, discovering relevant start-ups. Government initiatives are high-level levers to drive innovation and more pointed approaches are needed by start-ups to scale.

Start-up Programs
- Startex – Highly impactful direct connect program between Wipro customers and curated set of startups relevant to clients’ business
- Wipro Ventures investments
- NIPP Program participation to encourage NASSCOM 10k startups and support with customer access
- iLaser – Innovation lab as a service, as part of which niche solutions / skills were offered to customers as a way to experiment with emerging tech startups, while being supported by Wipro tech and domain SMEs

Start-up Co-created in past 1 Year
More than 15

Start-up Co-created in past 5 Years
More than 100

Technology Focus
IoT, Artificial Intelligence & Machine Learning, Big Data / Analytics, AR & VR, BlockChain, Cloud Services, RPA
Start-up investment amount for 2017 and 2016
Qualcomm gave $400,000 in prize money (cash award without equity stake) in 2016 and $440,000 in 2017 and few million $s in creating innovation Labs and staffing engineers to support these start-ups.

First Collaboration with start-up
Qualcomm India started the Qualcomm Design in India Challenge in 2016.

Value add received from Start-ups
Many of the Start-ups use Qualcomm SoC solutions for their hardware, some of them have provided incremental business to Qualcomm.

Start-up Co-created in past 1 Year
15 Start-ups encouraged and promoted in the areas of med tech, Agri-Tech, Fin-Tech and Smart infra.

Start-up Co-created in past 5 Years
39 start-ups encouraged and promoted including this year.

Legislative landscape and government support
Right now the environment seems very favourable for start-ups with government and taking many initiatives for promoting and ensuring tech start-up success.

Technology Focus
IoT, Artificial Intelligence (AI), Machine Learning

Vertical Focus
Healthcare, Telecommunications, Agri-tech

Start-ups
Uncanny Vision, IntuVision, sensara, stellapps, TagBox
First Collaboration with start-up
Oracle Global Start-up Ecosystem was started in mid 2016. Tech Startups with Cloud based solutions were selected

Value add received from Start-ups
Start-ups continually use Oracle Cloud Services and provide feedback on the various offerings, which is on passed on to the product teams

Start-up Co-created in past 1 -2 Year
40 start-ups (in last 1 year)
50 start-ups over the last 2 years

Legislative landscape and government support
Legislative Landscape constantly changing and adopting to needs of start-ups
Oracle does not take any support from Government

Technology Focus
Artificial Intelligence, IoT, Machine Learning, Big Data / Analytics, AR & VR, Cloud Services, Robotic process automation(RPA)

Vertical Focus
Information Technology, BFSI, Manufacturing, Healthcare, Retail, Telecom, Education.

Start-up Programs
Residential Program - 6 month
Non Residential Program - Continual Engagement

Start-ups
First Collaboration with start-up
Mahindra Group has been working with start-ups since long. The earliest is REVA in 2009 which was an EV upstart by Chetan Maini. Today REVA is Mahindra Electric.

Value add received from Start-ups
Launch of innovative customer experiences like VR demos of cars at Mahindra showrooms or at customer premises. Launch of new type of financial products etc.

Earmarked Investment amount for benefitting Start-ups
There are internal corporate venture funds set up as well as budgets for innovative pilots. The funds are set for 5 year term, and pilot budgets are part of R&D percentage.

Start-up investment amount for 2017 and 2016
More than 30 Crore each year

Start-up Co-created in past 1-5 Years
2 Start-ups in 1 year and more than 5 in past 5 years

Technology Focus
Artificial Intelligence, IoT, Machine Learning, Big Data / Analytics, AR & VR, Cloud Services and Blockchain.

Vertical Focus
Information Technology, BFSI, Manufacturing

Start-up Programs
Mahindra Center for Emerging Technologies has been set up by Mahindra Group that helps track new technologies and help pilot with start-ups and use start-ups for products or to invest in them. Mahindra Group also has several start-up funds that invest in growth stage start-ups

Start-ups
...
Is there an earmarked investment amount for each year that is utilised for benefitting Start-ups?
They have a fund adjunct to the program and fund only select startups from the cohort. They invest anywhere between US$50k - $100k. There is no specific measurement set up for the amount of funding, but purely on the startups potential scalability and growth.

First Collaboration with start-up
The 1st cohort in the accelerator program went live in October 2016.

Value add received from Start-ups
The start-ups who have had businesses from Brigade have added value in terms of saving time and cost for projects that has a direct impact on the bottom-line of the company.

Earmark Investment Amount each year
Brigade invests anywhere between US $50k - $100k.

Technology Focus
IoT, Big Data / Analytics, AR & VR and 3D Modelling.

Vertical Focus
Retail/E-tail and Real Estate

Start-up Programs
Brigade runs a Accelerator programs focussed on Real Estate Tech to help start-ups scale and grow their business.

Start-up Co-created in past 1-5 Years
18 Start-ups
Start-up Programs

Incubator programs, Startup showcase/pitch fest day for internal organisation, partnered with ecosystem players such as university incubators, research parks, governmental organisations.

First Collaboration with start-up

The corporate venture capital arm started in 2009. It partners with startups that are strategically aligned with ABB.

Value add received from Start-ups

Current startup engagements have led to joint product development, go-to market, access to new business markets, technology innovation etc.

Vertical Focus

Information Technology, Manufacturing, Energy

Start-ups Co-created in past 1 Year

ABB directly invested in one startup in India this year. Apart from that, there are various other startup collaborations happening in the organisations (in India and globally).

Technology Focus

IoT, Artificial Intelligence, Machine Learning, Big Data / Analytics, AR & VR, Cloud Services, BlockChain, RPA, Additive manufacturing, cybersecurity, edge/fog computing, sensors

Start-ups

[Images of Start-ups]
Start-up Programs

Cisco LaunchPad by mentoring on varied areas including business and technology

First Collaboration with start-up

Cisco LaunchPad began in 2016 in Bangalore. Cisco has been working in M&A with startups since much earlier in the US

Value add received from Start-ups

Enhancement to application portfolio

Vertical Focus

Information Technology

Start-ups Co-created in past 1 Year

At least 16 promoted as part of Cisco LaunchPad

Start-ups Co-created in past 5 Years

At least 32 as part of Cisco LaunchPad

Technology Focus

IoT, Artificial Intelligence, AR & VR, BlockChain

Start-ups
Semiconductor manufacturing company

First Collaboration with start-up
Started in 2016

Value add received from Start-ups
Better ecosystem connect
Learnings from startups

Legislative landscape and government support
It can only get better. There are a lot of initiatives at the plan stage, however, there needs to be an equal vigour at the implementation stage

Start-up Co-created in past 1 Year
15 Start-ups encouraged and promoted in the areas of med tech, Agri-Tech, Fin-Tech and Smart infra.

Start-up Programs
Intel India Maker Lab program, Plugin program

Start-up Co-created in past 1 Year
15

Start-up Co-created in past 5 Years
45

Technology Focus
IoT, Artificial Intelligence, Machine Learning, Big Data / Analytics, AR & VR, BlockChain

Vertical Focus
Manufacturing, Retail/E-tail, Healthcare, Transportation
Private banking company

First Collaboration with start-up

Has a dedicated team for Fintech collaboration which started 2 years ago. It has gone live with above 50+ start-ups.

Value add received from Start-ups

Benefits are both on the technology (AI, Blockchain) as well as business side (lending and payments)

Start-up Programs

Kotak co-creation program, Innovation lab

Start-ups Co-created in past 2 Years

15 Start-ups encouraged and promoted in the areas of med tech, Agri-Tech, Fin-Tech and Smart infra.

Technology Focus

Artificial Intelligence, BlockChain

Vertical Focus

BFSI

Start-ups

Bankchain

Invezo

ACTIVE.AI

Rockmetric
First Collaboration with start-up

Started the start-up focus from 2016, with key focus on Retail, CPG, Cybersecurity, Image recognition, automation

Value add received from Start-ups

- New business models especially outcome-based
- Automation
- Larger solution having pre-build start-up solution

Earmarked Investment amount for benefitting Start-ups

It's all value created based investment

Start-up Programs

Co-created solutions and presented to customers, Presented startup solutions to customers

Start-up Co-created in past 1 Year

At least 15 startups.

Start-up Co-created in past 5 Years

At least 25 startups

Technology Focus

Artificial Intelligence, IoT, Machine Learning, RPA

Vertical Focus

Information Technology, BFSI, Manufacturing, Retail/E-tail
Oil industry company

First Collaboration with start-up
Shell has been working in open innovation for over 20 years, involved with startups for a long time.

Earmarked investment amount for benefitting Start-ups
Yes, many programs across the company

Legislative landscape and government support
Legislative landscape can use improvements. Establish better IP capabilities, cheaper to file, easier to enforce. Easier contract structures for investing in startups, particularly around options for equity such as warrant but with less restrictions (time, minimum investment amount) than current warrants. Open up regulations to allow startups to develop new areas such as electric mobility and grids of the future. Right now regulation makes key areas difficult.

Start-up Co-created in past 1 Year
Directly worked to develop 16 in India, many more worldwide

Start-up Programs
Intel India Maker Lab program

Start-up Co-created in past 1 Year
15

Start-up Co-created in past 5 Years
45

Technology Focus
IoT, Artificial Intelligence, Machine Learning, Big Data / Analytics, AR & VR, BlockChain

Vertical Focus
Manufacturing, Retail/E-tail, Healthcare, Transportation
## Acknowledgement

<table>
<thead>
<tr>
<th>Company</th>
<th>Person Interviewed</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnson &amp; Johnson</td>
<td>Venkatraman C K</td>
<td>Business Technology Leader , IT Director</td>
</tr>
<tr>
<td>kotak Mahindra Bank</td>
<td>Venkat Kumar</td>
<td>Vice President, Inventor, Head of Innovation Labs &amp; Fintech Collaborations</td>
</tr>
<tr>
<td>Mphasis</td>
<td>Deepa Nagraj</td>
<td>Global Head - Sparkle Innovation Ecosystem</td>
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<tr>
<td>SAP</td>
<td>Mohammed Anzy S</td>
<td>Vice President</td>
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<tr>
<td>Mahindra Rise</td>
<td>Rohit Pandharkar</td>
<td>Head of Data Sciences</td>
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<td>Wockhardt</td>
<td>Rajaram Bhat</td>
<td>DGM - HR &amp; HR Technology</td>
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<td>Qualcomm</td>
<td>Pushkar Apte</td>
<td>Associate Director, Business Development</td>
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<tr>
<td>Mindtree</td>
<td>Sanjeev Babel</td>
<td>Associate Vice President</td>
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<td>Siemens</td>
<td>Praneet Mendon</td>
<td>Manager Corporate Communications</td>
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<tr>
<td>accenture</td>
<td>Muralidharan Chandra</td>
<td>Sr Principal Accenture Ventures</td>
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<tr>
<td>cisco</td>
<td>Sruthi Kannan</td>
<td>Lead - Cisco LaunchPad</td>
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<tr>
<td>Jindal Steel &amp; Power</td>
<td>Rajesh Kumar</td>
<td>Head - Group IT</td>
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<tr>
<td>Shell</td>
<td>James Unterreiner</td>
<td>GM Shell E4 Start-up Hub</td>
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<td>BRIDGEGAP REAP</td>
<td>Rajeev Nair</td>
<td>Head - Operations</td>
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<td>AXIS BANK</td>
<td>Isha Bhatnagar</td>
<td>Co-founder, Thought Factory, Axis Bank Innovation Lab</td>
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<tr>
<td>Intel</td>
<td>Ashok Chandavarkar</td>
<td>Director - Strategic Initiatives</td>
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<tr>
<td>bookmyshow</td>
<td>Mitesh Shah</td>
<td>Head of Finance</td>
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<tr>
<td>ABB</td>
<td>Hina Garg</td>
<td>Investment Analyst</td>
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<td>TARGET</td>
<td>Ravi Kanniganti</td>
<td>Director</td>
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<td>Capgemini</td>
<td>Satishchandra Nayak</td>
<td>Senior Director</td>
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<tr>
<td>Oracle Global Startup Ecosystem</td>
<td>Rahul Gupta</td>
<td>Investments &amp; Portfolio Manager</td>
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<tr>
<td>Pavan Cheruvu</td>
<td></td>
<td>Oracle Global Startup Ecosystem - Program Director</td>
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### Enterprises

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<tbody>
<tr>
<td>Wipro</td>
<td>G S Nathan/Ramanan Sambukumar</td>
<td>GM &amp; Head Innovation/Head - Open Innovation &amp; Wipro Ventures</td>
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<tr>
<td>PayU</td>
<td>Mayank Garg</td>
<td>Chartered Accountant</td>
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<tr>
<td>BOSCH</td>
<td>Debasis Goswami</td>
<td>Head Start-up Engagement</td>
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<tr>
<td>PHILIPS</td>
<td>Kedar Medhi</td>
<td>Director - Philips Innovation Campus</td>
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<td>Societe Generale</td>
<td>Christophe Duprat</td>
<td>Head of Innovation</td>
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<tr>
<td>Vodafone</td>
<td>Govindaraj Avasarala</td>
<td>Vice President - Strategy and Sales Enablement</td>
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<tr>
<td>Amdocs</td>
<td>Anjan Biswas/ Rajarshi Chakravorty</td>
<td>India Innovation Lead /Centre Head, Amdocs Development Center</td>
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<tr>
<td>WeLab</td>
<td>Kanwal Rai</td>
<td>Vice President Innovation</td>
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### Start-ups

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<thead>
<tr>
<th>Company</th>
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<tbody>
<tr>
<td>Altizon</td>
<td>Abhijit Mhetre</td>
<td>VP Marketing</td>
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<tr>
<td>bevendee</td>
<td>Layak Singh</td>
<td>Founder &amp; CEO</td>
</tr>
<tr>
<td>billion loans</td>
<td>Irfan Ahmed</td>
<td>Co-founder</td>
</tr>
<tr>
<td>Krishnamurthy N</td>
<td>Vice President</td>
<td></td>
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<tr>
<td>Mohit Ramani</td>
<td>CEO</td>
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<tr>
<td>FINTECH LABS</td>
<td>Vipul Rawal</td>
<td>Co-founder</td>
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<tr>
<td>FluidAI</td>
<td>Raghav Aggarwal</td>
<td>Co-founder</td>
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<tr>
<td>Gold Farm</td>
<td>Abhilash Thirupathy</td>
<td>Co-founder</td>
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<tr>
<td>haptik</td>
<td>Shubham Bagri</td>
<td>Marketing and Communications</td>
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<tr>
<td>Porter</td>
<td>Vikas Choudhary</td>
<td>Co-Founder and CTO</td>
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<tr>
<td>racetrack</td>
<td>Subrat Parida</td>
<td>Founder &amp; CEO</td>
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<tr>
<td>Stellapps</td>
<td>Prasanna Ramachandran</td>
<td>Presales Manager</td>
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</tbody>
</table>

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Acknowledgement

Company Person Interviewed Designation

Abhijit Mhetre VP Marketing
Layak Singh Founder & CEO
Irfan Ahmed Co-founder
Krishnamurthy N Vice President
Mohit Ramani CEO
Vipul Rawal Co-founder
Raghav Aggarwal Co-founder
Abhilash Thirupathy Co-founder
Shubham Bagri Marketing and Communications
Vikas Choudhary Co-Founder and CTO
Subrat Parida Founder & CEO
Prasanna Ramachandran Presales Manager
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<td>Stride</td>
<td>Vijay Nadadur</td>
<td>Co-Founder &amp; CEO</td>
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<td>Tagflow Solutions</td>
<td>Saumitra Singh</td>
<td>Co-Founder</td>
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<tr>
<td>techforce.ai</td>
<td>Sahil Gupta</td>
<td>Director – Global Business Development and Partnerships</td>
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<td>vPhrase</td>
<td>Kevin Shah</td>
<td>Solutions Consultant</td>
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<td>xoxoday</td>
<td>Mahendra Rathod</td>
<td>VP Business Strategy &amp; Operations</td>
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<td>GIEOM</td>
<td>Pooja Singh</td>
<td>Product Marketing Lead</td>
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<td>Bridge12i</td>
<td>Naveen Prabhu</td>
<td>Practice Head, Digital Transformation &amp; Head, Business Development, APJ</td>
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<td>ToneTag</td>
<td>Kumar Abhishek</td>
<td>CEO &amp; Co-Founder</td>
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<td>Zenatix</td>
<td>Vishal Bansal</td>
<td>Co-founder and COO</td>
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<td>Uncanny Vision</td>
<td>Ranjith Parakkal</td>
<td>CEO</td>
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<td>INSIGHT JEDI</td>
<td>Swarna Kumar Vallabhaneni</td>
<td>Co-Founder</td>
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<td>Yottaasys</td>
<td>Arun Pandey</td>
<td>CEO and Founder</td>
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<td>Scalend</td>
<td>Ravi Madhira</td>
<td>CEO</td>
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<tr>
<td>PERPULE1PAY</td>
<td>Noumaan Wajid</td>
<td>Analyst, Key initiatives</td>
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<td>senseforth</td>
<td>Ritesh Radhakrishnan</td>
<td>CTO</td>
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<td>Niramai</td>
<td>Nidhi Mathur</td>
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<td>Ankit Mehta</td>
<td>CEO &amp; Co-Founder</td>
</tr>
<tr>
<td>PALESTU</td>
<td>Bindu Sagadevan</td>
<td>Founder and Director</td>
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About NASSCOM

NASSCOM is the industry association for the IT-BPM sector in India. A not-for-profit organization funded by the industry, its objective is to build a growth led and sustainable technology and business services sector in the country. Established in 1988, NASSCOM’s membership has grown over the years and currently stands at over 2,500. These companies represent 95 percent of industry revenues and have enabled the association to spearhead initiatives and programs to build the sector in the country and globally. NASSCOM members are active participants in the new global economy and are admired for their innovative business practices, social initiatives, and thrust on emerging opportunities.

About NIPP

The NASSCOM Industry Partnership Program (NIPP) is India’s largest industry backed corporate innovation program. It seeks to foster sustained engagement between large corporations and innovative technology ventures in India. This nationwide initiative is industry agnostic and focusses on fostering a culture of open innovation through strategically aligned, curated connects. The program operates on a collaborative model of participation, and includes mentorships, workshops and design reviews by experts, in addition to long-term commitments, events and annual meetings. All this, along with our association with Fortune 500 companies & global innovation leaders provides an ecosystem for innovation, like no other.
Thank You