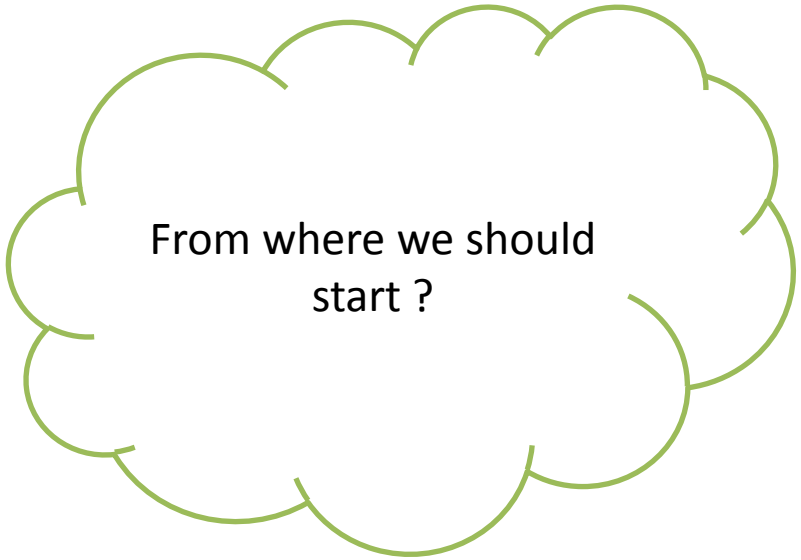
Companies
Unit 2

Lecture 1


How you can start a company ?


Is there any law in India related to companies?


From where we should start ?

- COMPANY ACT
- Started in→1956. (company act , 1956)
- Need →enabled companies to be formed by registration, sets out the responsibilities of companies, their directors and secretaries and also provides for the procedures for its winding
- Till a date two new act passed by INDIAN government
- Company act 1956→ company act , 2013→ company act 2017

Structural Comparison

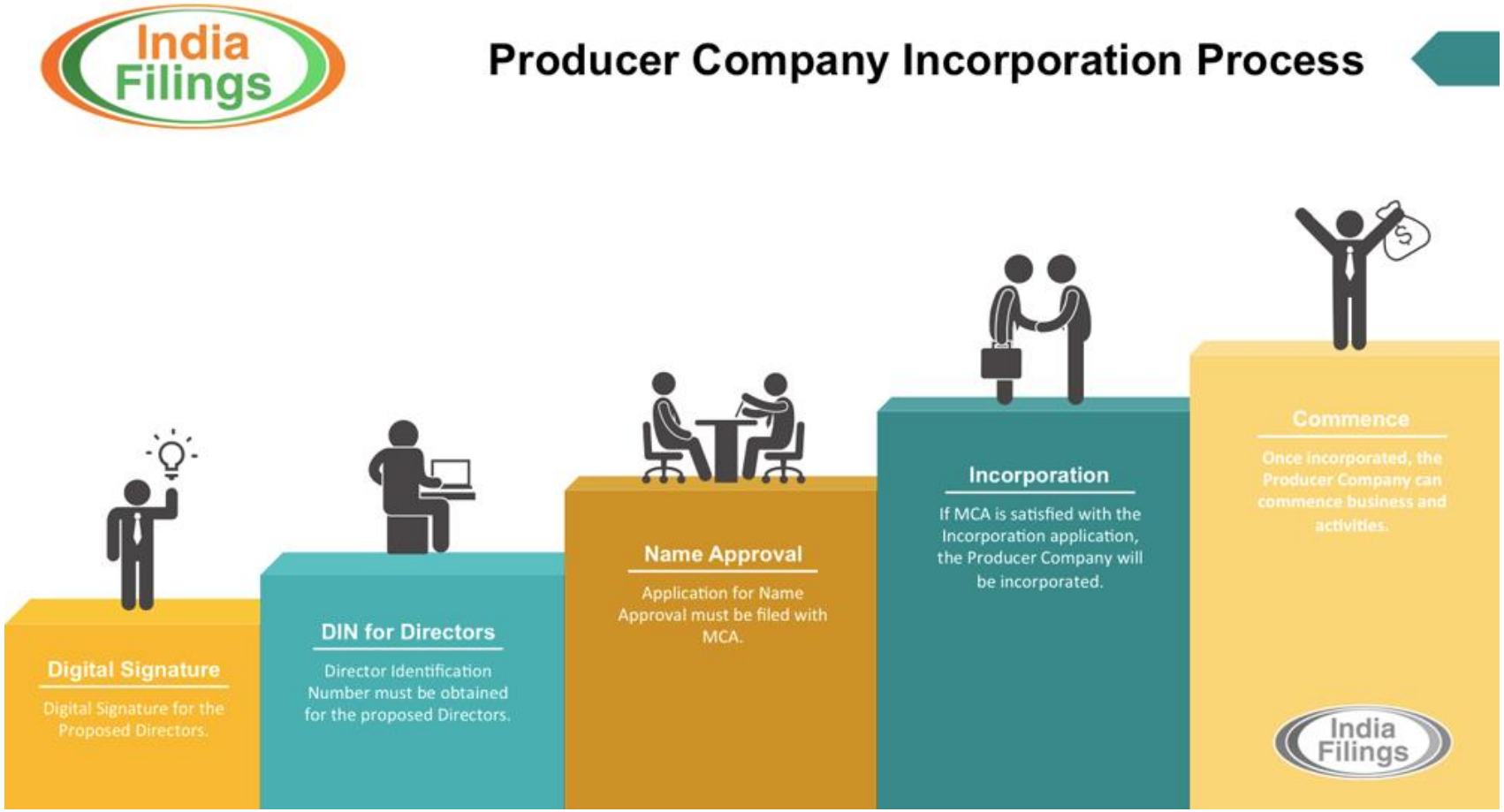
Companies Act 1956	Companies Act 2013
13 Parts	29 Chapters
658 Sections And 15 Schedules	470 Sections And 7 Schedules

Highlights

- Companies Act 1956 explains about the whole procedure of

✓ How to form a company
✓ Its fees procedure,
✓ Name
✓ Constitution,
✓ Its members,
✓ The motive behind the company,
✓ Its share capital,
✓ Its general board meetings
✓ Management and administration of the company including an important part which is the directors as they are the decision makers and they take all the important decisions for the company their main responsibility and liabilities about the company matter the most.
✓ The Act explains about the winding of the business as well and what happens in detail during liquidation period.

Process to start a company



Process to start a company

Step 1: DSC

- The Information Technology Act, 2000 provides for use of Digital Signatures on the documents submitted in electronic form in order to ensure the security and authenticity of the documents filed electronically
- **Names of Certification Agency (CA) from where DSC can be acquired are** MTNL CA, TCS, IDBRT, SAFESCRYPT (SATYAM), nCODE Solutions, NIC, Central Excise & Customs

Step 2: Acquire Director Identification Number

- The concept of a Director Identification Number (DIN) has been introduced for the first time with the insertion of Sections 266A to 266G of Companies (Amendment) Act, 2006. As such, all the existing and intending Directors have to obtain DIN within the prescribed time-frame as notified.

Step 3: Register DSC

- Third step is to register DSC of the person authorized to sign E-forms on MCA21

Step 4: Apply for Reservation of Name [S.4(4)]

As per section 4(4) of Companies Act, 2013 read with rule 9 of Companies Incorporation Rules, 2014, application is to be made to registrar for reservation of name. 6 names can be proposed after checking its availability at MCA21 and as per guidelines given in the said rules

Process to start a company

Step 5: <u>Drafting and Printing of Memorandum and Articles of Association</u>

After ascertaining name availability from the Registrar of Companies steps should be taken to get the memorandum and articles of association for the proposed company drafted and printed. The memorandum of a company limited by shares shall be in Tables – A in Schedule – I of the Companies Act, 2013.

If the promoters plan to get the securities of the proposed company listed with one or more designated stock exchanges, it is advisable to send the draft of the memorandum and articles of association to those stock exchanges for their scrutiny and suggestion to the effect whether they would like to have certain articles incorporated therein in compliance with the provisions of the Listing Agreements of the stock exchanges.

Step 6: <u>Filing of Company Incorporation form – eform INC 7, DIR 12 & INC 22</u>

- As per Rule-12 of Companies (Incorporation) Rules, 2014, application for incorporation of a private and Public company, with the Registrar, within whose jurisdiction the registered office of the company is proposed to be situated, shall be filed in Form no. INC 7 [Rule 12 to 18] along with Form no. INC.22 for situation of registered office of the Company, (as the case selected in form no. INC 7) and DIR -12.

<u>Note</u>:

- Form is required to be filed within 60 days as the name is reserved only for this time period.
- Stamp Duty is payable online as it exceeds Rs. 100/-
- **If you have to file INC 22 with INC 7, then:**

Step 7: <u>Filing of Commencement of Business – eform INC 21</u>

- On registration, a company cannot commence business or exercise any borrowing powers until it files a declaration by directors in Form INC – 21 to the effect hat every subscriber to the memorandum has paid the value of the shares agreed to be taken by them as specified in section 1(1)(a).
- E-form INC.21 is required to be filed with concerned Registrar of Companies for obtaining approval for commencement of Business and exercise of borrowing powers. This E-form is required to be filed by all companies incorporated under Companies Act 2013.

Difference between MOA AND AOA

BASIS FOR COMPARISON	MEMORANDUM OF ASSOCIATION	ARTICLES OF ASSOCIATION
Meaning	Memorandum of Association is a document that contains all the fundamental information which are required for the incorporation of the company.	Articles of Association is a document containing all the rules and regulations that governs the company.
Defined in	Section 2 (56)	Section 2 (5)
Type of Information contained	Powers and objects of the company.	Rules of the company.
Status	It is subordinate to the Companies Act.	It is subordinate to the memorandum.

Step 5

TABLE –A

MEMORANDUM OF ASSOCIATION OF A COMPANY LIMITED BY SHARES

1st The name of the company is ''.....Limited / Private Limited''.

2nd The registered office of the company will be situated in the State of.....

3rd (*a*) The objects to be pursued by the company on its incorporation are:—

(*b*) Matters which are necessary for furtherance of the objects specified in clause 3(*a*) are:—

4th The liability of the member(s) is limited and this liability is limited to the amount unpaid, if any, on the shares held by them.

5th The share capital of the company is.....rupees, divided into.....shares of.....rupees each.

6th We, the several persons, whose names and addresses are subscribed, are desirous of being formed into a company in pursuance of this memorandum of association, and we respectively agree to take the number of shares in the capital of the company set against our respective names:—

Names, addresses, descriptions and occupations of subscribers	No. of Shares taken by each subscriber	Signature of subscriber	Signature, names, addresses, descriptions and occupations of witnesses
A.B. of.....Merchant	.....		Signed before me: Signature.....
C.D. of.....Merchant	.....		Signed before me: Signature.....
E.F. of.....Merchant	.....		Signed before me: Signature.....
G.H. of.....Merchant	.....		Signed before me: Signature.....
I.J. of.....Merchant	.....		Signed before me: Signature.....
K.L. of.....Merchant	.....		Signed before me: Signature.....
M.N. of.....Merchant	.....		Signed before me: Signature.....
Total shares taken:			

Process to start a company

- **Minimum Requirement of a Private Company:**

❖ Minimum 2 Shareholders
❖ Minimum 2 Directors (The directors and shareholders can be same person)
❖ Minimum Authorised Share Capital shall be Rs. 100,000 (INR One Lac)
❖ DSC (Digital Signature Certificate) for all the Directors (for applying of DIN)
❖ DIN (Director Identification Number) for all the Directors

- **Minimum Requirement of a Public Company**:

❖ Minimum 7 Shareholders
❖ Minimum 3 Directors (The directors and shareholders can be same person)
❖ Minimum Authorised Share Capital shall be Rs. 500,000 (INR Five Lac)
❖ DIN (Director Identification Number) for all the Directors
❖ DSC (Digital Signature Certificate) for one of the Directors

CAPTION	OLD COMPANIES ACT 1956.	NEW COMPANIES ACT 2013.
 Members	There are maximum of 50 members.	There are maximum number of 200 members.
 One person Company	Does not exists.	The concept of one person company was introduced to form a private limited company.
 In-corporation	It can be treated has conclusive evidence.	It cant be treated has conclusive evidence because action can be taken even after incorporation.

CAPTION	OLD COMPANIES ACT 1956.	NEW COMPANIES ACT 2013.
 Memorandum of association	It consists of name clause, situation clause, object clause, subscription clause, etc.,.	It consists of all the clauses but in object clause the sub-clause named other objectives is excluded.
 Articles of association	It has companies limited by share, limited by guarantee & unlimited companies.	No changes have been done in this regard.
 Resident Director	No such provision existed.	Every company shall have one director who lives in India for a period of 180 days for last calendar year.

CAPTION	OLD COMPANIES ACT 1956	NEW COMPANIES ACT 2013.
 E-governance	No such provision existed.	Inspection of documents in electronic form is made.
 Women director	No such provision existed.	In prescribed companies classes or class women can be a director.
 Maximum no. of Directors	Max. no of directors are 12 not beyond them with approval of central govt.	Number increased to 15 but by passing with special resolution .

CAPTION	OLD COMPANIES ACT 1956	NEW COMPANIES ACT 2013.
 Applicability of law	It is acceptable whole India except in Sikkim has they has their own company's act.	It is applicable to whole India.
 Issue of bonus shares	No such provision existed. However rules framed in unlisted public company.	Private limited company's are not permitted to issue bonus shares.(clause 63 and 23)
 Exit option of share holder	No such provision existed.	Share holders can have exit option if money raised has not been utilised.

CAPTION	OLD COMPANIES ACT 1956	NEW COMPANIES ACT 2013.
 **Corporate Social Responsibility (C.S.R.)**	• No provisions for CSR initiatives	• Constitution of corporate social responsibility (C.S.R.) Committee of the board is compulsory for companies: - Having turnover of rupees **1000 crore** or more or -a net profit of rupees **5 crore** during financial year. • Every financial year at least **2%** of the average net profits to be spent on CSR activities,

Company act, 2017

- Amendment done in 2017

The Companies (Amendment) Bill, 2017

The Bill amends the Companies Act, 2013 in relation to structuring, disclosure, and compliance requirements for companies. The amendment aims to strengthen corporate governance, strict action against defaulting companies, facilitating case of doing business in India and harmonization with SEBI.

KEY DATES

Introduced on: Mar 16, 2016
Passed in Lok Sabha: Jul 27, 2017
Passed in Rajya Sabha: Dec 19, 2017

NASSCOM

TRADE ASSOCIATION

an organization founded and funded by businesses that operate in a specific **industry**.

NASSCOM

The National Association of Software and Services Companies (NASSCOM) is a trade association of Indian Information Technology (IT) and Business Process Outsourcing (BPO) industry.

Established in 1988, NASSCOM is a non-profit organisation.

Vision:

To help the IT and IT enabled products and services industry in India to be a trustworthy, respected, innovative and society friendly industry in the world.

Headquarters

NASSCOM is a global trade body with over 2000 members, of which over 250 are companies from China, EU, Japan, the U.S. and the UK.

NASSCOM's member companies are in the business of **software development, software services, software products, IT-enabled/BPO services and E-commerce**.

NASSCOM is headquartered in New delhi(Noida), India, with regional offices in the cities of Bengaluru, Chennai, Hyderabad, Kochi, Kolkata, Mumbai, Pune and Thiruvananthapuram.

FUNCTIONS OF NASSCOM

Partnership with the government

NASSCOM acts as an advisor to the Indian government at the centre as well as state levels. With adequate representation in various ministries of the government, the organization ensures that the government frames industry friendly policies. It also forms partnerships at the global level for promoting the Indian IT and ITES industries

Protection of Intellectual Property Rights

The organization is a strong proponent of intellectual property rights. It supports software anti piracy by setting up hotlines and facilitating law enforcement.

Research on IT and ITES

NASSCOM conducts in depth research on the IT and ITES industries to keep its members well aware of the global trends, best practices, threats and opportunities.

IT companies are those which do projects related to programming , testing , database and other project related works

ITES as a form of outsourced service which has emerged due to involvement of IT in various fields such as banking and finance, telecommunications, insurance, etc.

Support for quality products and services

NASSCOM encourages its members to maintain high quality of products and services with the aim of developing global public confidence for its members and the industry. It also helps the members achieve international quality certifications through regular seminars and workshops on quality standards.

Talent Pool in India

India has one of the largest talent pool in the world with 300,000 engineers and 2.1 million graduates being produced by its 11,200 higher education institutions each year. NASSCOM ensures that the quality and quantity of professionals in the country increases with time and that the country is able to cater to the global demand of IT and ITES outsourcing services


MEMBERSHIP BENEFIT
Access to Industry Trends
Education and Talent Developement
Networking Opportunity
Participate in Forum
Be a part of Initiatives
Visibility
Focus on Emerging Companies

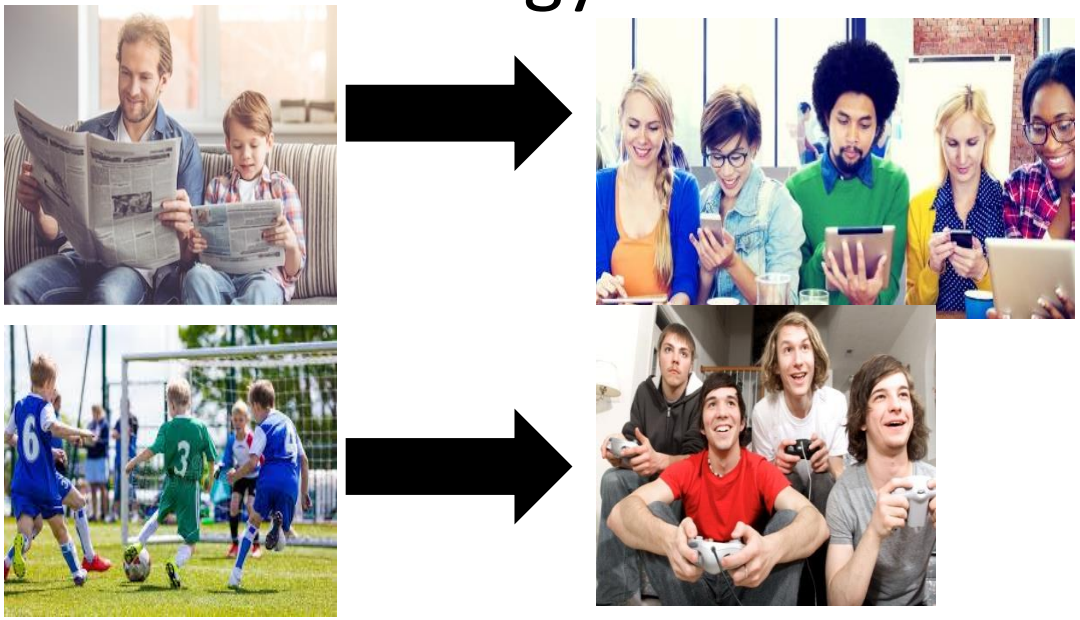
Role

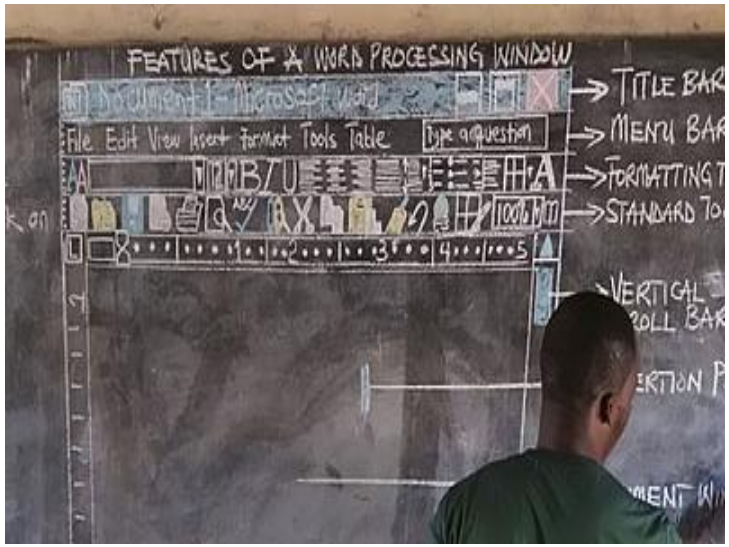
Industry Development

As the industry has expanded into multiple sub-sectors, NASSCOM has built an Industry Council structure that addresses the needs of the specific sector. Focused programs, research, events, industry initiatives are implemented through Industry Councils.

Ex: **IT Services Council**

- With the advent of digital technologies, traditional businesses are being disrupted with technology central to this transition.




FEATURES OF A WORD PROCESSING WINDOW
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Type a question
MENU BAR
FORMATTING
STANDARD
VERTICAL

- By 2025, it is expected that the total addressable technology market would have grown to almost $ 4 trillion – however with one big difference.
- Almost 80% of this incremental spends on technology will be driven by digital technologies including mobile systems, social media, cloud, analytics, machine to machine, cyber security and integration platforms to connect these to legacy systems.
- How will the Indian IT services industry react to this opportunity?
- NASSCOM has constituted a cross section of senior industry executives, forming the IT Services and Solutions Council, to address the needs of this industry during this inflection time.

Ex: **Internet, Mobile and E-Commerce Council**

- The number of internet users in India have surpassed 400 million mark, making it the second largest market after China. Increase in internet penetration in India has also led to the exponential growth in e-commerce sector in India.
- With an annual growth of around 20%, it is estimated that the e-commerce industry will surpass $ 100 billion mark by 2020.

- New emerging fields like Internet of Things (IoT) are thriving on the success of internet and has started revolutionizing various sectors such as manufacturing, energy, transportation, medical, health care etc.

- Globally IoT market is expected to cross $300 billion by 2020 and India aims to capture 20 percent of its market share by this time.

STPI

- Software Technology Parks of India(STPI) , is an Autonomous Society set up by the Ministry of Electronics and Information Technology(MeitY), Government of India in 1991.

- OBJECTIVE- to encourage, promote and boost the Software Exports from India.

- STPI maintains internal engineering resources to provide consulting, training and implementation services.
- Services cover Network Design, System Integration, Installation, Operations and maintenance of application networks and facilities in varied areas.
- Software Technology Parks of India centre also adhere to ISO 9001 certification.

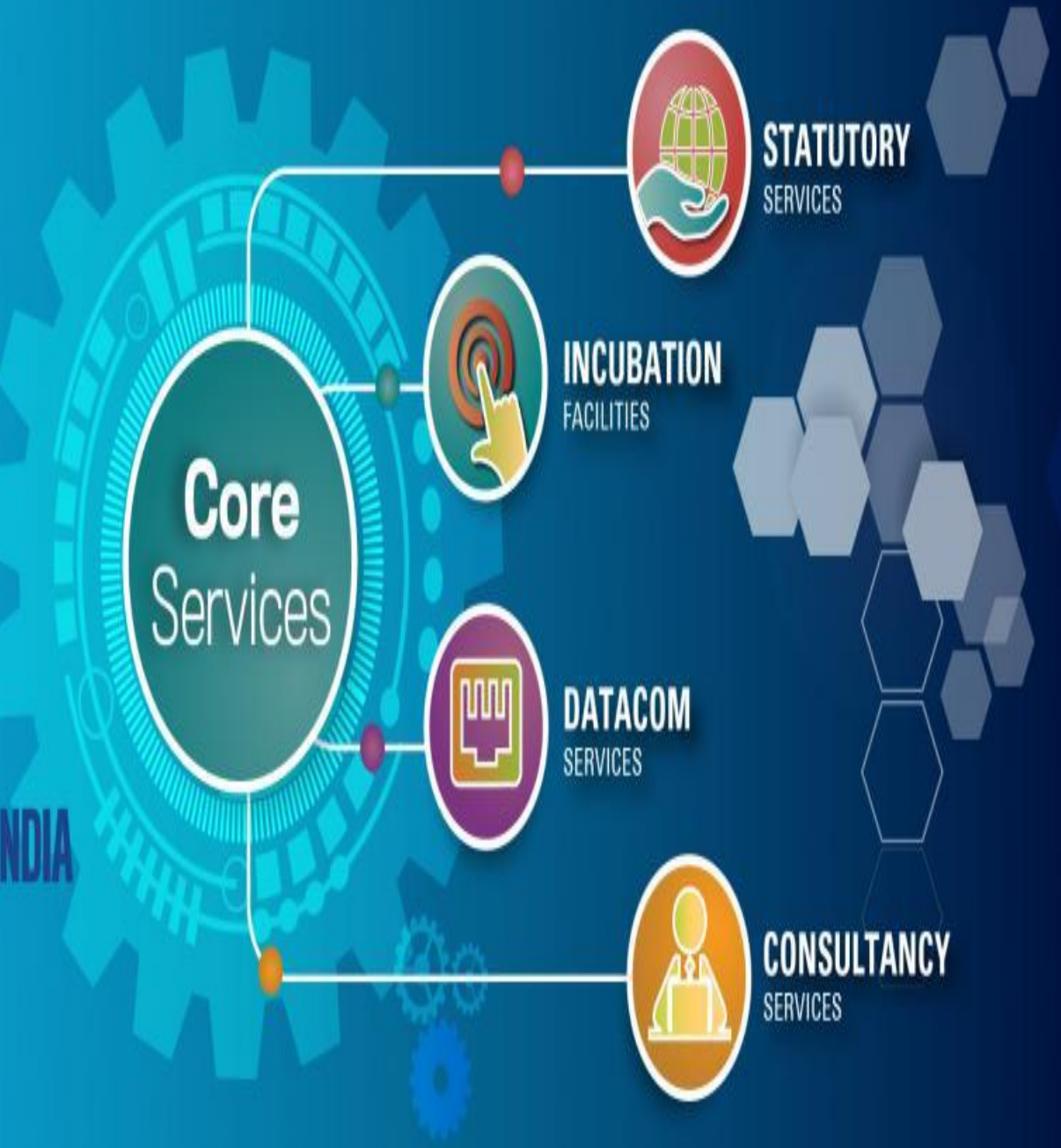
- The STP Scheme provides various benefits to the registered units, including 100% foreign equity, tax incentives, duty-free import, DTA entitlement, and deemed exporting.
- HISTORY- Software Technology Parks of India was established and registered as an Autonomous Society under the Societies Registration Act 1860, under the Ministry of Electronics & Information Technology, Government of India on 5th June 1991 with an objective to implement STP Scheme, set-up and manage infrastructure facilities and provide other services like technology assessment and professional training.

- International Communication is one such factor which needed much attention and India was factored -2 as against +8 factored to Ireland.
- This is one of the primary reasons why STPI took up the responsibility of improving the International Data Communication facilities exclusively for the Software Export Industry.
- Even though the intention was not to become an International Carrier, but because of the better quality of service provided by STPI and with a high rate of acceptance from the Industry, STPI's International Data Communication Services have grown much beyond anybody's imagination.
- STPI has truly emerged as an unconventional International carrier within a short span of time and developed relationships with 26 International carrier companies worldwide.

एसटीपीआई

STPI

SOFTWARE TECHNOLOGY PARKS OF INDIA



Year Wise List of Establishment of **STPI Centres**

Year	Centres
1990	Bhubaneswar Bengaluru Pune
1991	Hyderabad Gandhinagar Noida Thiruvananthapuram
1995	Chennai
1998	Mohali Jaipur Navi Mumbai
1999	Manipal Mysuru Coimbatore
2000	Visakhapatnam Guwahati
2001	Vijayawada Warangal Kolkata Rourkela Shimla Srinagar Lucknow Dehradun Indore Hubballi Mangaluru Aurangabad Nagpur Madurai Tirunelveli Puducherry

Year	Centres
2002	Tirupati Bhilai Kanpur Nashik Kolhapur Trichy
2003	Allahabad
2004	Gangtok Durgapur Kharagpur Imphal Ranchi Jammu
2005	Jodhpur
2006	Siliguri
2007	Kakinada Haldia Patna Shillong
2010	Berhampur
2012	Gwalior
2014	Aizawl
2016	Gurugram Surat
2017	Agartala

Objectives of Software Technology Parks of India

(a) To promote the development and export of software and software services including Information Technology (I.T.) Enabled Services/ Bio-IT.

(b) To provide statutory and other promotional services to the exporters by implementing Software Technology Park/ Electronics and Hardware Technology Park Schemes and other such schemes which may be formulated and entrusted by the Government from time to time.

(c) To provide data communication services including value added services to IT / IT Enabled Services related industries.

(d) To promote micro, small and medium entrepreneurs by creating conducive environment for entrepreneurship in the field of IT / IT Enabled Services.

सॉफ्टवेयर टेक्नोलॉजी पार्कस् ऑफ इंडिया
इलेक्ट्रॉनिकी और सूचना प्रौद्योगिकी मंत्रालय, भारत सरकार
गंगा सॉफ्टवेयर टेक्नोलॉजी कॉम्पलेक्स, सेक्टर –29, नोएडा – 201 303 (उ० प्र०)
फोन : 91-120-2470400 • फैक्स : 91-120-2470403
वैबसाइट : www.noida.stpi.in

Software Technology Parks of India
Ministry of Electronics & Information Technology, Govt. of India
Ganga Software Technology Complex, Sector-29, Noida - 201 303 (U.P.)
Tel.: 91-120-2470400 • Fax : 91-120-2470403
Website : www.noida.stpi.in

पंजीकरण प्रमाणपत्र
CERTIFICATE OF REGISTRATION

पंजीकरण सं. /REGISTRATION NO: STPIN/NAPP/20171013/970051 दिनांक /DATE: 18.10.2017

मैं एतद् द्वारा प्रमाणित करता हूँ मेसर्स *Nandyavart Consultancy Services* जिसकी परिचालन इकाई *SCO 2445, Sector-22 C, Chandigarh-160022* में है , को आज के दिन एस टी पी आई- मोहाली के अन्तर्गत पंजीकृत किया जाता है।

I hereby certify that *M/s Nandyavart Consultancy Services* having operational unit at *SCO 2445, Sector-22 C, Chandigarh-160022* on this day is registered with STPI Mohali.

इस पंजीकरण से पंजीकृत इकाई एस टी पी आई को सत्यापन के लिए साफ्टेक्स फार्म (डाटा संचार सम्पर्क के माध्यम से ऑफशोर आई टी/आई टी ई एस निर्यात् के लिए) प्रस्तुत करने के लिए प्राधिकृत हो गई है।
This registration entitles the registered unit to submit Softex form (for offshore IT/ITES exports through Data Communication links) to STPI for verification.

इकाई को निर्धारित प्रारूपों के अनुसार तिमाही निष्पादन प्रतिवेदन (क्यू पी आर) और वार्षिक निष्पादन प्रतिवेदन (ए पी आर) इस कार्यालय को भेजनी होंगी।

The unit has to submit Quarterly Performance Reports (QPR) and Annual Performance Reports (APR) as per the prescribed formats to this Office.

यह पंजीकरण दिनांक 17 अक्टूबर, 2020 तक के लिए वैध है।
This registration will be valid till...17th October 2020.

निदेशक/DIRECTOR
सॉफ्टवेयर टेक्नोलॉजी पार्क्स ऑफ इंडिया
Software Technology Parks of India
Rajneesh Agrawal
निदेशक / Director
सॉफ्टवेयर टेक्नोलॉजी पार्कस् ऑफ इंडिया
इलेक्ट्रॉनिकी और सूचना प्रौद्योगिकी मंत्रालय,भारत सरकार
Ministry of Electronics and Information Technology, Govt. of India
नोएडा 201303 (उ.प्र.) Noida-201303 (U.P.)

Functions of Software Technology Parks of India

(1) To establish Software Technology Parks / centres at various locations in the country-

(a) to perform all functions in the capacity of the successor to the erstwhile Software Technology Park Complex which were taken over by the Software Technology Parks of India

(b) to establish and manage the infrastructural resources such as integrated infrastructure including International communication / Data center / Incubating facilities etc. for 100% export oriented units and to render similar services to the users other than exporters.

(c) to undertake other export promotional activities such as technology assessments, market analysis, market segmentation as also to organize workshops/exhibitions/seminars/conferences etc.

(d) to facilitate specialized training in the niche areas to meet the above objectives.

(e) to work closely with respective State Government and act as an interface between Industry and Government.

(f) to promote entrepreneurship through incubation programmes / seed funds / IP development and other awareness programmes.

(g) to assist State Governments in formulating IT policies and liaison for promoting the IT industries in respective states to achieve an exponential growth of exports.

(h) to promote quality and security standards in the I.T industries.

(i) to work jointly with venture capitalists for providing financial assistance to the IT industries.

(j) to provide Project Management and Consultancy services both at national and international level in the areas of expertise of Software Technology Parks of India

(2) To perform financial management functions which comprise of the following activities;

(a) to obtain or accept grants, subscription, donations, gifts from Government, Corporations, Trusts, Organizations or any person for fulfilling the objectives of the Software Technology Parks of India

Note: Whenever any gifts from foreign Governments/ organizations are accepted / obtained they shall be routed through Government and be regulated by such directions as may be issued by Government.

(b) to maintain a fund to which shall be credited:
-all money provided by Central Government, State Governments, Universities etc.

-all fees and other charges received by the Software Technology Parks of India .
-all money received by the Software Technology Parks of India by way of grants, gifts, donations, benefactions, bequests or transfers; and
-all money received by the Software Technology Parks of India in any other manner or from any other source.

(c) to deposit all money credited to the Fund in Scheduled Banks / Nationalized Banks or to invest in such a manner for the benefit of the Software Technology Parks of India as may be prescribed.

(d) to draw, make, accept, endorse and discount cheques, notes or other negotiable instruments and for this purpose, to sign, execute and deliver such assurance and deeds as may be necessary for the purposes of the Software Technology Parks of India

(e) to pay out of the funds maintained by Software Technology Parks of India or part thereof, the expenses incurred by the Software Technology Parks of India from time to time including all expenses incidental to the formation and reorganization of the Software Technology Parks of India and management and administration of any of the foregoing activities including all rents, rates, taxes, outgoings and the salaries of the employees.

(f) to acquire, hold and dispose of the property in any manner whatsoever for the purposes of the Software Technology Parks of India, with the prior approval of Governing Council as per the procedure laid down by Government.

PRODUCT BASED COMPANIES
VS
SERVICE BASED COMPANIES

UNIT 2

SERVICE COMPANY

- They fulfil software requirements for a client.
- Examples of a service-based company are TCS, Infosys and Wipro
- Statement :-

PRODUCT COMPANY

- They fulfil product requirements of the general consumer.
- Product-based company examples are Microsoft, Google and Yahoo,amazon.
- Statement:-

CASE STUDY OF SERVICE BASED COMPANY (TCS)

- TCS' offerings include application development and maintenance, business intelligence and business process services. TCS employs more than 285,000 professionals in 44 countries and in FY13 generated annual revenue of US$11.6 billion. In 2005, TCS created TCS IT Infrastructure Services (TCS-IT IS) to help businesses develop infrastructure that improved revenues, facilitated cost management and delivered better customer service. TCS-IT IS is growing at 30% annually and generates more than US$1 billion in revenue each year.

The Challenge(TCS)

- In 2009, TCS-IT IS noticed that businesses around the world were adopting on-demand access to third-party infrastructure. rather than investing in on-premise servers, storage and networking equipment TCS-IT IS found many of these businesses wanted to extend this model to access applications such as enterprise resource planning as part of an integrated solution stack—comprising hardware, networking, software and services—from a third-party provider. TCS-IT IS started addressing this need by delivering infrastructure and applications as a service from its datacentres to small businesses in industries such as healthcare, education, retail and manufacturing

What exactly a problem that is faced by a company ?

How can they solve the problem?

OPTION AVAILABLE TO COMPANY

- In 2010, TCS-IT IS decided to develop a cloud service that would extend its multi-tenant datacentre offerings to larger businesses. The proposed India Cloud Platform (ICP) would allow businesses of all sizes to access infrastructure and applications from the cloud.
- TCS-IT IS wanted the ICP to scale easily, enable new customers to be added quickly and keep sensitive information secure. The ICP would also complement TCS-IT IS' consulting services, which businesses could use to ensure their data in the cloud complied with internal policies and governance regimes, as well as external regulations.

What type of option is available with company and how it is beneficial for them ?

The Solution

- After reviewing its options, TCS-IT IS decided to implement VMware datacentre virtualization for the first stage of the ICP project." said Menon.[1]
- In 2011, TCS-IT IS began ramping up from a multi-tenant datacentre to a full cloud service and conducted a more comprehensive evaluation of the virtualization market. This included completing proofs of concept with two technology providers headquartered in the United States.
- "With one of the providers, we couldn't mix and match data storage types," said Menon. "We needed this because our existing storage area network did not have the capacity on its own to manage our workloads. "We also found that the products supplied by the other vendors were far behind in providing centralized management over a single console."
- At this time, VMware was finalizing a new release of VMware vSphere® and briefed TCS-IT IS on features that made it easier to provision physical and virtual machines, enforce security and compliance, manage networks and control traffic flows. "We opted to stay with VMware because of its technical superiority and our comfort with the technology," said Menon.
- "When it came to this stage of the project, we wanted to ensure that our choice of platforms and technologies was right, and that we could support a range of usage scenarios," said Menon. "We selected VMware PSO to undertake the deployment so we could draw on the team's experience and expertise,"[2]

Business Results & Benefits

- VMware vSphere—combined with technologies from Cisco, HP and NetApp—has enabled TCS-IT IS to provide cloud-based infrastructure services that meet the needs of businesses of all sizes.
- “The ICP is a modular, scalable and configurable cloud platform that gives Indian businesses the benefits of increased efficiencies, faster go-to-market, market-leading technologies; predictable spend, IT talent on call and better business results,” said Menon.
- ICP customers pay monthly or quarterly to access infrastructure on demand rather than investing several hundred thousand dollars in on-premise datacentre equipment. This gives them greater certainty over costs and enables more accurate budgeting.

Taking reference of this case study explain the need of Decision making in company

CASE STUDY OF PRODUCT BASED COMPANY (Amazon's Echo)

“Alexa is my new BFF”: A Case Study of the Amazon Echo’s Use by companies and common man.

“Alexa, tell me the future of radio!”

- Amazon’s Alexa voice-controlled environment. Alexa exists in an audio-centric world, performing a variety of tasks in response to voice commands. And her integration into Amazon’s family of wireless speakers, including Echo, allows Alexa to play out live radio and on-demand audio content, serving as a hub for entertainment and information.
- The radio industries in the US and UK, in particular, have been quick to get friendly with Alexa, marking the start of a new voice-activated journey for the medium, a journey that may eventually change the way we interact with radios in cars, at home and on the move.

Why companies are taking interest in ALEXA.

- Alexa has music at her heart, with TuneIn (the default radio service), Spotify Premium, iHeartRadio and – naturally – Amazon's own Prime Music among a number of supported services. Sensing an opportunity to build a presence in this new audio environment, the UK radio industry has made a fast entry to the fray, through its market-level UK Radioplayer platform. Radioplayer is available as an Alexa skill (Amazon's name for the environment's apps). When enabled, Radioplayer gives voice-controlled access to more than 450 radio stations from around the UK, allowing users to start a station by name or by recommendation based on location, what's popular at the time or on past listening. The integration is the result of a close cooperation between Radioplayer's R&D team and Amazon. Ensuring seamless functionality across the whole country required all of the radio stations names to be pre-recorded in a variety of regional dialects, and this attention to detail seems to have paid off in terms of a smooth user experience, according to reviews, making the Radioplayer skill more effective in selecting the right station than, for example, the default TuneIn skill. *"We've been prototyping voice-controlled interfaces, but the Echo is by far the most capable device we've seen"* commented Michael Hill, Radioplayer's Managing Director, in a press release announcing the launch. *"Voice interfaces will play a huge part in car dashboards and home automation devices, and they can help people with impaired vision and mobility too*.

Interest of General public in ALEXA

- *"My entire family enjoys Alexia! This device is in the center of our home! She keeps our grocery list, many reminders, plays all of our favourite playlists, orders amazon items, wakes us up, tells us when its time to leave, adds events to our calendars, and much more!"*

	Name Personification
Echo only	122
Echo & Alexa	57
Alexa only	149

Table 1: Frequency of name (Echo/Alexa) personification levels

	Pronoun Personification
Object only	307
Both	48
Person only	63

Table 2: Frequency pronoun (it/her) personification levels

	Frequency of Interaction Type
Info	135
Entertainment	274
Assistant	116
Companion	19
Friend	25

Table 4: Frequency of interaction types

Question

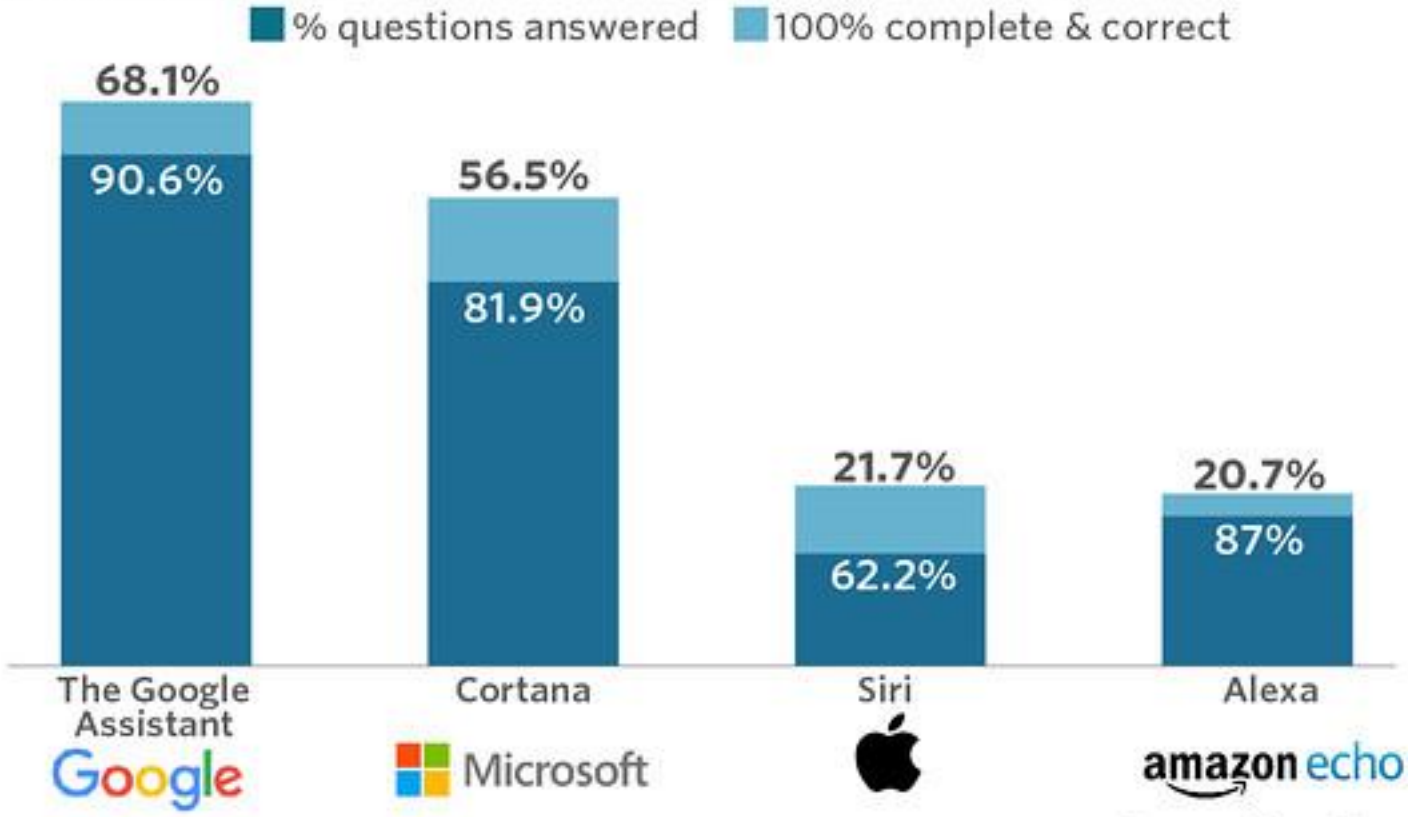
- Why this type of social conversational agents are that much popular.
- How companies are taking advantages from them.
- Big question! Is it good for Human or question to our existences . If yes/ No then why?

Why Companies are concerned for Virtual assistant.

- 50% of all searches will be voice searches by 2020.
- By 2019, the voice recognition market will be a $601 million industry.
- 40% of adults now use voice search once per day.
- 19% of people use Siri at least daily.
- Mobile voice-related searches are 3X more likely to be local-based than text.
- 28% think Voice Search is a more accurate way of searching.

How smart is your smart assistant?

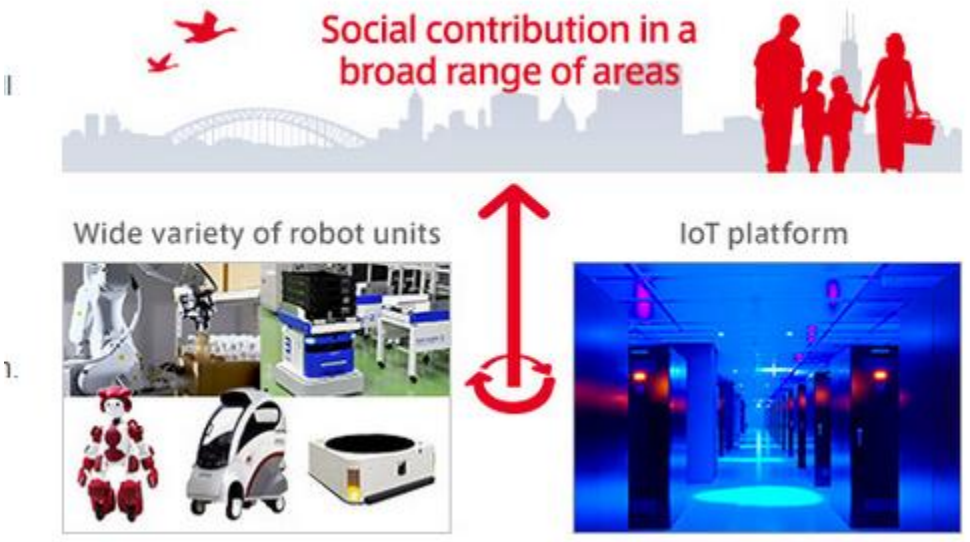
The performance of computing devices in a quiz of 5,000 questions



Source: Stone Temple

New advancement

- Hitachi's robotics contributes to society in various areas
- **Hitachi develops a wide variety of robots integrated with an IoT platform to improve people's lives.**



EMIEW3

- EMIEW3 is a human symbiotic robot that aggregates data obtained from various external sensors.
- Information necessary for providing services is then processed over a cloud-based robotics IT platform and fed back to the robot – helping it navigate, communicate, and interact with its surroundings.
- This IT infrastructure can also be integrated with existing operational systems to provide business intelligence by processing various kinds of relevant information. We also offer business solutions with interconnected robots.