

Why Hyderabad

なぜハイデラバードか

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Why Hyderabad?

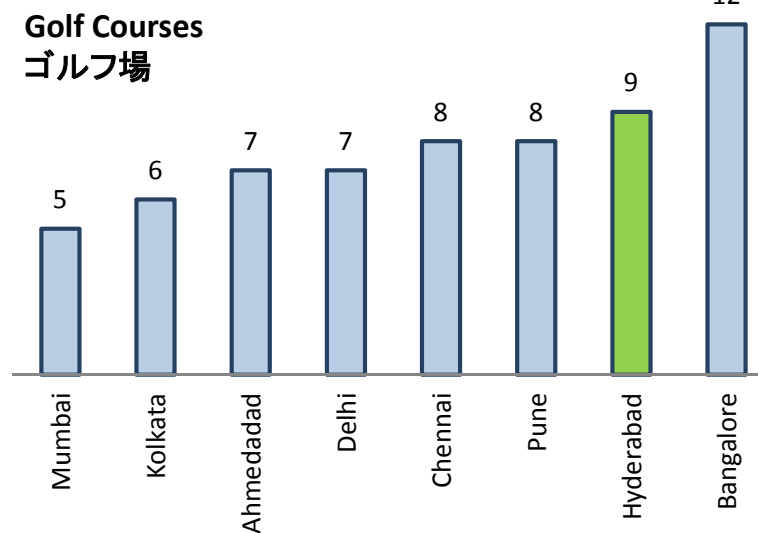
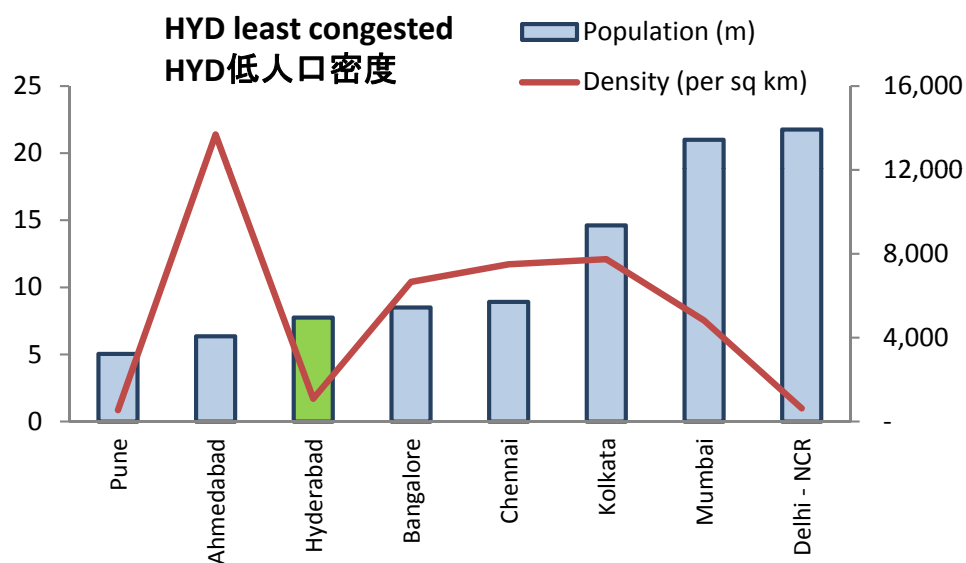
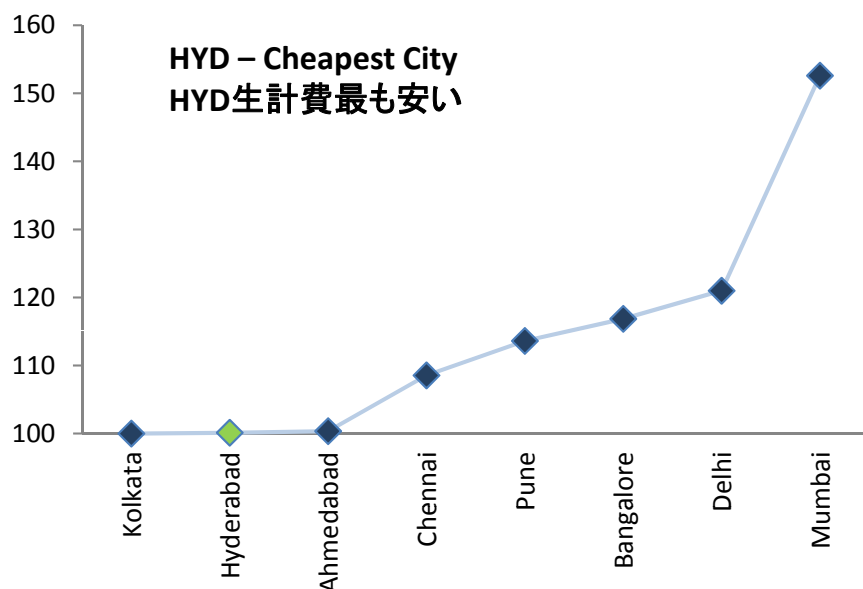
なぜハイデラバードか

- India's 6th largest urban center, but least polluted and least congested
- Offers better quality of life than most major cities :
 - ✓ Altitude of 505 m, best climate among top 6 cities (Bengaluru - also good, but congested)
 - ✓ Lowest cost of living amongst major cities (Kolkata & Ahmedabad - cheap, but poor social infra)
 - ✓ Amongst India's best airports
 - ✓ Has five 18-hole golf courses & four 9-hole
 - ✓ Great dining & entertainment for adults and kids
- Most centrally located of major cities
- India's education hub, leader in technical education
 - ✓ ~ 20% of Engineering college seats
 - ✓ Top-3 states for medical schools & polytechnics
- Large number of government sponsored SEZ & R&D centers
 - ✓ 50,000 acre of Information Tech Investment Region, 20+ National Labs
 - ✓ 4 Biotech/pharma centers including Indian Inst of Biotech, 3 labs for Agri R&D, including Rice research
 - ✓ 3 defense, 1 atomic centers; Indian Inst of Chemical Technology, National Geophysical Research Inst
- Head offices of leading Indian and global companies
 - ✓ R&D Hub for Aerospace, Animation, Defense, Electronics, Pharma, Semiconductor & Software
 - ✓ Google, Facebook, Amazon & Microsoft – India head offices
 - ✓ Large R&D centers owned by DuPont, GE, Hyundai, Honeywell, Covidien, Mylan, Dae-woong, Areva
- インド第6の大都市、最も汚染が少なく、人口密度も低い
- 他の都市に比べより質の高いライフを提供
 - ✓ 標高505m、トップ6都市の中で最も良い気候(バンガロールも気候は良いが、混雑している)
 - ✓ 主要都市の中で最も低い生活コスト(コルカタ、アーメダバードも同様に低コストだが、ソーシャルインフラは不足している)
 - ✓ インドのベスト空港の一つ
 - ✓ 5つの18ホールと4つの9ホールゴルフ場がある
 - ✓ 大人、子供両方が楽しめるハイレベルのレストランとエンターテイメント
- インドの主要都市では最も中心に位置する
- インドの教育ハブ、技術教育ではトップ
 - ✓ 約20%のエンジニアはハイデラバードの大学出身
 - ✓ メディカルスクールとポリテクニクではトップ3の州に入る
- 最大の経済特区と国立R&Dセンターを有する都市
 - ✓ 約20,000ヘクタールの情報技術インヴェストメント地域、20以上の国立研究所
 - ✓ Indian Institute of Biotechnologyを含む4つのバイオ・製薬研究所、米研究を含む3つの農業R&Dセンター
 - ✓ 3つの防衛研究所、原子力研究所、Indian Institute of Chemical Technology (IICT)、National Geophysical Research Institute
- 大手インド&グローバル企業が本社を置く
 - ✓ 航空宇宙、アニメーション、防衛、エレクトロニクス、製薬、半導体、ソフトウェアのR&Dハブ
 - ✓ Google、Facebook、Amazon、Microsoft – インド本社
 - ✓ DuPont、GE、Hyundai、Honeywell、Covidien、Mylan、Dae-woong、Arevaの大規模なR&Dセンター

Top 8 Cities – HYD Most Livable

インドで最も暮らしやすい大都市ハイデラバード

- 6th largest Indian metropolis
- Among the least population densities
Mumbai and Delhi are now above 20m population
- Robust transportation, urban law & order
- Great dining & entertainment
Unlike Pune & Ahmedabad
- Cheapest major city
Kolkata is cheap, but the poorest infrastructure; Bangalore and Delhi are 20% more expensive, while Mumbai is at least 50% more expensive

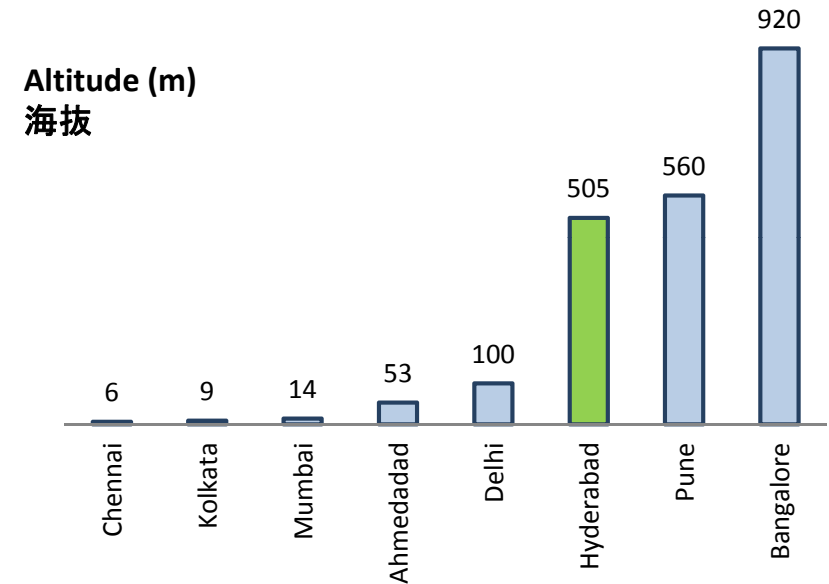


Top 8 Cities – Best Climate, Easiest Access

インドの大都市の中では一番良い気候、アクセス

- Delhi is very hot in summer, Chennai is always HOT, Mumbai is very humid & hot. Hyderabad, Bangalore and Pune have the best climate

- Pune's airport not very active, Puneites often use Mumbai which is 200km away
- Ahmedabad, Kolkata and Chennai are substandard airports

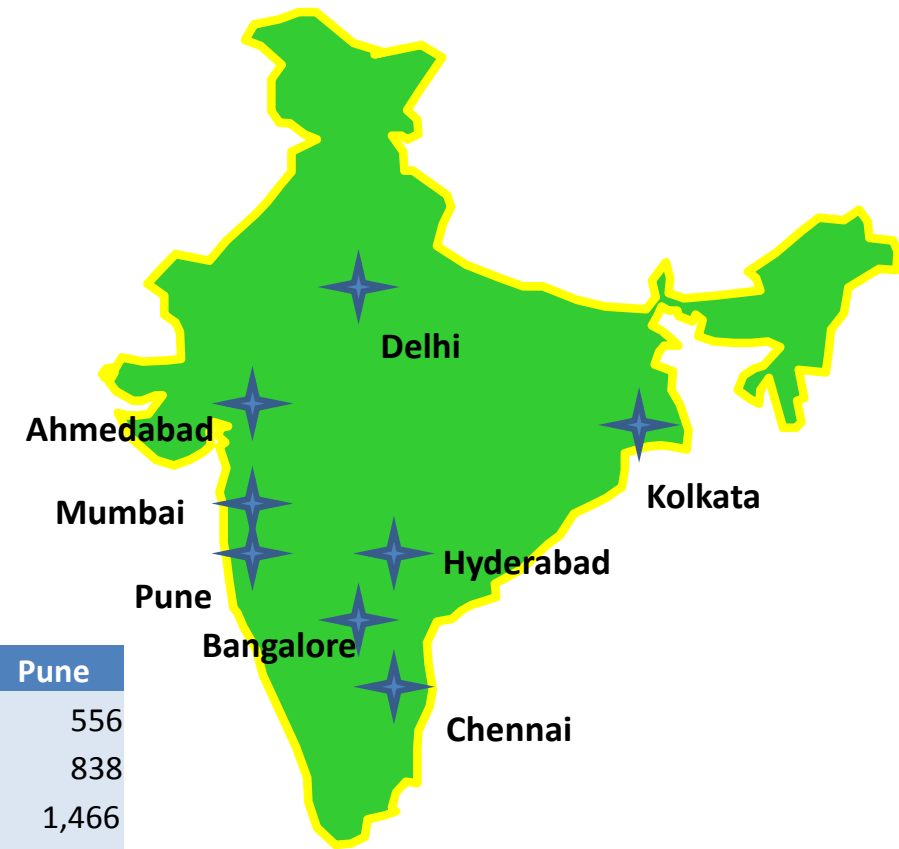


India's Best Airports	
Delhi	1
Hyderabad	2
Bengaluru	3
Mumbai	4
Chennai	5
Kolkata	6
Ahmedabad	7

HYD – Most Centrally Located

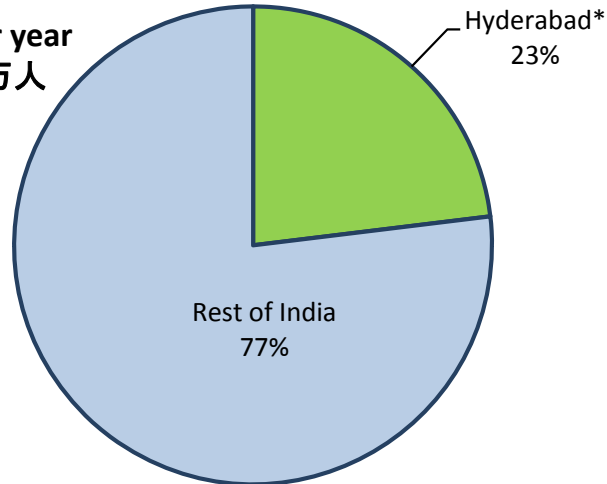
インドで最も中心に位置する大都市

- Hyderabad has the least distance from other major cities
- Delhi, Chennai, Bangalore, Kolkata are worse off compared to Hyderabad, Mumbai and Pune



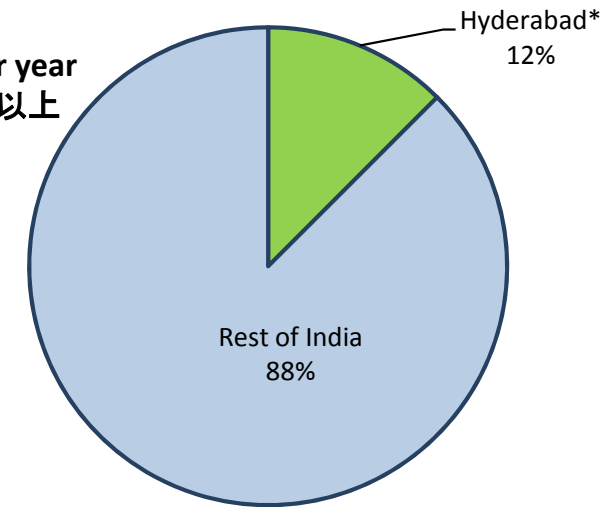
KM	Hyd	B'lore	N Delhi	Mumbai	Chennai	Kolkata	A'bad	Pune
Hyderabad	-	545	1,537	702	643	1,461	1,148	556
Bangalore	545	-	2,080	713	338	1,883	1,516	838
New Delhi	1,537	2,080	-	1,445	2,158	1,464	932	1,466
Mumbai	702	713	1,445	-	1,330	1,998	524	148
Chennai	643	338	2,158	1,330	-	1,669	1,841	1,190
Kolkata	1,461	1,883	1,464	1,998	1,669	-	2,076	2,033
Ahmedabad	1,148	1,516	932	524	1,841	2,076	-	657
Pune	556	838	1,466	148	1,190	2,033	657	-
Total	6,592	7,913	11,082	6,860	9,169	12,584	8,694	6,888

1.43m per year
年間143万人



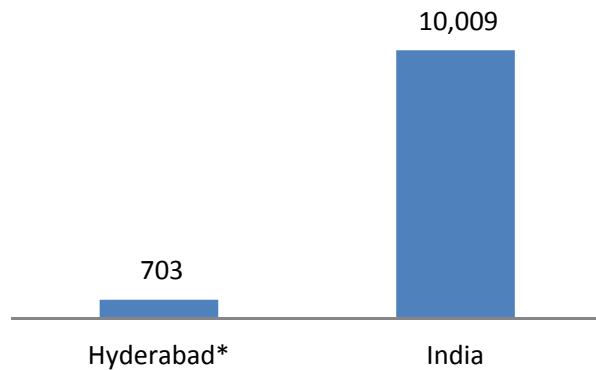
23% of India's engineering seats

40,000+ per year
年間4万人以上



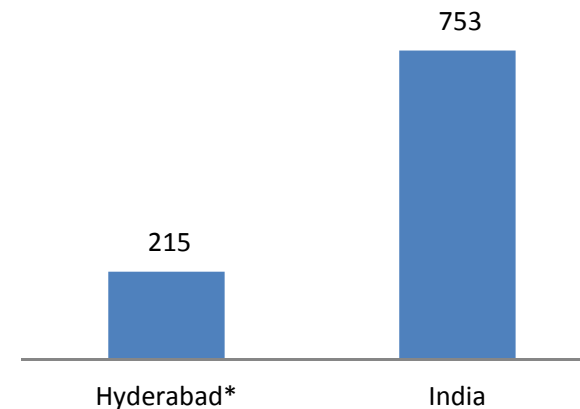
12% of India's medical seats

Number of Polytechnics



7% of India's polytechnics

Colleges giving IT degrees



Leads in IT education

* Telengana+Seemandra combined

Proprietary & Confidential

- Close to 10% of India IT companies are from Hyderabad
- **ALL** leading IT companies in India, even if not from Hyderabad, have considerable manpower in Hyderabad
 - ✓ **TCS**, India's largest IT company, had 24,000 people working in Hyderabad in 2013. It was also building a **new complex** in Adibatla which is on **79 acres** and which will have **26,000 seats**
 - ✓ **Infosys** has a **448 acre campus** at Pocharam, designed to accommodate **60,000 employees** (around 60% occupied currently). It has another campus as well
 - ✓ **Cognizant** is now building its **second campus**. It bought a 11 acre parcel of land for \$20m in Jan'14
 - ✓ **Wipro** too is planning to hire 10,000 software professionals for its second campus in Hyderabad
 - ✓ **Tech Mahindra** has 7 campuses in Hyderabad. Is currently building a new 26 acre SEZ
- Hyderabad is centre of choice for several IT MNCs, often scoring over all other Indian cities
 - ✓ **Microsoft** set up an **R&D centre** in Hyderabad in 1998 -- Microsoft India Development Center (MSIDC) – at Hyderabad in 1998. A **54 acre** facility, it is now the largest campus of Microsoft in India, and the largest R&D centre for Microsoft outside Redmond, USA
 - ✓ **Google** employs **7,500 employees** at three locations in the city and plans to double the headcount in five years. It also **plans to set up a dedicated campus in Hyderabad**.
 - ✓ In 2010, **Facebook** decided to make **Hyderabad its first address in Asia**.
 - ✓ **Amazon** currently employs 4,000 people at its campus in the leased premises (~8% of its global workforce) . It plants to build a **1.6 million square feet facility**, which will be its biggest facility outside its corporate headquarters in the US. It aims to hire 13,500 people by 2016 here
 - ✓ **Accenture** has 3 development centres

- The **Information Technology Investment Region (ITIR)**, Hyderabad is an upcoming IT investment region jointly being developed by **Govt of India** and **Govt of Telangana**
 - ✓ Will involve development of self-contained integrated knowledge clusters for growth of IT and electronic hardware manufacturing in 50,000 acres in and around Hyderabad.
 - ✓ The project which is modeled along the lines of Shenzhen SEZ in China, is aimed at attracting an investment of Rs 2.19 trillion (\$44 billion) in the IT, ITES and electronics sectors and providing direct employment to 1.5 million people
 - ✓ On September 20, 2013 the Central Government gave the official approval for the ITIR project

- Hyderabad is a key hub of India's pharmaceutical business. It has close to 800 pharma units in its vicinity
- Several large listed pharma companies, and MNCs, have operations in Hyderabad, namely
 - ✓ **Mylan**, world's second largest generics player, has its India base in Hyderabad, **employs over 9000 people**. Its R&D centre in Hyderabad employs 600 scientists.
 - ✓ **Dr Reddy's**, India's 3rd largest pharma firm with a market cap of \$8.5b, has its **R&D centre** in Hyderabad, with 18 chemistry labs, 3 analytical labs and pilot plants.
 - ✓ **Aurobindo Pharma**, India's 6th most valuable pharma firm with a market cap of \$4b, is head quartered in Hyderabad. Its R&D centre here employs 700 scientists
 - ✓ **Divi's Lab**, leader in CRAMs, and having a market cap of \$3.5b, is head quartered in Hyderabad. It has a **500 acre** site at Hyderabad, and another facility in Visakhapatnam. Its R&D centre employs over 250 scientists.
 - ✓ **Natco Pharma** – A pharma firm focussed on oncology (market cap \$800m)
 - ✓ **Shantha Biotech** – India's largest pvt sector vaccine company, now acquired by **Sanofi**
 - ✓ Several PE backed firms like **Gland Pharma, Biological E, Indian Immunolgicals, Granules India**

Large Number of Govt R&D Facilities → Good source of human capital / collaborative research
多くの国立研究所 → 人的資本のソースと共同開発のチャンス

Pharma/Lifesciences 製薬ライフサイエンス

- **Centre for Cellular and Molecular Biology** : a designated Center of Excellence for Global Molecular and Cell Biology Network, UNESCO
- **National Institute of Nutrition (NIN)** is a Public health, Biotechnology and Translational research centre. It is the largest arm of Indian Council for Medical Research (ICMR)
- **National Institute of Pharmaceutical Education and Research**: is an Indian public Pharmacy research university
- **Indian Institute of Biotechnology** is a bio-pharma institute. The main objective of the institute is to bring innovative products that are needed for vast majority of the world population in the areas of malnutrition and diabetes

Food / Agriculture 食品と農業

- **Directorate of Rice Research** is India's key rice research institute, setup by Indian Council of Agricultural Research (ICAR)
- **Central Research Institute for Dry-land Agriculture (CRIDA)** is a National Research Institute under the Indian Council of Agricultural Research (ICAR) established in 1985 with a mandate to carry out basic and applied research in rainfed farming
- The **National Academy of Agricultural Research Management** is focussed on agricultural research and education management

Chemical Industry 化学工業

- **Indian Institute of Chemical Technology**: A national-level research center under the Council of Scientific and Industrial Research (CSIR). IICT conducts research in basic and applied chemistry, biochemistry, bioinformatics, chemical engineering

Defense 防衛

- **Advanced Numerical Research and Analysis Group (ANURAG)** is a laboratory of the Defence Research and Development Organisation (DRDO). It is involved in the development of computing solutions for numerical analysis and their use in other DRDO projects
- **Defence Electronics & Research Laboratory (DLRL)** is a laboratory of the DRDO. It is involved in the design and development of integrated Electronic Warfare systems for the Indian Armed Forces.
- **Defence Metallurgical Research Laboratory (DMRL)** is a research laboratory of the DRDO. It is responsible for the development and manufacture of complex metals and materials required for modern warfare and weapon systems

Atomic Energy 原子力

- **Atomic Minerals Directorate for Exploration and Research (AMD)**, with headquarters at Hyderabad and seven regional centers, is the oldest unit of the Department of Atomic Energy (India) (DAE), Government of India. The principal mandate of the organization is to carry out geological exploration and discover mineral deposits required for nuclear power programme of India

Geophysics, Oceanography 地球物理学、海洋学

- **The National Geophysical Research Institute (NGRI)** is a geoscientific research organization established in 1961 under the Council of Scientific and Industrial Research (CSIR). Research areas covered by this institute include hydrocarbon and coal exploration, mineral exploration, deep seismic sounding studies, exploration and management of groundwater resources
- **Indian National Center for Ocean Information Services (INCOIS)** is an autonomous organization of the Government of India, under the Ministry of Earth Sciences. It provides ocean information and advisory services

Pharmaceuticals 製薬

- Several leading Indian pharma companies like Dr Reddy, Divi's, Aurobindo Pharma or MNCs like Mylan have R&D centres in Hyderabad
- Medical devices company **Covidien , Inc.** opened a 40,000-sft facility for 350 professionals at an investment of USD 28m In Feb'14
- South Korea company **Dae-woong Pharmaceutical** set up its very first R&D center based in Hyderabad in 2008

Semi-conductors 半導体

- **Freescale Semiconductor**, a New York Stock Exchange-listed provider of embedded communications processors for networking equipment, opened its R&D centre in Hyderabad in 2011
- **Microsemi Corporation**, a Nasdaq-listed semiconductor technology provider, employs 130 people at its at its Hyderabad R&D centre
- **Silicon Image Inc**, has a 80 people facility to develop semiconductor intellectual property

IT

- **Microsoft's** India R&D centre is based in Hyderabad on a 54 acre facility, its largest outside Redmond, USA

Aerospace 航空宇宙

- The **Airports Authority of India (AAI)** has tied up with US-based MITRE to set up a research, development and training facility in Hyderabad
- **Honeywell** opened an R&D centre for Aviation research in Sep'14. The 1st phase of 125,000 sq ft will employ 1000+ by the end of 2014.

Automotive 自動車

- **Hyundai Motor** India Engineering (HMIE) has set up a 200,000 sqft **R&D Centre** in Hyderabad, with an investment of Rs. 1.84b (USD 35m)

Chemicals 化学

- **DuPont** has its first integrated R&D and knowledge science center, the **DuPont Knowledge Center (DKC)** located **in Hyderabad in 2008**. This is the sixth of the seven DuPont global R&D centers outside the US, and the only one in India. Currently, about 600 scientists, engineers and other employees work out of this center

Capital Goods

- India's leading **Capital Goods** company **BHEL** has its **R&D head quarters** in Hyderabad
- **Generic Electric's Hyderabad Technology Center (HTC)**: Spread over three campuses in Hyderabad, HTC is home to global engineering for control and embedded systems, automation, software, electronics design, electromechanical design and embedded computing.
- Areva's India R&D is out of Hyderabad. In Apr'14, it opened its second R&D base in Hyderabad.

Hyderabad is the leading center for animation industry in India

アニメ産業をリードする中心地

- Hyderabad has 20 established gaming and animation firms along with 250 digital media firms of various formats
- More than 50 institutes offering various certificate, diploma and B Sc courses in animation have come up in the city
- Leading Indian animation companies like DQ Entertainment, Game Shastra, Electronic Arts, Fx Labs, Green Gold Animation are based out of Hyderabad
- Some of these companies serve leading global majors like Disney, Cartoon Network and Nickelodeon
- The state government has come out with its Andhra Pradesh Gaming, Animation, Media and Entertainment (GAME) Policy 2014-19 in Feb'14, which has several incentives for Animation firms.
- As part of the policy, **Andhra Pradesh Animation and Gaming City will be set up in Hyderabad over a 30 acre facility**