



Digital Karnataka

Next Steps



nasscom



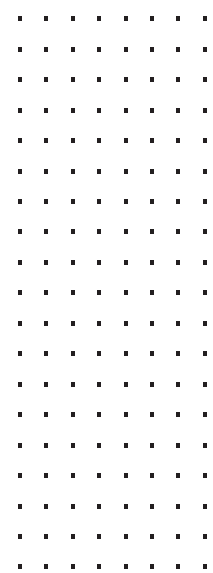
BENGALURU SILICON VALLEY OF INDIA



The city of Bengaluru has come a long way in becoming one of the most recognized cities in the world

Known as the **Silicon Valley of India** due to its position as the nation's leading IT exporter.

- ✓ **4th** largest technology cluster in the World
- ✓ **12500+** expats in living in Bengaluru currently (estimates based on Foreigner's Registration Office),
- ✓ **7%** of expatriate population (approx.) in India is in Bengaluru
- ✓ **107** languages are spoken in Bengaluru, which makes the city top the list of cities where the most number of languages are spoken in the country
- ✓ **#13** among the top 25 global cities of the future.
- ✓ Bengaluru has the highest employability rate in India, wherein Bengaluru is the first choice for women in employability.
- ✓ **33%** of India's tech talent are in Bengaluru



Factors favouring Bengaluru



Silicon Valley of India



Salubrious weather



R&D capital of India



Affordability



Options for recreation



Emerging VC ecosystem

Testimonials on Bengaluru

“We considered Finland & Canada before settling in Bengaluru. People here have hunger to learn.

- Joseph Kim, Lila Games (Expat)

“Local people are very friendly and welcoming towards new entrants. Bengaluru is diversified as different cultures get integrated”

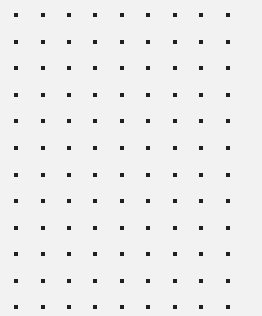
- Lucy, Writer

“Venture capital scene in Bengaluru is strong, and continues to grow. The city is home to a vibrant startup ecosystem & large pool of skilled professionals”

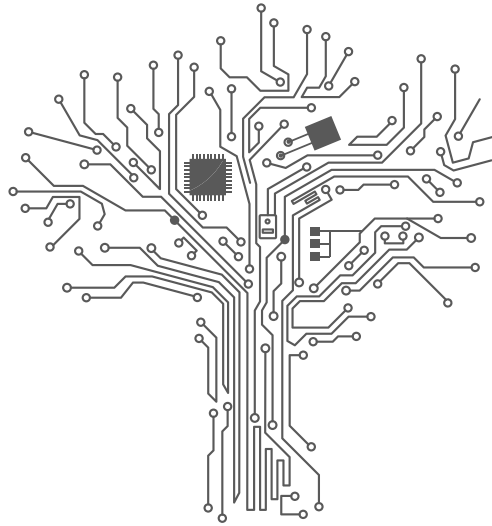
- Elio Assuncao, Founder, VC World summit

“Foreigners can enjoy a good standard of living in this city as the city has a variety of options for everyone”

- Internations, Global network for expatriates

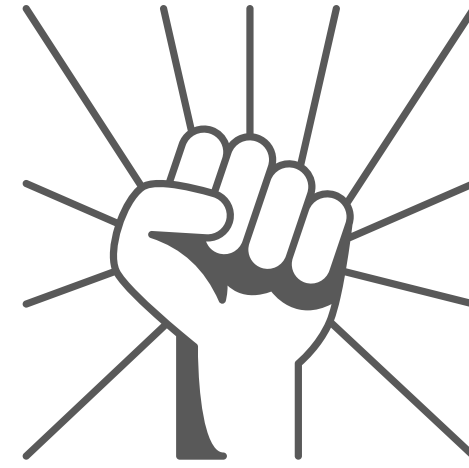


The city of Bengaluru has come a long way in becoming one of the most recognized cities in the world



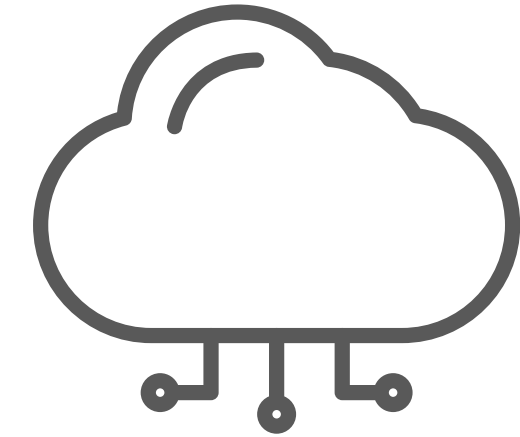
1984

The making of an IT capital



2010-2020

**From Back office to an
R&D hotspot**



2020 Onwards

The Silicon Valley of Asia

While Bengaluru itself has successfully emerged as the startup capital of India, its success has not resulted in other cities in the state developing into homes for tech startups wherein the regulatory push in creating corporate/university tie-ups and giving platforms for entrepreneurs from tier 2 & 3 cities will be critical in ensuring development of new ecosystems.

Bengaluru: India's technology and innovation capital currently stands at...

Per capita income

1. ~\$11000

40+

4.

Unicorns in Bengaluru

Startups employing 5 Lakh+ India's top hub

2. ~15000+

44

5.

Soonicorns

Research laboratories spanning multiple and intersecting disciplines

3. ~450+

~300000+

6.

Chip designers and testers in ~250+ companies

~250+

7.

Women led startups

BLR, India's leading state for space research & applications, has a strong existing space ecosystem with ISRO and multiple upcoming space startups



Karnataka has a rich history of being at the forefront of space Innovation

- **ISRO**, Indian Space Research Organization, setup in Bangalore in 1969
- **Aryabhata**, India's 1st satellite, assembled in Bangalore in 1970s
- **Antrix Corporation**, commercial arm of ISRO setup in Bangalore in 1992
- **Chandrayaan (2008) & Mangalyaan (2013)** driven from the state



ISRO, India's national space agency is headquartered in Bangalore

- ISRO Satellite Center in B'lore- **Lead center for building satellites** and developing satellite tech
- ISTRAC¹ Center in B'lore provides **tracking support for all satellite & launch missions**
- Master Control Facility in Hassan **monitors all geostationary satellites** of ISRO
- **Gaganyaan** (Crewed spacecraft), **Chandrayaan-3** (Lunar lander, rover) being driven from Bangalore



Multiple startups further driving space innovation



Internet access from space using own constellation of satellites in LEO



Mfg. high quality nanotubes for space applications



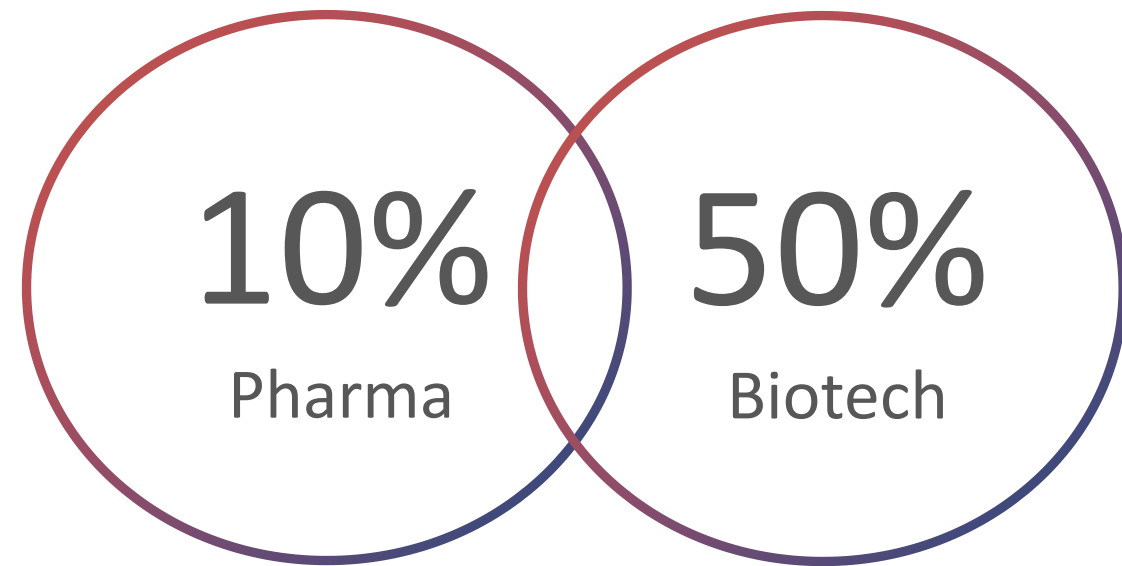
Building world's most adv. earth imaging satellite constellation



Designing and building lander for NASA's next lunar mission

Bangalore has a strong biotech & pharma ecosystem; Several global leaders already manufacturing in the state

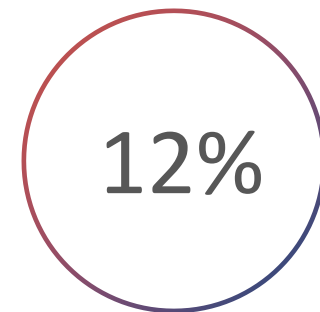
Karnataka is a significant contributor to India's Pharmaceutical and Biotech revenues and exports



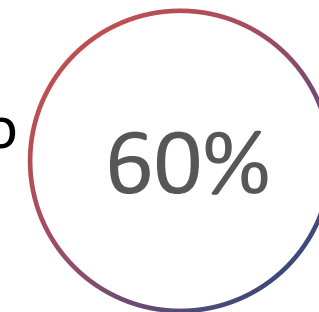
% India's Revenue from Karnataka



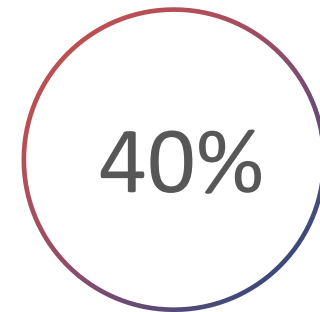
- 1st state to formulate a comprehensive Biotech policy
- Presence of exclusive Pharma SEZs and industrial areas to **boost manufacturing**



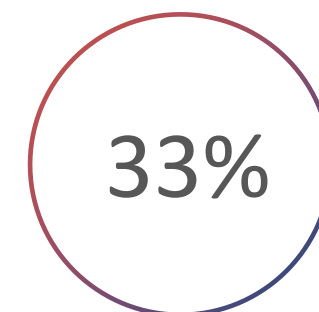
Karnataka's contribution to India's pharma exports



60% of India's Biotech companies are in Karnataka



Karnataka exports 40% of its pharma output



Karnataka's contribution to India's Biotech exports

Leading players manufacturing in Karnataka



GE Healthcare



Novo Nordisk®



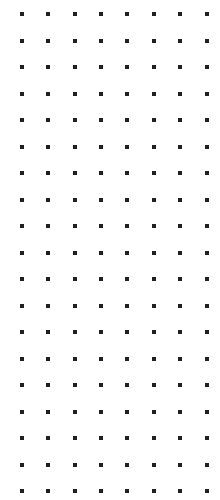
Bangalore is among top 3 global Aerospace cities in attracting foreign investments



Aerospace cities of the future ranking by FDI intelligence

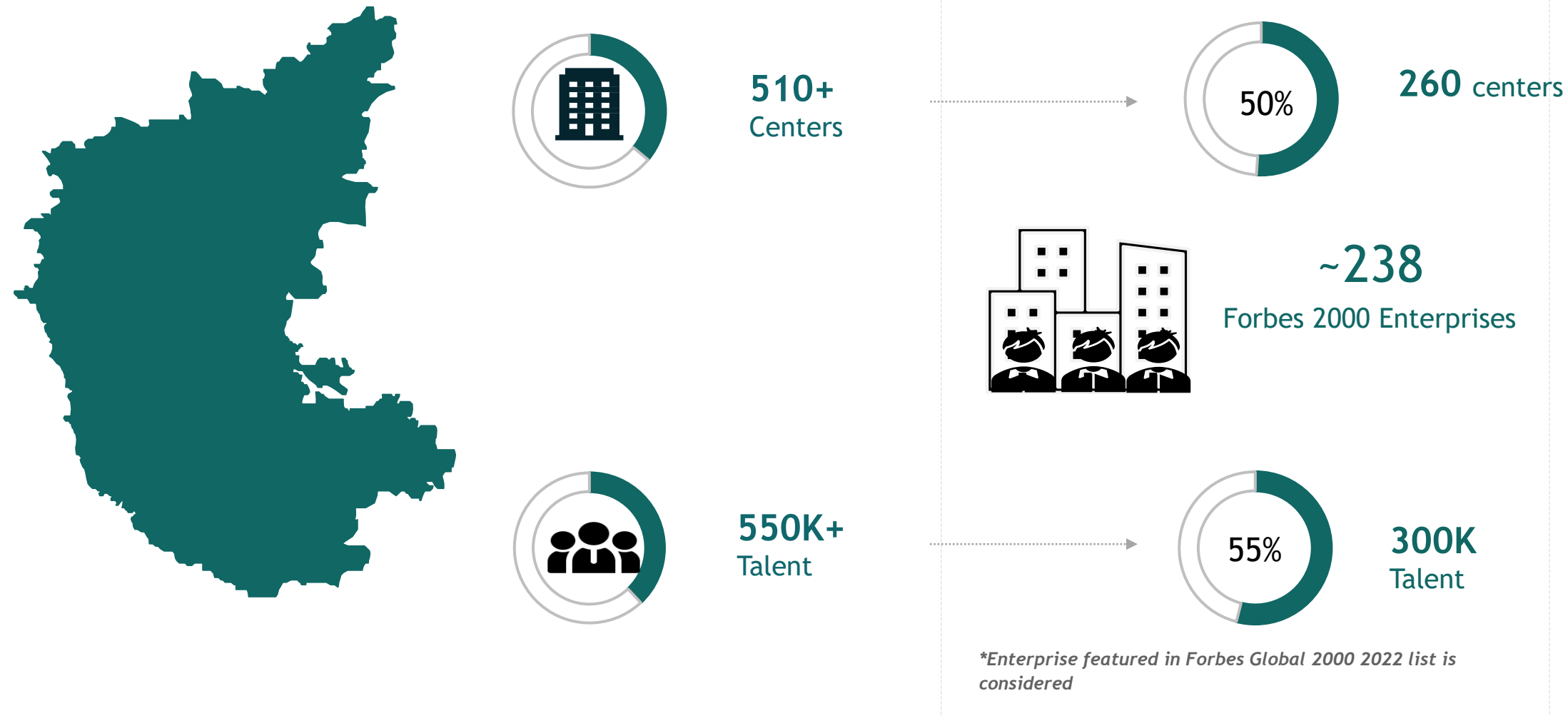


Rank	Location	Country
1	Singapore	Singapore
2	Dubai	UAE
3	Bangalore	India
4	Shanghai	China
5	Paris	France
6	London	UK
7	Prestwick	UK
8	Dublin	Ireland
9	Mexicali	Mexico
10	Queretaro	Mexico



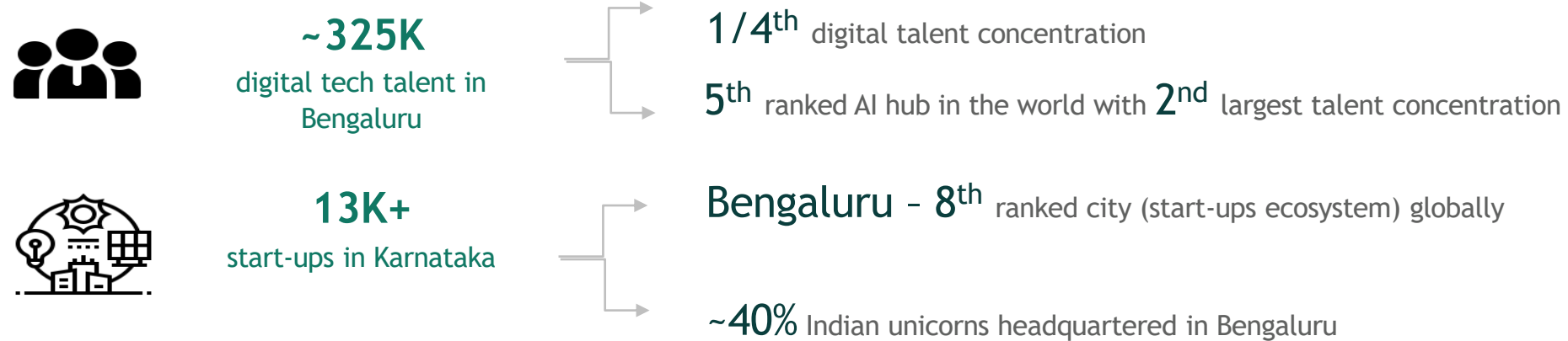
Bangalore - India's Leading GCC Destination

Global MNCs with Centers in Karnataka



**Bangalore –
Home to ~60%
of Forbes
Global 2000 in
India**

Key Facts: Karnataka's advantage





IT PARKS IN BENGALURU

- **Electronic City**
- **ITPL**
- **ITBP**
- **Bagmane Tech Park**
- **Embassy Tech Village**
- **Prestige Tech Park**
- **RMZ Ecoworld**
- **Global Technology Village**

SOCIAL INFRASTRUCTURE AT BENGALURU

Schools

- The International School Bangalore (TISB)
- Mallya Aditi International School
- Greenwood High International School
- Inventure Academy
- Indus International School

Malls

- Phoenix Market city Bengaluru
- Orion Mall
- Forum Mall, Koramangala
- Mantri Square Mall
- UB City

Transportation

- Roadways
- Railways
- Metro
- Taxis and cabs
- Airport

Hospitals

- Manipal Hospital (Old Airport Road)
- Apollo Hospital (Bannerghatta Road)
- HCG Cancer Centre
- Fortis Hospital
- Sakra World Hospital
- Hosmat Hospital
- Aster Hospital
- Narayana Hrudayalaya
- Jayadeva Hospital
- KIMSc



KARNATAKA'S STARTUP STORY IN NUMBERS

10K

DPIIT registered
startups

\$64 Bn

As of 2022 (Venture
Capital raised by
Bengaluru-based
start-ups)

4K+

active tech
startup investors

40

Tech
unicorns

44

tech
sooniconns

1.7K

funded tech
startups- the
highest number in
our country

138+

accelerators and
incubators

47

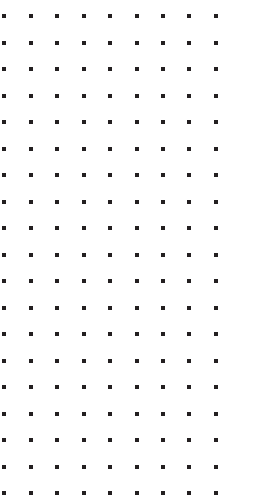
Innovation
hubs

304

mergers and
acquisitions as of
2022

8

Centres of
excellence



SECTOR-WISE LANDSCAPE OF UNICORNS AND SOONICORNS IN BENGALURU

FINTECH

Finte



ENTERPRISE TECH

Finte



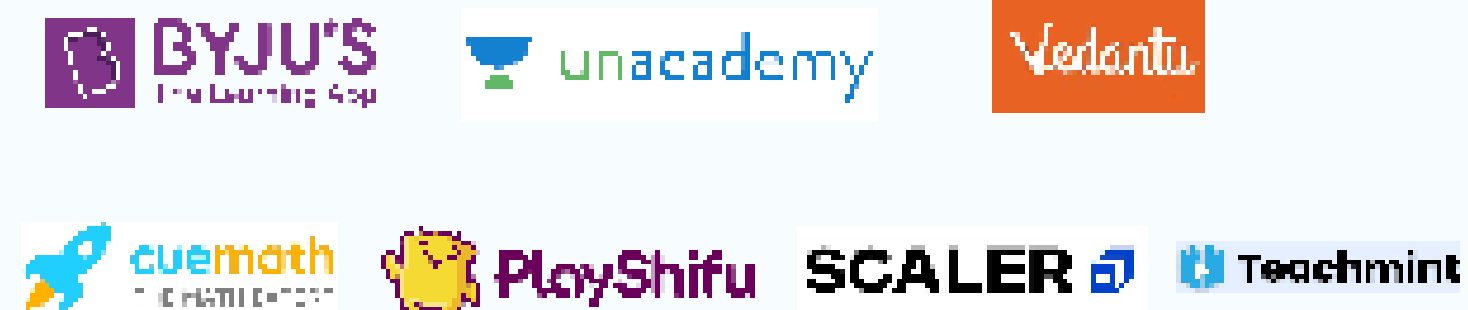
E-COMMERCE

Finte



EDTECH

Finte



EDTECH

Finte



SECTOR-WISE LANDSCAPE OF UNICORNS AND SOONICORNS IN BENGALURU

OTHERS

Fintech



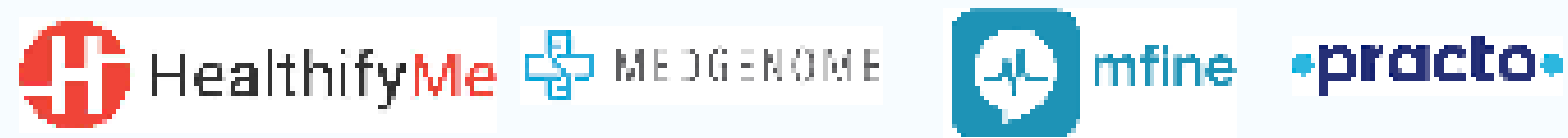
MEDIA & ENTERTAINMENT

Fintech



HEALTH TECH

Fintech



Unicorns (40 in number)

Top-Sectors

- 10 Fintech
- 8 Enterprise tech
- 7 E-commerce

\$170 Bn+ combined valuation

\$49 Bn+ combined capital raised

Soonicorns (44 in number)

Top-Sectors

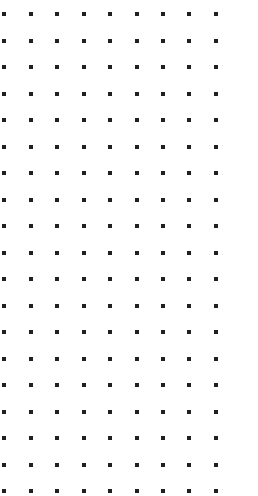
- 15 Fintech
- 7 Enterprisetech
- 4 Ecommerce

\$16 Bn+ combined valuation

\$7 Bn+ combined capital raised



Mission Beyond Bengaluru



Beyond Bengaluru



Mysuru Cluster
ESDM & Cybersecurity



Mangalore Cluster
FinTech



HDB Cluster
Edu & AgriTech

FOCUS AREAS

EXISTING ECOSYSTEM OF COMPANIES





Fintech, IT/ITES, AVGC, ESDM, Cyber Security, Agritech, AI/ML, Manufacturing, Food processing, Chemical, Banking, Electronics, BioTechnology, HR, EdTech

Spoke-shore strategy

Any metro city within India or outside India can be as the hub location and clusters can become the spokes.

Spoke defines the product of each clusters:

- Talent
- Shared services
- Infrastructure
- Full-fledged IT services

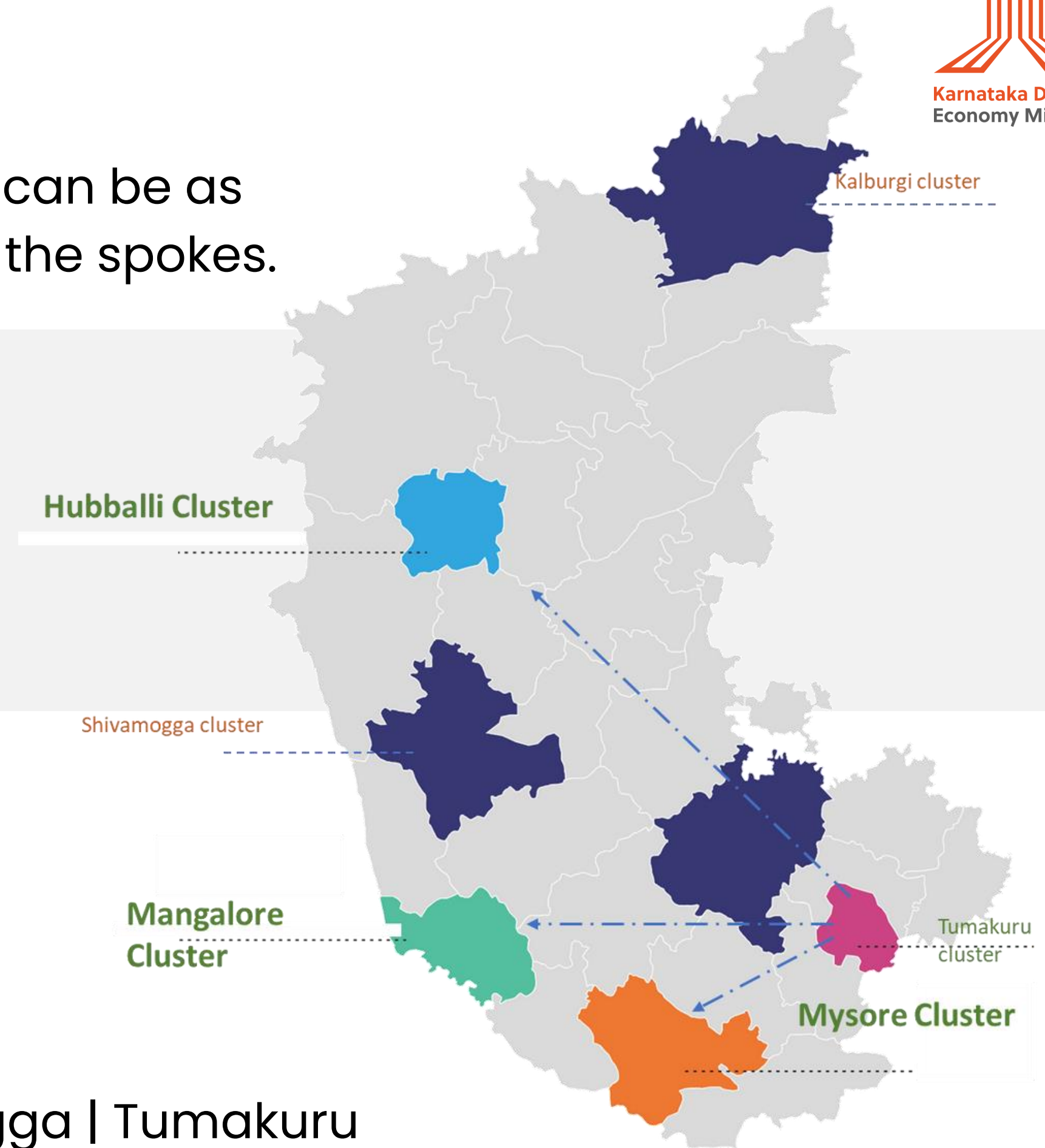
Clusters

Mysuru

Mangaluru

Hubballi-Dharwad-Belagavi

Upcoming Clusters: Kalaburagi | Shimogga | Tumakuru



IT Policy 2020-2025



Incentives under updated IT policy

Financial support of up to 20% of Fixed Investment for Infrastructure

Financial support of up to 33% of the Fixed Investment for Infrastructure

Reimbursement at the rate of INR 10/- per sq. ft

IT/ ITeS Entities shall be entitled to an exemption of 75% in Mysuru, Hubballi, Dharwad and Mangaluru,

Reimbursement of PF/ESI for all IT/ITeS entities outside Zone 3, at the rate of INR 2000 per employee per month for 2

30% of actual cost incurred including travel for international marketing

Up to INR 2 lakh for domestic patents and up to INR 10 lakhs for international patents.

Demand Incentives

50% reimbursement of cost of quality certification

30% of actual cost incurred including travel for international marketing

R&D projects : up to a maximum of 33% of the total project R&D cost, or up to INR 1 crore, whichever is lower

Govt. of Karnataka provides special package of incentives for setting up Semiconductor / OSAT unit as per the new ESDM incentives package

PRE OPERATIONS

Capital Investment Subsidy

25% subsidy on land

25% subsidy on land

20% subsidy on plant & machinery

20% subsidy on plant & machinery

20% subsidy on plant & machinery

POST OPERATIONS SETUP2

Production Linked Incentive (PLI)

1% of annual turnover for 5 years

INR 1 per unit Power tariff subsidy for 5 years

100% exemption from electricity duty

Additional incentives

can be considered for big projects for setting up Semiconductor / OSAT unit

- Land at subsidized rates
- Built-to-suit, plug & play facilities
- ...and more

E-R&D policy recently launched by Karnataka provides multiple incentives for R&D centers

Wide range of incentives provided under new E-R&D Policy

Establishment / Expansion of MNC E-R&D Operations ¹	Fund to support Tech. innovation	Prototyping & Testing infrastructure ¹	Innovation labs ¹	Digital Innovation for services/social challenges
<p>For Engineering R&D entities (GCC):</p> <p>Rental reimbursement:</p> <ul style="list-style-type: none"> 50% of rent (up to Rs. 2 Cr. or Rs. 1666 per employee) <p>Recruitment assistance: Up to Rs. 20 lakhs</p> <p>Investment subsidy:</p> <ul style="list-style-type: none"> 20% of investment amount (up to Rs. 2 Cr.) 	<p>For Engineering R&D entities (GCC & ESPs):</p> <ul style="list-style-type: none"> Grant of 40% of approved R&D expenditure up to Rs. 8 Cr. per entity 	<p>For implementing agencies (KDM):</p> <ul style="list-style-type: none"> 40% of approved budget up to Rs. 50 Cr. per entity 	<p>For Engineering R&D entities (GCC & ESPs):</p> <ul style="list-style-type: none"> Grant of 33% of approved innovation labs budget up to Rs. 8 Cr. per entity 	<p>For Engineering R&D entities (GCC & ESPs) & startups:</p> <ul style="list-style-type: none"> Funding of 80% of approved project budget up to Rs. 3 Cr. per entity
<p>Additional support provided:</p> <ul style="list-style-type: none"> To implementing agency (KDM) for evangelizing E-R&D capability by setting up Go & See centers as well for hosting/participating in R&D events (up to Rs. 50 lakhs) To Engineering R&D entities (GCC & ESPs) for internship program: Reimbursement of 50% of intern stipend for 3 months up to Rs. 10,000 per intern per month 				

Note: Detailed applicable restrictions for each incentive category provided in the E-R&D policy; 1. For investment beyond Bengaluru Urban district

BEYOND BENGALURU MISSION – A SUCCESS STORY



Hubballi-Dharwad- Belagavi

Mangaluru

Mysuru

Accomp- lishments

400+ Startups;
80+ Funded startups;
65+ Trademarks registered;
4,500+ Jobs added;
90+ IPs file;
30%+ Women entrepreneurs;
5+ acquisitions worth INR 1,500 Cr

200+ Startups;
3,000 Top skills-Finance & Accounting;
5,000 HR & Knowledge Services;
6,000 QA, Testing & IMS
10,000 Application Development &
Maintenance (IT);
7,000 Software Products

240+ Startups
8,000 in Finance & Accounting skills;
11,000 HR & Knowledge Services;
11000 QA, Testing & IMS;
19,000 Application Development &
Maintenance (IT);
13,000 Software Products

Notable Investors

Stakeboat Capital, Y Combinator, Sandbox
Startups, Rebel Foods, Prime Venture
Partners, Indian Angel Network

CIIE.CO, Riidl.org, IndiaRF.com

Ascent Capital, Startup India,
JITO Angel Network

Primary Sectors

Foundry, Automobile, SaaS, Edtech, Agritech,
AI/Data Science

Fintech, IT

ESDM, Cybersecurity,
Enterprise Services,

Notable Startups

Docketrun, Labinapp, Careerboat,
Vayavyalabs, Ecomjetco, Cautomate

DiyaSystems, Novigo Solutions, Semnox
Solutions, Codecraft Technologies

Skarray, Sportiwe,
S3V vascular Technologies

Other Initiatives

Cluster seed fund: INR 25 Cr Acceleration
Network
Kalyana Karnataka: EDP
Women Elevate | Elevate
Beyond Bengaluru Startup Grid

End-to-end support for setting up
an IT/ITeS entity |
Government subsidies: 10% through
government subsidies

INR 223,305 Revenue (2019-20)
15 industry sectors
10+ renowned academic institutions
88,000 total available talent pool
30%+ women entrepreneurs
120+ startups onboarded
230 ESDM companies

Beyond Bengaluru



Mysuru Cluster
ESDM & Cybersecurity



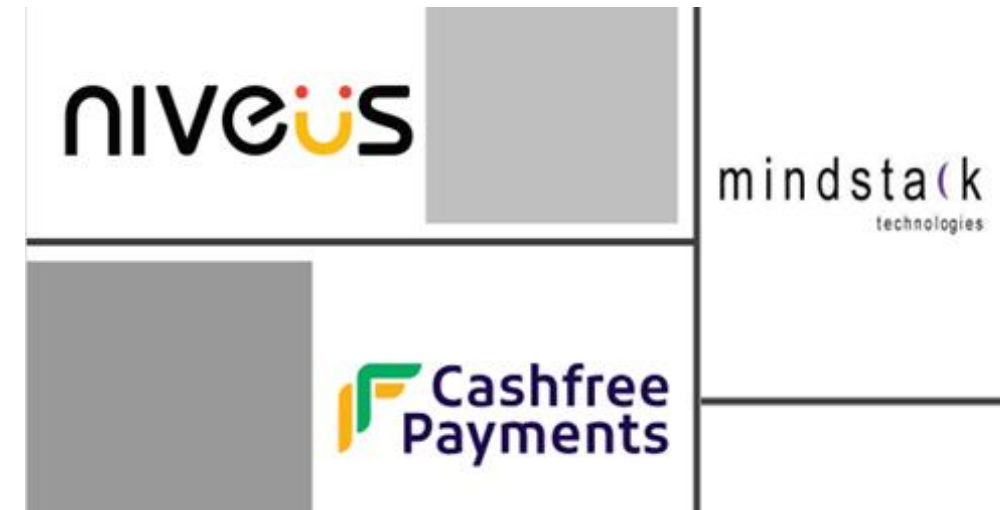
Mangalore Cluster
FinTech



HDB Cluster
Edu & AgriTech

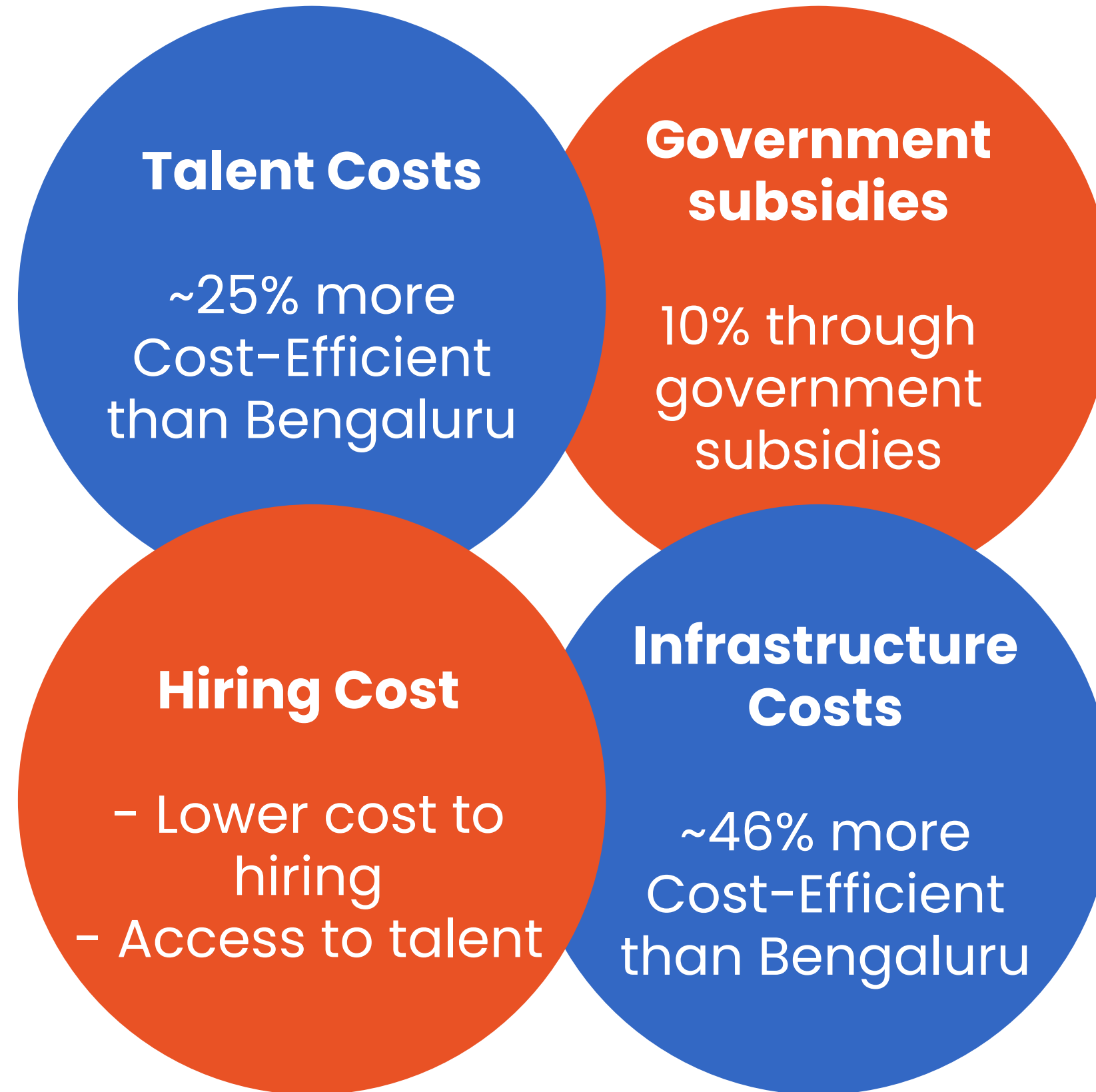
FOCUS
AREAS

RECENT
ADDITIONS



36+ Companies, Approx 15000 employment

PRODUCT FOR EACH CLUSTER



Overall Impact
on P&L : **25-30%**



Cluster focus Infrastructure

Mysuru Cluster

1L Sq. Ft.

Plug & Play Infrastructure

~350+

Co-working Spaces

**9 SEZ
1 STPI**

~2L Sq. Ft.

Global Technology Centre
under construction

Mangalore Cluster

**3L+
Sq. Ft.**

Plug & Play Infrastructure

~500

Co-working Spaces

**3 SEZ
1 STPI**

**4.5L+
Sq. Ft.**

IT Parks
(about 3-4)

HDB Cluster

**0.5 Mn+
Sq. Ft.**

Shared space

~400+

Co-working Spaces

**3 SEZ
1 STPI**

CLUSTER-WISE TALENT POOL

Mysuru

15+

Renowned
Engineering Colleges

~40k

Engineering &
Degree College
students

~30k

Availability of
IT Talent

~25k

Availability of
BPM Talent

~19k

Application Dev. &
Maintenance
- Top Available IT Skill

Mangaluru

20+
15+

Engineering Colleges
Medical & Dental
Collages

~60k

Engineering &
Degree College
students

~12k

Availability of
IT Talent

~10k

Availability of
BPM Talent

~10k

Application
Development &
Maintenance

HDB

10+

Renowned Institutes
of Eminence

~35k

Engineering &
Degree College
students

~14k

Availability of
IT Talent

~30k

Availability of
BPM Talent

43
49
127

Engineering
Diploma
Degree College

Man-
power
hired in
last 18
months

- IBM (300)
- Glowtouch (200)
- I-Socrates (50)
- HGS (50+)

- Niveus (600)
- Mindstack (25)
- Cashfree (25)
- Sacumen (25)

- IMerit (200)
- Five S (300)
- IonIdea (100)
- dhiomics (20), IMOS (20)



SOCIAL INFRASTRUCTURE AT MANGALURU CLUSTER

Physical infrastructure

- Mangaluru-well connected by air, rail, road & sea
- Active domestic & international airport
- One of the major sea port in Mangaluru
- 4.MRG Group, Prestige group and Brigade group. City Centre Mall, Nexus Fiza Mall and Bharath Mall.

- 4 & 5-Star Hotels | Best-in-Class Standards
- Presence of premier Schools/Institutions /Engineering Colleges/Medical Colleges/Hospitals
- Mount Carmel Central School, Podar International School and Prestige International School etc.
- St Aloysius College, Canara college and Mangaluru University etc.
- Surf in the Arabian sea & Trek the western ghats.
- Ola and Uber – operational
- Ocean Pearl, Goldfinch, BMS Hotel, Sea View by Swathi, AJ Grand , Taj Gateway, Suraj International

Hospital infrastructure

- 8500+ Hospital Beds
- World class multi-specialty hospitals like
- Kasturba, Manipal group, Unity hospitals, AJ hospital & research center, Yenepoya specialty hospital



SOCIAL INFRASTRUCTURE AT MYSURU CLUSTER



Physical infrastructure

- ~90 mins connectivity to Bengaluru | 10 lanes highway connecting to Bengaluru
- Active domestic airport and upcoming international airport
- Railway junction with India-wide connectivity
- India's first wi-fi enabled city



Hospital infrastructure

- 3500+ Hospital Beds
- Government Medical College, JSS Medical College
- World-class multi-specialty private hospitals- JSS, Apollo, Columbia Asia, Narayana Hrudalaya



- Hospitality: 4 & 5-Star Hotels | Best-in-Class Standards & Facilities
- 6 Malls (Central, Garuda, Forum etc.)
- Best in class schools
- Premium Residential Complexes | Villas & Apartments by Sobha, Brigade developers and others



SOCIAL INFRASTRUCTURE AT HDB CLUSTER

Physical infrastructure

- Hubballi Airport & Belagavi Airport is connected to many Indian cities
- Both the cities (Hubballi-Dharwad & Belagavi) well connected to pan India through rail

Hospital infrastructure

- 3500+ Hospital Beds
 - World-class multi-specialty private hospitals- Karnataka Institute of Medical Sciences, SDM Medical College & hospital etc.
-
- Hospitality: 4 & 5-Star Hotels
 - Best in class schools
 - Premium Residential Complexes | Villas & Apartments



BEYOND BENGALURU START-UP ECOSYSTEM



Mysuru

250+

Startups supported by the Ecosystem

80+

65+

90+

Startups Funded
Trademarks
IPs Filed

30%+

Women
Entrepreneurs

5+

Acquisitions worth INR 1500 Cr.

Notable Investors

Ascent Capital, Startup India, JITO Angel Network

Types of domains

ESDM, Cybersecurity, Enterprise Services

Mangaluru

200+

Engineering Colleges
Medical & Dental
Collages

Notable Investors

CIIE.CO, riidl.org, indiarf.com

Types of domains

FinTech, IT/ITeS

Centers of Excellence

FinTech, IT/ITeS

HDB

400+

Renowned Institutes of Eminence

Notable Investors

Stakeboat Capital, Y Combinator, Sandbox Startups, Rebel Foods, Prime Venture Partners, Indian Angel Network

Types of domains

Agritech, Enterprise Services, AI/ML, Automotives, Foundry

BEYOND BENGALURU START-UP ECOSYSTEM



Mysuru

HOLOSUIT

HoloWorld is Mysuru based start-up on Skill MetaVerse Augmenting Humans and Robots is funded by cricketer Yuvraj Singh. It does business with 20+ countries and has represented the state of Karnataka in Indo-Israel start-up delegation

Mangaluru

ROBOSOFT

An Udupi based gaming company was acquired by a Japanese company, TechnoPro, for Rs 805 crore.

HDB

Sankalp Semiconductor of Hubballi

Acquired by HCL

Saankhya Labs of Belagavi

Tejas Networks acquired 62.65% stake in Saankhya Labs for Rs 276.24 crore.

Unforeseen situations mitigated by cluster ecosystem

In the wake of COVID-19, business functions were not disrupted because of the support extended by the local administration to the smooth functioning of overall cluster operations.

- Law and order situation at the clusters have been excellent at the clusters
- Very low crime rates
- Healthcare infrastructure at cluster levels are good: successfully handled covid situations
- Vaccination drives for industry was conducted extensively by local administrations
- Disaster Management Authority



Advantage Beyond Bengaluru

Advantage for Employee & Employer(1/2)

Office Space Rental	Mysuru (in INR)	Mangaluru (in INR)	HDB (in INR)	Bengaluru (in INR)	Chennai (in INR)
Plug & Play	Approx. 70 /sq. ft	Approx. 62 /sq. ft	Approx. 60 /sq. ft	Approx. 90 /sq. ft	Approx. 80 /sq. ft
Bare-shell	Approx. 60 /sq. ft	Approx. 30 /sq. ft	Approx. 43 /sq. ft		
Co-working	Approx. 7K /Seat	Approx. 6K /Seat	Approx. 7K /Seat	Approx. 14K /Seat	Approx. 14K /Seat

Residential Cost of Apartments	Mysuru (in INR)	Mangaluru (in INR)	HDB (in INR)	Bengaluru (in INR)	Chennai (in INR)
2-3 BHK-outskirts	Approx. 15 K	Approx. 10K	Approx. 10K	Approx. 30K	Approx. 35K
2-3 BHK City Centre	Approx. 20 K	Approx. 15K	Approx. 15K	Approx. 35K	Approx. 40K
3 BHK	Approx. 25K	Approx. 20K	Approx. 20K	Approx. 45K	Approx. 50K

On an average, Office Cost in Beyond Bengaluru clusters is ~30-35% lower than Metros

On an average, Residential Cost in Beyond Bengaluru clusters is ~40-45% lower than Metros

Advantage – HR Cost (2/2)

Designation	Mysuru (in INR)	Mangaluru (in INR)	HDB (in INR)	Bengaluru (in INR)
Beginner (Associate Software Engineer to Senior Software Engineer)	Approx. 3 - 5 Lakh per annum	Approx. 2.5 - 5 Lakh per annum	Approx. 2.5 - 5 Lakh per annum	Approx. 6 - 8 Lakh per annum
Managerial positions (test lead/team lead/ technical lead)	Approx. 10 - 20 Lak per annum	Approx. 10 – 18 Lakh per annum	Approx. 10 – 18 Lakh per annum	Approx. 20 - 30 Lakh per annum
Senior Manager Roles	20 Lakh - 30 Lakh per annum	Approx. 20 – 30 Lakh per annum	Approx. 20 – 30 Lakh per annum	>35 Lakh per annum
AVP & VP	35 Lakh to 60 Lakh per annum	Approx. 30 – 50 Lakh per annum	Approx. 30 – 50 Lakh per annum	>50 Lakh per annum
Senior VP	60 Lakh to 70 Lakh per annum	Approx. 50+ Lakh per annum	Approx. 50+ Lakh per annum	1 Crore and above per annum

On an average, HR Cost in Beyond Bengaluru clusters is ~**30-35%** lower than Metros

Benefit Use Case (simulation)

Assumption 1:

Number of seats- 100 | Area- 10000 sq. ft | Domain of company's operations: IT/ITeS

Assumption 2:

Approximation of some reimbursements / subsidies that a company may avail under GoK's IT policy

Benefit under IT Policy

Incentive		Rate of Reimbursement (INR)	Total (INR)
Rent reimbursement	Area (sq. ft.): 10,000	10	1,00,000 [#]
Quality Certification [^]			~150,000-200,000
Electricity subsidy			50,000-100,000
PF / ESI Reimbursement [*]	Resources: 1,000	2,000	20,00,000
Patent cost			India: 200,000 International: 10,00,000

Rent reimbursement capped to INR 300,000

[^] ISO certification cost is USD 3,000-5,000 (INR 225,000-375,000); reimbursement under policy capped to 50% of cost

^{*} Maximum reimbursement INR 24,00,000 per company during policy period

Incentives that can get a cost reduction to the tune of INR 45,00,000

Few American companies successfully growing in Karnataka

Large Size



Middle Size



Startups



Leverage us to be part of your growth journey

India
Bangalore and..Beyond
Jai Hind!



**Karnataka Digital
Economy Mission**



Karnataka Digital
Economy Mission



KEONICS – K-WINGS,
27th Main Rd, 1st Sector, HSR Layout
(behind HSR Police Station), Bengaluru



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