

# **Digital Karnataka**

# Karnataka fostering the **DIGITAL WORLD**

# JOIN THE DIGITAL REVOLUTION, **POWERED BY KARNATAKA.**









Karnataka Digital **Economy Mission** 





**100X** rise in GDP; currently at USD 3.5 Tn

**500X** rise in per capita income; currently at USD 2,300

**500X** rise in total exports; highest ever exports of USD 660 Bn in 2021-22





5th largest economy; jumped 6 positions since 2012



Annual FDI doubled in last 8 years (launch of Make in India in 2014); USD 35 Bn to USD 84 Bn in a decade



During pandemic, India witnessed V-shaped recovery; GDP contracted 24% in first quarter of the year before bouncing back to 20% in 4th quarter







2nd largest working population of 522 Mn with median age of ~29 years

# **Amrit Kaal : Vision 2047**

	Economy	2 <sup>nd</sup> largest	USD 32Tn
	Per Capita Income	10X	USD 20,000
	Manufacturing GDP	15X	USD 6.2Tn
Ц Ч	Services GDP	13X	USD 20Tn
\$	FDI	12X	USD 1Tn
<u> V</u>	Exports	12X	USD 8Tn
	Human Capital	Largest and Youngest working population	Median age o years





#### Shri Narendra Modi Hon'ble Prime Minister of India

"India is making policies keeping in mind the goals of next 25 years. In this time period, the country has kept the goals of high growth and saturation of welfare and wellness". *'State of World' address World Economic Forum, 2022* 

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# **Technology: Digitally Empowering Indian Society**

#### **India's Scale and Speed**



1.3 Bn people with unique digital identity



#2 in Mobile phone users (1.2 Bn); Smartphone users (750 Mn)



#1 Fintech adoption rate



74 Bn digital transactions worth USD 1.6 Tn in CY 2022



USD 1Tn digital economy by FY 2025









30x reduction in data cost; amongst lowest globally \$0.68 per GB





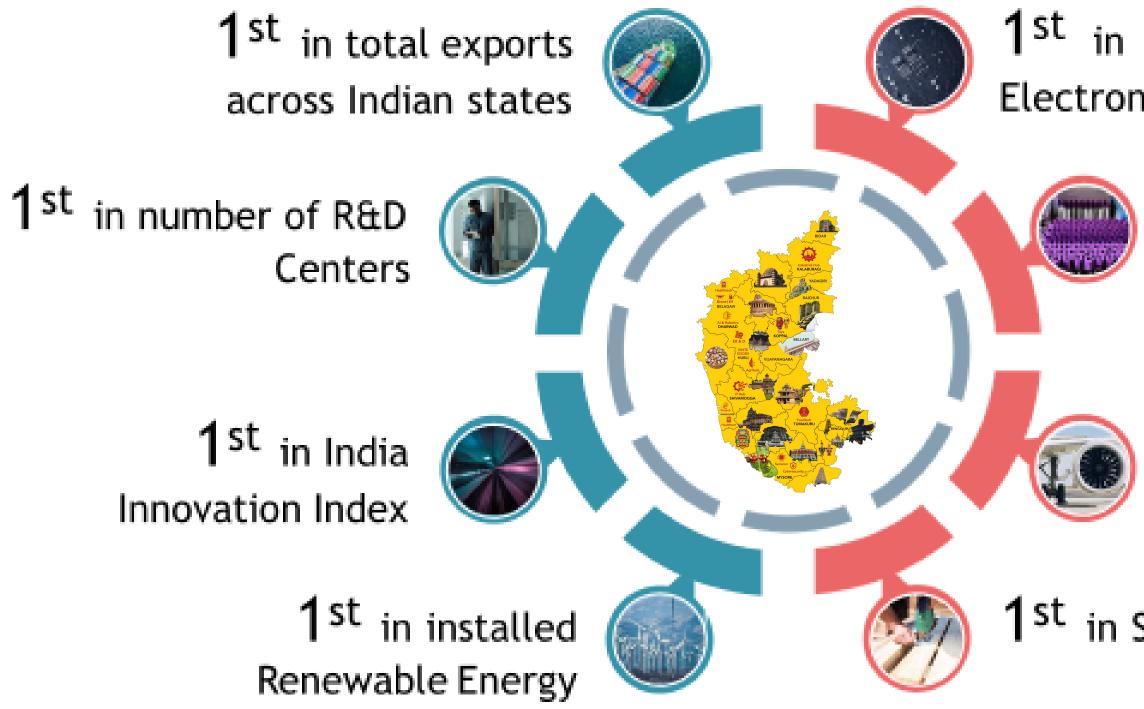


1.3 Bn Internet Users by 2030

61% internet penetration

373 Mn Estimated Rural Internet Users

# Karnataka – Stands Out...





## **1**<sup>st</sup> in Electronics design

1<sup>st</sup> in Biotech production & exports

1<sup>st</sup> in Aerospace & Defense manufacturing

# 1<sup>st</sup> in Start-up Ranking

# Numero Uno to Remain Numero Uno?

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# **KDEM**

**KDEM** – A unique PPP model (In Asia) to grow the Digital Economy of the State and the Country.

#### A Section 8 company with **51% equity with Industry** and **49% equity with the Government**, with all OpEx supported by the Government.

#### Organization designed as BY THE INDUSTRY FOR THE INDUSTRY

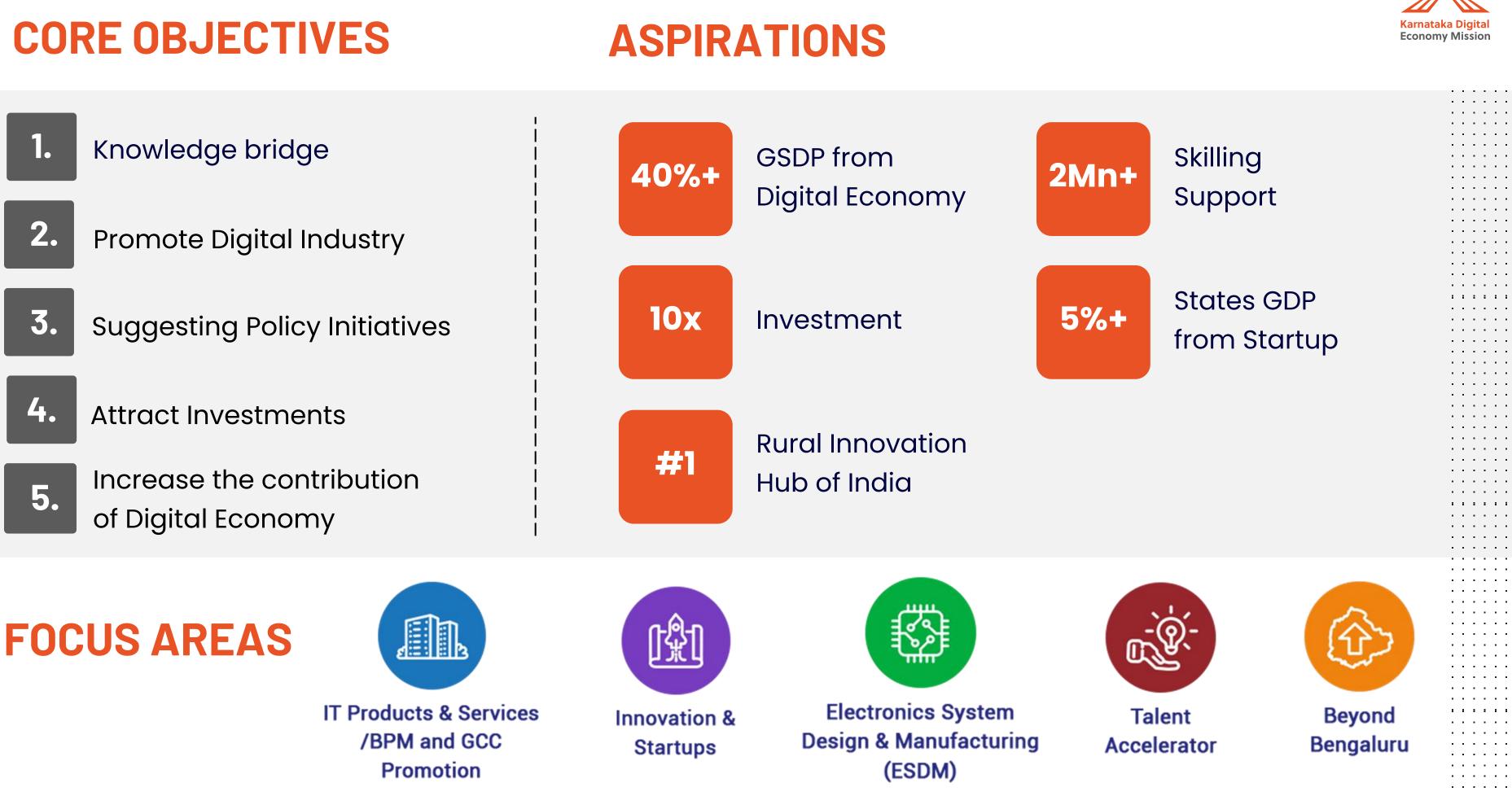
To function to accelerate growth and investments of the IT, BT and S&T (Digital Economy) sectors in Karnataka.

To harness the unlimited potential of the digital economy of Karnataka to transform the lives of the people in the State.

## Vision for New Karnataka: \$ 300 Bn Digital Economy by 2027



## "Karnataka will contribute \$1 trillion to Indian economy by 2032".





# **KDEM – USP's**

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Board of Directors comprises of Industry Champions and Government



Cluster Aspirations & Vision designed by Industry Leaders



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#### Each Vertical is led by Industry anchors



02

# **Macro Strategy Themes – Vertical**





#### **Cluster presence:** Mysuru, Mangaluru, Hubballi-Dharwad-Belagavi

# Where are we and how we are progressing?

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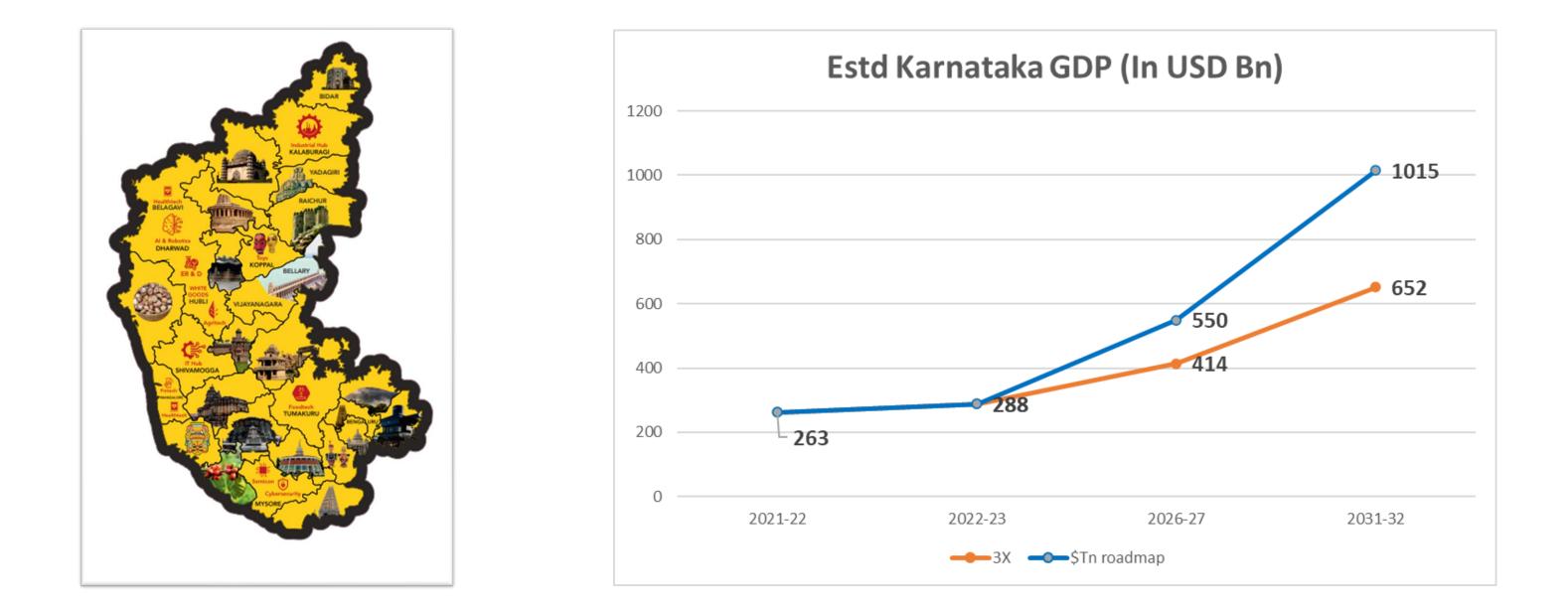
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# Karnataka GDP (In USD Bn) by 2031-32



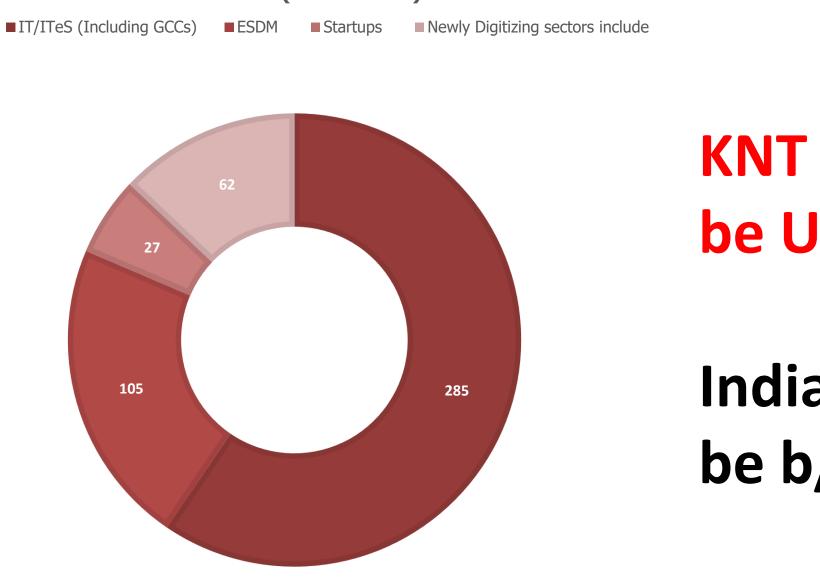
- Karnataka GDP to grow **3X by 2031-32** based on current growth strategy •
- Karnataka is aiming to grow its GDP by 4X with a special plan being prepared to reach USD 1T •

Source: Base value of Karnataka GDP calculated based on 2021-22 figure of Karnataka Economic Survey 2021-22 and assumed 9.5% CAGR year on year basis



# Karnataka Digital Economy by 2031-32





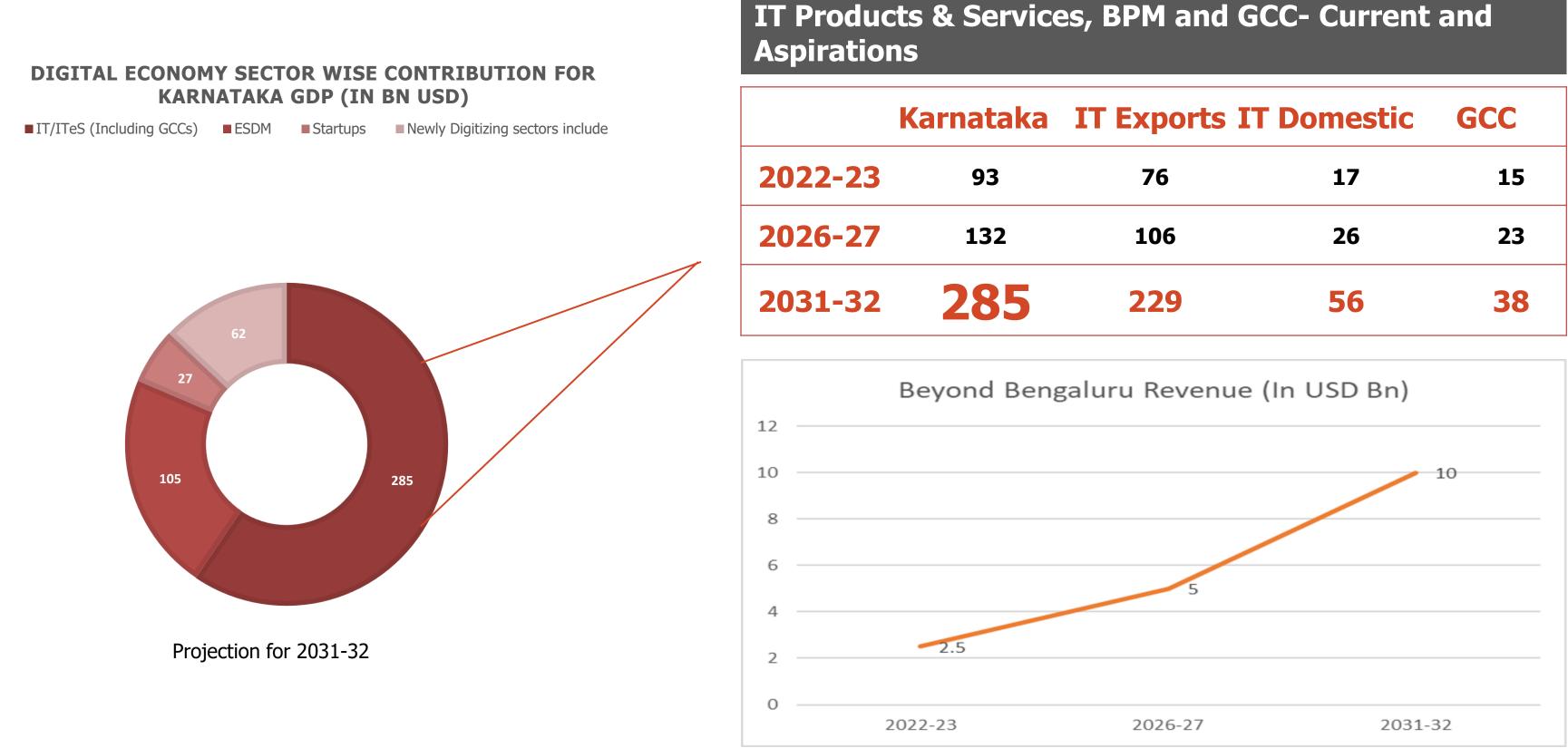
Projection for 2031-32



# KNT DE by 2031-32 may be USD 500 B

# India DE by 2031-32 may be b/w USD 1.5-2 T

# IT & ITES, GCC BPM in Digital Economy by 2031-32



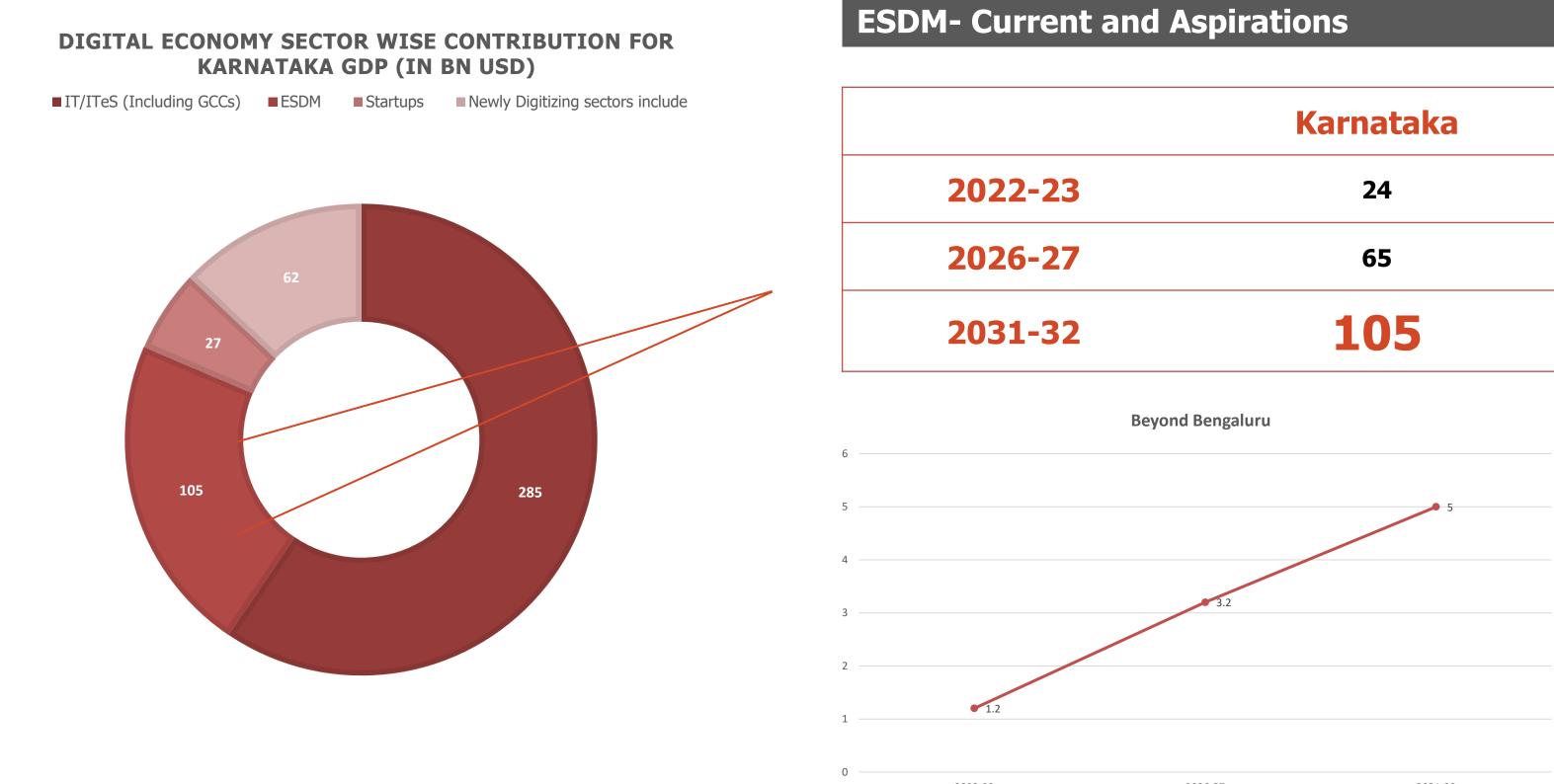
\*Karnataka contribution value consists of a total of IT Exports, IT Domestic, Beyond Bengaluru contribution and contribution from GCC's as a whole





ka	IT Exports I	<b>T Domestic</b>	GCC
	76	17	15
	106	26	23
5	229	56	38

# ESDM in Digital Economy by 2031 -32



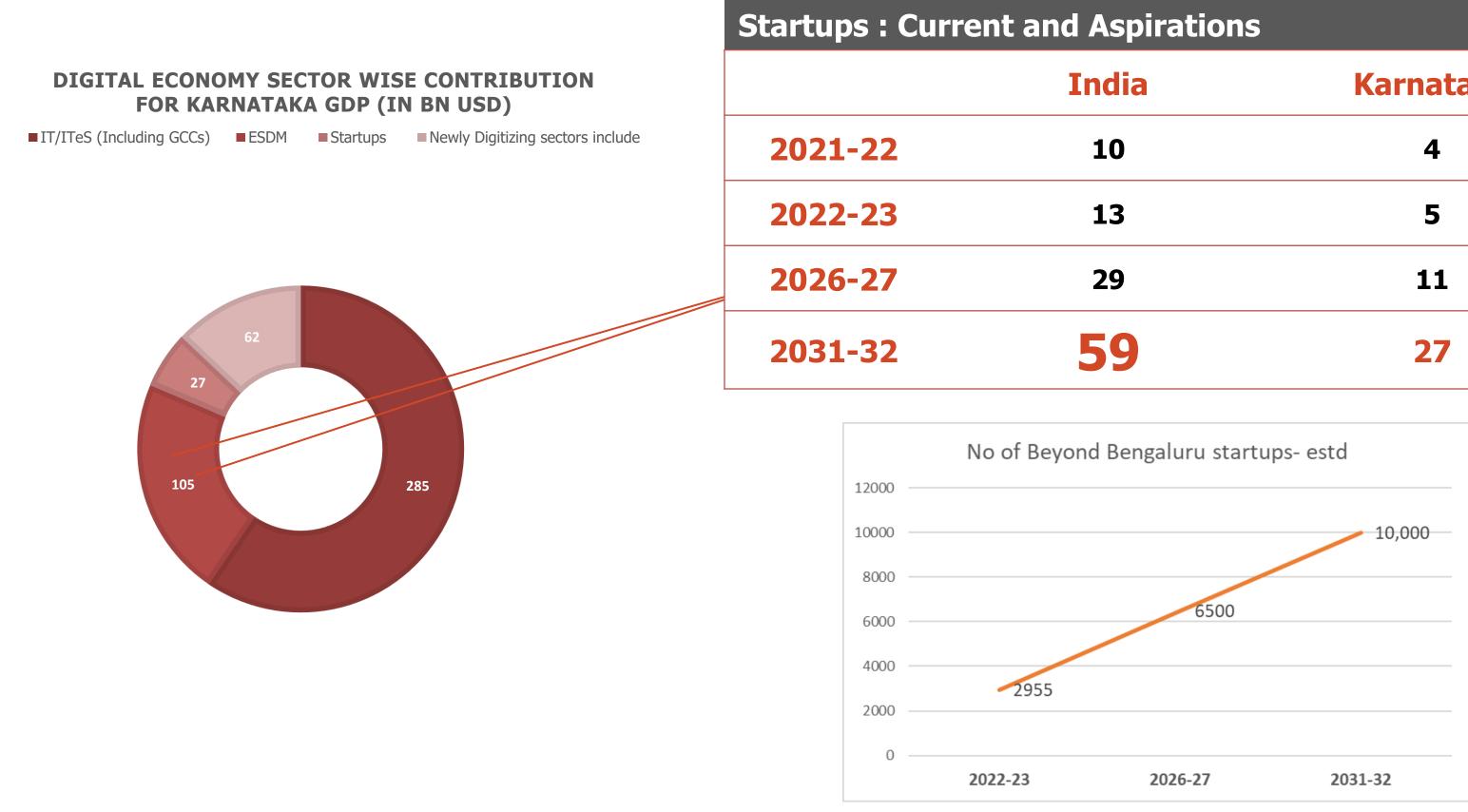
2022-23



	Karnataka
23	24
27	65
32	105



# **Start Ups in Digital Economy by 2031 -32**

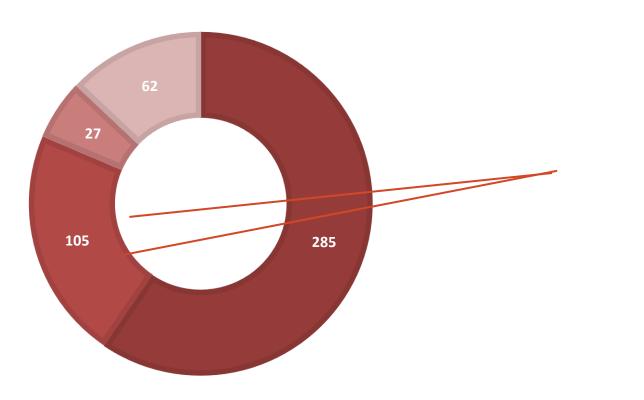




# Karnataka

#### **DIGITAL ECONOMY SECTOR WISE CONTRIBUTION** FOR KARNATAKA GDP (IN BN USD)

■ IT/ITeS (Including GCCs) ■ ESDM Newly Digitizing sectors include Startups



2026-30)

5.

Computation (including growth rate) comprises of

- 1. IT exports(12% till 2025 & 10% from 2026-30),
- 2. IT Domestic (15% till 2025 & 12% from 2026-30)
- 3. ESDM (ICEA estimates till 2025; 12%) for 2025-30 onwards
- 4. Startups (30% till 2025 & 20% from

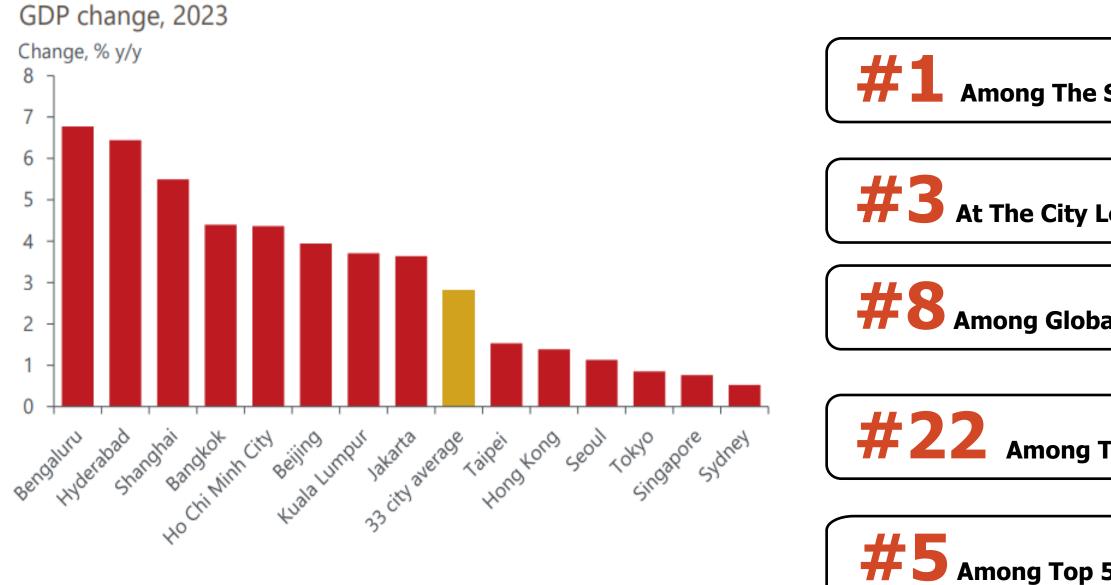
Other sub sectors of Digital Economy: Assumptions for the sub sectors based on McKinsey Global Institute Digital India report for India level and the assumptions based on the BCG estimation for Karnataka based on 19 (Growth rate for India post 2025-10%, Karnataka post 2025-15%

#### **Newly Digitizing Sectors in Digital Economy includes :**

- 4.1 Digital Communication Services
- 4.2 Government e-Market place
- 4.3 Direct Benefit Transfer
- 4.4 Tech-enabled healthcare
- 4.5 Customizable education platform for students
- 4.6 Digitally enabled power distribution
- 4.7 Smart grids with distributed generation
- 4.8 Digital payments
- 4.9 Flow based lending and advanced credit (MSME's)
- 4.10 Digital Farmer financing and insurance payouts
- 4.11 Precision agriculture
- 4.12 Universal agricultural marketplace
- 4.13 Online talent platforms
- 4.14 End to end digital supply chain Traditional Retail
- 4.15 End to end digital supply chain E-Commerce
- 4.16 Efficient transport and logistics
- 4.17 Business digitization and IoT based analytics



# **Bengaluru- The Fastest Growing City in Asia Pacific**



Source: Oxford Economics



**Among The South Asian Cities** 

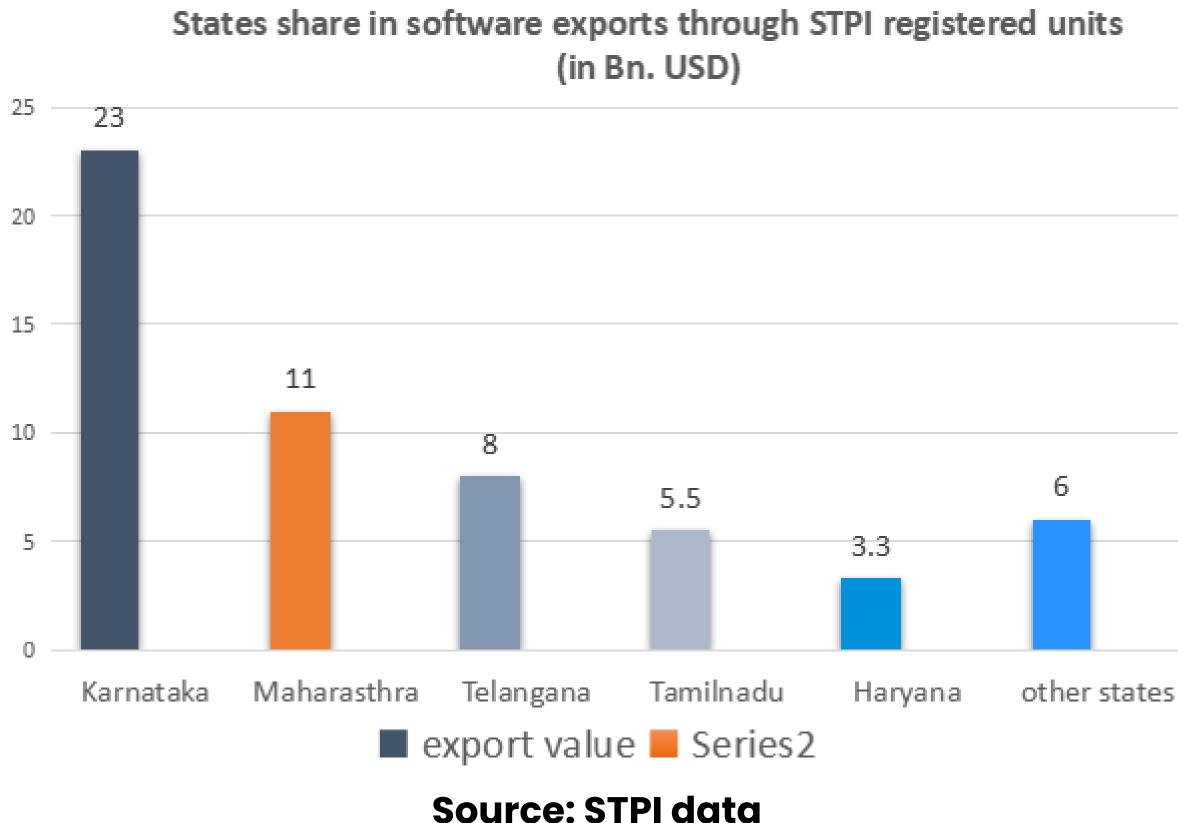
At The City Level In APAC Region

Among Global Startup Ecosystem Index (GSEI) 2022

Among Top 30 Global Startup Ecosystems

Among Top 5 Global VC Funded Startup Ecosystems

## **INDIA-STATES SHARE IN IT AND ITES EXPORTS**

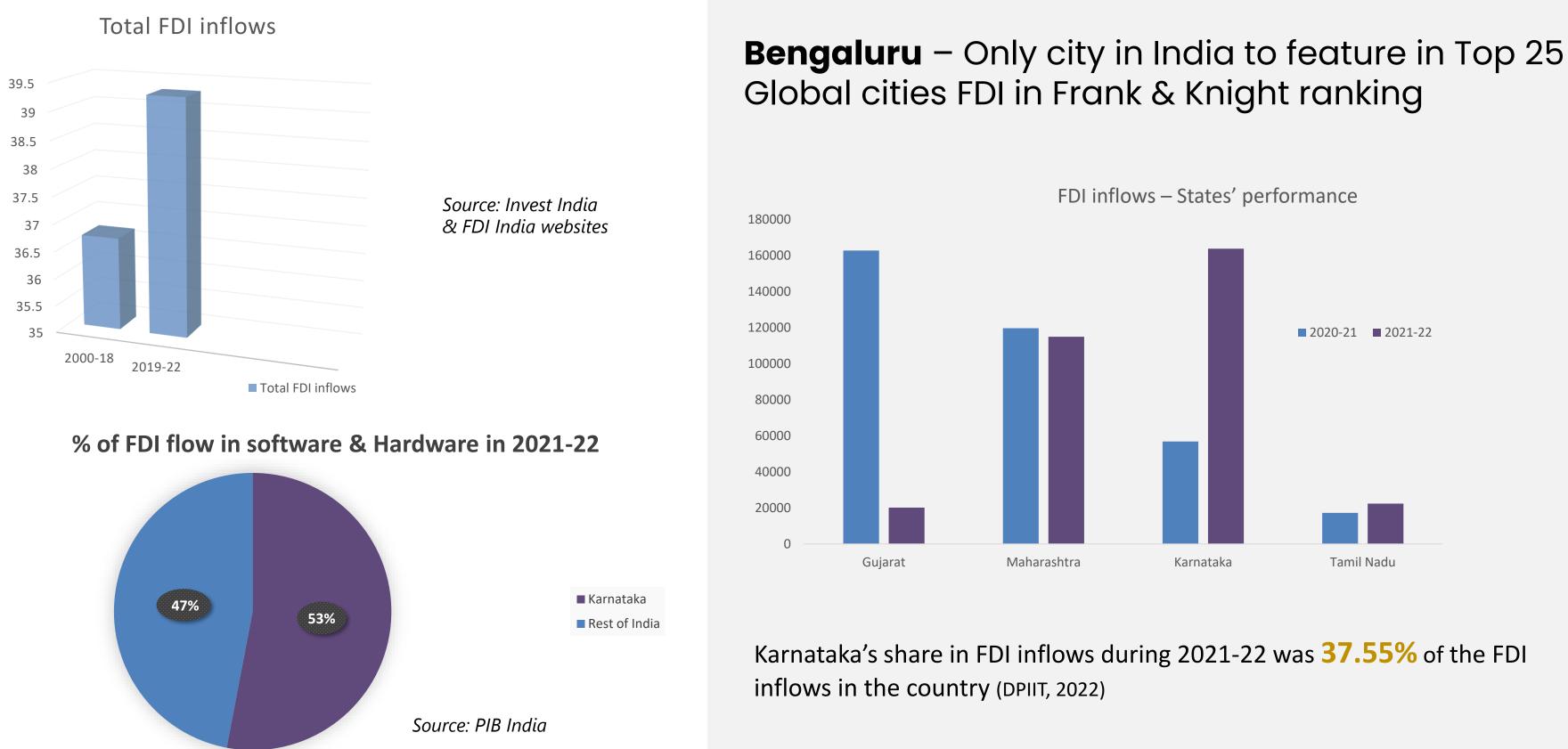




## **STATES SHARE**

- Exports of IT & ITES- state wise is highly concentrated with 5 states occupying 90% of the total export volume
- Karnataka constitutes nearly 40% of the total IT & ITES exports from India

# Investment: Consistently attracting FDIs





# Innovation & R&D: Karnataka is a global innovation hub with more than 400+ MNCs having their R&D centers

#### Karnataka has a strong Innovation ecosystem



1st in NITI Aayog's India Innovation Index

Home to 400+ MNCs with global R&D Centres (35% of 1500 GICs)



Bangalore - 4<sup>th</sup> Largest technology and innovation cluster in the world



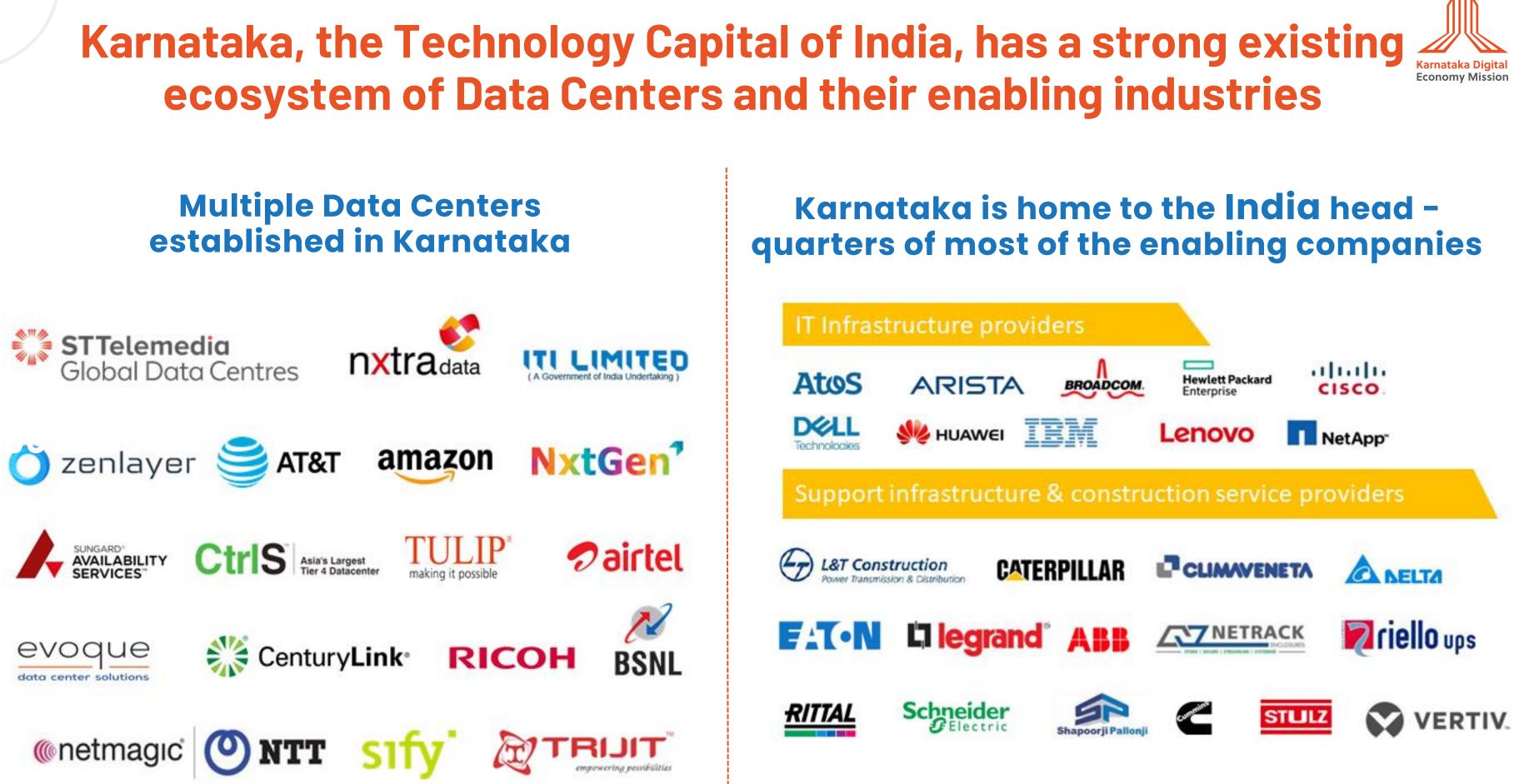
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Highest in India for number of patent applications

# Global companies have R&D units set up here:



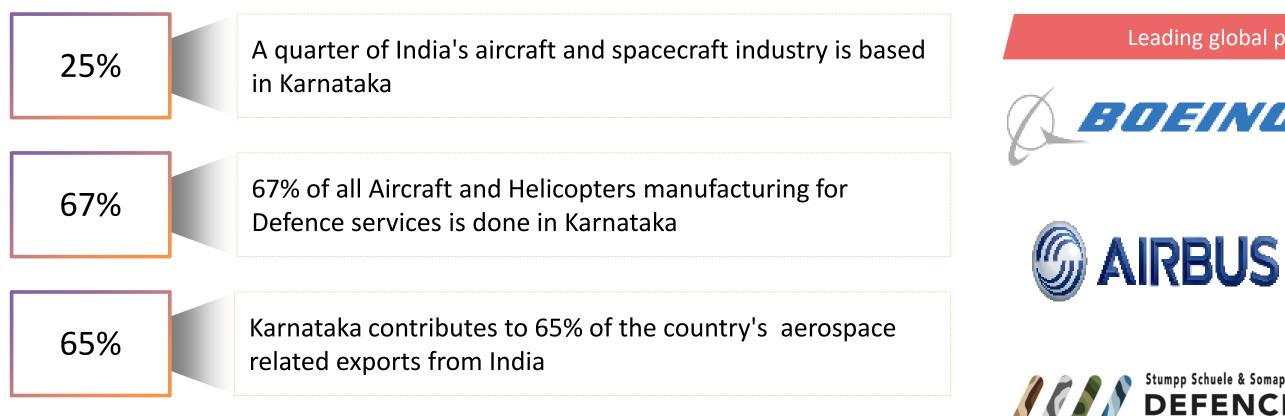




## Karnataka has a strong ecosystem of Aerospace and Defence industries; active support from State Govt.

## Karnataka is a leader in

#### **Aerospace & Defence industry**



#### **Government of Karnataka has supported the industry's** development at critical times





## **Presence of global leaders** & India's major PSUs

Leading global players with presence in Karnataka















Foundation for A&D ecosystem laid by major PSUs







## Karnataka is home to many promising startups in the ev segment which are at the forefront of innovation

#### **Ather Energy**



- Electric scooter manufacturer with an electric vehicle charging network – "Ather Grid"
- Key Models S 340, S 450
- Features: Fast charging up to 80% at 1 km/min
- Intelligent and interactive touchscreen dashboard

#### Ultraviolette



- EV motorcycle manufacturer with ٠ plans to set up charging network
- Key Model F77
- Features: Acceleration from 0 to 60kmph in 2.9s
- Modular battery with 10th Gen Battery system
- Top speed of 140 Kmph

#### Yulu



- Technology-driven mobility platform making use of micromobility vehicles
- Key Models Miracle & Move
- Features: Smart dockless electrical vehicle powered by state-of-the-art IoT technology
- Lightweight and designed for urban traffic conditions



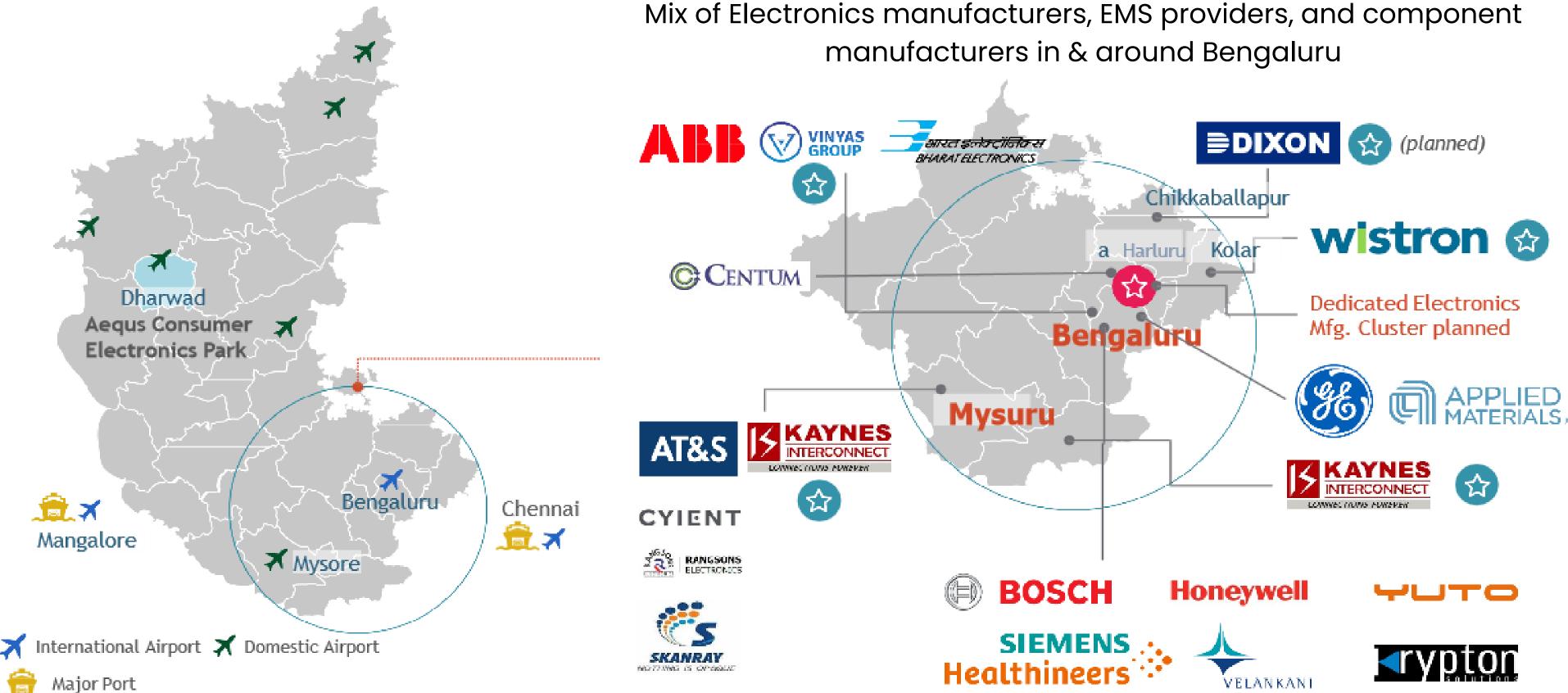


#### Altgreen



- Road ready EV solutions for 2W, 3W • & small commercial 4W vehicles
- Key Products Offers complete technology stack along with customized design to launch own EV
- Features : Motors optimized for high traffic
- BMS which can work with different battery types

# **KARNATAKA: HOME TO LEADING GLOBAL & INDIAN ELECTRONICS MANUFACTURERS**





# Karnataka: COE For Enablement



- Knowledge Hub 1.
- Talent and Skill 2.
- **Incubation Centre** 3.
- Mentorship 4.
- Global Bridges (GTM) 5.
- Access to funds 6.

Center for AI and Robotics





Center for Nano and Soft matter sciences

Indian Institute of Science

Indian Institute Technology





Nasscom Center of Excellence -IoT

Central Manufacturing Technology Institute

High quality research through Academia and CPSUs- DRDO, ISRO, etc.



#### Indian Institute of Management



National Institute of Design





## **New CoE and** institutions

- Metaverse  $\bullet$
- Al  $\bullet$
- ESDM
- Fintech
- Agritech
- **IIT Dharward**
- Cybersecurity

## **Beyond Bengaluru**







**ADDITIONS** 

RECENT

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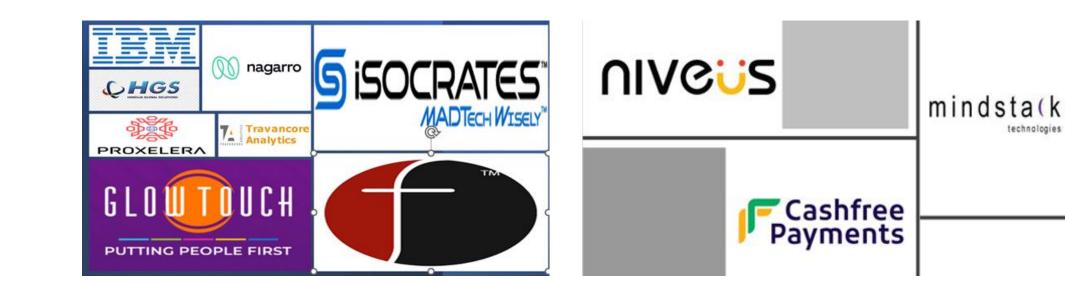
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**Mysuru Cluster** Semicon & Cybersecurity

**Mangalore Cluster** FinTech/IT ITES



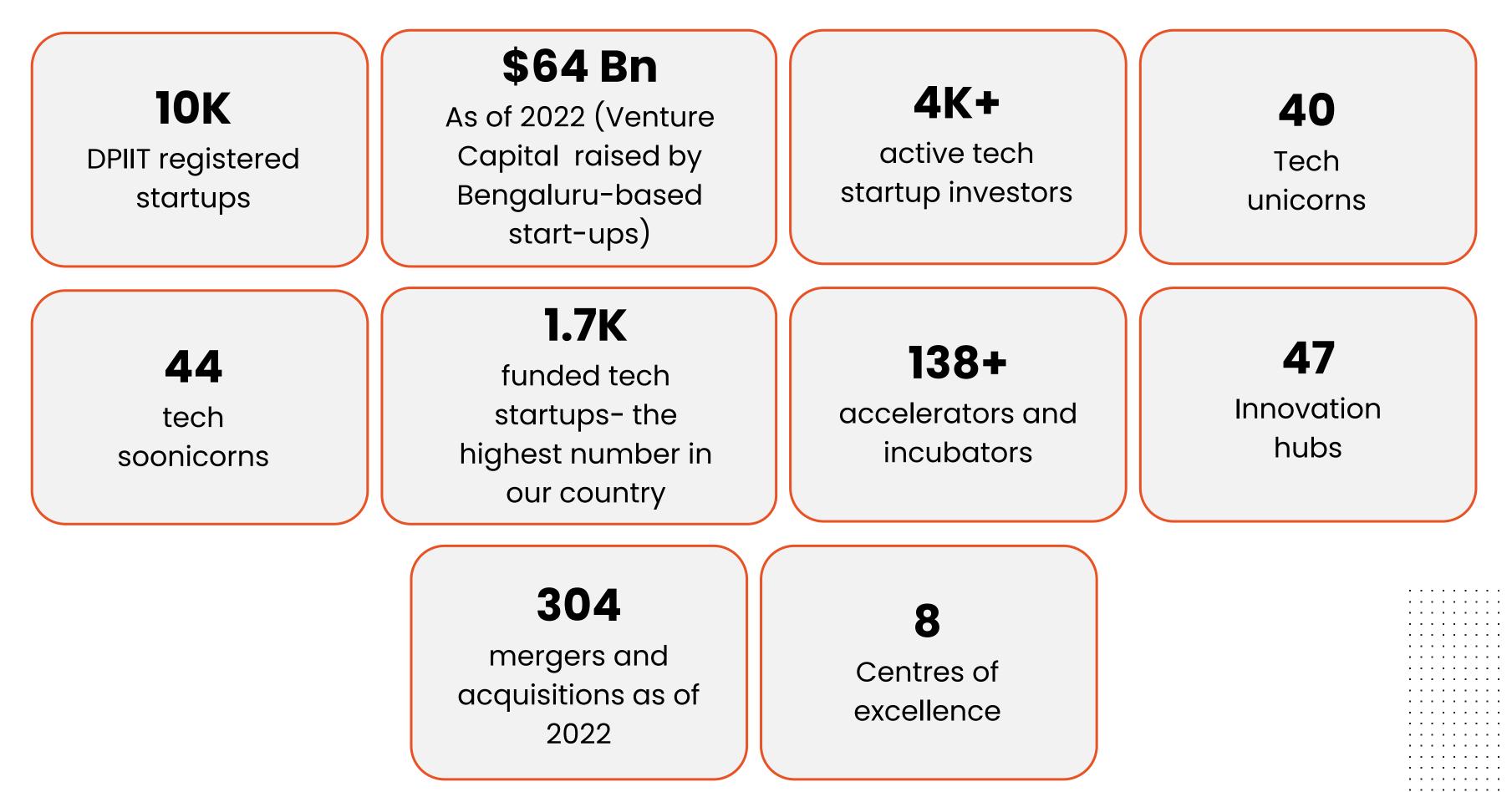




#### **HDB Cluster** EV/Drone, Edu & AgriTech



# KARNATAKA'S STARTUP STORY IN NUMBERS



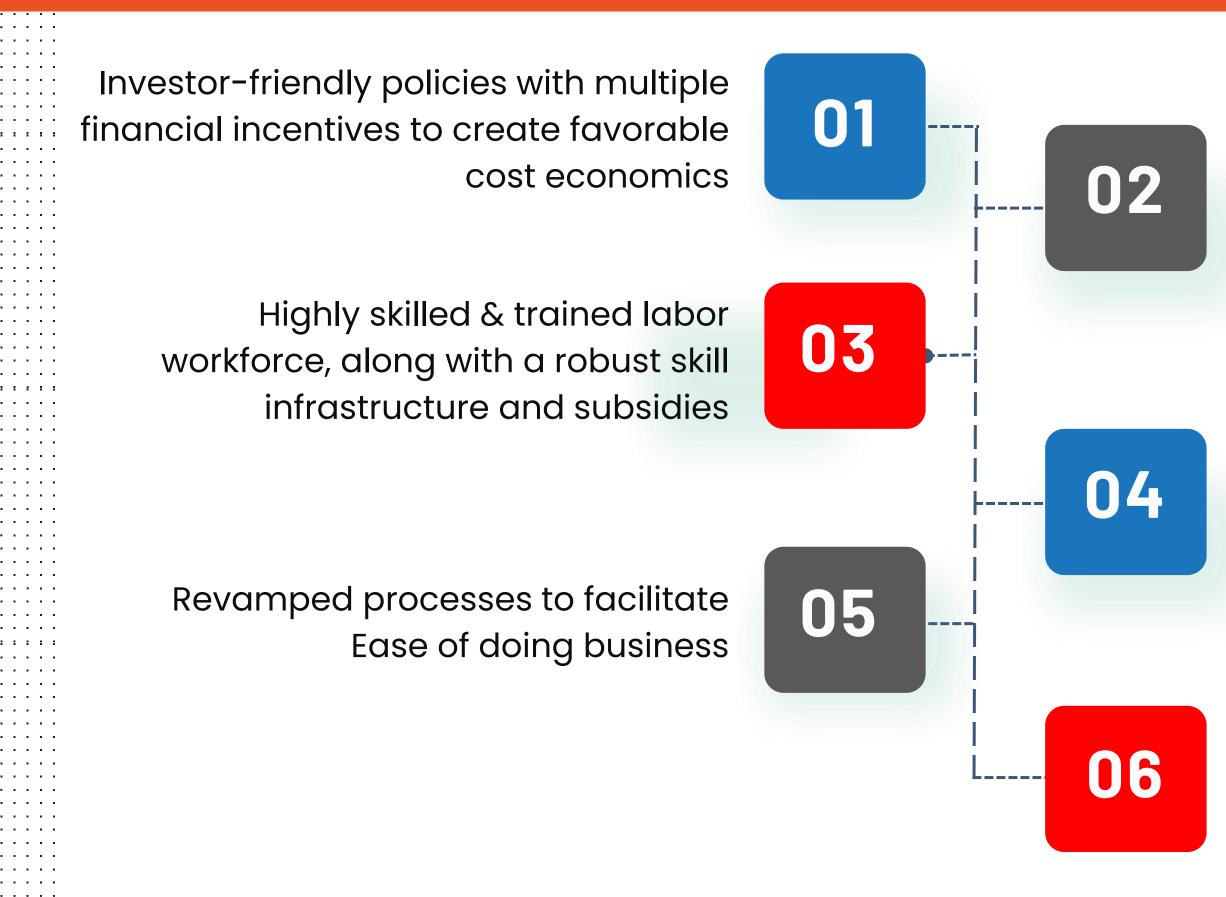


# **SECRET SAUCE - KARNATAKA**





## 6 Key Offerings That Make Karnataka The Most Attractive Investment Destination In India



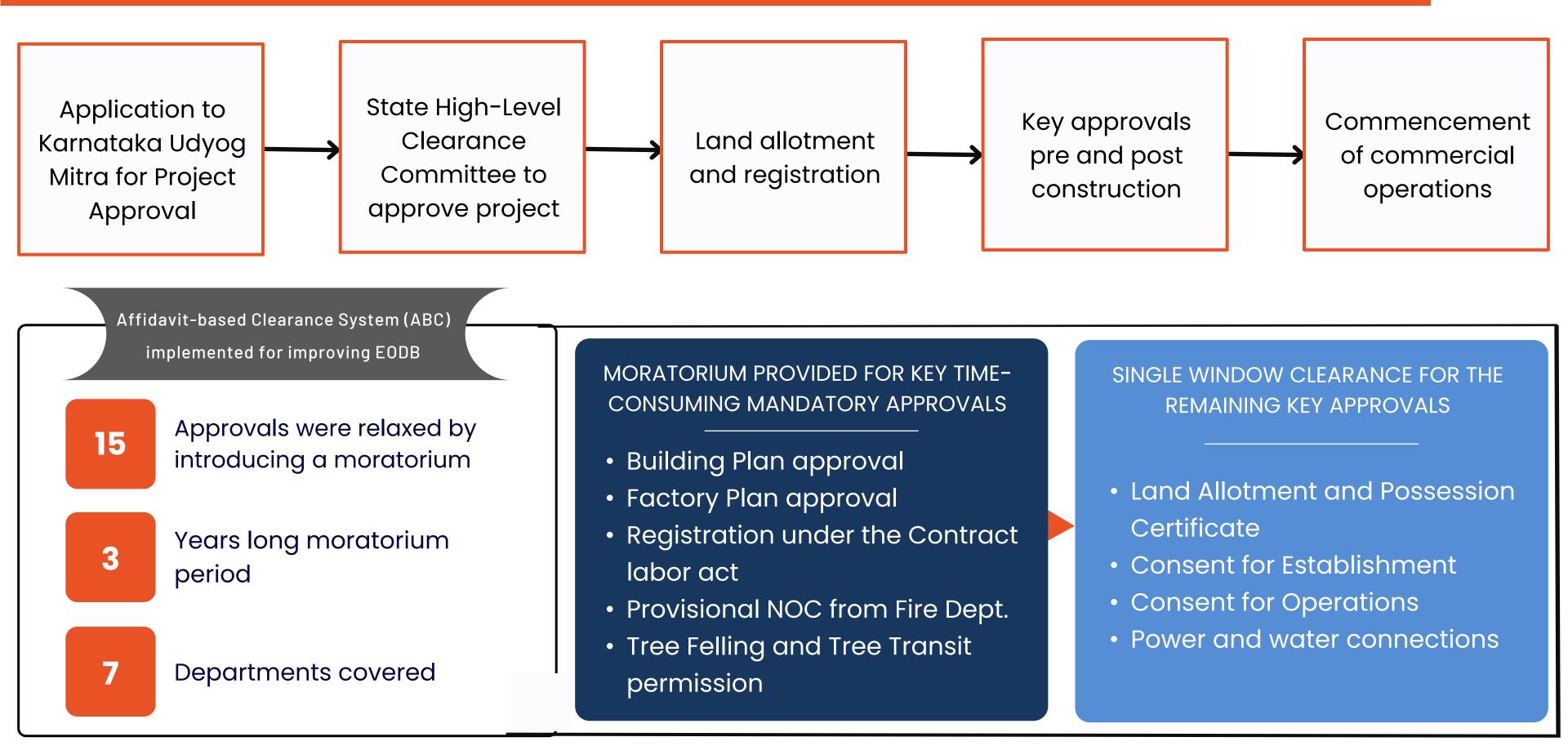


# Readily available industrial eco-system including land

Well connected to demand centers and gateways with an efficient logistics network

Industrial ecosystem well supported by World Class Social Infrastructure

## Karnataka has Simplified the Application and Approvals Processes to Ensure Hassle-free Investment





# Futuristic Karnataka – Where Future Is Made – GCC

#### **Digital Transformation to Become Mainstream Across Verticals**

#### The GCC Mirroring the Enterprise

Mirroring the GCC to be a true microcosm of the enterprise is an opportunity global organizations are building upon into the DNA of the GCCs

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#### **Global Leaders with Business** Accountability

More local GCC leaders will assume the role of global leaders. These global leaders will manage business-critical efforts, participate in planning & strategy, and interact with customers, thereby diminishing the distance between the GCC and the enterprise

#### Move Away From Cost Arbitrage to **Actual Value Accrued**

As the GCC's role evolves, companies will measure both tangible and intangible benefits contributed by the GCC as opposed to the traditional lens of cost reduction

Bengaluru is estimated to have 800K-900K digital talent pool by 2026. The city has emerged as the top hotspots for Artificial Intelligence (AI) globally and has the second-largest AI talent pool in the world

**FUTURE OF** 

THE GCC

INDUSTRY

GCCs will increasingly operate in an agile & distributed model to focus on digital transformation and will build digital products/platforms touching the entire value chain of the enterprise

#### **Reskilling / Cross-skilling to Gain Momentum**



#### **Karnataka to Remain Global Talent Hub**

#### **Digital Platforms to Act as Growth** Engines

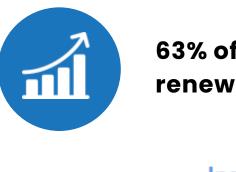
The war for talent has increased the talent cost for niche and next-gen tech skills. GCCs will significantly invest in reskilling/cross-skilling workforce in key emerging digital technologies -AI/ML, NLP, cloud, data analytics, etc.

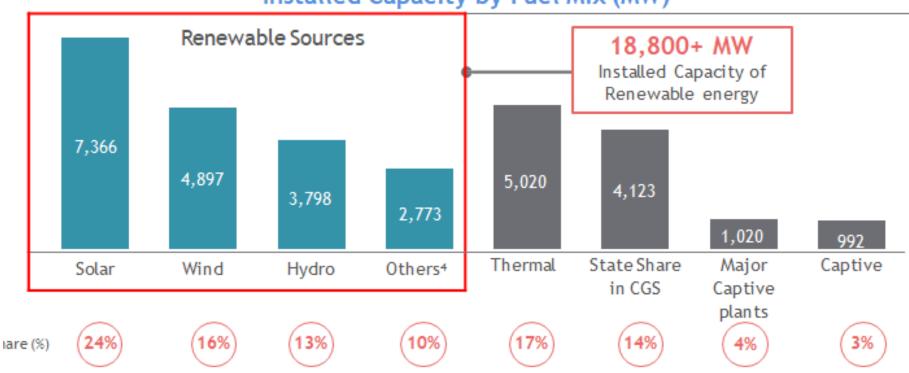
# Karnataka: A Power Surplus State With 63% Of Installed Power Capacity In Renewables



Karnataka is the leader among all states in promoting Renewable energy

- Renewable energy potential of 86.8 GW
- Largest market for solar power in the open
- access mode (3.6 GW)
- Best statel for setting up a solar rooftop project according to Ministry of New & Renewable energy
- Home to World's 2nd largest Solar Park in Tumkur
- Exceeded the target set for solar capacity under KN Solar Policy '14-'21 (120% achievement of 6000 MW target)





#### Home to 400+ renewable energy ecosystem companies and multiple IPPs3



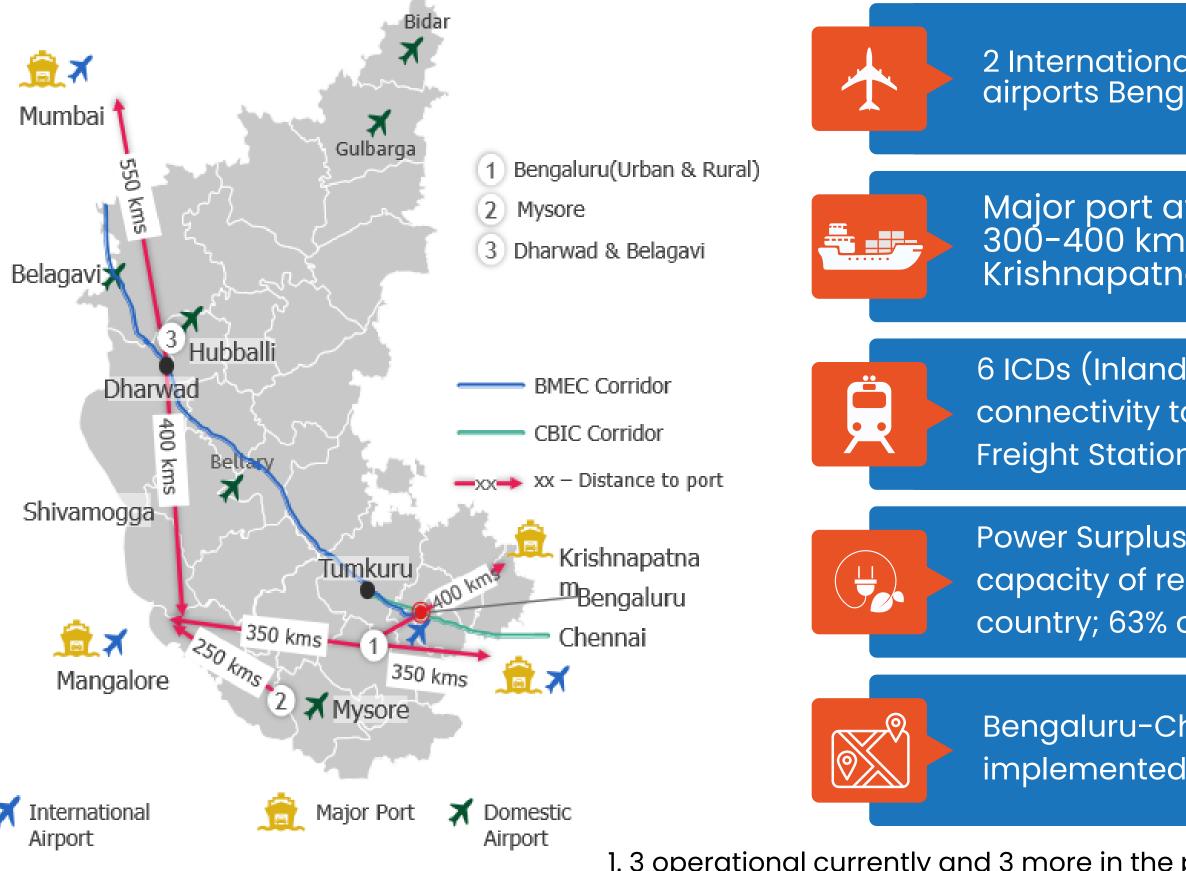
 According to State Rooftop Solar Attractiveness Index – SARAL 2. Renewable purchase obligation 3. Independent Power Producers 4. Others include Co-generation, Small Hydro and Biomass



# 63% of Karnataka's installed capacity is in renewables which is the highest in the country

#### Installed Capacity by Fuel Mix (MW)

# Developed Industrial Land Available At Strategic Locations - Well Connected To Key Demand Centers And Logistic Gateways





2 International airports and 6 Domestic airports Bengaluru Airport – 3rd Largest in India

Major port at Mangalore + 9 minor ports; 300-400 km access to Chennai, JNPT and Krishnapatnam ports

6 ICDs (Inland Container Depots) with direct rail connectivity to ports & 5 CFSs (Container Freight Station) incl. 2nd largest ICD2 in India

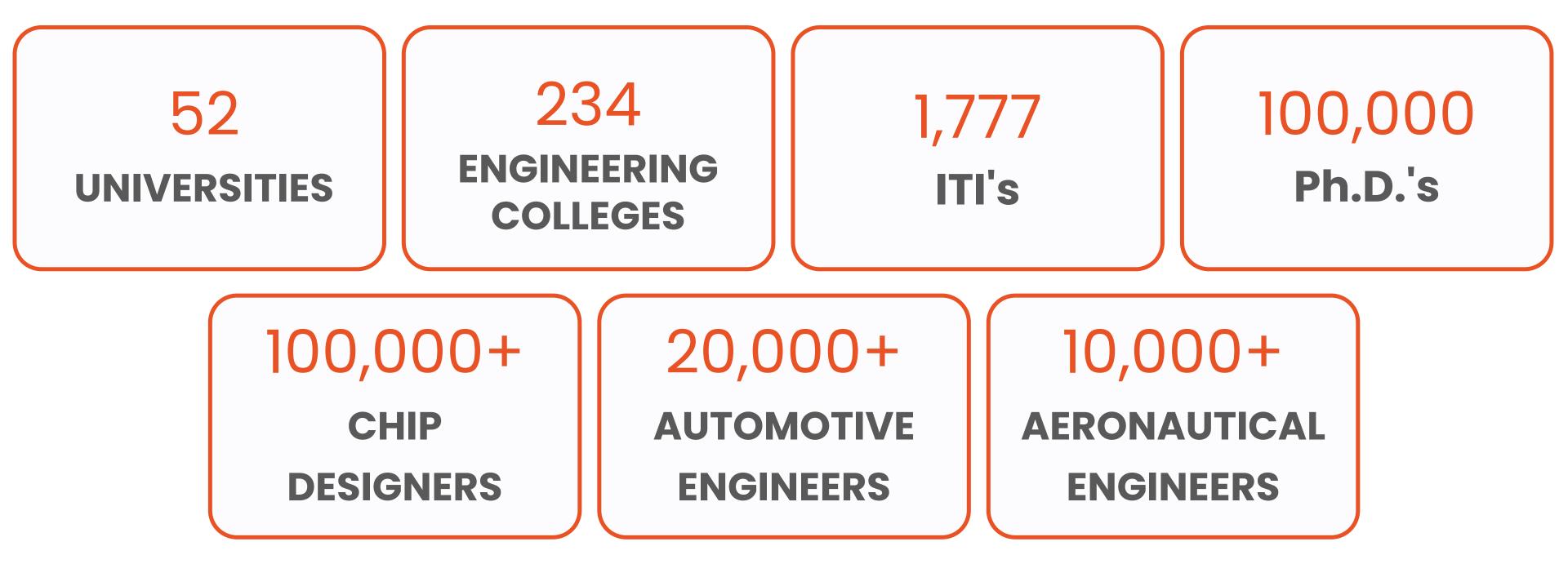
Power Surplus State with the highest installed capacity of renewable energy (18.8 GW) in the country; 63% of installed capacity is renewable

Bengaluru-Chennai expressway being implemented

1. 3 operational currently and 3 more in the pipeline 2. In terms of value of trade handled

Karnataka, the knowledge capital of the country, provides highly skilled & trained labor force; along with relaxed labor laws

> Promote sustained & sustainable economic growth, full & productive employment & decent work for all



Large talent pool for the global industry





# **Talent what new...**

# 20 Mn in age group of 16-35 years creating a favorable demographic dividend

#### ...along with relaxed labor laws

- capacity to cater to seasonality
- Recent amendments made to facilitate women's work timings in night shifts, between 7 PM to 6 AM
- Overtime limit per quarter increased from 75 to 125 hours with the amendments to the Factories Act
- Among the first few Indian states to introduce and implement labor reforms, ensuring **convenience for both** employees and employers

#### ...along with relaxed labor laws

- Partnership with Govt. training institutes can be provided, to tailor curriculum as per requirement
- Skilling subsidies can also be considered



• Provision to avail 'Fixed term employment' to optimize labor

# Industrial ecosystem well supported by World Class **Social Infrastructure in Karnataka**



8 of top 10 international schools of India present in Karnataka



Blessed with pleasant climate throughout the year, with abundant greenery



Home to world-class golf courses, sports clubs & wildlife resorts

Bengaluru consistently ranked amongst the best cities to live in India for expats - Mercers quality of living report 2019



Bengaluru ranked most dynamic city in India

Expatriate friendly ecosystem and lowest crime rate in South India







40+ five-star hotels in the state, such as Taj Group of Hotels, Hyatt, etc.





Popular tourism destination incl. **UNESCO** Heritage Sites, attracting tourists from across the world



- JLL report 2020



**Over 16 International Schools** 

# Summary and YOU (Our Partners in Progress)

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## Karnataka - Global Destination

Karnataka's ranking in the global startup ecosystem is 10th in the world	Bengalur
Karnataka is home to 100+ Chip Design companies	
Bengaluru is the 4th largest technology cluster in the world	Pre
Karnataka has the presence of 41 Unicorns	La
Bengaluru houses 36% of GCC's in India	Karnataka Ra (As per N



#### ru is home to 400 Fortune 500 Companies

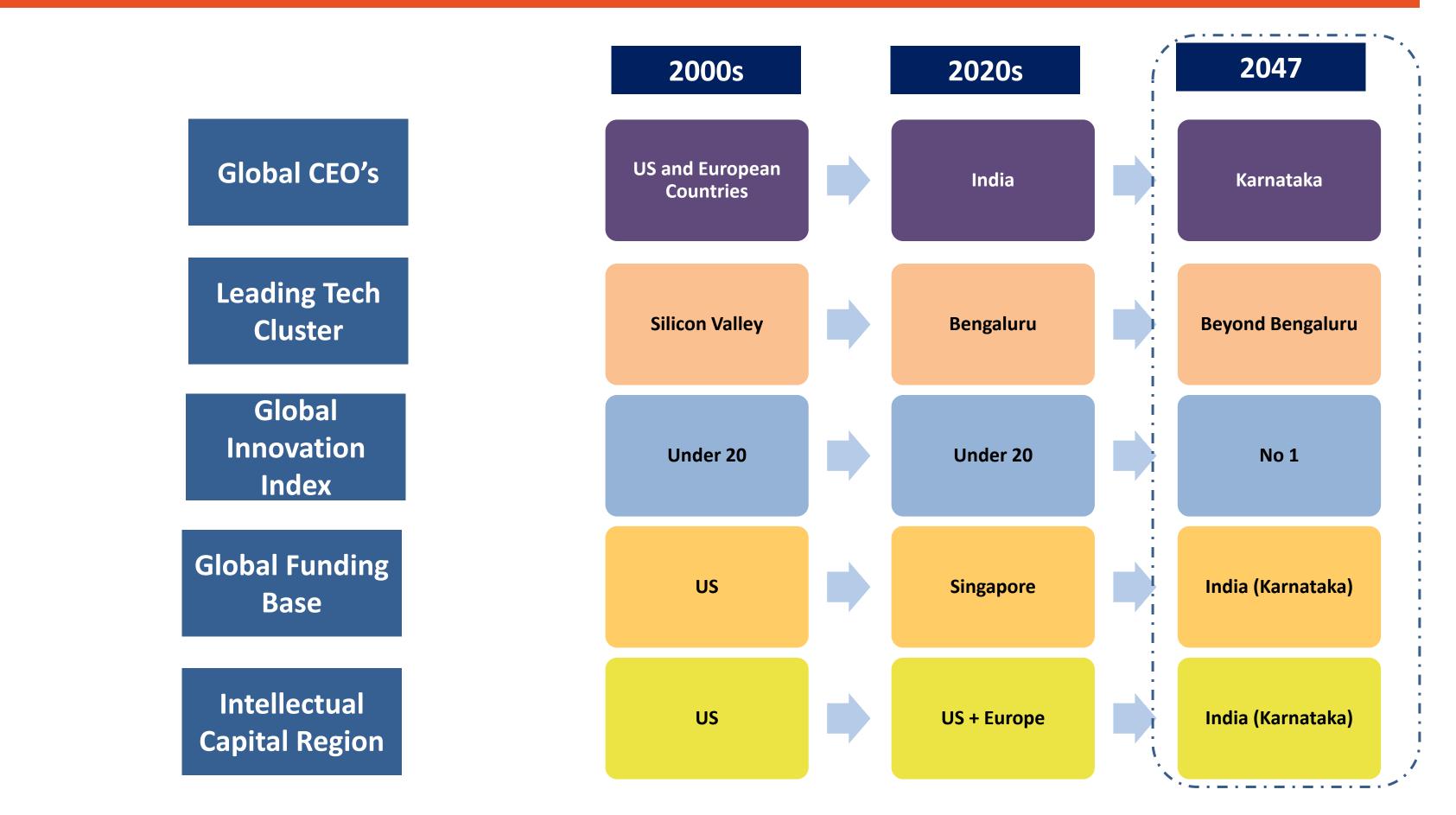
Highest talent supply

#### esence of largest Al skills

#### argest UPI transactions

#### anked No 1 for 2019, 2020 and 2022 NITI Aayog for Innovation Index)

# Karnataka – To Look For





# **Partners in Progress**







Strategic Fulfilment Partner



Event































# Partners in Progress Delegates with operations in USA & India

Adaptnxt Technology Solutions Private Limited AgWiQ Technologies Pvt Ltd **Alvolved Technologies** Broadridge Financial Solutions (India) Private Ltd **Cognizant Technology Solutions Cogvision AI** Digital Align Inc. **Digital Shark** DigitalAPICraft Divsoft Solutions India Pvt. Ltd. **Elfonze Technologies Private Limited** HPE IBM Infosys **Intelligrow Consultancy Services Private Limited** Ioora Technology pvt LTD **IQVIA** Technologies **Kanaada** Phonetics **KPMG** Manipal Dot Net Pvt Ltd Medicodio

NextWealth Inc

- **Novigo Solutions**
- Okkular.io
- **Oracle America Inc**
- Pace Wisdom Solutions Pvt Ltd
- PayPal
- PrintForm Cloud Manufacturing
- QuestKart Inc
- **Rocket software**
- Sapientury
- SK Telecom
- Skykrafts Aerospace Pvt Ltd
- Solutionec
- **Startup Grind**
- **Techment Technology**
- uniQin.ai
- Vidwath Innovative Solutions Pvt Ltd WhatsLoan Fintech Private Limited **XPERTAX AUDITING BAZAAR PRIVATE LIMITED Yugasys Software Pvt Ltd**

- & many more...



# **Delegates from India**

1Bridge Agwiq Technologies Pvt Ltd **Commit Services** Dbiz DJ Interactive Solutions Pvt Ltd (Digital Jalebi) Elfzone Technologies FalconX Farmonaut Technologies Private Limited **First Meridian services** Focus Engineering Holosuit iSocrates ITserve **Kaynes Technology** Kaynes Technology Kyndryl Mikro Grafeio Nextwealth Entrepreneurs Pvt. Ltd. NS Infotech Printform Prolim

Proxelera

- Sacumen
- SenseGiz
- Silicon Road
- **Skootr India**
- Startup Connect
- Third Eye Data
- TiE
- Vaultedge Software.
- Velox
- Vidphone
- **VMware**
- & many more...



# Proudly Join Us to be our PARTNERS IN PROGRESS

**Karnataka Digital Economy Mission** 

# India Karnataka **Jai Hind!**

