

Startup Ecosystem in Karnataka

US Roadshow

April 2023

India: 75 years of democracy - key achievements

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



Growth rate 8.7%
(FY21-22)



5th largest economy;
jumped 6 positions since 2012



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




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

Amrit Kaal: Vision 2047

	Economy	2 nd largest	USD 32Tn
	Per Capita Income	10X	USD 20,000
	Manufacturing GDP	15X	USD 6.2Tn
	Services GDP	13X	USD 20Tn
	FDI	12X	USD 1Tn
	Exports	12X	USD 8Tn
	Human Capital	Largest and Youngest working population	Median age of 29 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

Technology: Digitally Empowering Indian Society

India's Scale and Speed



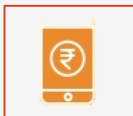
1.3 Bn people with
unique digital identity



#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



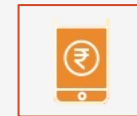
1.3 Bn Internet Users
by 2030



61% internet
penetration



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



373 Mn Estimated Rural Internet Users

Karnataka's Startup Story in Numbers

10K

DPIIT
registered
startups

\$64 Bn

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

4K+

active tech startup
investors in the
state

40

tech
unicorns

44

tech
soonicons in
Karnataka

138+

accelerators and
incubators

47

Innovation hubs

304

mergers and
acquisitions as
of 2022

8

Centres of
excellence

1.7K

funded tech
startups- highest
number in our
country

Bengaluru- Leading the Indian Startup Ecosystem

Startup Hub	Total Startups Launched (Up to 2022)	New Startup Launched (2019 to 2022)	3-Year-CAGR* (2019 to 2022)
Bengaluru	18K	4.6K	7%
Delhi NCR	15K	4K	6%
Mumbai	11K	2.4K	6%

Bengaluru Remains Undisputed Leader- 50% Share In Mega Deals

Despite the ongoing venture capital inflow correction in Indian startups, Bengaluru bagged 53% more deals valued at \$100 Mn or above in 2022 as compared to Delhi NCR

Top 5 Indian Startup Hubs 2022-

Despite the funding winter in calendar year 2022, Bengaluru had the highest number of unique investor count.

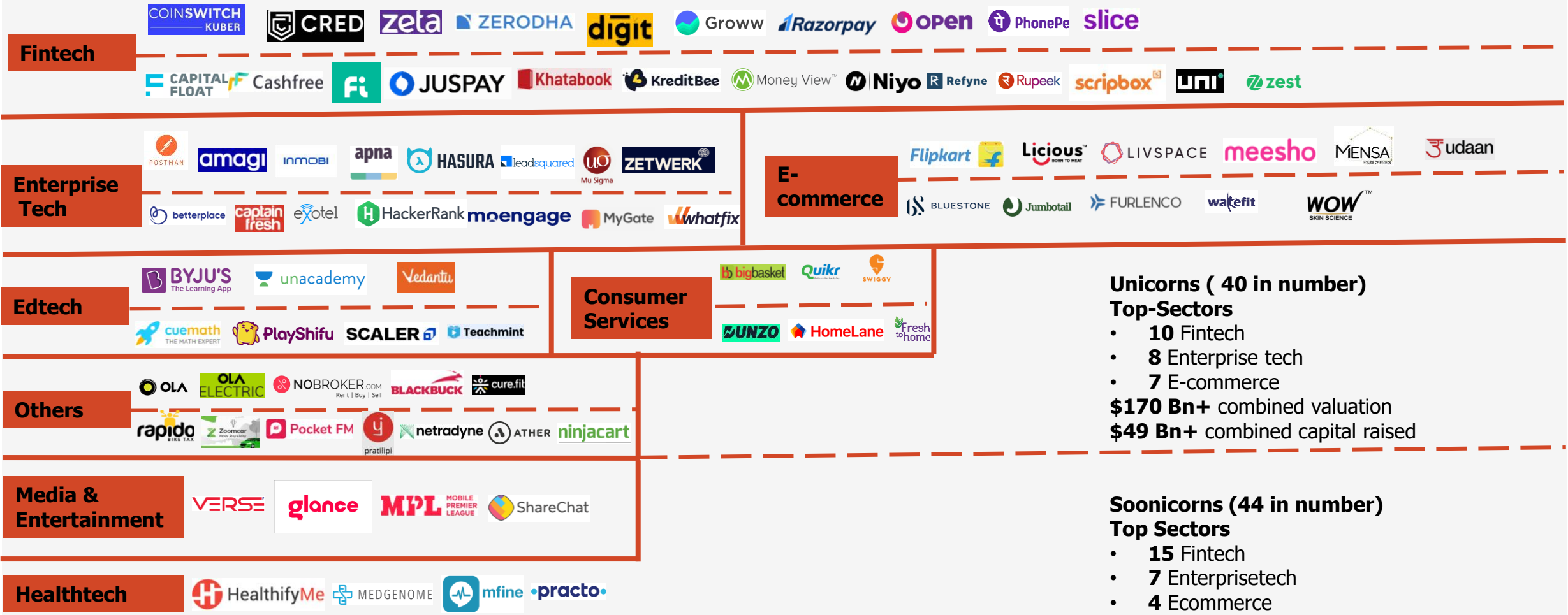
Startup Hub	Unique Investor Count (2022)	Median Ticket Size (2022)
Bengaluru	1.1K	\$5.5 Mn
Delhi NCR	930+	\$ 3 Mn
Mumbai	660+	\$3.4 Mn
Chennai	160+	\$5 Mn
Hyderabad	130+	\$2.3 Mn

VC Funding

Bengaluru-Investors are **bullish** about **seed-stage ecosystem** which saw a **CAGR growth of 60%** depicting the high-risk taking capability of the investor ecosystem to support innovation

	Funding Amount (2014 to 2022)	Deal Count (2014 to 2022)	5-Year- Funding- CAGR (2017 to 2022)
Seed Stage (Angel/Seed)	\$2 Bn	1.5k	60%
Growth Stage (Series A & B)	\$13 Bn	876	21%
Late Stage (Series C & Above)	\$49 Bn	495	4%
Bridge Funding (Pre-Series Rounds)	\$552 Mn	303	104%

Sector-Wise Landscape Of Unicorns and Soonicorns In Bengaluru



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

Karnataka- Leading AI Hub

AI Opportunities in Bengaluru

- **31,000+** AI talent pool; 250,000+ data scientists ; 28.6% of open jobs in AI;

AI & Robotics Technology Park [ARTPARK] in Bengaluru

- Joint initiative of IISC and AI Foundry (seed funding by DST and Govt. of Karnataka)

NorthStar

- **Create opportunities** for growth for everyone
- **Lower the cost of living** with AI & Robotics
- **Access to AI enablement** by connecting AI rich clusters in the US, Canada, UK & EU with India, Middle East, Southeast Asia & Africa

Activities

- Nurture AI & Robotics startups
- ART Venture Fund (\$100mn)
- Moonshots for Societal Scale AI

Growth of AI Talent

- 41% of 0.114 million AI job postings from Karnataka
- 90 AI and robotics colleges (95% pvt. And 5% govt. funded)
- Set up of CoE- 400 Million INR
- 35000 estimated jobs by AI hub

Globally Competitive AI products by Bengaluru start-ups

- 1870+ AI startups have raised USD 2Bn in cumulative investment
- 62% of total AI investments in India received by Bengaluru based startups

Leading Public Sector R&D Undertakings located in Bengaluru

- ISRO
- HAL
- DRDO

Academia and Start-ups

“Bengaluru has an ecosystem of globally reputed high-quality academic Institutes - IISc, IIITB, NLSUI, NIMHANS, IIITB. IIITB had seen students pursuing entrepreneurial route from its inception back in 2000. In the very first batch we had students founding startups, of which one is still thriving 19 years later. The trend continues today. **There are 64 startups that have IIITB alumni as a founder in varied areas including AI, Analytics, Ecommerce, Sustainability and others!**”- Prof. S. Sadagopalan, Director IIIT, Bengaluru

Impetus on Research

- Bengaluru is home to **premier Science & Tech**, and Management institutions- **IISc, IIM-B, IIIT-B, PESIT**
- **100+ out of 800+ colleges** are engineering colleges
- **100K+** engineering students graduate each year

Stats about start-ups originating from academic institutions- IISc, IIM-B, IIITB, PESIT, DERBI, NSRCEL

- **800 + startups**
- **56 patents** held by startups
- **34 startups** used institutions' tech/research
- **53K+ entrepreneurs** inspired/jobs created

Talent For Future Jobs In Bengaluru Is Disproportionately High

Bengaluru stands at a **center** with a **large infrastructure of technical universities** and **colleges** with the ability to nurture their students for the **futuristic jobs**.

Key Areas Of Futuristic Skill

- Biomedical engineering
- Augmented reality
- Virtual reality
- Metaverse
- Machine learning
- 3D printing
- Data security
- Financial management
- AI
- Robotics

Karnataka Education Landscape 2022-23

72758 Number of schools (Govt aided and unaided) **25K+** Junior primary schools

36K+ Senior primary schools **15K+** Secondary schools

211580 Number of teachers (Govt aided and unaided)

10678076 Number of students (Class 1-10)

1358552 Number of students (Class 11-12) **4300+** Colleges

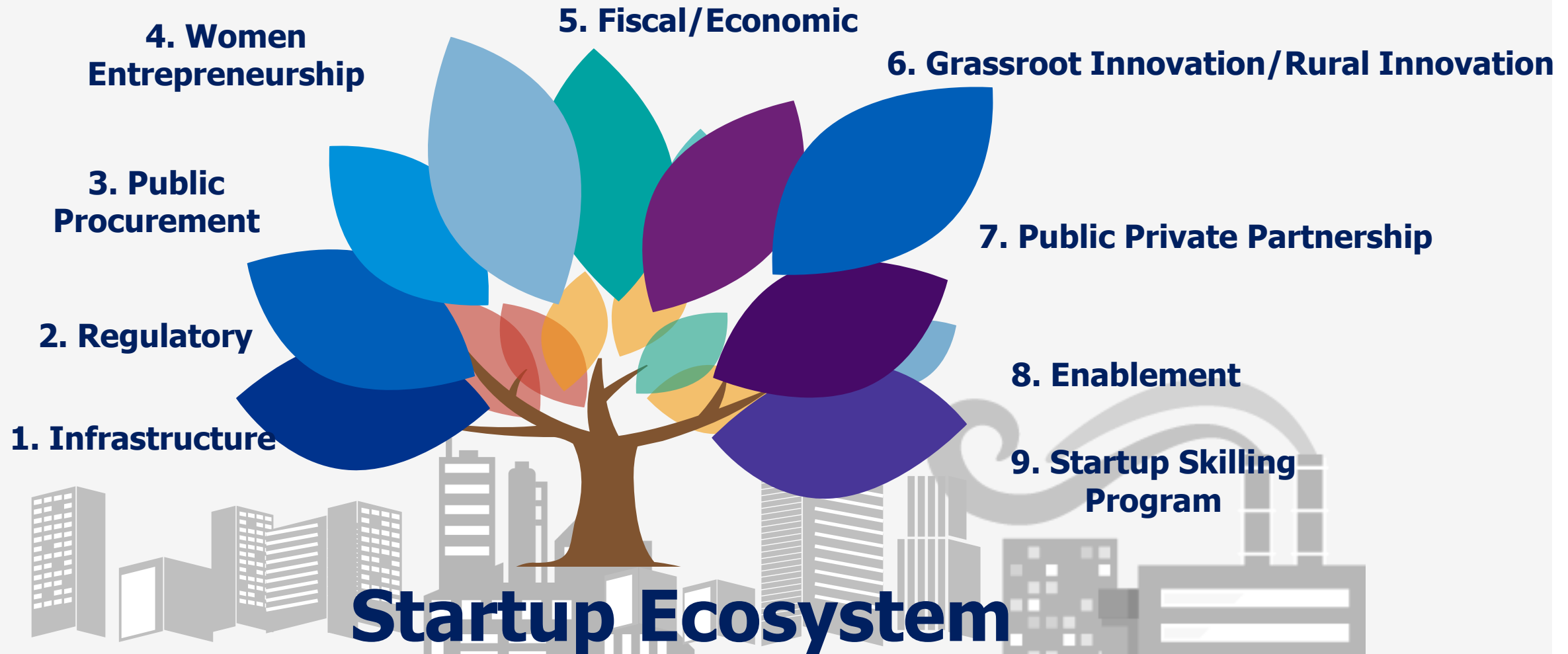
733 AICTE approved institutes **250404** Total student intake in AICTE approved institutes

120+ AICTE Collaborations (MoU) with other Organizations

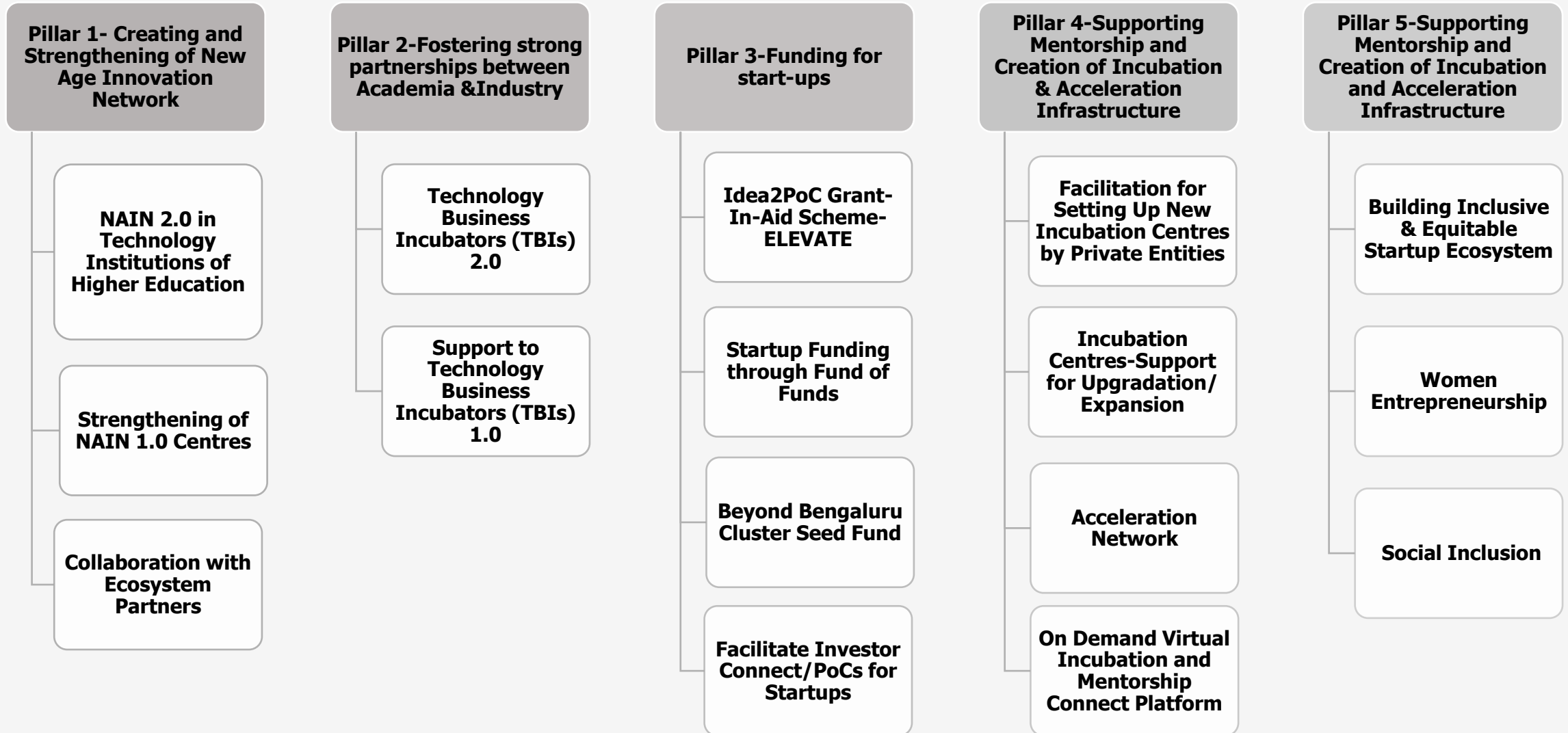
70+ Universities

460+ Institutes to study medicine and nursing

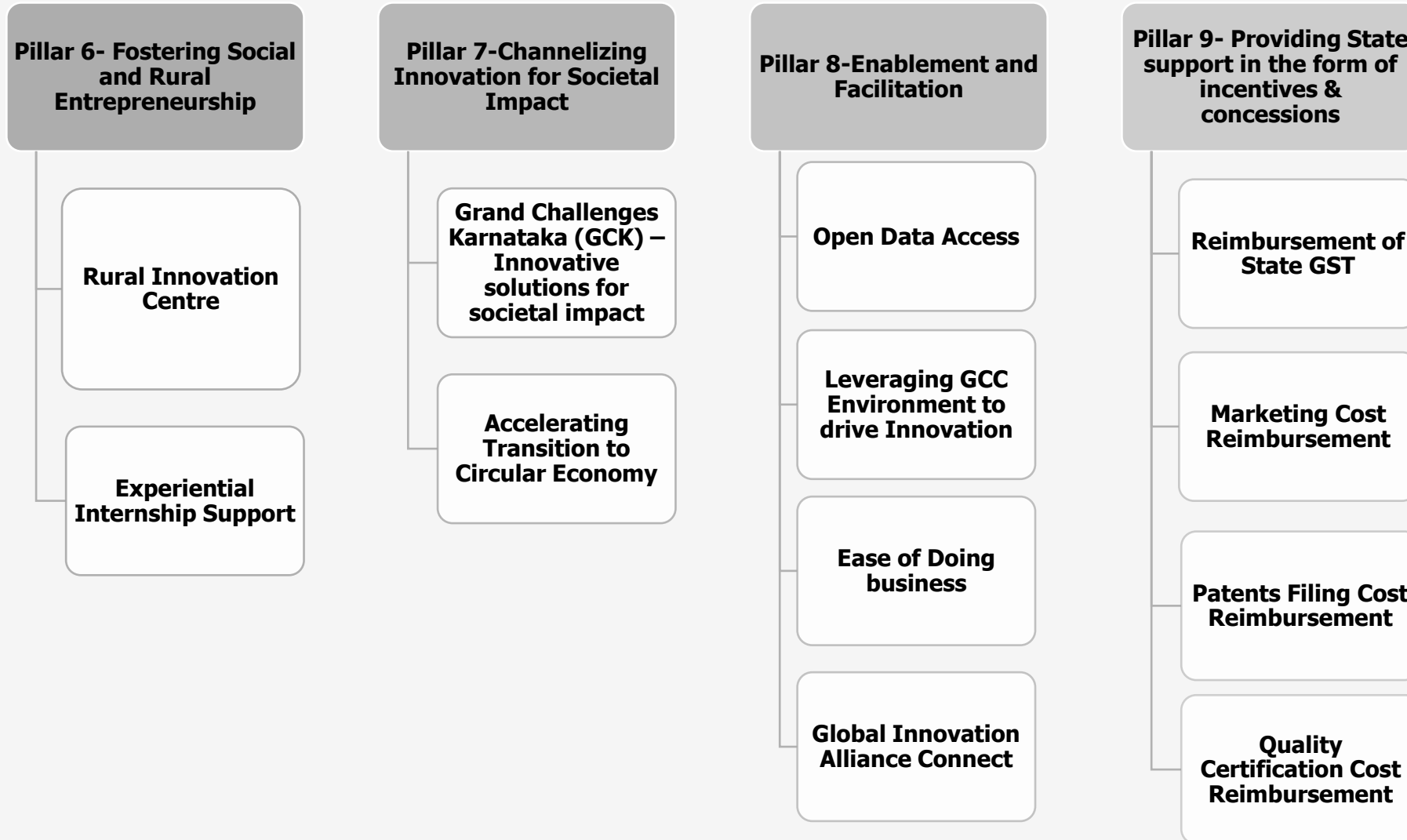
Karnataka Government as an Enabler – NAVRATNA



Karnataka Government as an Enabler- Start-Up Policy



Karnataka Government as an Enabler- Start-Up Policy



Creating future ready institutions

30 NEW AGE INNOVATION NETWORKS

Innovation Ecosystem at District Level

Approx. 60,000 sq. ft. area

Up to INR 3 lakh for Student Projects

30 NAIN Colleges , 19 Districts

470 Projects Funded, INR 4.83 crore

171 Projects Completed & 13 Patent filed

30 Companies Formed

8 Centres of Excellence(CoE's)

Aerospace and Defence - Dassault Systems

Agro Innovation - C-CCAMP

Cybersecurity - IISc

Machine Learning & Robotics - IIIT-B

Data Sciences & AI - Nasscom

Internet Of Things (IoT)- Nasscom

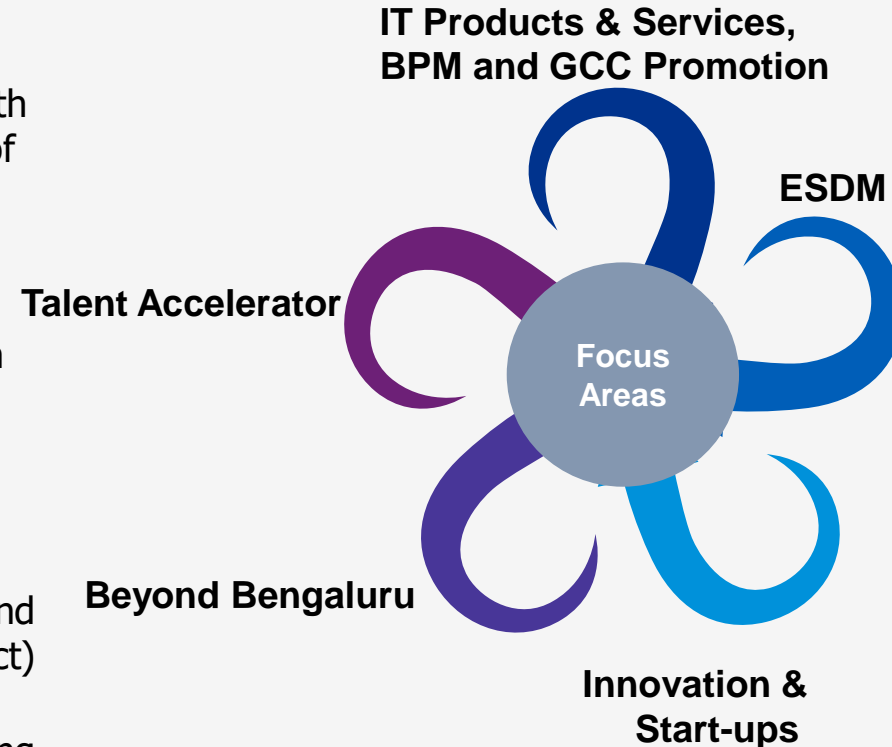
AVGC - ABAI

Semiconductors - IESA

The state also runs 5 Common Instrumentation Facilities (CIFs) in Bengaluru, Mysuru, Shivamogga, Belgavi and Mangaluru

KDEM: BY THE INDUSTRY FOR THE INDUSTRY

- Function as the **knowledge bridge** between the **Government of Karnataka and the industry** with a view of accelerating the growth and investments of the IT, ESDM and S&T sectors in Karnataka
- **Promote** the growth of **digital industry**
- **Attract investments** by providing hand-holding services and suggesting policy initiatives to be taken up by the State Government for facilitating investments
- Help in increasing the **contribution of Digital Economy** in the State
 - **40% GSDP from Digital economy** and creation of 30Lakhs+ (Direct and Indirect) jobs.
 - **Skill 2 Million** people in the new emerging technologies including job earning skills
 - **10X Investment** in next 5 Years under ESDM (EMS, FAB, ATMP, Supply Chain)
 - **5% States GDP** will come from Startups with ~100 Unicorns and ~300 Sonicorns
 - **Rural Innovation Hub of India** covering Agri, Education and Healthcare



Shri Basavaraj Bommai
Hon'ble Chief Minister of
Karnataka

"Karnataka will contribute \$1.5 trillion to Indian economy by 2025".
Vision of Karnataka 2025' Conclave: March 2022

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

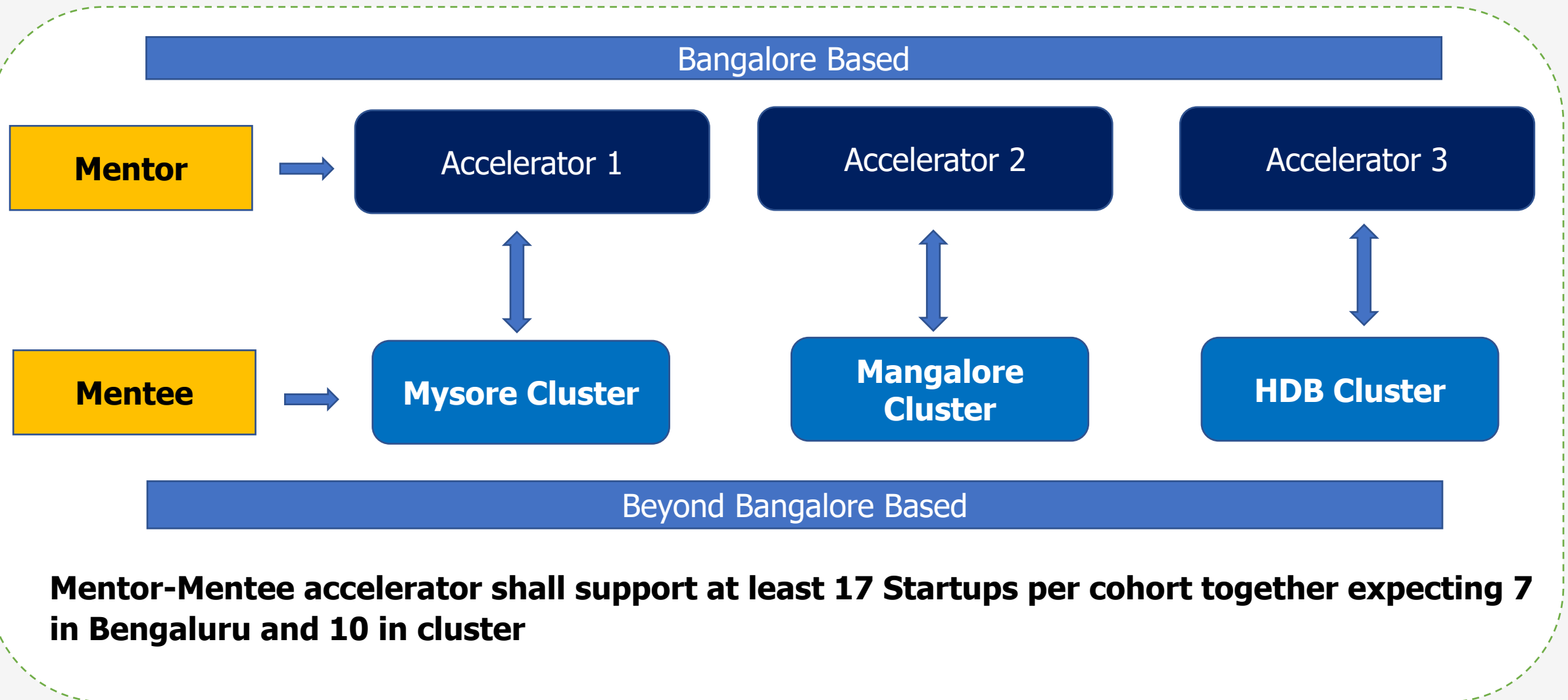
KDEM: **Beyond Bengaluru Cluster Seed Fund - Overview**

- Principal objective - **to make Beyond Bengaluru Clusters hub of Start-ups and innovations**
- Objective is **to have at least 10,000 start-ups** from these clusters **by 2030**
- **Government of Karnataka, KDEM and Industry anchors** has designed and suggested to set up a **Beyond Bengaluru Cluster Seed Fund of INR 75 Cr. i.e INR 25 Cr. each** for each of the three clusters
- Focussed Clusters:
 - Mysuru cluster
 - Mangaluru cluster
 - Hubballi- Dharwad-Belagavi cluster

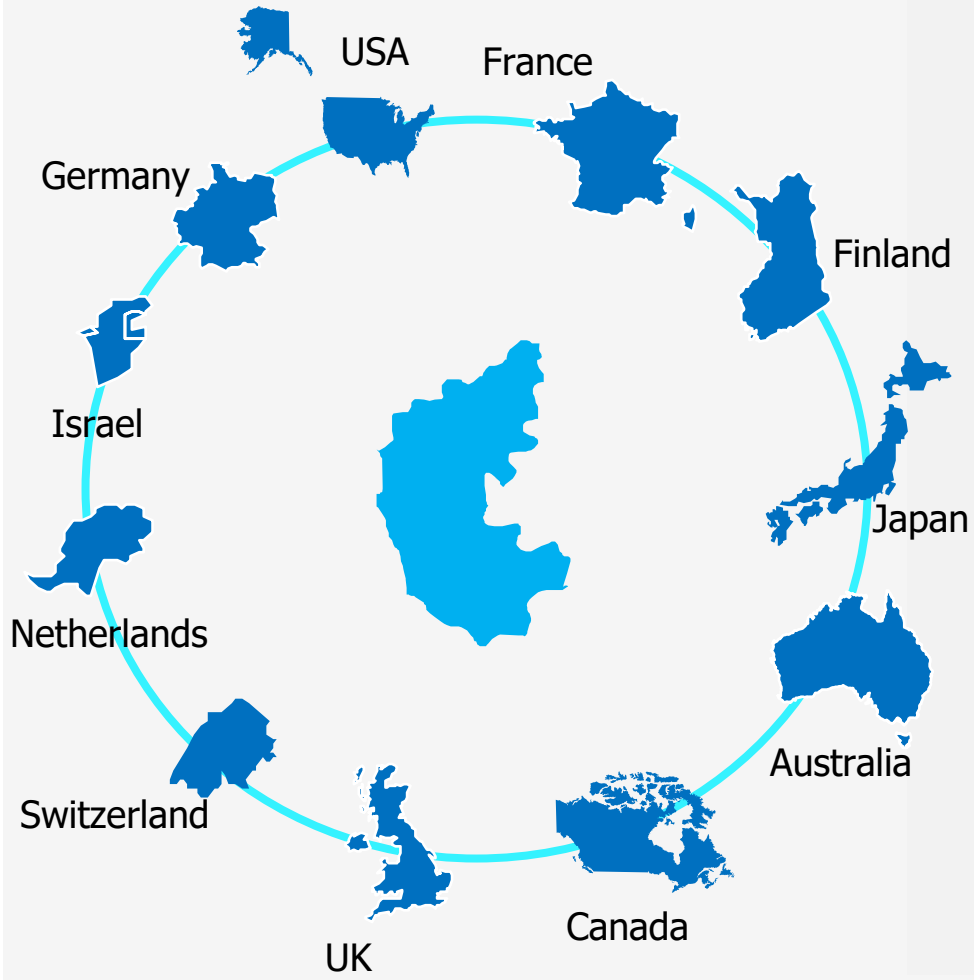
Expected Outcomes


- Expected to invest in 15-20 innovative start-up companies under each cluster
- The target employment generation will be around 400-500 and the estimated revenue generation from all companies will be around INR 40-100 crore

KDEM: Karnataka Acceleration Network - Overview



KDEM: Our global connect



 GIA partners with startup collaboration

Global Innovation Alliances

GIA Market Access Program: To help startups enter new markets, establish international partnerships, and increase global sales;


GIA Tech Engagement Meet: Event to introduce Karnataka startups to GIA country startup ecosystem for collaboration


Australia: MedTechs Got Talent
For Karnataka startups to enter Australia's largest medical device accelerator


Finland: i-Samarth program
Mentorship, training and lab facilities provided to Karnataka startups in Nokia Bengaluru


UK: Go Global
Skilling workshops and networking events in UK for Karnataka startups


Our Partners

 Abu Dhabi Global Market

 Israel Innovation Authority

 German Accelerator

 London & Partners

 NIPA

 EU India Innocentre

Beyond Bengaluru



	Hubballi – Belgavi - Dharwad	Mangaluru	Mysuru
Accomplishments	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	Design Manufacturing (ESDM), Cybersecurity, Enterprise Services, Electronics System
Notable startups	Docketrun, Labinapp, Careerboat, Vayavyalabs, Ecomjetco, Cautomate	Diya Systems, Novigo Solutions, Semnox Solutions, Codecraft Technologies	Skaray, Sportiwe, S3V vascular Technologies
Other initiatives	<ul style="list-style-type: none"> Cluster seed fund: INR 25 Cr Acceleration Network Kalyana Karnataka: EDP Women Elevate Elevate Beyond Bengaluru Startup Grid 	<ul style="list-style-type: none"> End-to-end support for setting up an IT/ITeS entity Costs efficiency compared to Bengaluru- 25% for talent; 46% for infrastructure Government subsidies: 10% through government subsidies 	<ul style="list-style-type: none"> 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

THANK YOU!!



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