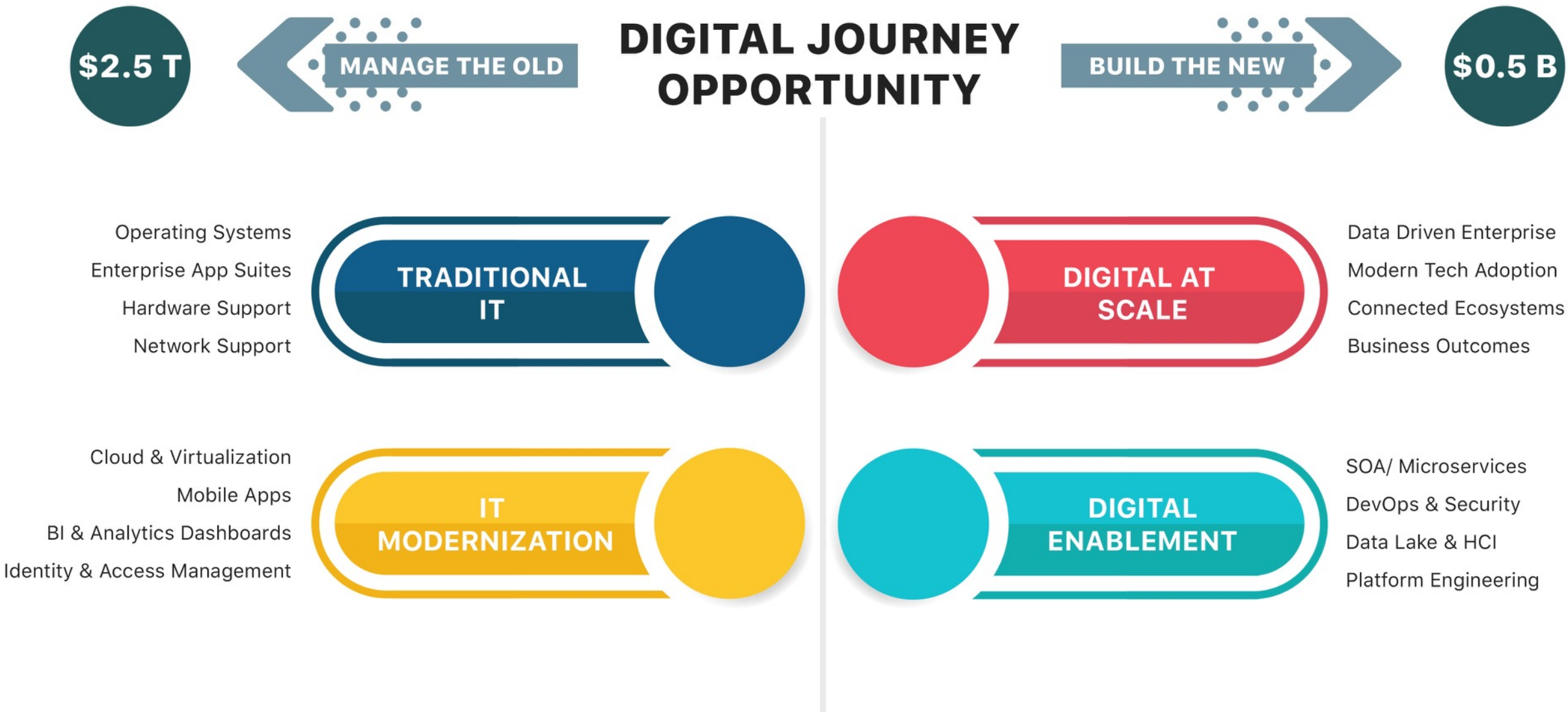




CENTER OF EXCELLENCE (CoE)

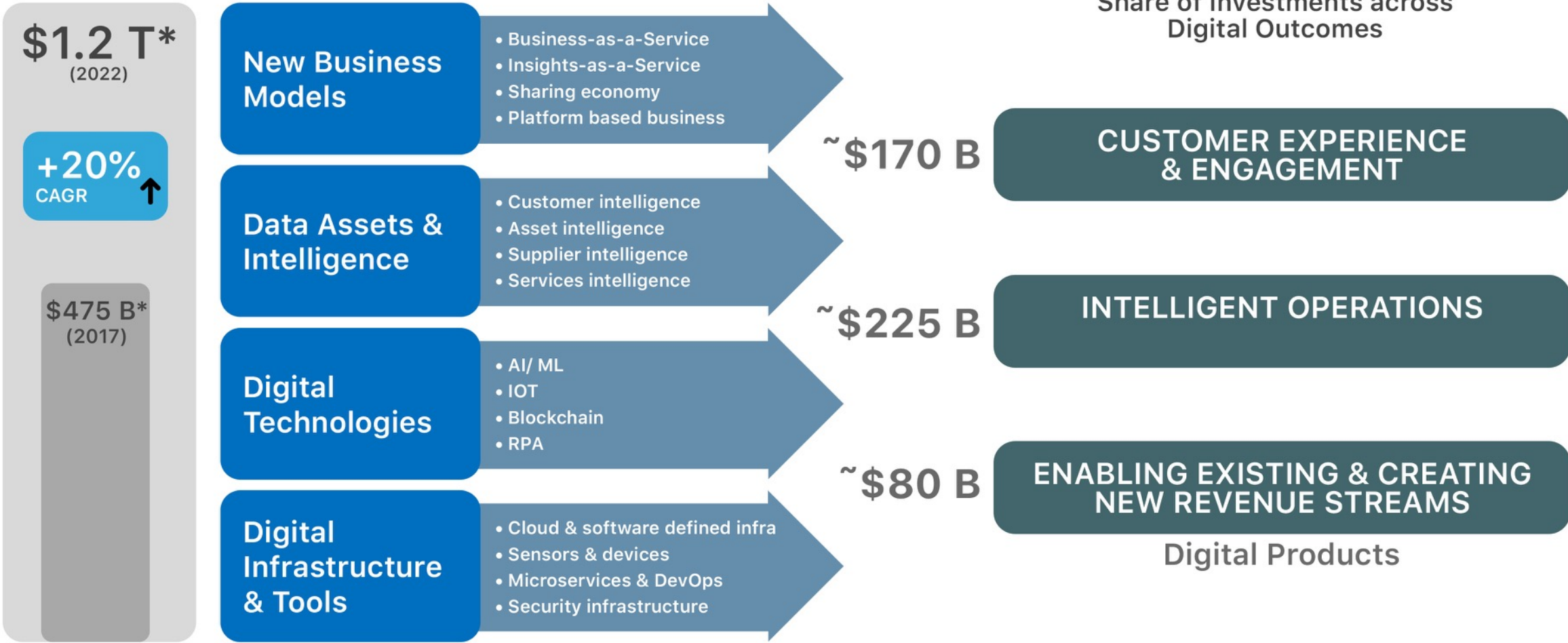
Digital transformation is core to enabling growth across industries



Enterprises are investing more on digital for improved business outcomes

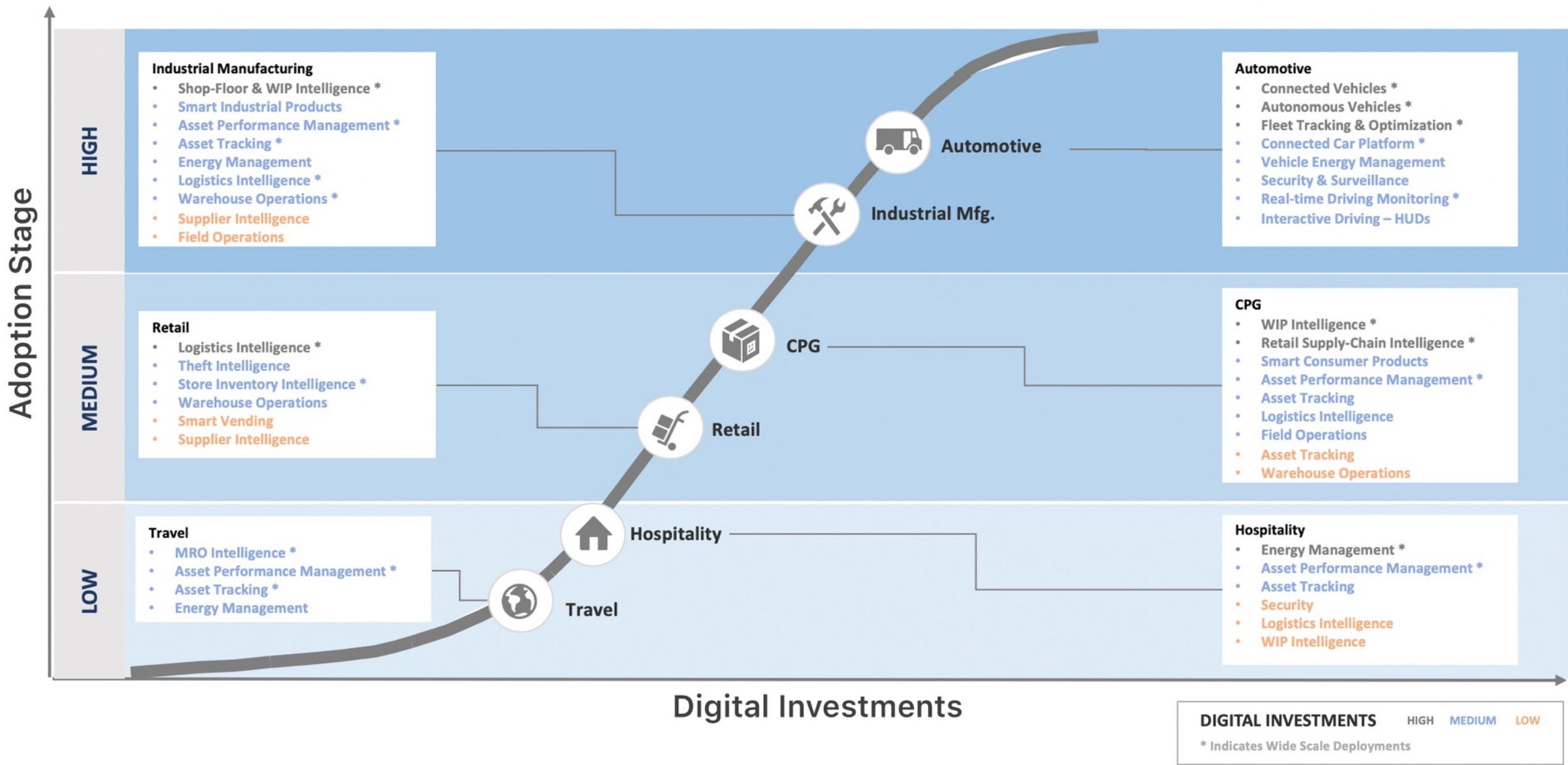


Digital Spend by Enterprises
(excluding Tech OEMs)

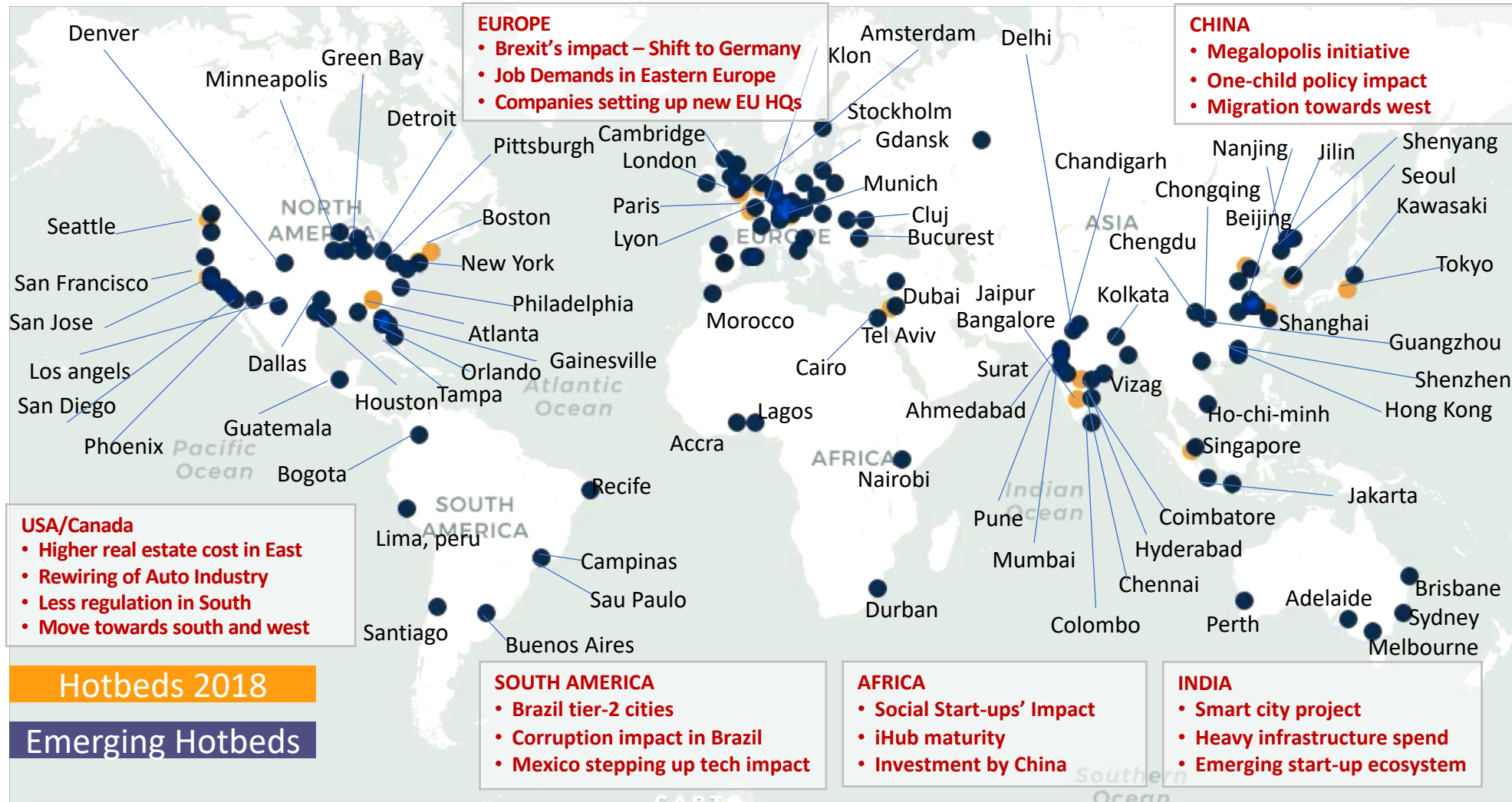


*includes investments in modern data driven technologies to help improve customer experience, drive higher order operational efficiencies and building new digital products & services; Includes R&D investments using digital technologies from both asset heavy & asset light industries; Digital technologies & tools such as AI/ ML, RPA platform, IOT platform, Data & analytics tools, software development platforms, Data & analytics tools, software development platforms; Portions of Datacenter required to support digital use cases; Investments in digital focused M&A and alliances; Setting up of COEs and digital labs; People cost (people employed to run digital initiatives) + stock options cost

Across industries, digital investments are giving rise to next-gen applications



Apart from established locations, many tier-2 destinations are also emerging as hotbeds for AI and Big Data talent



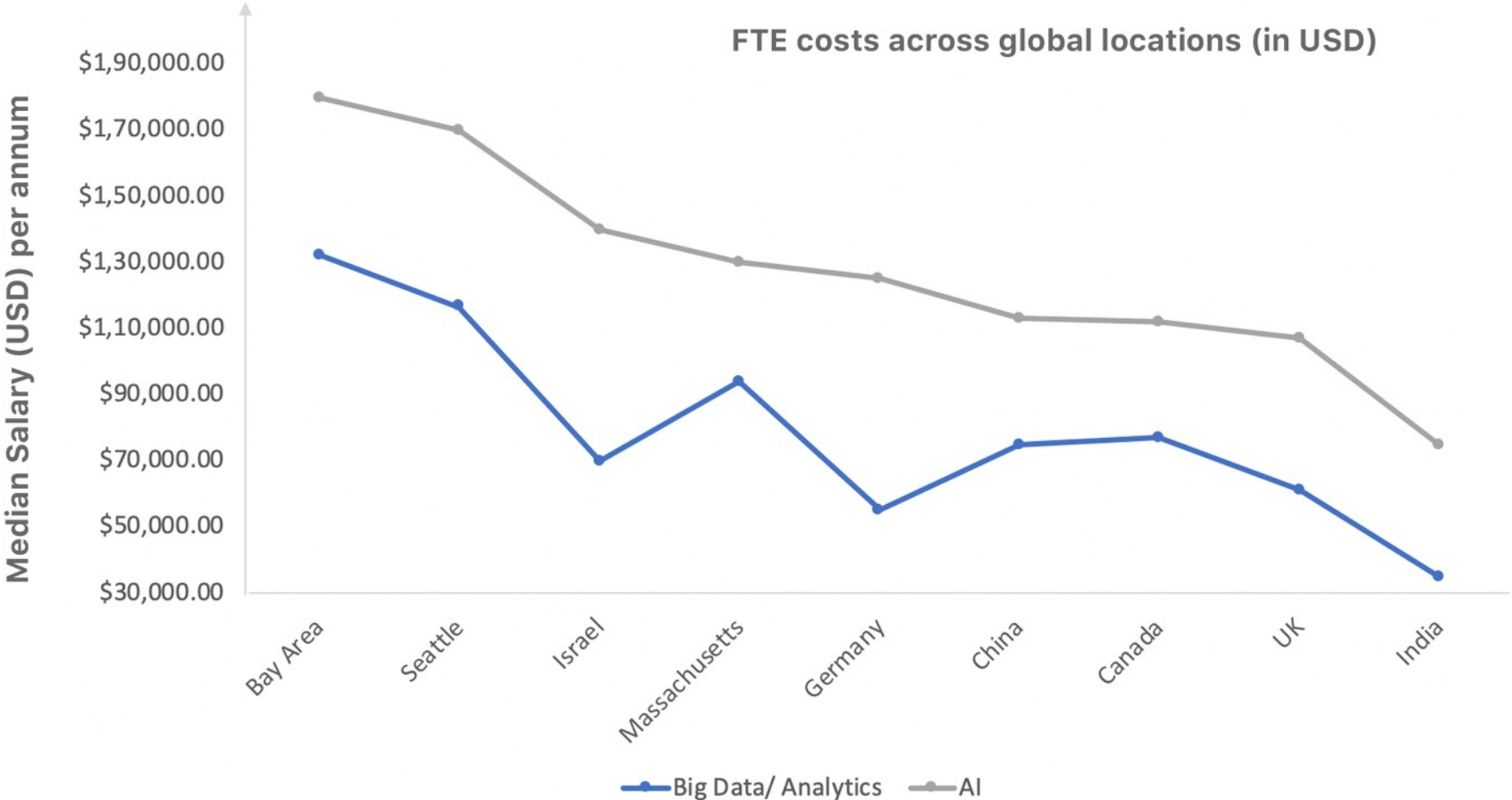
130+
Talent Hotbeds

~20%
Of AI Talent is employed
across tier-2 locations
in 2018

37
Countries will be home
to 1Mn Machine Learning
developers by 2030

Source: Zinnov Global Machine Learning talent forecasting modeler
Zinnov analysis of university programs, fresh ML graduates, digital initiatives of Government and Enterprises, Startups
Generic Data Science Talent pool not considered as there is noise in the data

Cost and talent are the two key drivers for growth decisions



Note : DRAUP's Talent Simulation Module . Median cost is derived from analysis of ~2000 tech company employers globally

>50%
Average FTE for talent (AI & Big Data/Analytics) in Silicon Valley Bay Area costs ~50% more than that of talent in Massachusetts

>15-20%
Globally, Machine Learning talent costs around 15-25% more than Big Data/Analytics talent

1/3RD
For both AI and Big Data/ Analytics, talent in India costs only around a third of the talent in Bay Area

Digital-first companies like Amazon have started putting some key roles outside the US



FORWARD FOCUS - Amazon is planning to invest heavily in retail (Amazon Go), delivery (Prime Now) and AWS

UNIQUE STRENGTH - Amazon has inculcated AI into almost every product line and business solution

AI/BIG DATA HEAD TALENT OVERVIEW

TOTAL HEADCOUNT ~1500

Core Roles		US	India	Germany	UK	Others
Data Scientist	~460	89%	9%	<1%	<1%	<1%
Applied ML	~350	75%	9%	6%	4%	~1%
Database Engineer	~180	60%	28%	1%	2%	9%
Data Architect	~25	73%	27%	%	%	%
Analyst	~120	65%	35%	%	%	%
Product Manager	~80	73%	17%	~2%	~2%	~8%
		~1100	~225	~25	~25	~25



Other large enterprises like Samsung are exploring various geographies to build their skill base



FORWARD FOCUS - Samsung plans for AI integration and internet connectivity in all its products by 2020

UNIQUE STRENGTH - Knowledge about connections between machines, applications, and customer demands in IoT

AI/BIG DATA HEAD TALENT OVERVIEW

Roles		South Korea	US
Data Scientist	~550	29%	16%
Applied ML	~500	33%	11%
Database Engineer	~180	31%	12%
Data Architect	~60	46%	35%
Analyst	~100	14%	22%
Product Manager	~40	13%	39%
		~770	~300

TOTAL HEADCOUNT ~2200

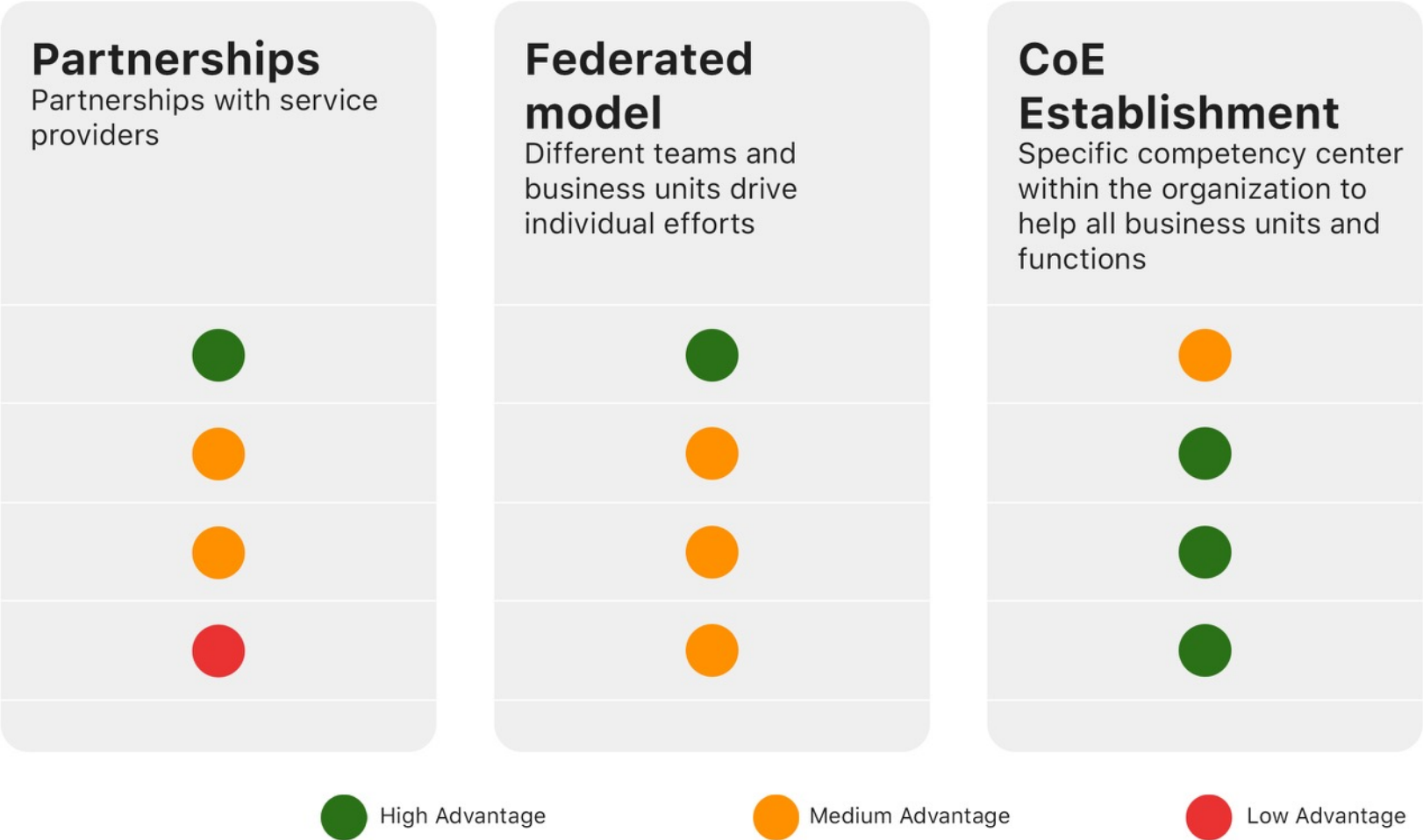
India	Poland	Others
6%	17%	32%
12%	8%	36%
23%	7%	26%
12%	7%	0%
23%	9%	33%
29%	0%	18%
~400	~200	~500



Enterprises are exploring various models to build digital capabilities



Although external partnerships do help in jump-starting the process, a CoE can help a company solve the talent challenge for the long term



Key activities across the lifecycle of a CoE



Design

- Design principals
- Location of CoE
- Use Case Prioritization framework
- Org structure
- Talent strategy
- Roles and responsibilities
- CoE persona
- Partnership needs



Execution

- Operating model
- Hiring and training
- Partnerships
- Collaboration with BUs



Governance

- CoE Maturity framework
- KPI definition
- Maturity and KPI tracking



CoE-BU integration

- Transition to BUs
- Collaboration on new areas
- Joint initiatives

CoE maturity model that can be a guideline in its transformation



Maturity Level		Stage 1	Stage 2	Stage 3	Stage 4
P&L Ownership					Business Leadership
					External Customer Connect
					Company Brand establishment
Platforms and Assets				Technology Leadership	Technology Leadership
Reusable Components			Domain Expertise	Domain Expertise	Domain Expertise
Shared Service Capability		Internal Customer (BA and MA) connect	Internal Customer (BA and MA) connect	Internal Customer (BA and MA) connect	Internal Customer (BA and MA) connect
		AI and ML Technology Competency	AI and ML Technology Competency	AI and ML Technology Competency	AI and ML Technology Competency
		CoE Culture	CoE Culture	CoE Culture	CoE Culture
		Employer Brand Establishment	Employer Brand Establishment	Employer Brand Establishment	Employer Brand Establishment

Zinnov helps enterprises set up and operate CoEs to groom talent and drive innovation

A



Insights

Insights around:

- Hotskills
- Location hotbeds
- Peer landscape
- Industry trends
- Key partnerships
- University competence

B



CoE Design

Advisory services to design the CoE:

- Charter and focus
- Location/Locations
- Location personas
- Organization structure
- Roles and responsibilities
- Use Case prioritization framework
- Talent strategy
- Partnerships

C



CoE governance

End-to-end management

- CoE maturity model
- KPI definition
- CoE governance management
- Partnerships governance dashboards and management
- Strategic reviews and realignment



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