

COVID-19 and Digital Transformation of the Philippines

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Asian Economic Integration Report 2021

making digital platforms work for Asia & Pacific

- Impact of Covid on trade, investment, supply chain & mobility
- Role of digitalization & regional cooperation in economic recovery

Harness digital trade opportunities

- affordability of & access to ICT
- logistics & delivery infrastructure
- regional efforts to modernize & harmonize regulations
- e-payment availability & options
- legal, regulatory, & institutional reforms
- E-readiness & digital divide

Technology could be disruptive but it also ushers in positive & inclusive development impacts

How economies manage digital transformation will determine their economic fortune

- Harmonized & clear definition & measurement of digital indicators is an important step
- Coordination among key institutions
- Flexible regulatory environment can nurture innovation
- Upgrading of education & labor market policies
- Key infrastructure, trade & logistics reforms

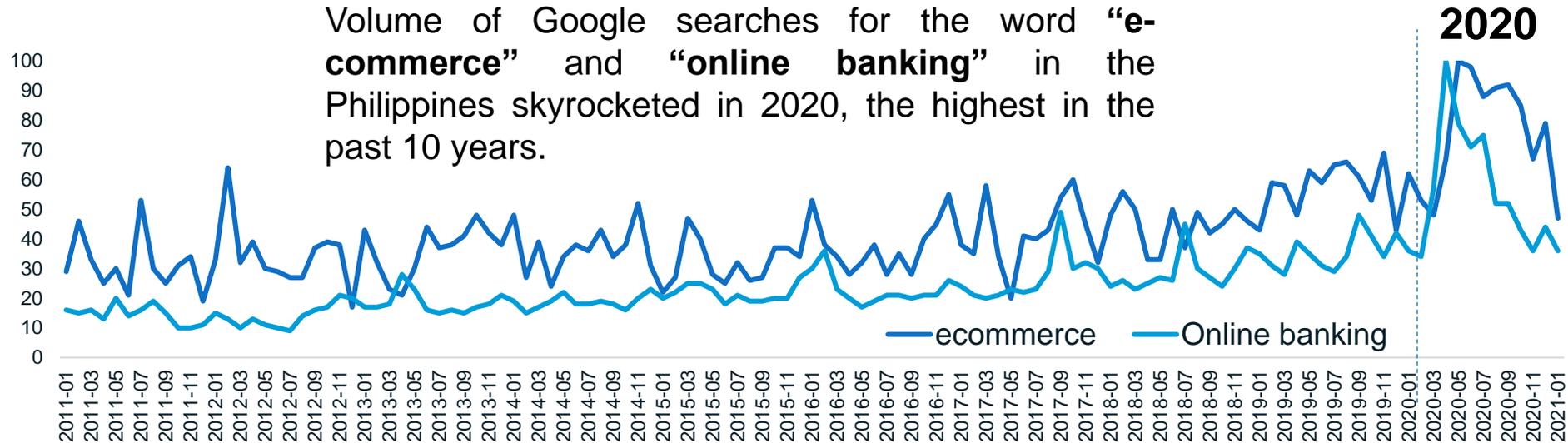
Using the above as guide, present PH major strategies & policies in pursuing digital transformation

Towards measuring the platform economy: concepts, indicators, & issues

- Platforms have disrupted many of the markets they have entered
- Policymakers need to assess & compare across countries speed with which platforms are transforming markets, subsequent impacts on firms, market dynamics, people, communities
- Economic statistics do not currently give a clear & integrated response to questions about role, nature, & size of platforms
- **Challenges:** definition, classifications, obtaining the data
- NSOs can include platforms in their surveys: turnover, employment
- How to capture platforms that do not have formal presence in PH
- Large international platforms can have complicated structures with transactions routed & processed in multiple ways, challenging for NSO to get a holistic view of a platform's activities
- **Scope for international action:** ADB & other international organizations to establish definitions of online platforms, a key step toward wider uptake of survey-based approaches & developing internationally comparable data
- establish online community through which experiences, case studies & experiments could be shared
- Include in labor force surveys indicators to estimate number of platform workers*, their characteristics as well as jobs/tasks, type of service provided

*platform workers: individuals who use an app (Uber) or a website (Amazon Turk) to match themselves with customers to provide a service in return for money

The increasing use of technology to work, buy, and stay connected have shaped **new digital habits** among Filipino consumers



82k

Number of DTI-registered online businesses in Oct 2020; only 1.7k in Jan-Mar 2020

48%

plan to do more online shopping after the pandemic (Global Web Survey)

624%

Increase in volume of online payment transactions via Instapay (PESONet recorded 130%)

14.7%

Expected e-commerce annual growth from 2021-25

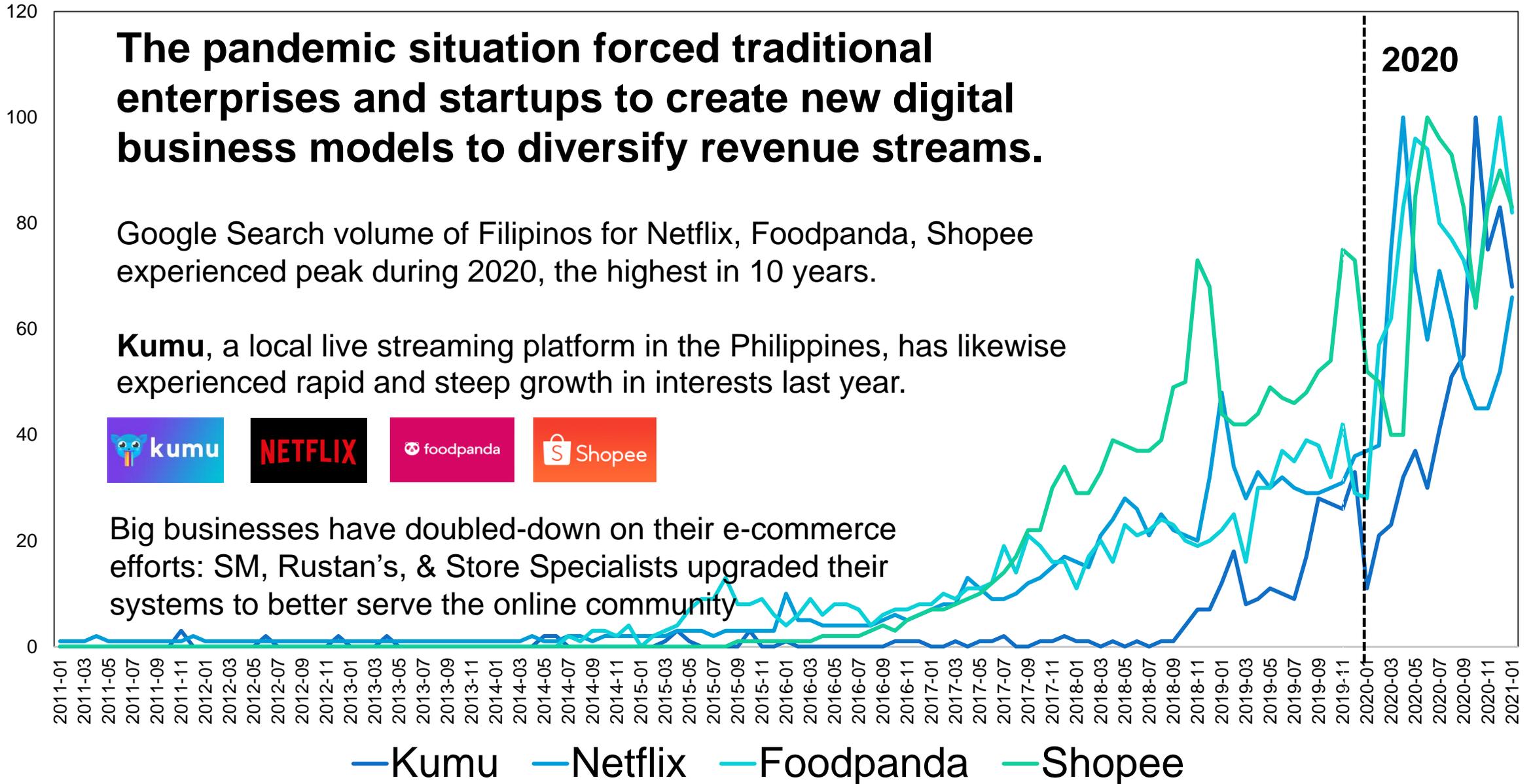
The pandemic situation forced traditional enterprises and startups to create new digital business models to diversify revenue streams.

Google Search volume of Filipinos for Netflix, Foodpanda, Shopee experienced peak during 2020, the highest in 10 years.

Kumu, a local live streaming platform in the Philippines, has likewise experienced rapid and steep growth in interests last year.

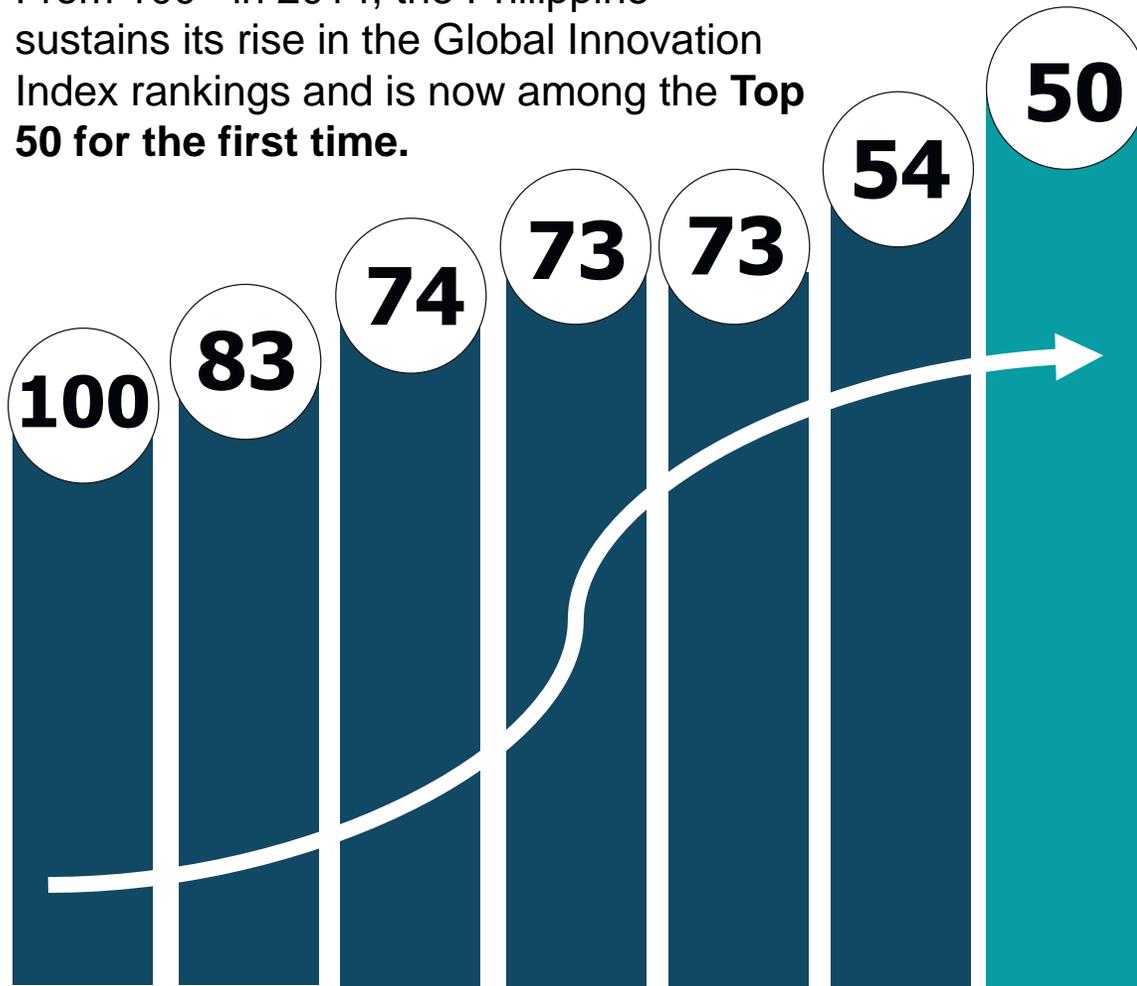


Big businesses have doubled-down on their e-commerce efforts: SM, Rustan's, & Store Specialists upgraded their systems to better serve the online community



COVID-19 hit the Philippine economy at a time when **innovation was starting to flourish**

From 100th in 2014, the Philippine sustains its rise in the Global Innovation Index rankings and is now among the **Top 50 for the first time.**



Philippines is top digital riser in East Asia and the Pacific European Center for Digital Competitiveness

Philippine Startup Ecosystem: Rank 31-40
Top 100 Emerging Startup Ecosystems

PH: outstanding performance in GII creative goods and services sub-pillar ranking 29th of all countries

57th

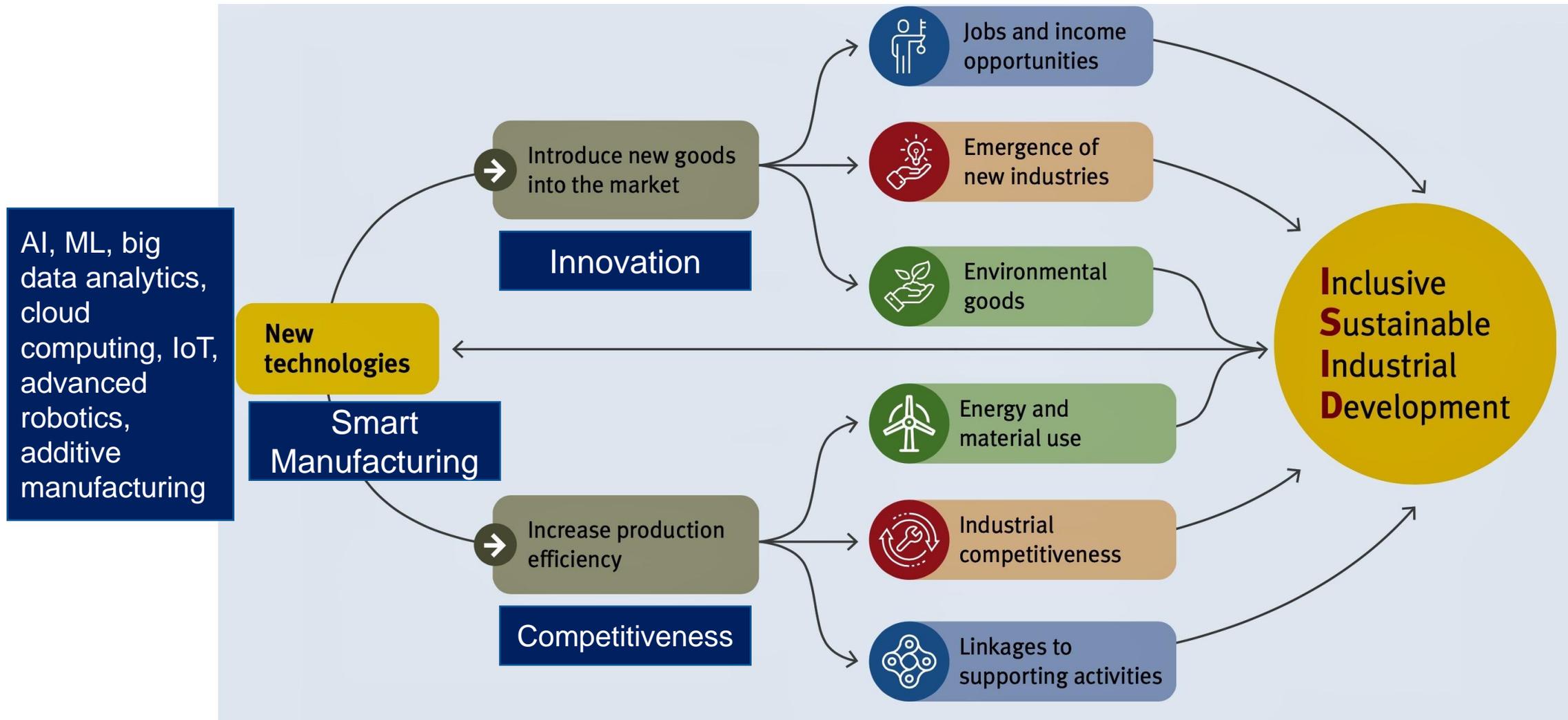
Out of Almost 130 Countries in terms of **Creative Outputs**

10th

in terms of **Creative Goods Exports as a % of Total Trade**

PH to combine creativity & technological expertise to capture value: software & game development, edtech, vidtech (entertainment/media technology)

New Technologies can drive inclusive, resilient, & sustainable industrial development



Inclusive Innovation Industrial Strategy (i³S)

Embrace Industry 4.0

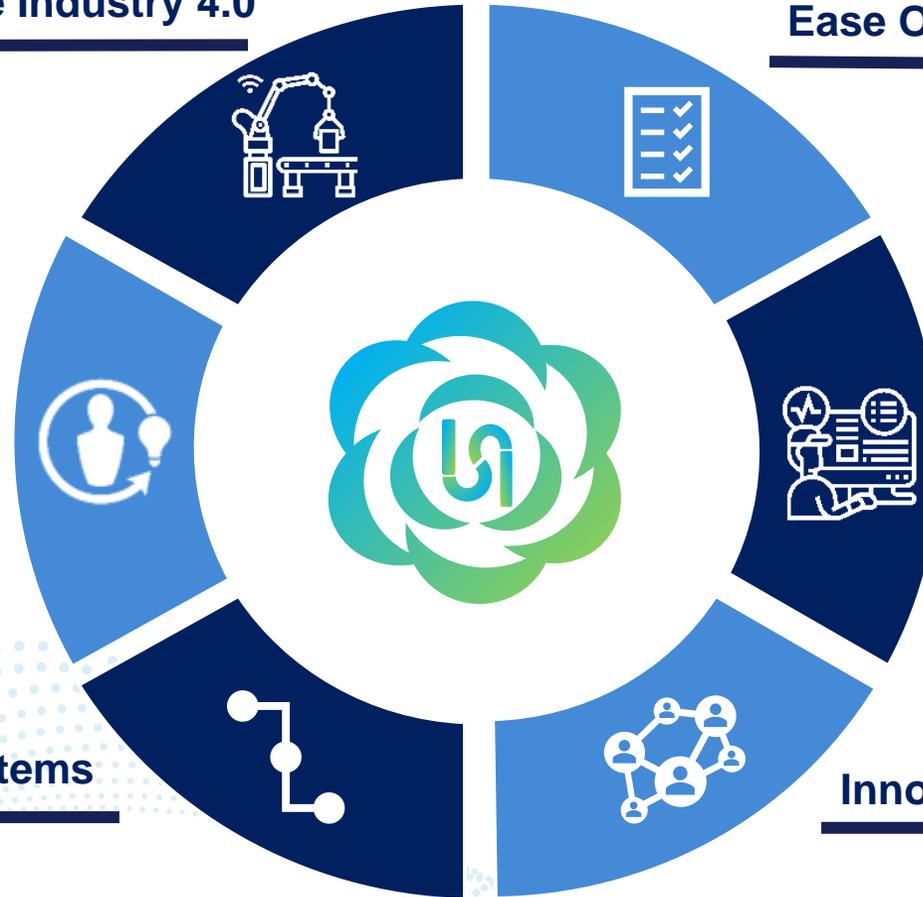
Ease Of Doing Business

Innovative SMEs & Startups

Upskill/Reskill Workforce

Integrate Production Systems

Innovation & Entrepreneurship Ecosystem



- Prepare SMEs for Industry 4.0
- Build startup ecosystem
- Link manufacturing with agriculture & services
- Participation in global value chains
- Promote research commercialization
- Creation of new products, services, business models

- Use and adapt new technologies
- Simplification of processes, automation
- Power, logistics, infrastructure
- Upgrade education curricula
- Skills training programs
- Improve digital skills

15 PRIORITY INDUSTRIES FOR DOMESTIC AND EXPORT MARKETS

MANUFACTURING; AGRICULTURE, FISHERY, FORESTRY; SERVICES, PUBLIC UTILITIES; NEW TECHNOLOGIES, INNOVATION



Electrical & Electronics



IT BPM



Agri-business



Transport, Logistics, Construction



Creative



Auto & Auto Parts



Tool & Die, Iron & Steel



Shipbuilding, RORO



Innovation, R&D



Tourism



Aerospace Parts



Chemicals



Furniture, Garments

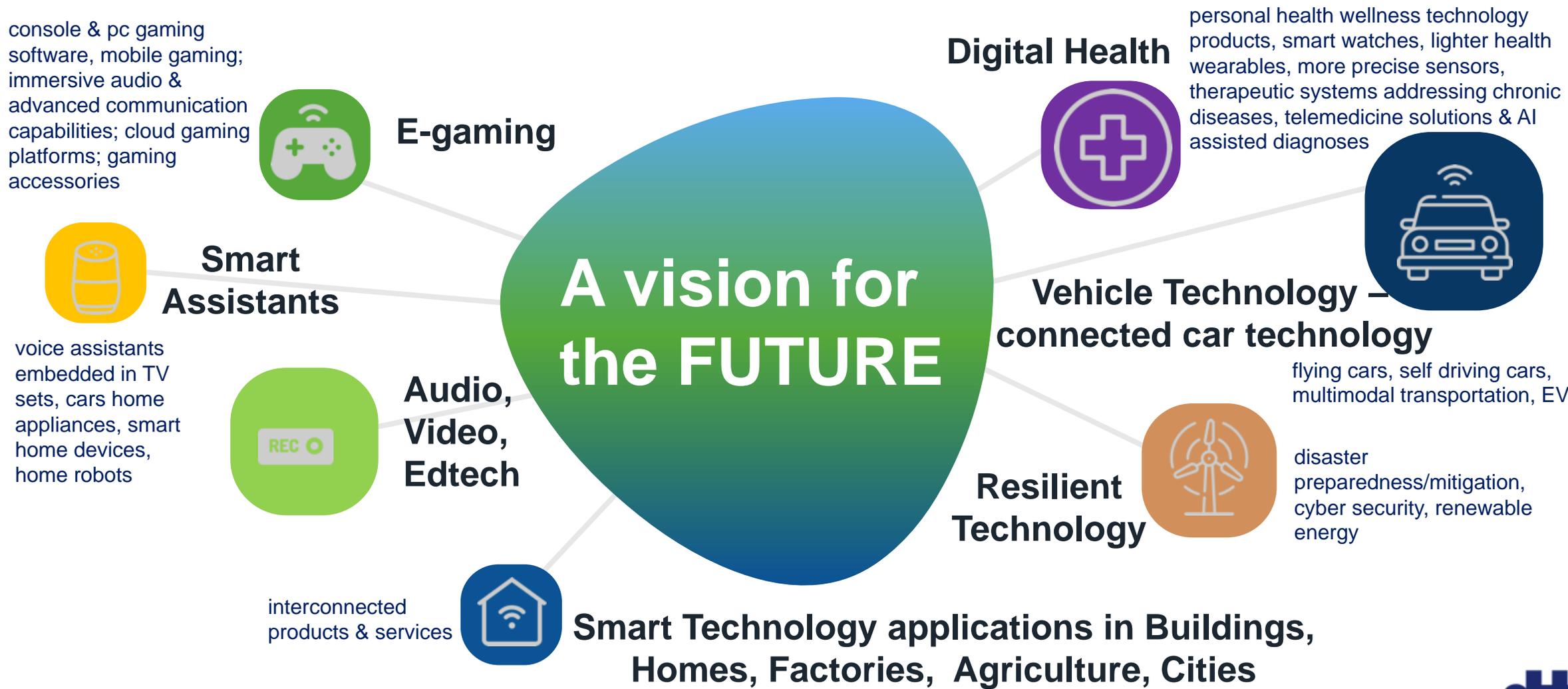


Environment, Climate Change

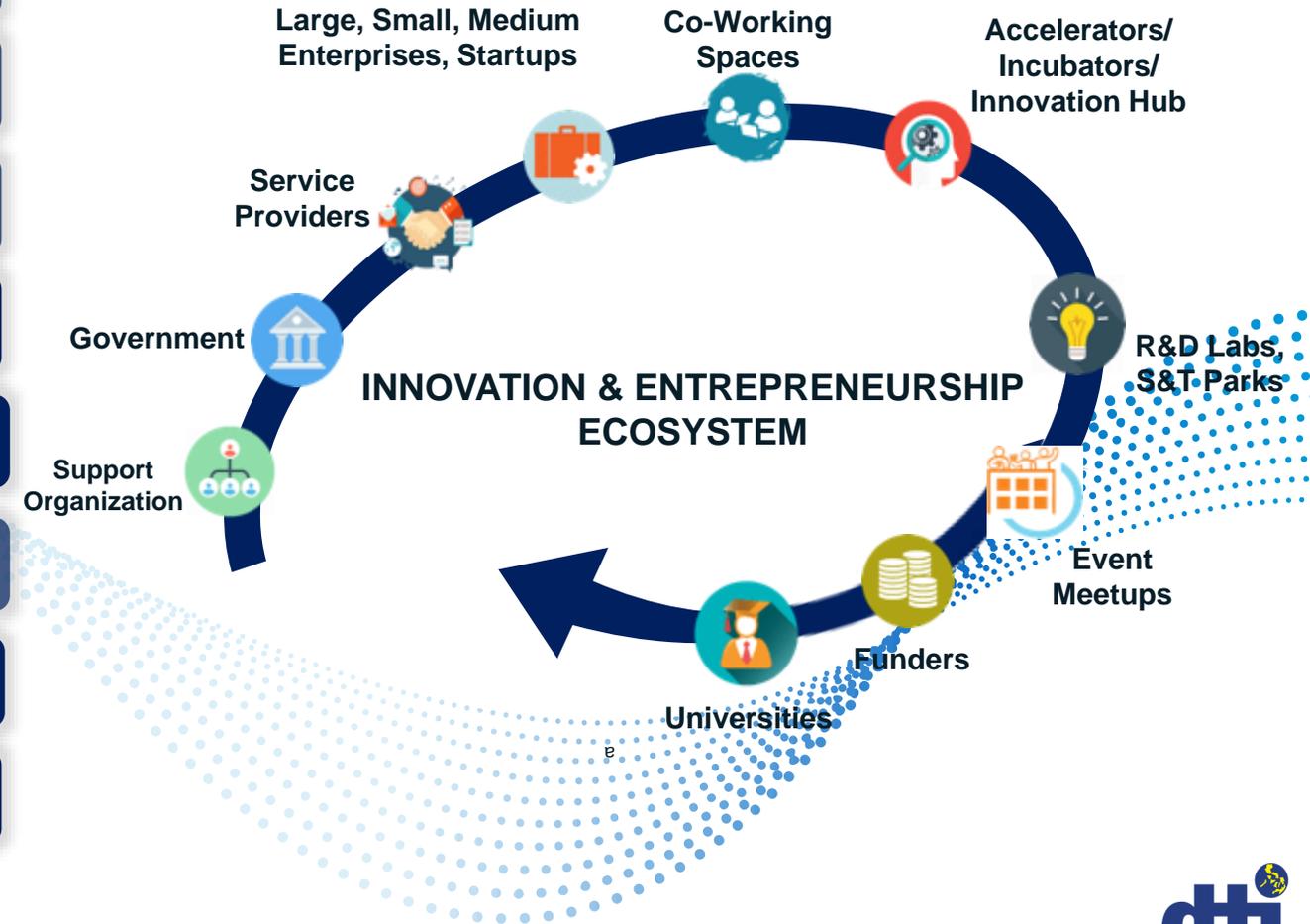
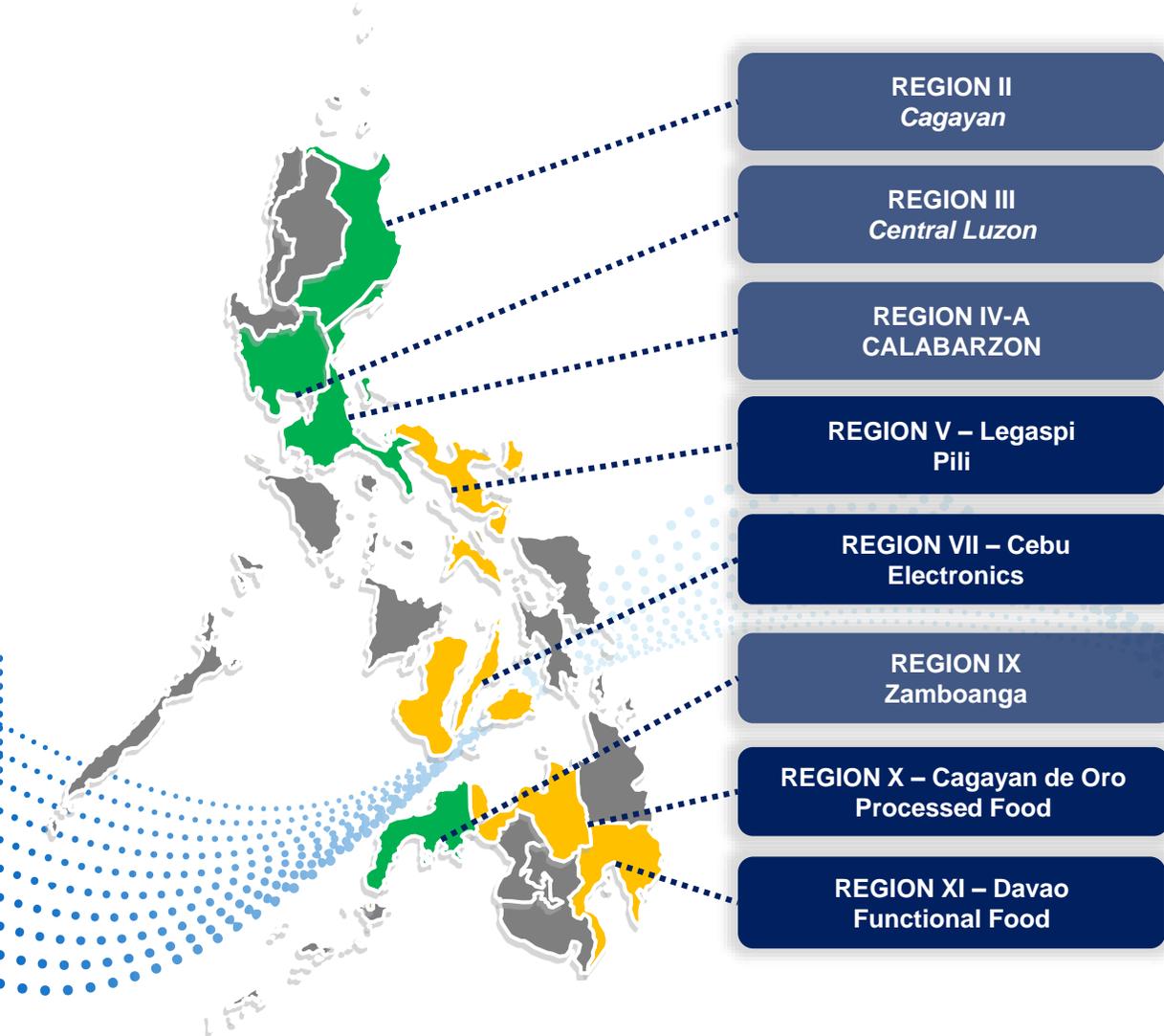


Digital Technology

Creating new products or solutions with technology building blocks Voice Recognition, AI, AR, robotics, 5G connectivity, and IoT



Regional Inclusive Innovation Centers (RIICs) : Driving S&T-led Industrialization through Innovation and Research Commercialization



PH STARTUP ECOSYSTEM

The PH Startup Ecosystem is young with promising opportunities for growth. Most startups are into various service activities, fintech, and e-commerce.

35+ Incubators & Accelerators

120+ Co-working Space

600+ Startups

50+ Angel Investors

40+ Venture Capitalist

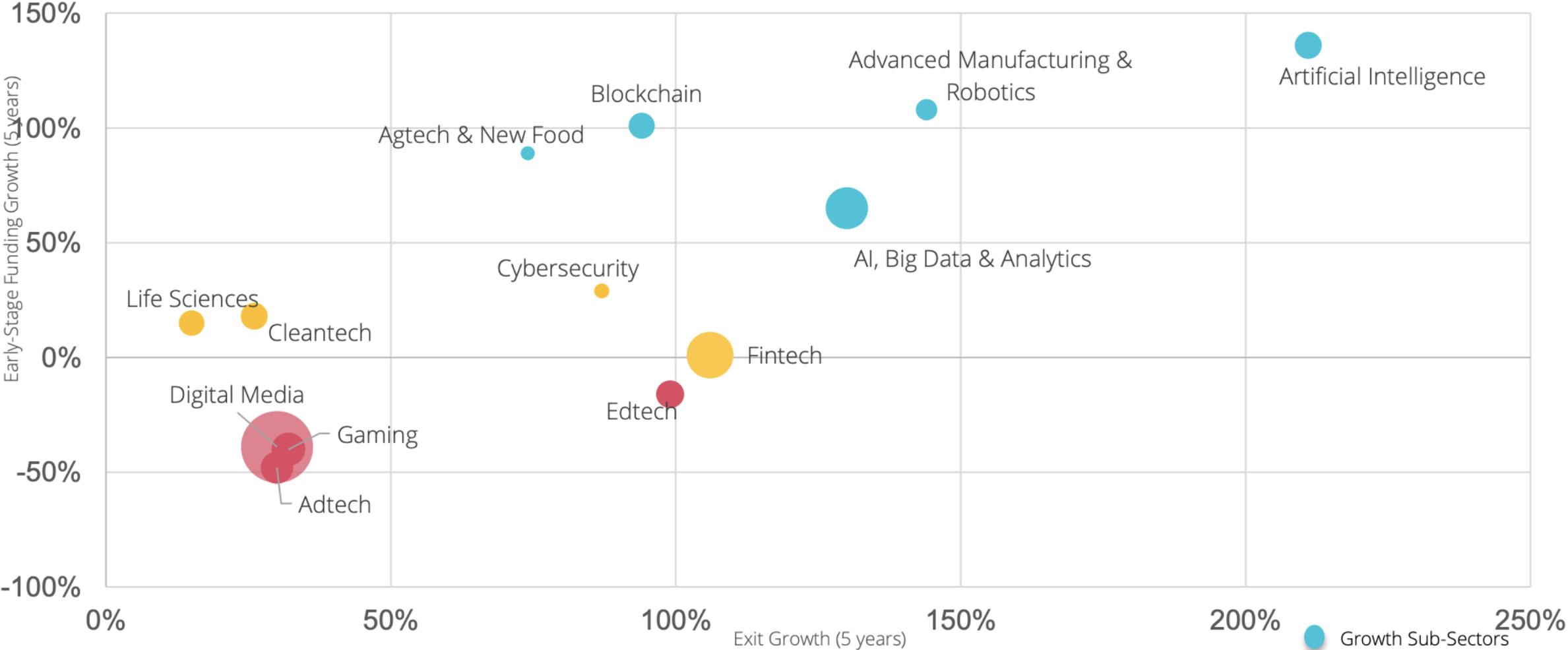


Fintech, E-Commerce, and Digital Services will power the digital transformation in the New Normal

- We can build on our **key advantages** in these sectors to accelerate recovery
- Innovative startups have been providing tech solutions to address issues in health, agriculture, education, finance, supply chain & logistics
- Startups offering **Industry 4.0** and **Digital Transformation** services will support the transition of enterprises into the digital economy



Deep Technology is now a highly emerging sub-sector in the Startup Ecosystem across the world



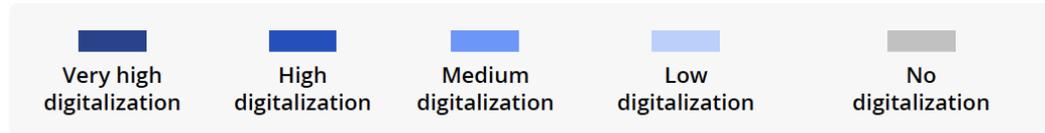
Size of the bubbles indicate share of global

- Growth Sub-Sectors
- Mature Sub-Sectors
- Decline Sub-Sectors



Digitalization Across the Philippine Supply Chain

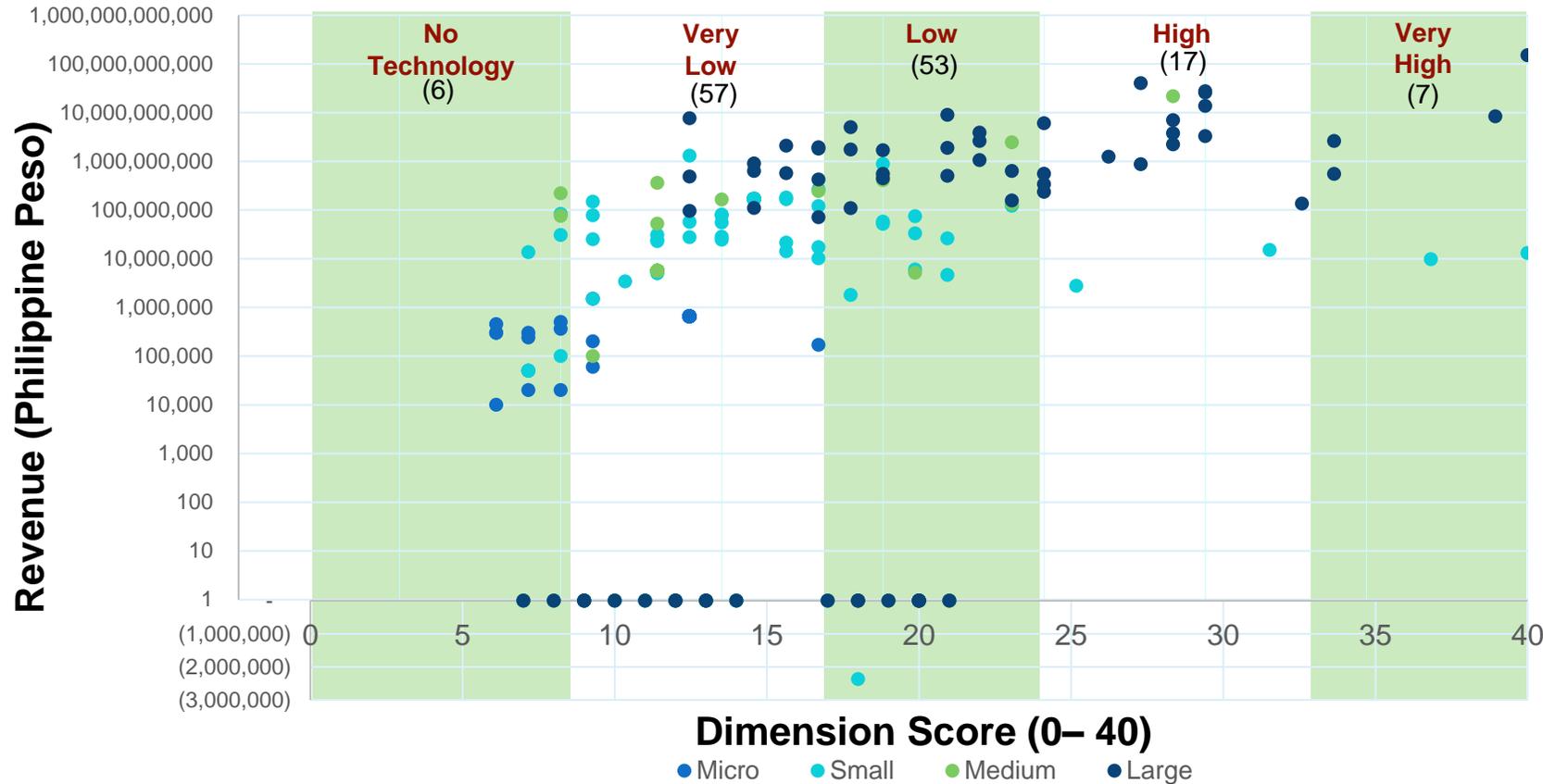
Addressing the challenges such as high logistics cost, inefficiencies, and delays



Strategic Actions of the Philippines towards a globally competitive logistics sector:

- Encourage private sector investments in the logistics services sector;
- Eliminate red tape and streamline government issuances;
- Establish public and private sector partnerships;
- Adhere to standardization of processing times for issuance of permits and licenses;
- Craft enabling laws and policies to increase the competitiveness of the sector;
- Provide skills training for a future-ready logistics workforce.

79% of the respondents very low to low technology utilization



Level	SMMI 8 Dimensions
0	Purely Manual
1	With Spreadsheet Management
2	Stand-alone DB Management System with Legacy Applications
3	Mostly Manufacturing Execution System used in this Layer
4	Industry 4.0: MES + IIoT, Big Data, Machine Learning, Robotics, etc

	No Tech	Very Low	Low	High	Very High	Total
Micro	4	14	4	0	0	22
Small	2	28	18	3	2	53
Medium	0	8	8	1	0	17
Large	0	8	21	14	5	48
Total	6	58	51	18	7	140

Source: DTI-CIG Survey of Manufacturing Technology Utilization 2019



Industry 4.0 Readiness Initiatives

Industry 4.0 Roadmaps

Industry-level Industry 4.0 roadmaps covering four (4) sectors: Agribusiness, Aerospace, Automotive, and Electronics/Semiconductor Industries.

Industry 4.0 Pilot Factory

Host demonstrations and case applications of Industry 4.0 technologies that enterprises, especially MSMEs, can access to facilitate the adoption of Industry 4.0 technologies in their production operations

Industry 4.0 SME Academy

Support technological learning and innovation by SMEs through creating innovative training materials and which will help test new curricula using operational and practical experience.

Industry 4.0 Firm Assessment

Provide Industry 4.0 assessment using the Smart Industry Readiness Index (SIRI) and recommendations to companies which will help them assess their technologies, processes, and organization

- SMART Link Program, Philippine Skills Framework, AI Roadmap for Industry

Digital divide, limited digital adoption, weak digital infrastructure must be addressed to ensure that nobody is left behind

- Digital divide has been an issue even prior to the pandemic
- PH has one of the highest internet usage, has lagged behind our neighbors in digital adoption
 - high cost & uneven quality of internet
 - limited adoption of digital payments
 - high cost of logistics
 - business environment characterized by low levels of competition particularly in telecommunications
 - Regulatory constraints: foreign equity restrictions, Congressional franchise to build a network, radio control law of 1931, lack of an open access policy, multiple permits & licenses to deploy networks slowed down installation of towers & networks
- IFC: logistics account for 27% of sales of manufacturing firms in PH, 21% in INDO, 16% in VN, 11% in TH
- No. of towers: PH<20K VN 70K, INDO 90K
- Without the necessary digital infrastructure and without access to digital technologies and digital skills; the poor, uneducated, and those living in remote areas would be left behind leading to a worsening of inequality

KEY MESSAGES

1. COVID-19 has **fast-tracked the digitalization** journey of the Philippines
2. Inclusive Innovation Industrial strategy focuses on innovation & embracing Industry 4.0, use and adapting new technologies to strengthen competitiveness & sustainability of industries
 - PH startup ecosystem is **young, vibrant, huge growth opportunities**, strengths in Fintech, E-Commerce, & Digital Solutions Services
3. Apart from building data on digital economy, build the digital infrastructure; address regulatory constraints that limit competition in telecommunications & logistics along with skills development & digital trainings to upskill/reskill our workforce
4. Strong **government-industry-academe collaboration** is necessary to ensure that our road to recovery & digital transformation will be rapid, inclusive, sustainable, & resilient
5. As we pursue digital transformation, we need to ensure that no worker, enterprise, especially MSMEs or region is left behind



THANK YOU!