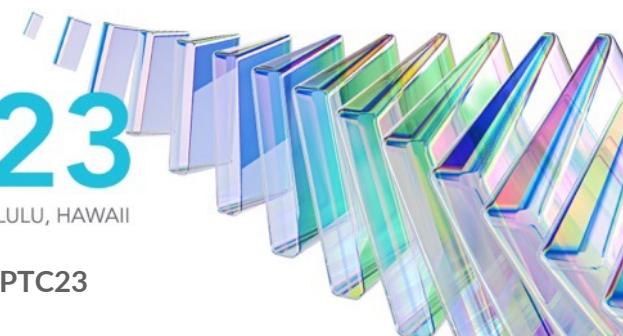


How Startup Ecosystems Accelerate Telcos' Transformation

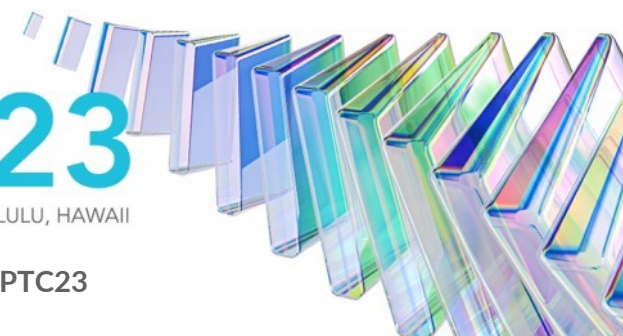
A study in Hong Kong and Singapore Startup Ecosystems

10:45-12:00



Topics

- Telcos' value proposition in the Internet Value Chain
- A startup idea to accelerate the 5G business model
- Startup ecosystems and telcos' transformation
- Action plan in 2023-2025



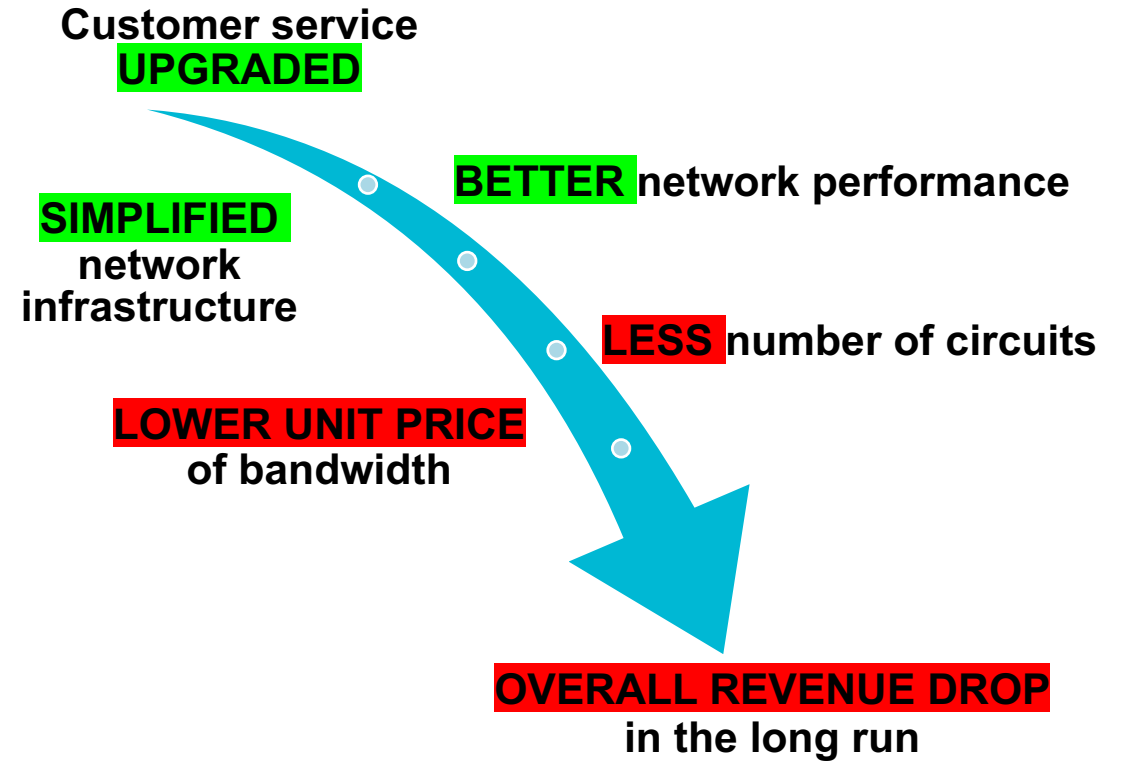
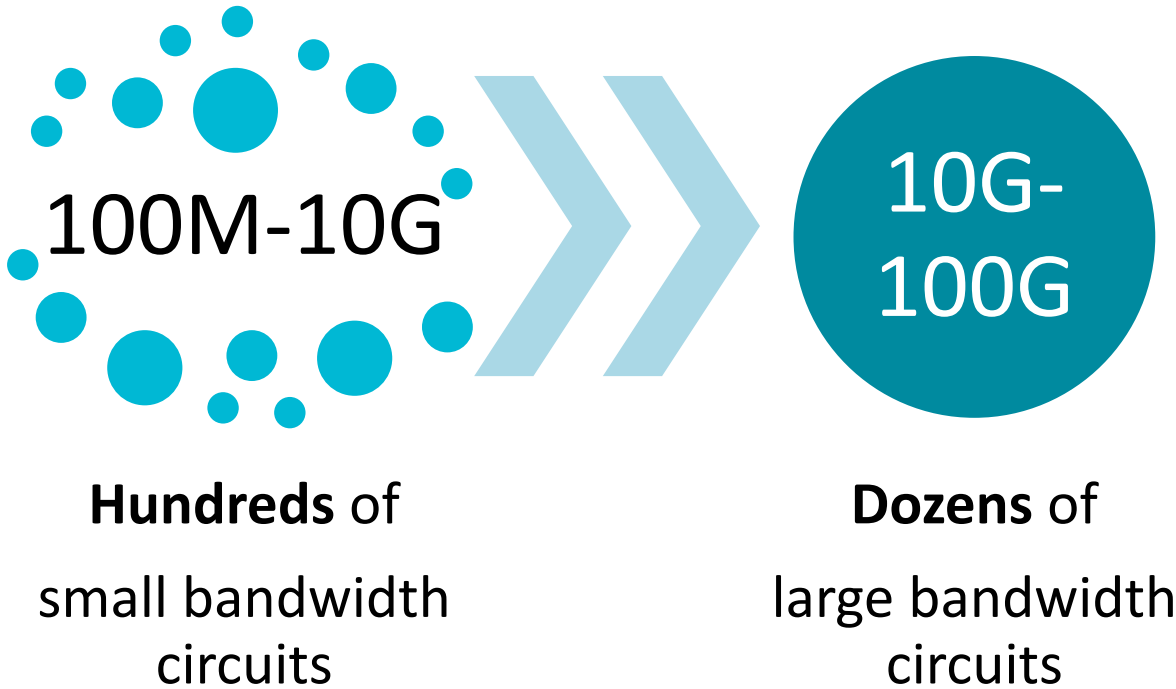
A wakeup call in 2017

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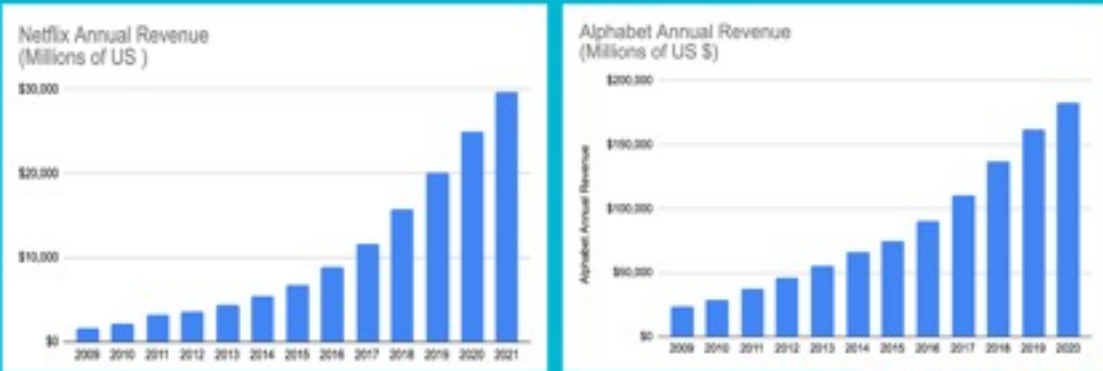
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A successful project but ... something went wrong



Value proposition

OTT players' CAGR: 26.7% and 20.1%

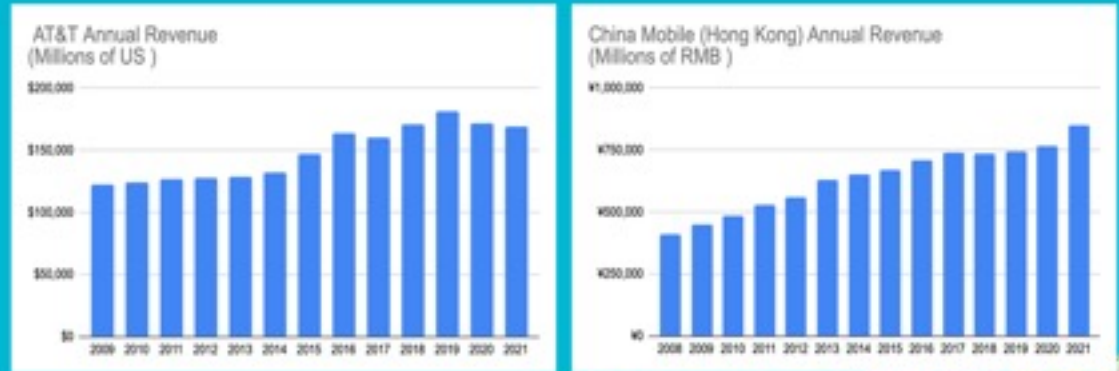


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Telcos' CAGR: 2.4% and 5.7%



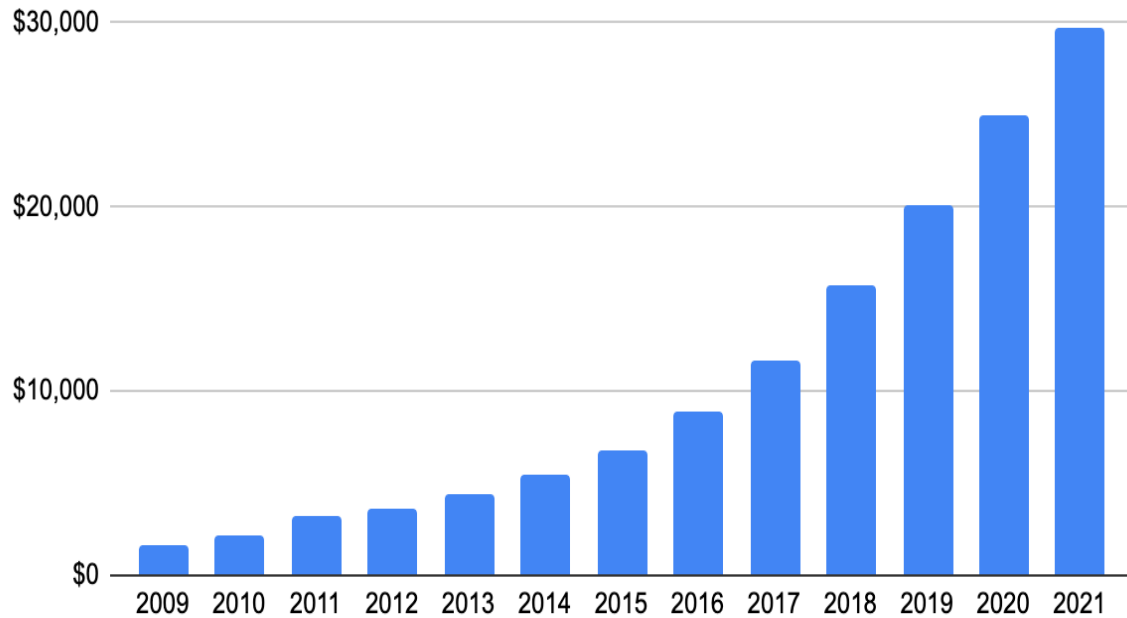
PACIFIC TELECOMMUNICATIONS COUNCIL

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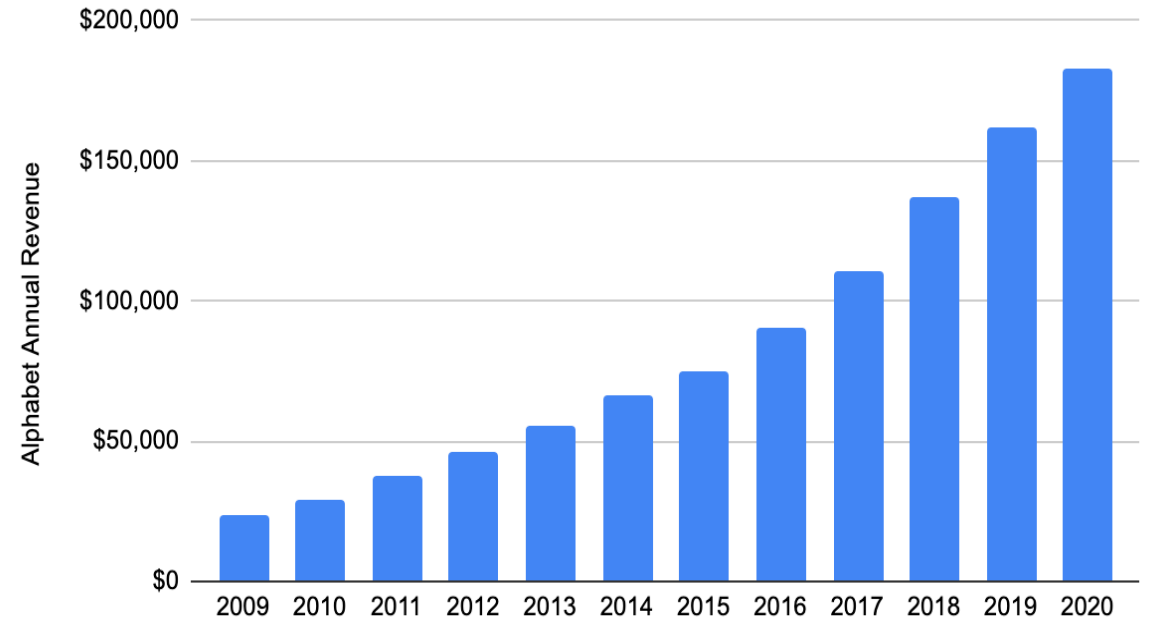
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OTT players' CAGR: 26.7% and 20.1%

Netflix Annual Revenue
(Millions of US)

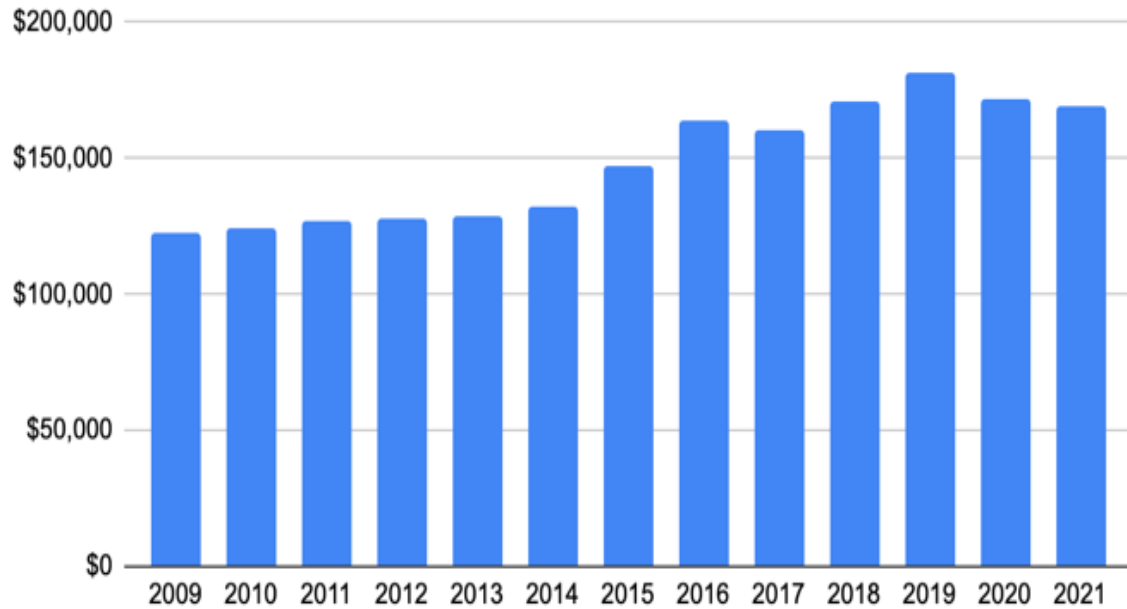


Alphabet Annual Revenue
(Millions of US \$)

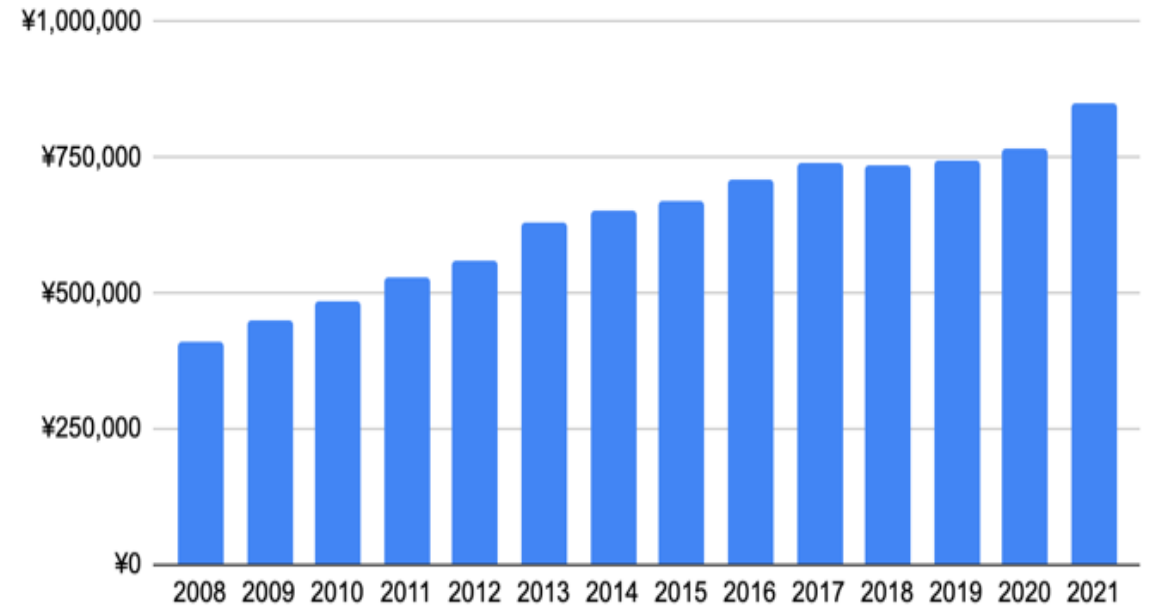


Telcos' CAGR: 2.4% and 5.7%

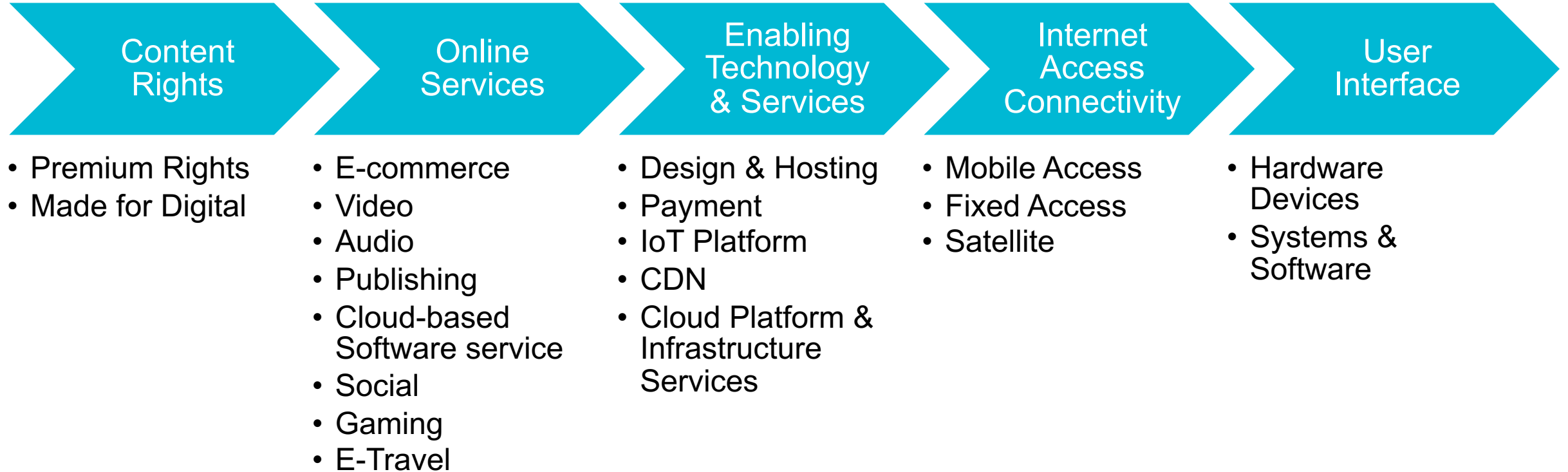
AT&T Annual Revenue
(Millions of US)



China Mobile (Hong Kong) Annual Revenue
(Millions of RMB)

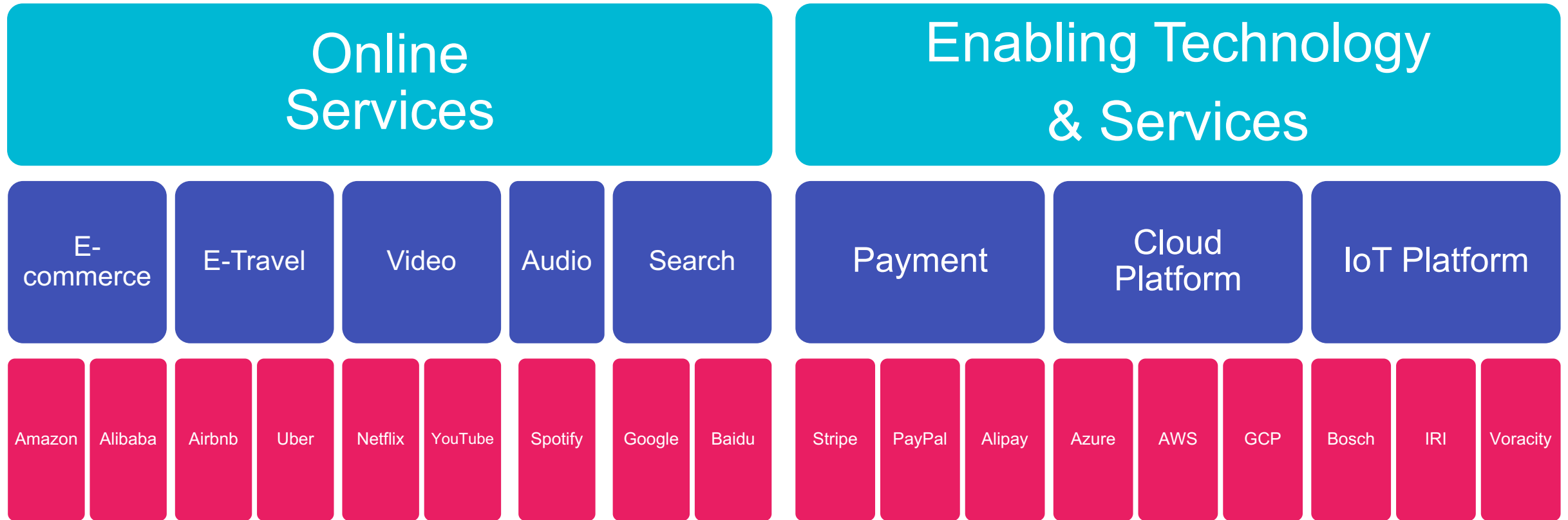


Internet Value Chain Framework



Source: GSMA Internet Value Chain 2022

Internet Value Chain Framework



Topics

- Telcos' value proposition in the Internet Value Chain
- **A startup idea to accelerate the 5G business model**
- Startup ecosystems and telcos' transformation
- Action plan in 2023-2025

An ambitious idea in 2020

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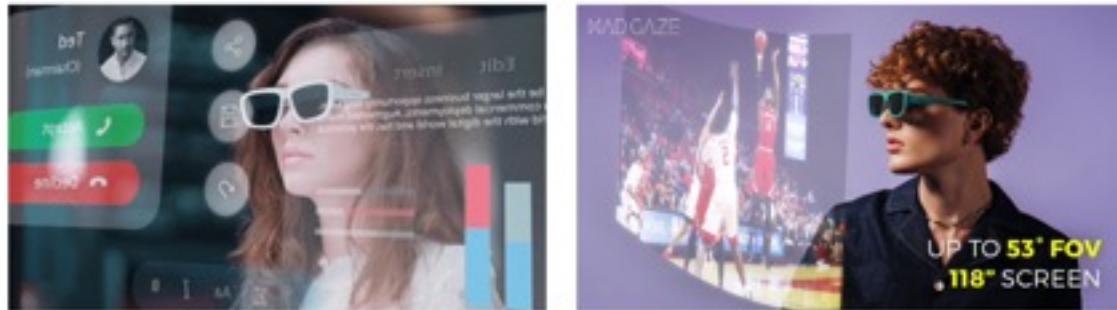
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An inspiration from PTC'20



Monetizing the 5G infrastructure

Augmented Reality (AR) wearable



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Smart City in Mixed Reality



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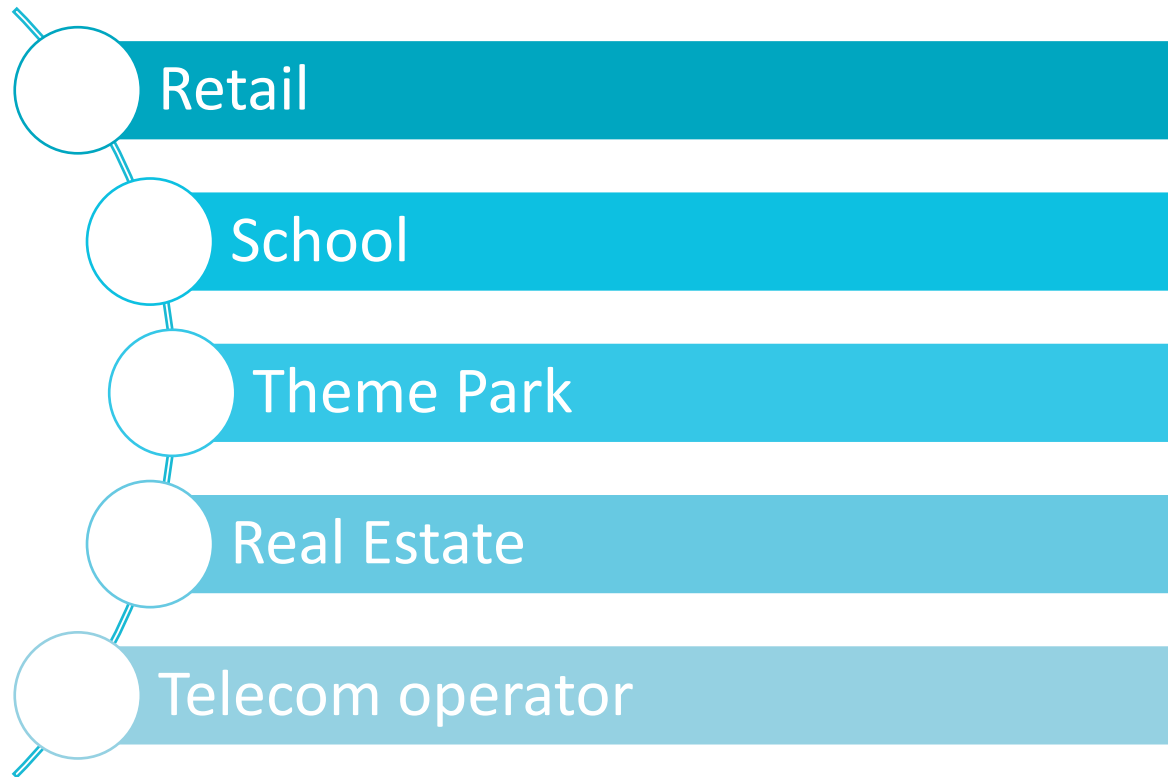
Augmented Reality (AR) wearable



Smart City in Mixed Reality



Mission failed, yet Vision gained



IDEAS FROM THE PROJECTS

It's not a choice between standardization and customization but an **INTEGRATION OF BOTH**.

IMPRESSION FOR THE TELCOS

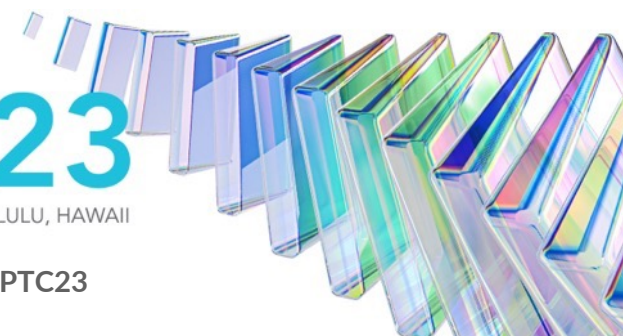
To monetize the 5G business, it requires **NEW BUSINESS MODEL** rather than **5G CELL SITES**.

LESSON FOR THE START-UPS

To fulfil the needs of the telcos, it requires a **START-UP ECOSYSTEM** rather than a **STARTUP**.

Topics

- Telcos' value proposition in the Internet Value Chain
- A startup idea to accelerate the 5G business model
- **Startup ecosystems and telcos' transformation**
- Action plan in 2023-2025



An initiate of emerging innovations in 2023

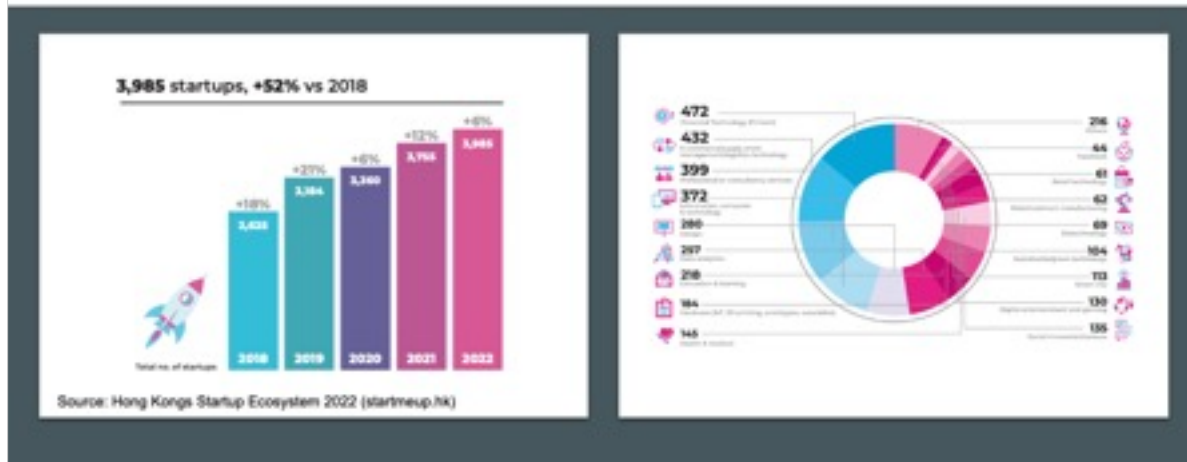
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Hong Kong and Singapore Startup Ecosystems

Hong Kong Startups



Singapore Startups



Over 50 categories

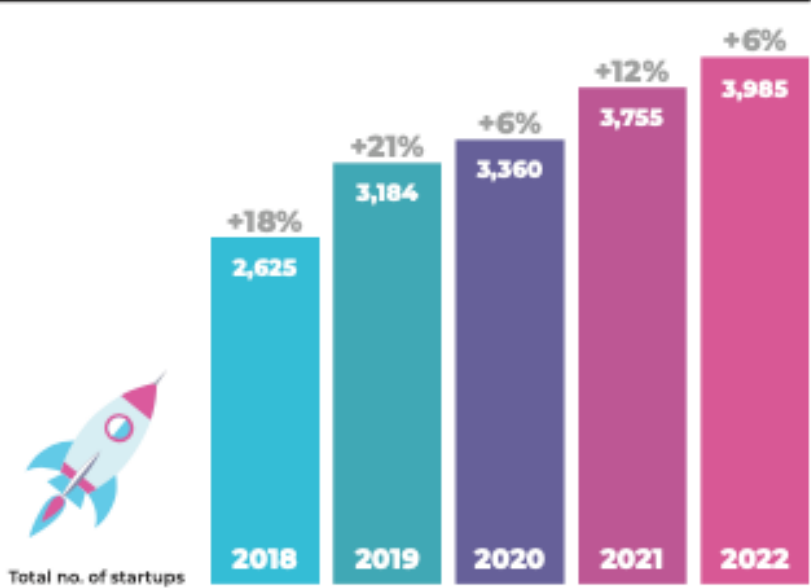


Source: Singapore's Startup Ecosystem (startupsg.gov.sg)
 PACIFIC TELECOMMUNICATIONS COUNCIL

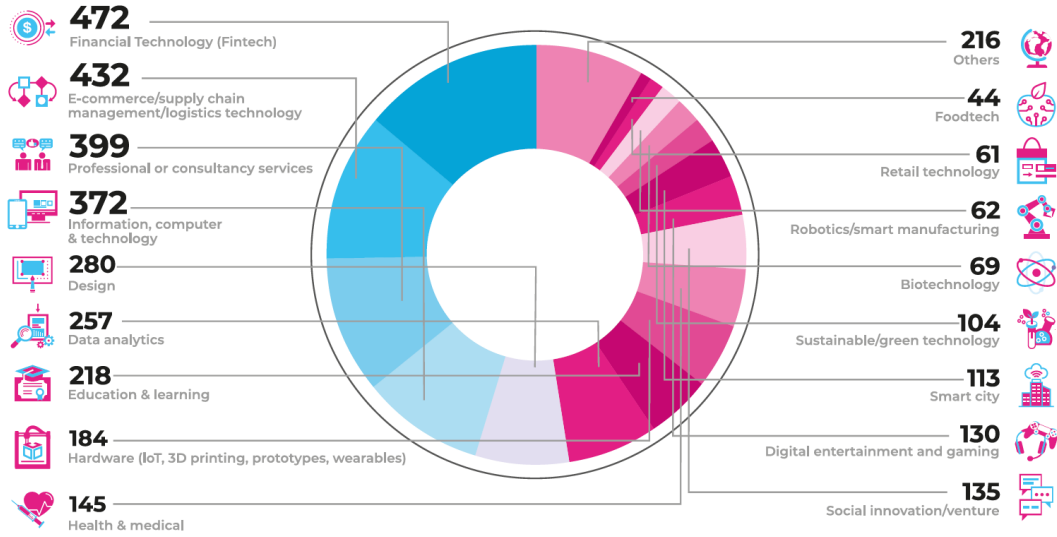
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Hong Kong Startups

3,985 startups, +52% vs 2018



Source: Hong Kongs Startup Ecosystem 2022 (startmeup.hk)



Singapore Startups

Startups: 4,356

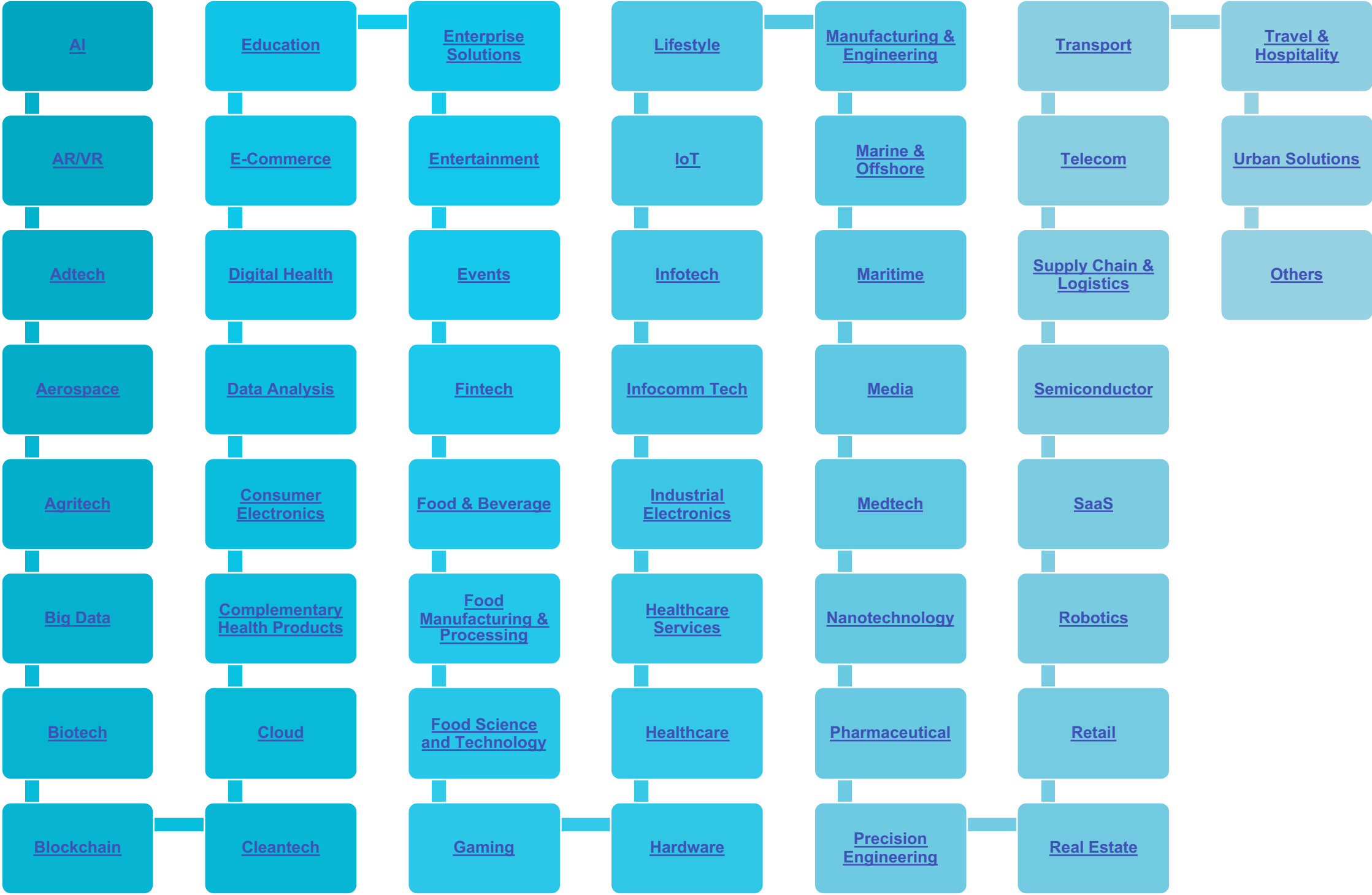
Investors: 515

Incubators: 228

Over 50 categories



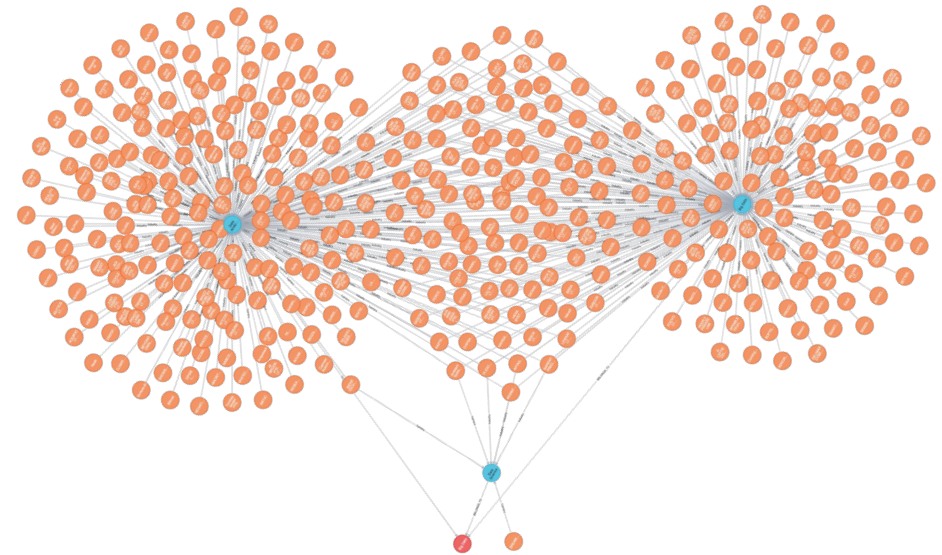
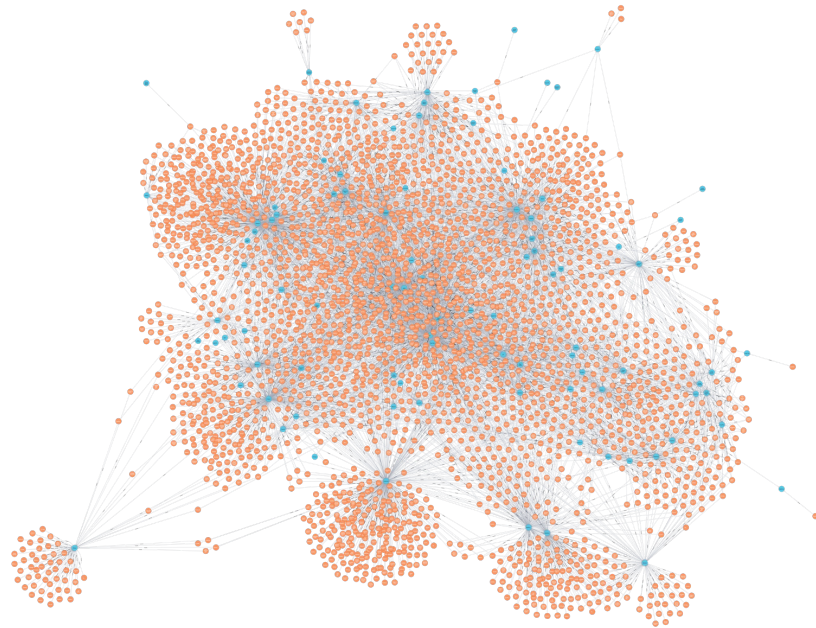
Source: Singapore's Startup Ecosystem (startupsg.gov.sg)



Overview of the Startup Ecosystem

- Data map of over 3,500 Startups

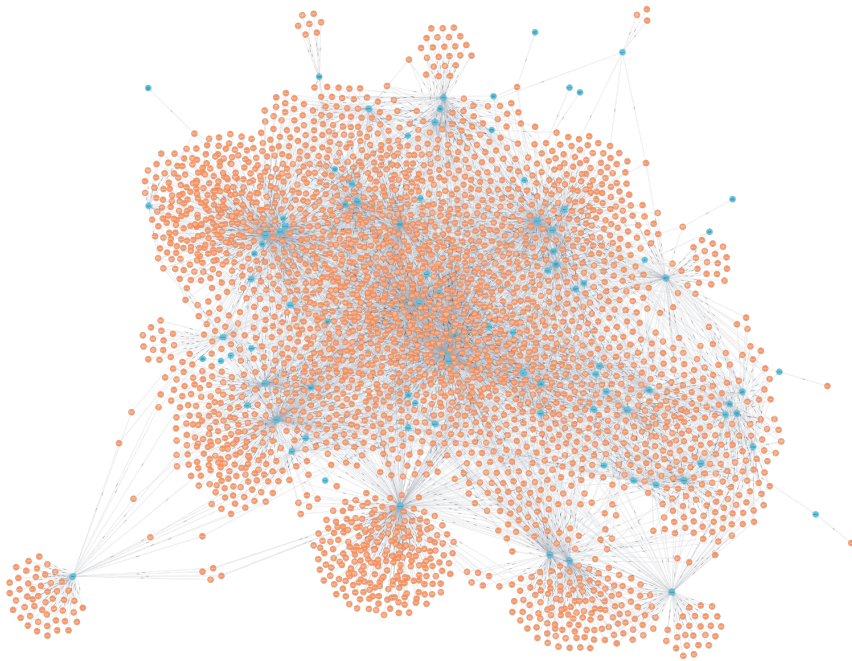
- Big Data (436 startups)



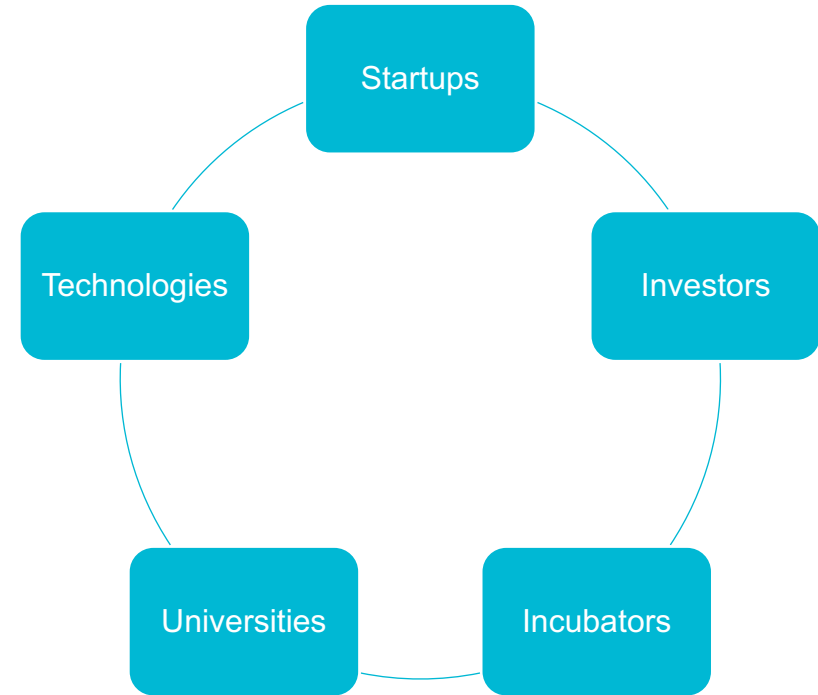
● Sector ● Domain ● Startups

Capture the innovations from Startups

Startup Ecosystem Landscape

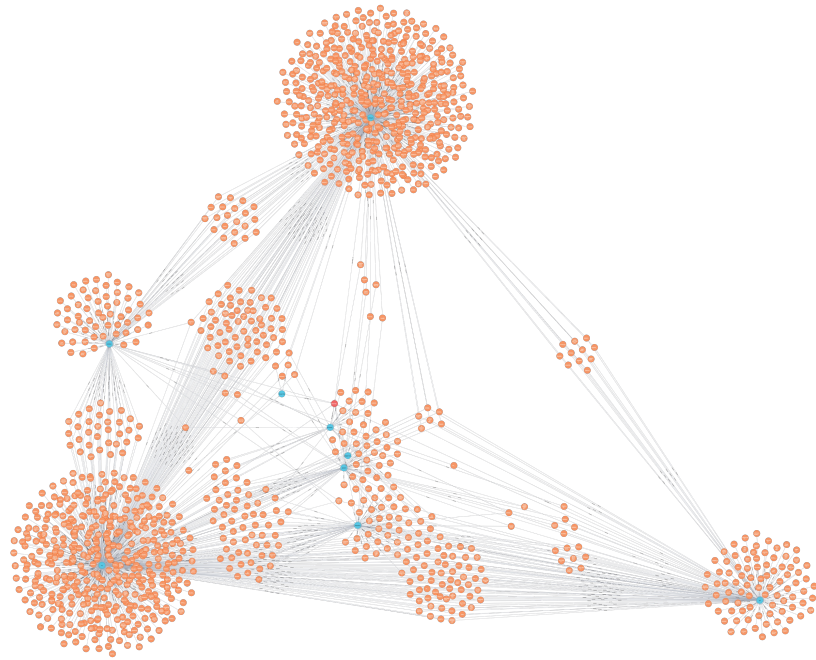


Emerging techs and Mega trends



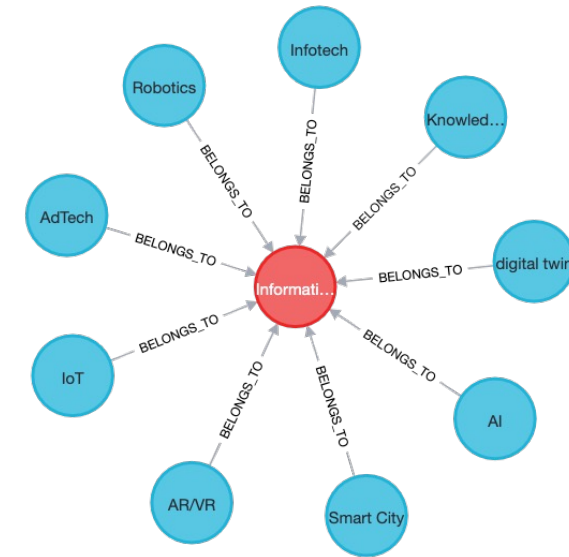
Visualization of the IT Sector

IT Sector Overview (1,401 startups)



● Sector ● Domain ● Startups

IT Sector and its 9 domains



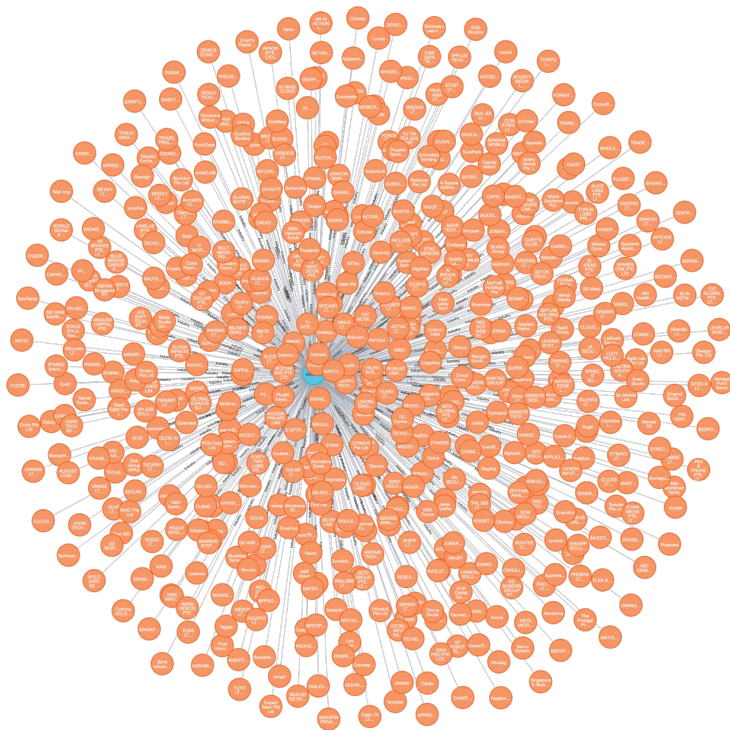
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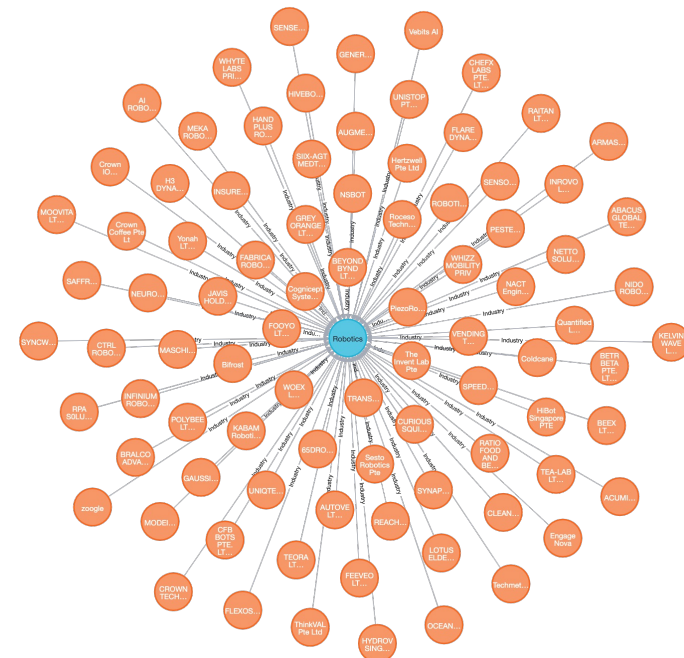
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Visualization of the domains

Domain: Infotech (580 startups)

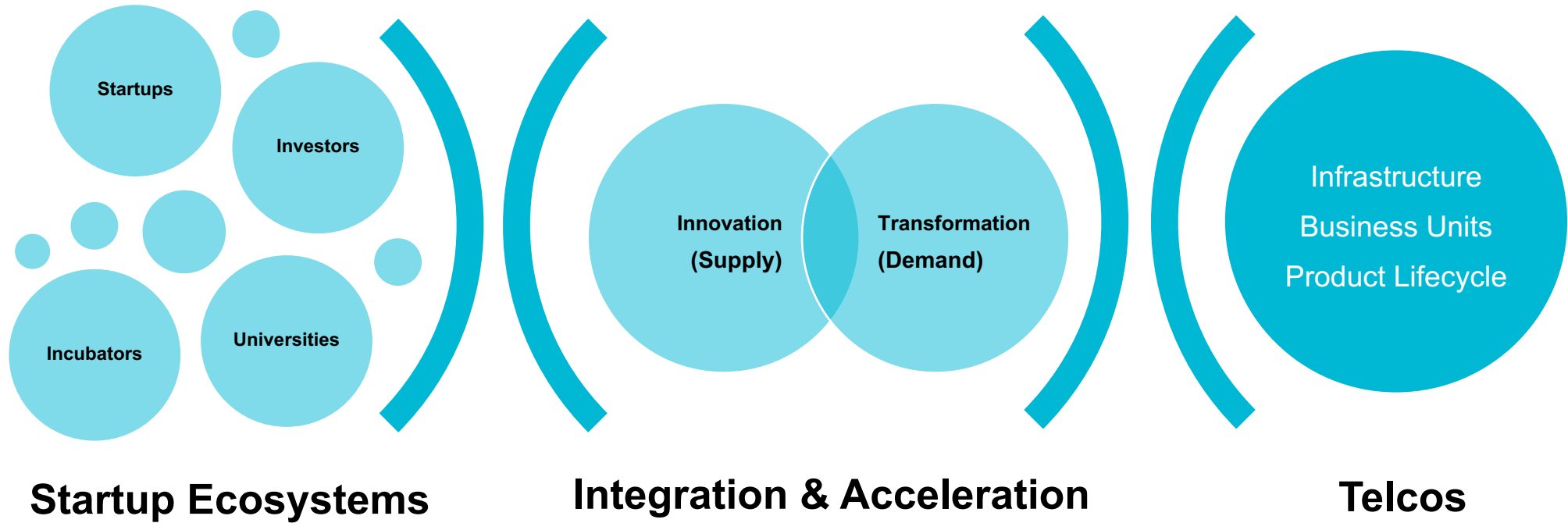


Domain: Robotics (87 startups)



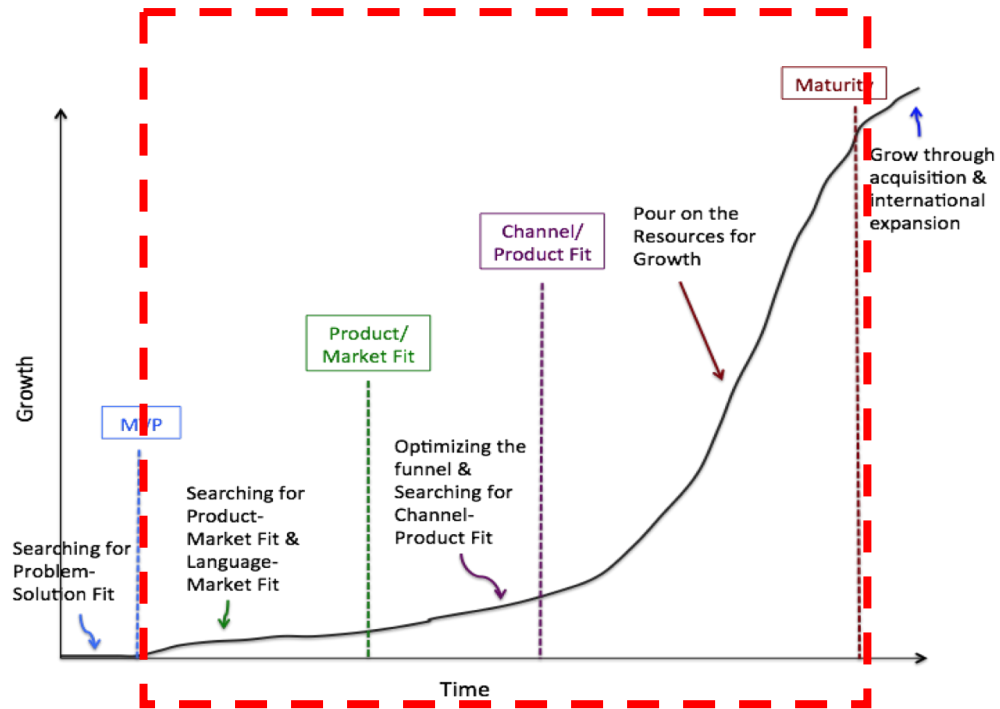
● Sector ● Domain ● Startups

Innovation identification

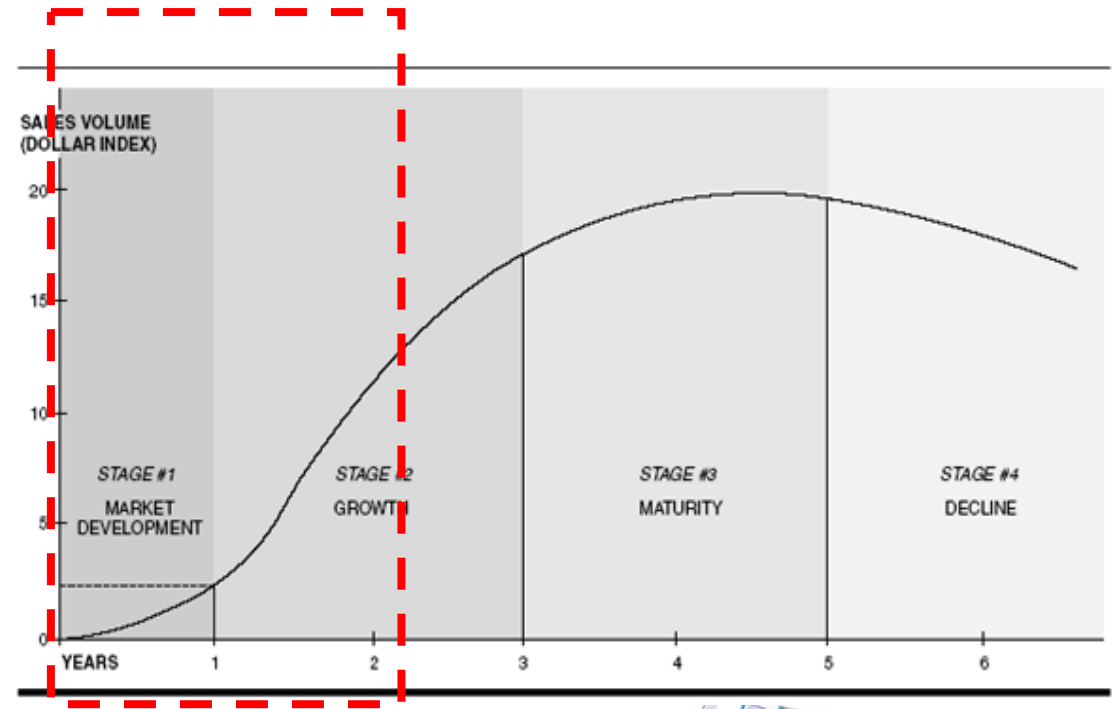


Integration & Acceleration

Startup Growth Lifecycle



Telco's Product Lifecycle



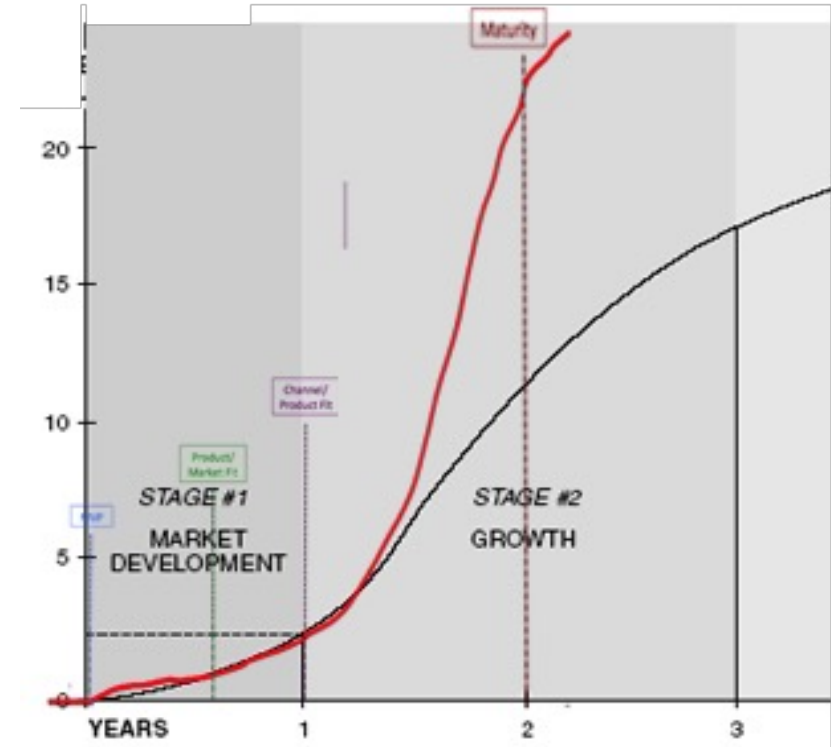
Integration & Acceleration (Cont.)

PROS

With the startup partners, telcos can leverage the startups' innovation and technologies to accelerate the new product development.

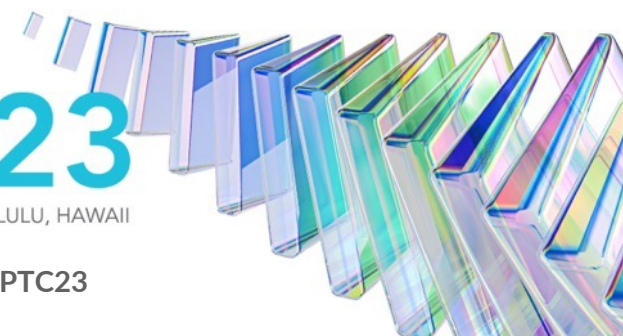
CONS

New R&D methodology and business model need to be developed.



Topics

- Telcos' value proposition in the Internet Value Chain
- A startup idea to accelerate the 5G business model
- Startup ecosystems and telcos' transformation
- **Action plan in 2023-2025**



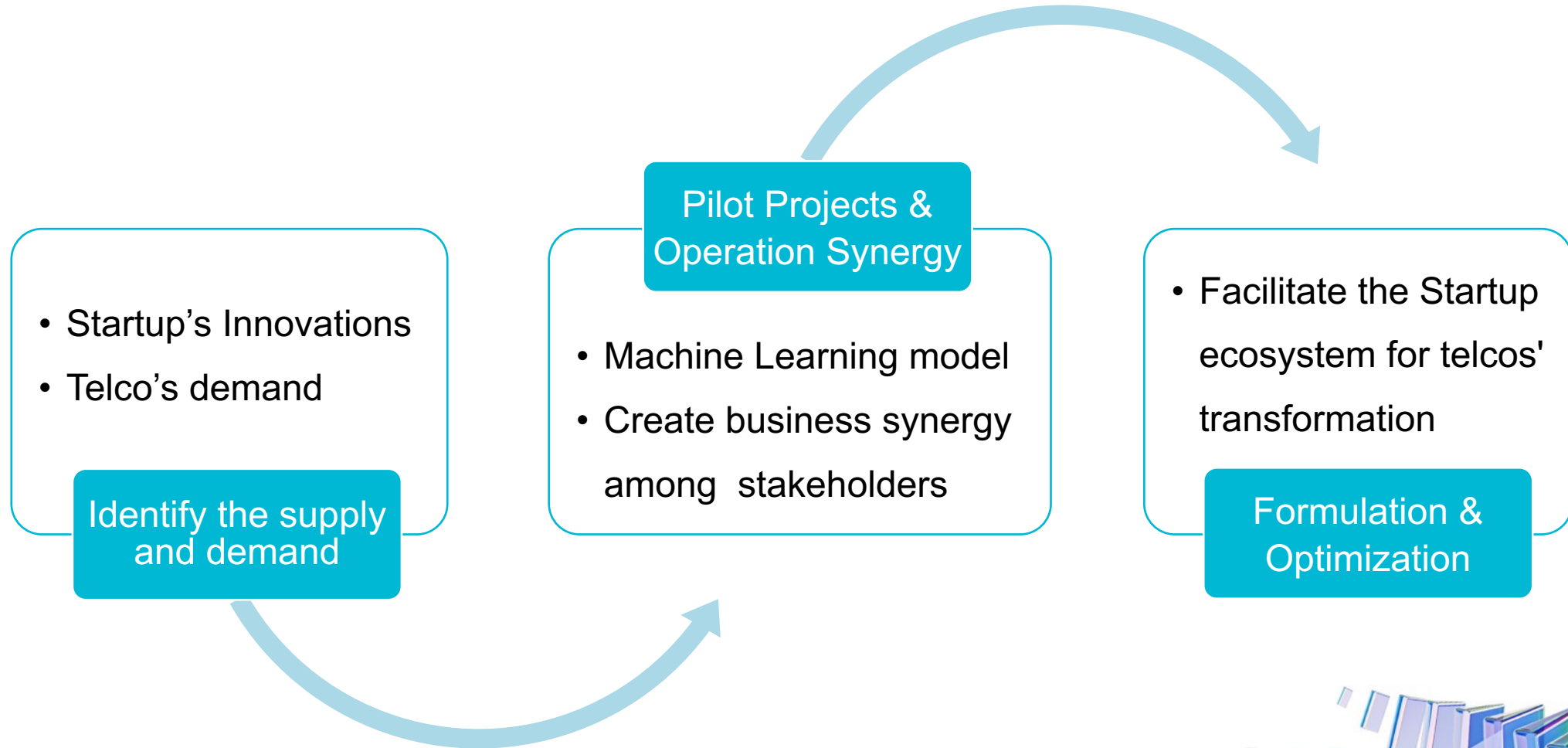
Three Phases in 2023-2025

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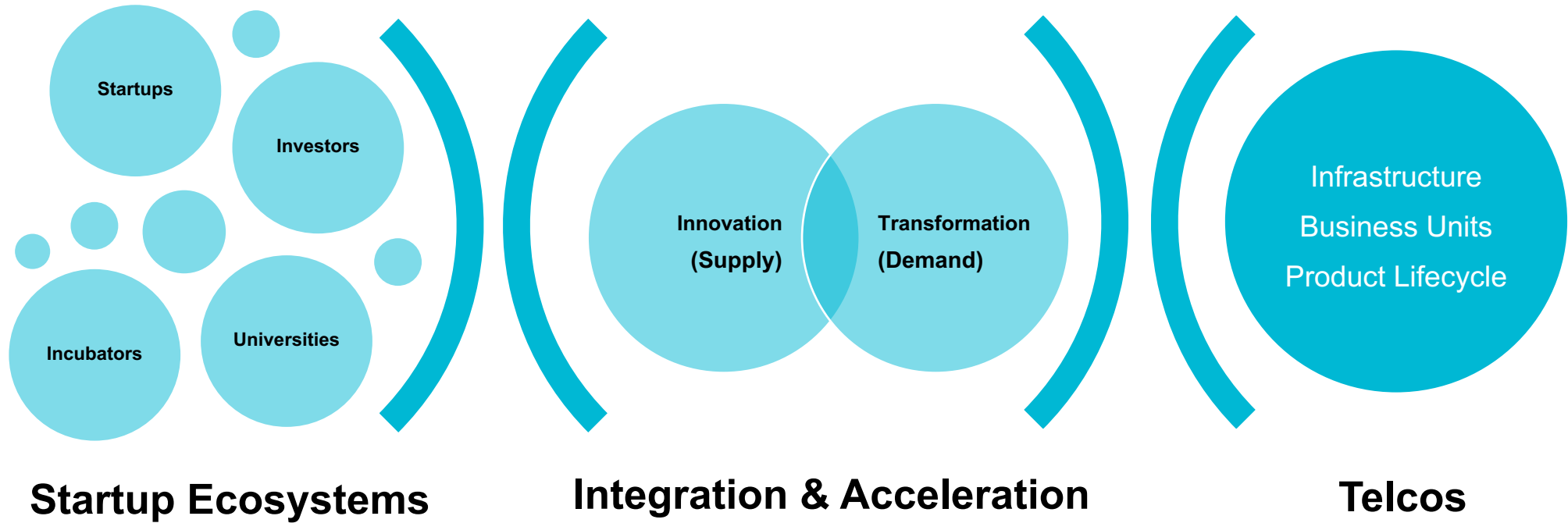
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Action plan in three phases

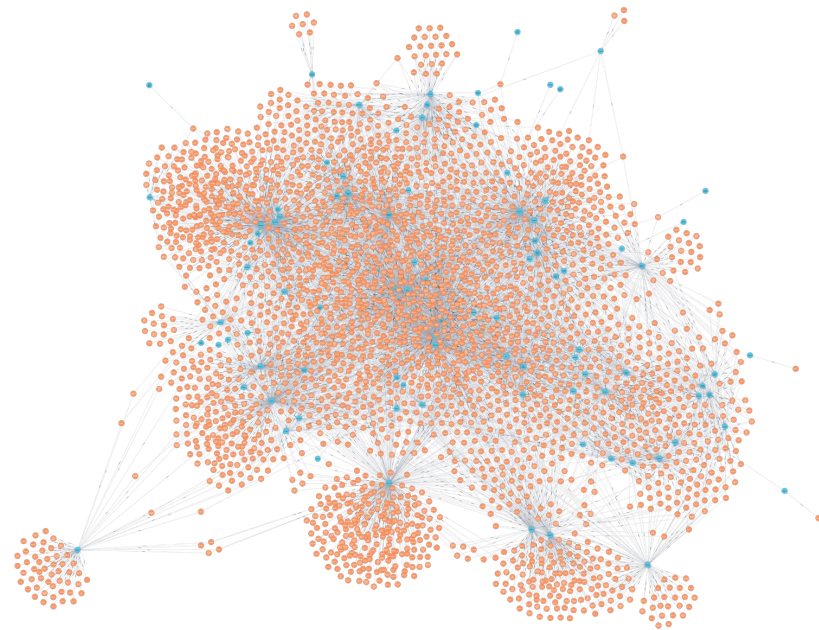


Innovation identification

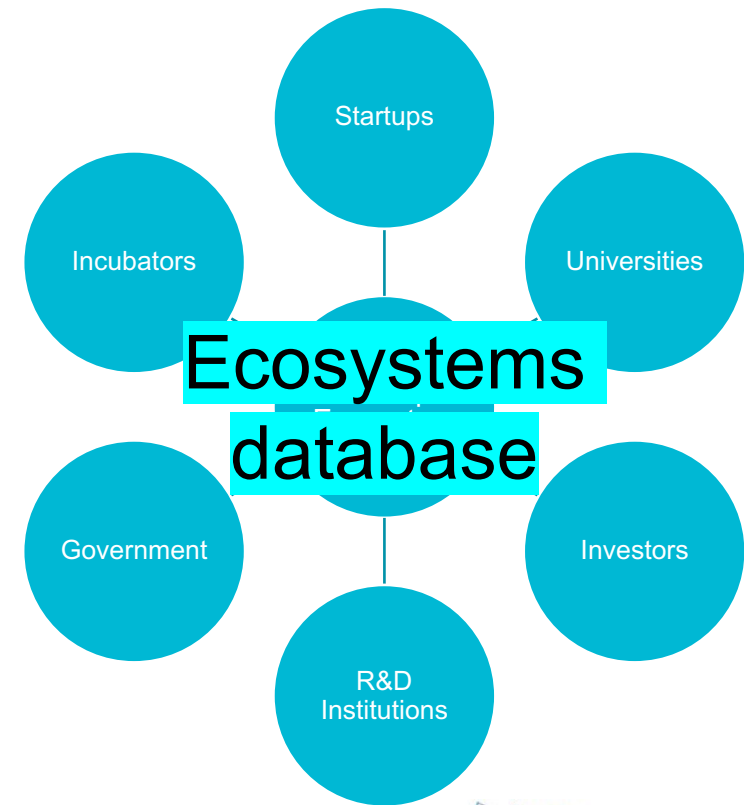


Database for the whole Startup Ecosystem

Startups' database



● Sector ● Domain ● Startups

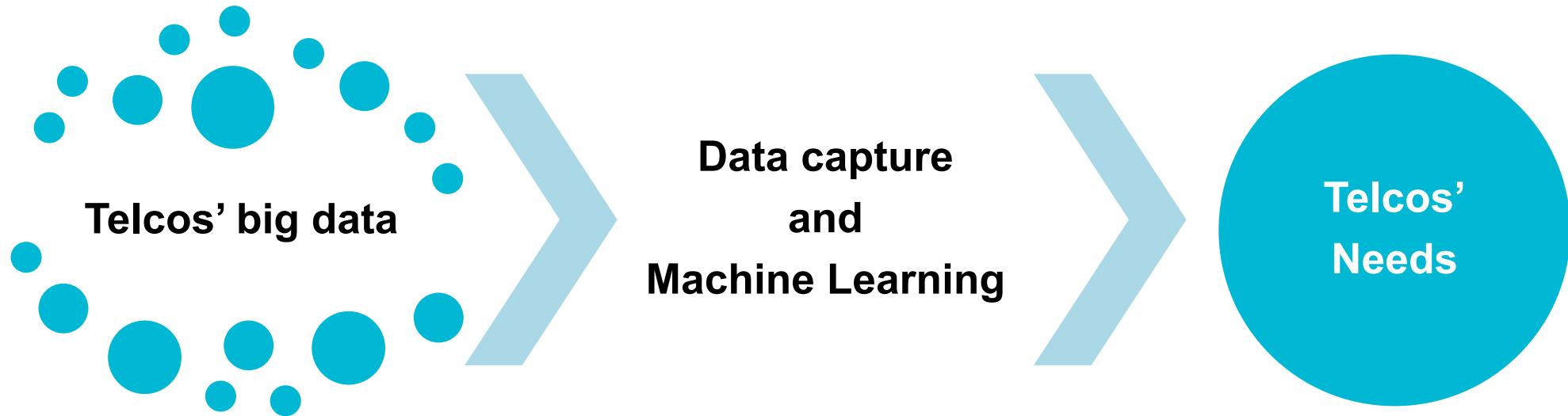


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Retrieve the “unknown” needs of telcos’



- Internal request
- Technology trend
- Social media
- PR news
- Corporate reports

**Needs without
“knowing”**

Do things in a different way, the better way

TRADITIONAL

- Solution or product
 - Price
- Supplier v.s Customer

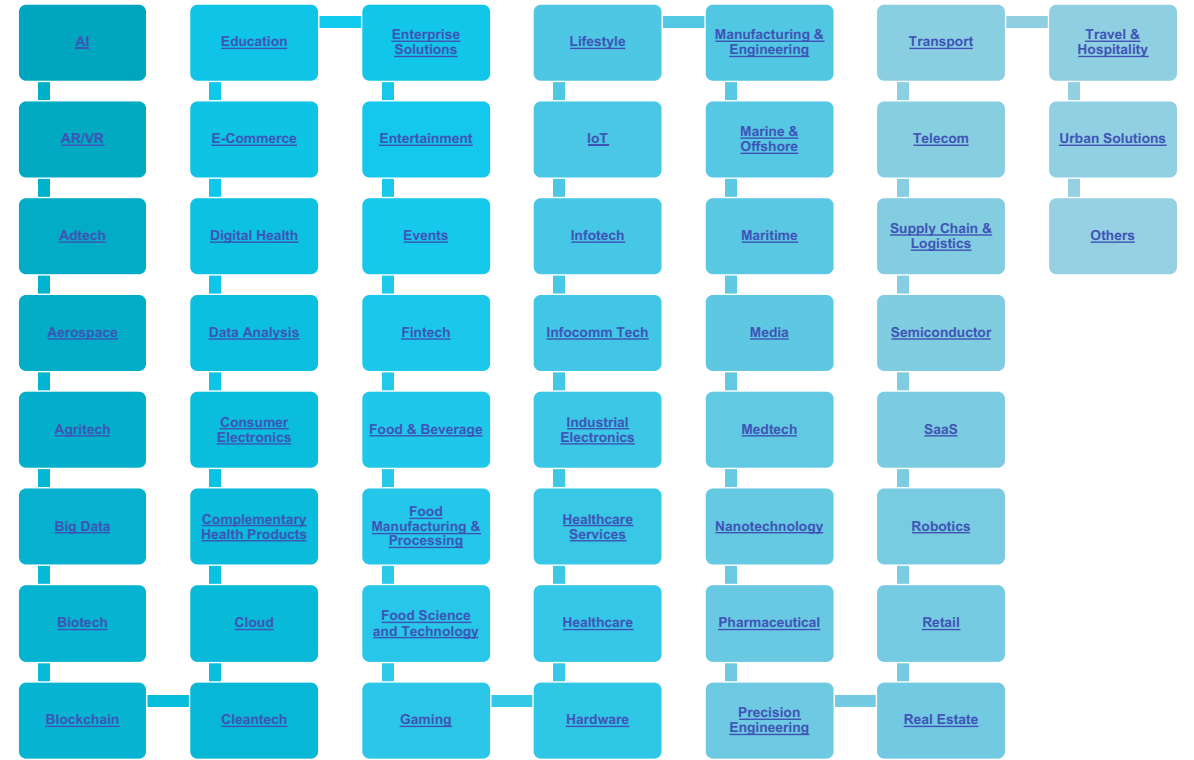
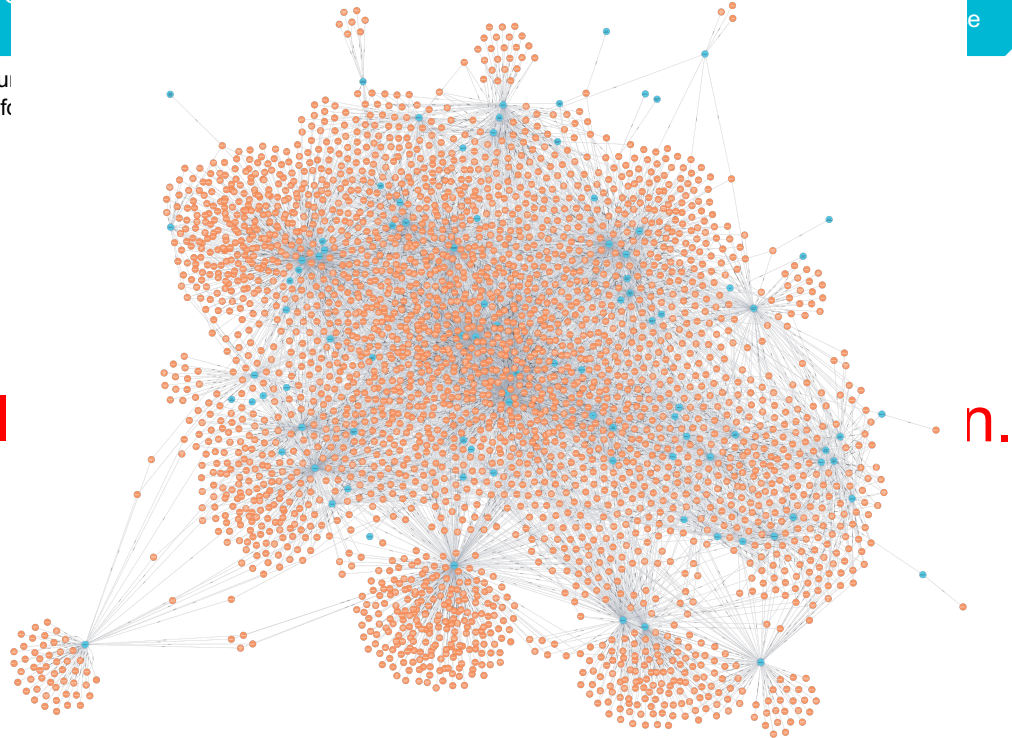
INNOVATION

- Partnership
- Business remodel
- Tackle the “social problem” with technologies and innovations

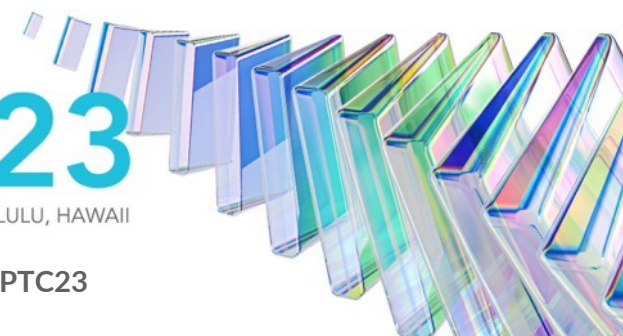
Our Goal



- Premium
- Made for



But... to rebuild one!



Thank you!

Should you have any question, feel free to contact us
idea@telcox.io