

# Regional Innovation Forum

## BRIDGING THE DIGITAL INNOVATION DIVIDE

Fostering Digital Entrepreneurship and Startup  
Ecosystems

**1 – 2 October 2019**

Smart Village, Cairo, Egypt



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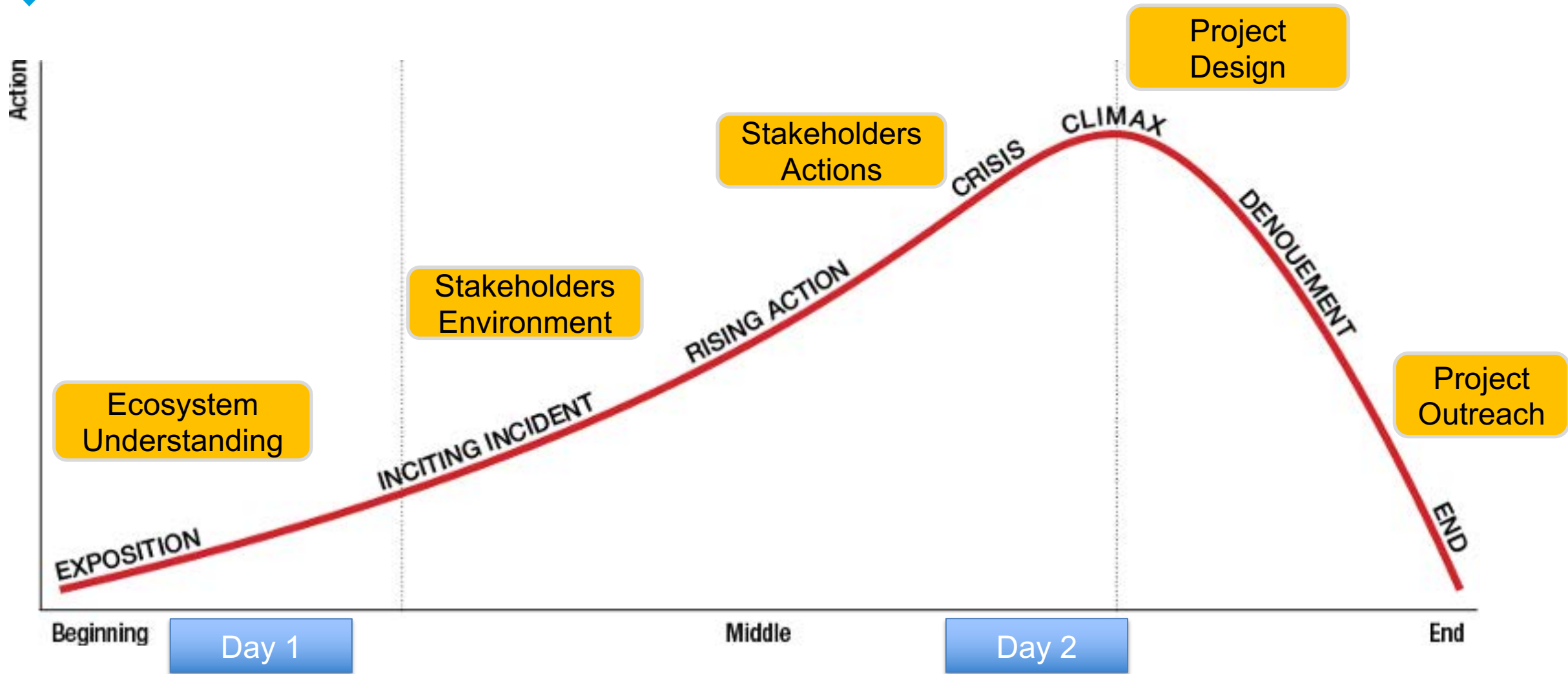
Thoughts **and**  
reflections

What is the relationship between entrepreneurship, innovation, trading and creativity?



**“Entrepreneurship without Innovation is trading, and Innovation without entrepreneurship is creativity”**

# Agenda





## Accelerate Digital Transformation

## Mission

To “bridge the digital innovation divide (gap) through strengthened ICT ecosystems that are vibrant, innovation driven and supportive of job creation, development of innovative businesses, and the growth of small and medium enterprises, as well as inclusive of all economic sectors and aligned to national development.”

## Vision

To achieve a sustainable digital transformation of society and inclusive economic growth.



### REGIONAL REPORT | EUROPE

Accelerating Digital Transformation:  
Good practices for developing, driving and accelerating ICT centric innovation ecosystems in Europe



### POLICY TOOLKIT – IN SIX LANGUAGES

Bridging the digital innovation divide:  
A toolkit for strengthening ICT centric ecosystems



### DIGITAL INNOVATION PROFILE

SERBIA  
ICT centric innovation ecosystem Snapshot



### COUNTRY REVIEW

ICT centric Innovation Ecosystem Country Review  
MOLDOVA

## Initiatives

Launch of the African Digital Transformation centre initiative in Durban, South Africa -September 2018



## Knowledge sharing



## Champions and Good Practices



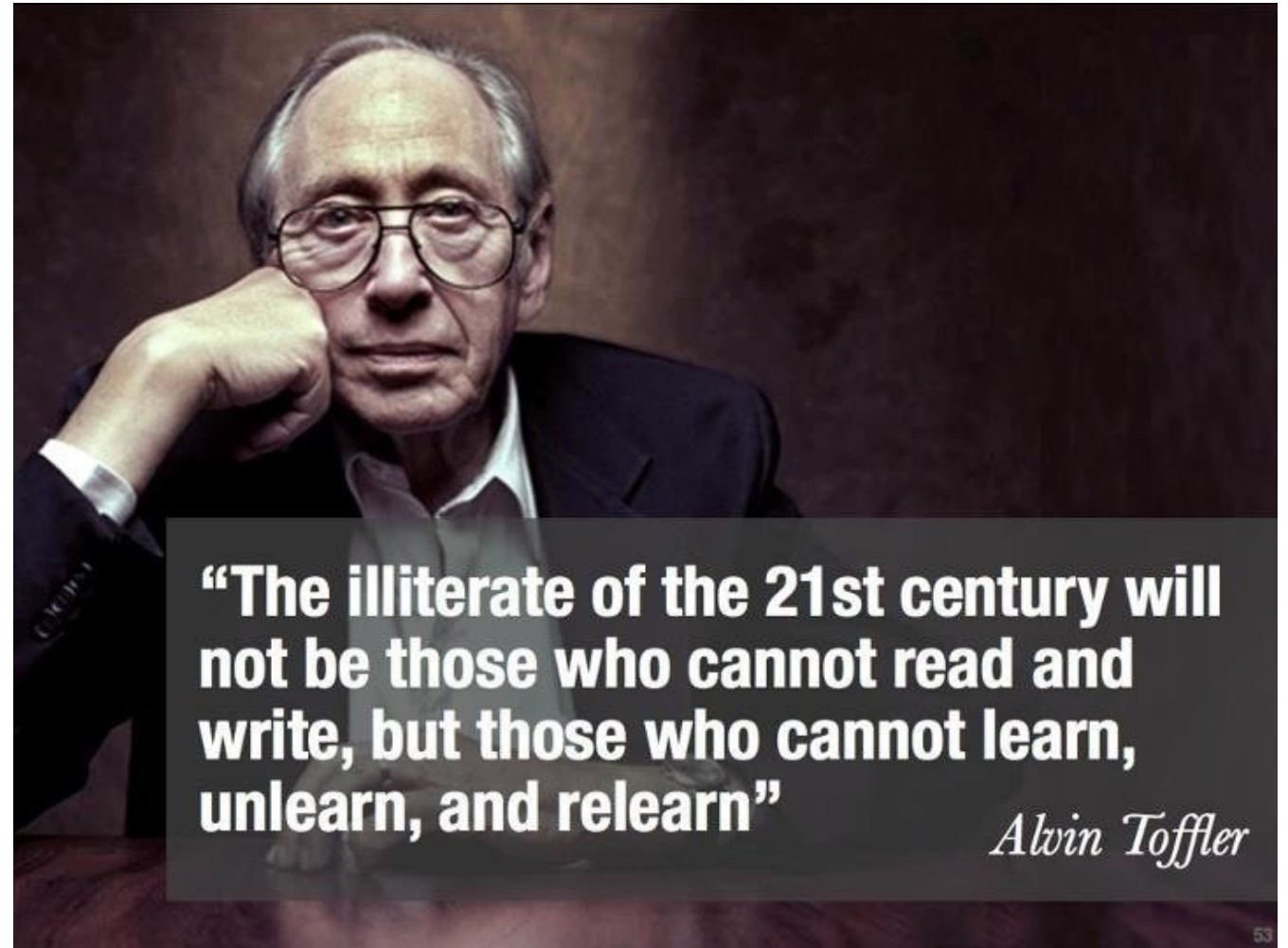
# CASE PRESENTATIONS

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## Session 1:

# Understanding the Digital Innovation Divide





# Competitiveness of communities



# Impact of a globally connected world



Can current innovation undermine future incentives to



For example: Scale without Mass



**WhatsApp:** 300 M users, 50B message/day, 55 employees



**Netflix:** USD8.8B revenue, 3500 employees



**Dropbox:** 500M users, 1.2B files stored/day, 1200 employees

Challenges policies that target firms by measure of mass (e.g. employees) as well as competition policy, may contribute to productivity divergence across firms

Credits: Andrew Wyckoff and Dirk Pilat  
Directorate for Science, Technology and Innovation, presentation at European Political Strategy Centre, 5 May 2017, Brussels

Innovation@ITU-D



## ICT vs Manufacturing

### • Alphabet:

Operating revenues: 90,272,000 Th. USD  
Employees: 72,053  
Ratio: **1253** Th. USD per employee

### • Volkswagen:

Operating revenues: 237,564,000 Th. USD  
Employees: 626,715  
Ratio: **379** Th. USD per employee

### • Facebook:

Operating revenues: 27,638,000 Th. USD  
Employees: 17,048  
Ratio: **1621** Th. USD per employee

### • Johnson & Johnson

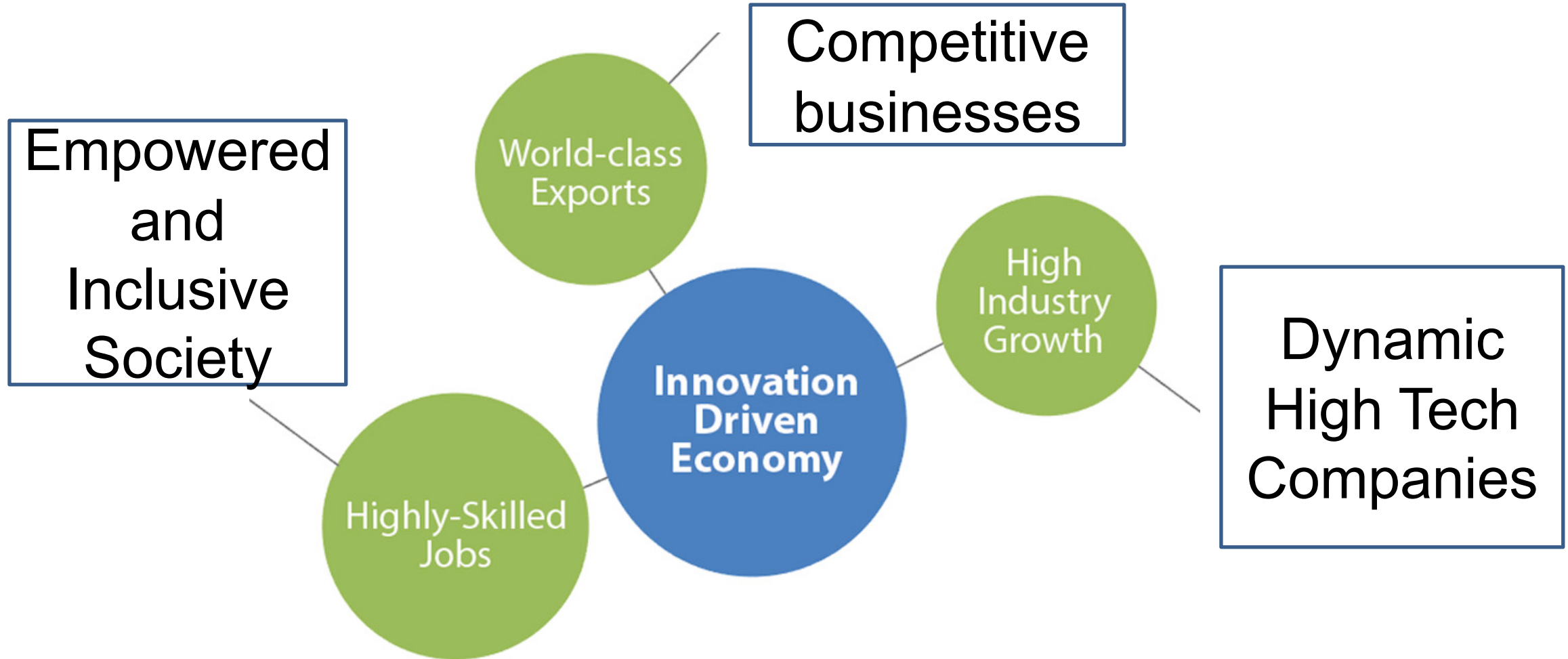
Operating revenues: 71,890,000 Th. USD  
Employees: 126,400  
Ratio: **568** Th. USD per employee

Source: ORBIS, Bureau Van Dijk. Data refers to 2016

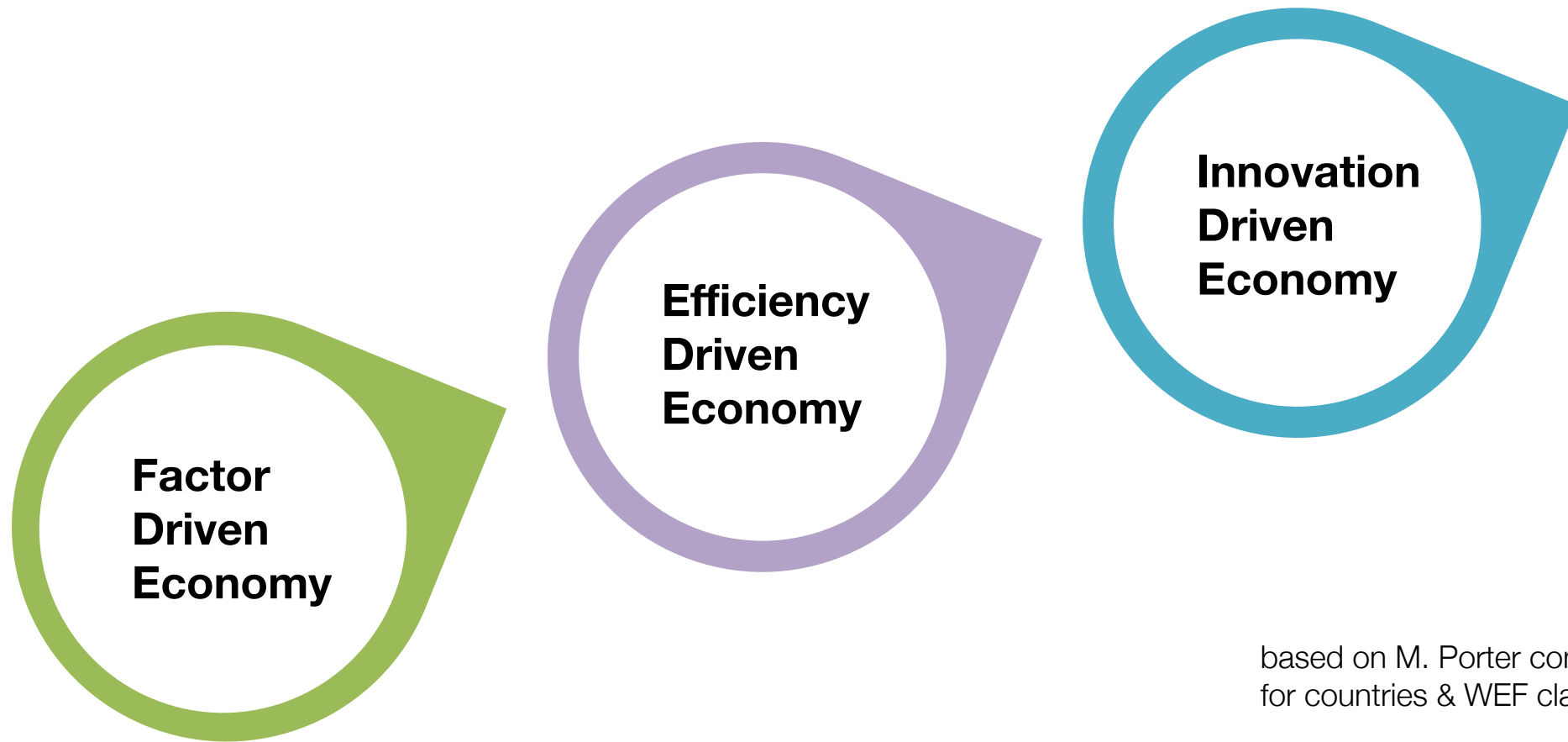
Champions of productivity or simply **Scale without Mass?**



# The desire for competitive jobs and inclusive growth



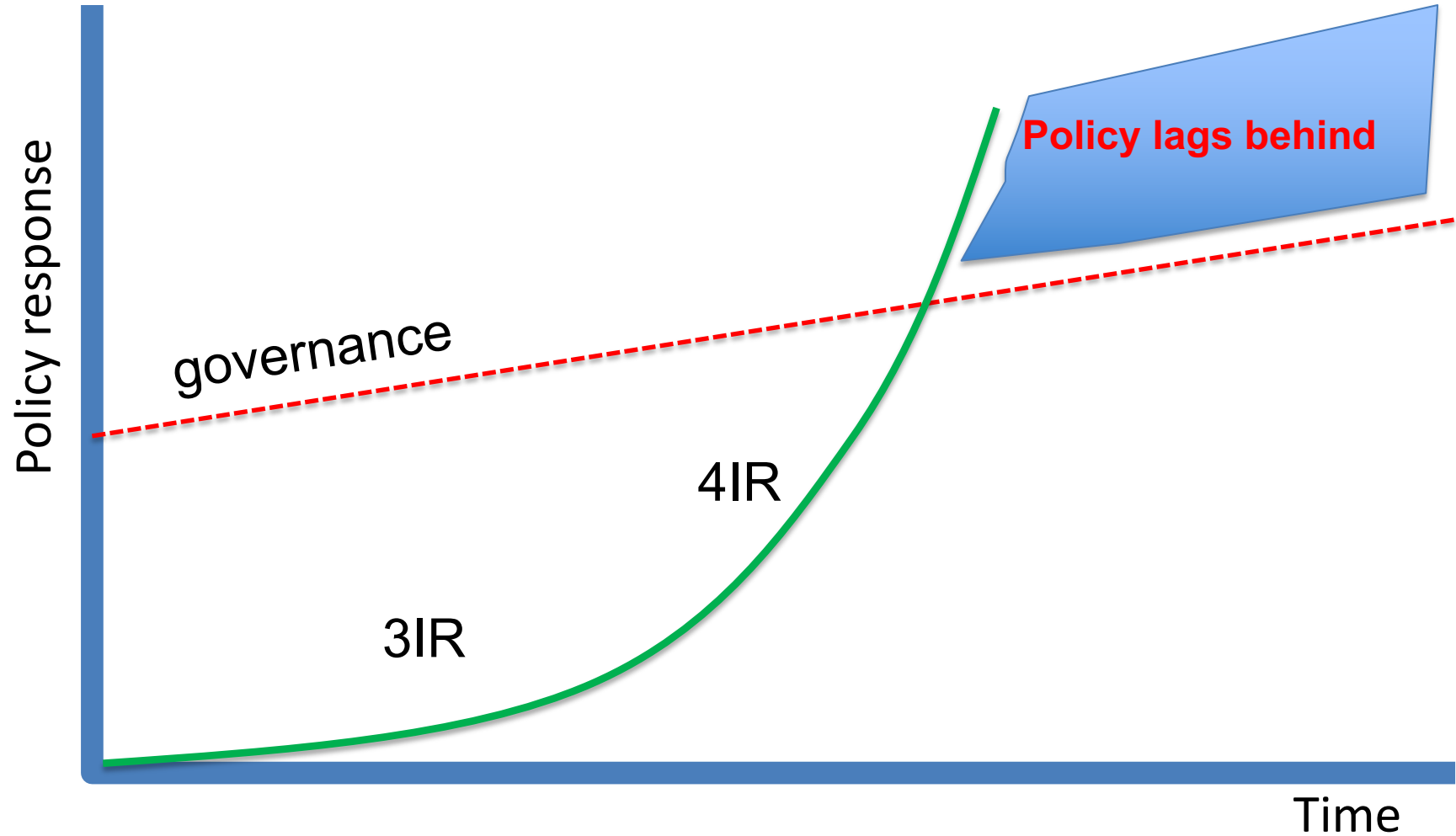
# There Is Always A Risk To Be Left Behind



based on M. Porter competitive strategy  
for countries & WEF classification

Source: ITU

# Increasing complex technology vs. policy response





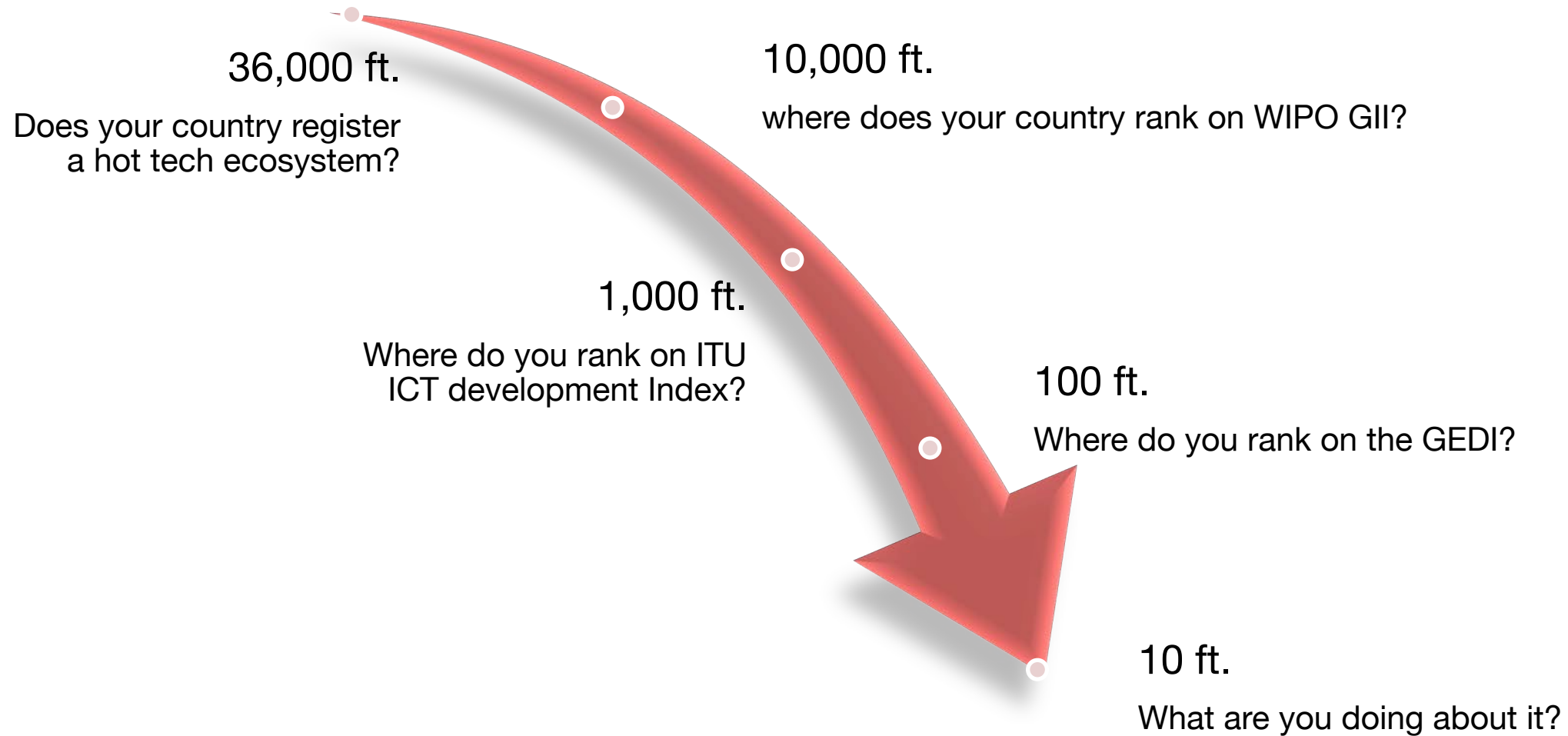
# You need a proper diagnosis of your capabilities

*Research is the transformation  
of money into knowledge.*

*Innovation is the transformation  
of knowledge into money.*

*—Dr. Geoffrey Nicholson, 3M  
(inventor of the Post-it note)*

# What is the Nation's performance?












# Global Innovation Index

Output rank	Input rank	Income	Region	Efficiency ratio	Population (mn)	GDP, PPP\$	GDP per capita, PPP\$	GII 2017 rank
68	82	Lower-middle	SEAO	62	104.9	874.5	8,314.6	73

	Score/Value	Rank
 Institutions.....	52.6	93
 Human capital & research.....	24.6	86
 Infrastructure .....	43.6	67 ◆
 Market sophistication.....	39.5	100

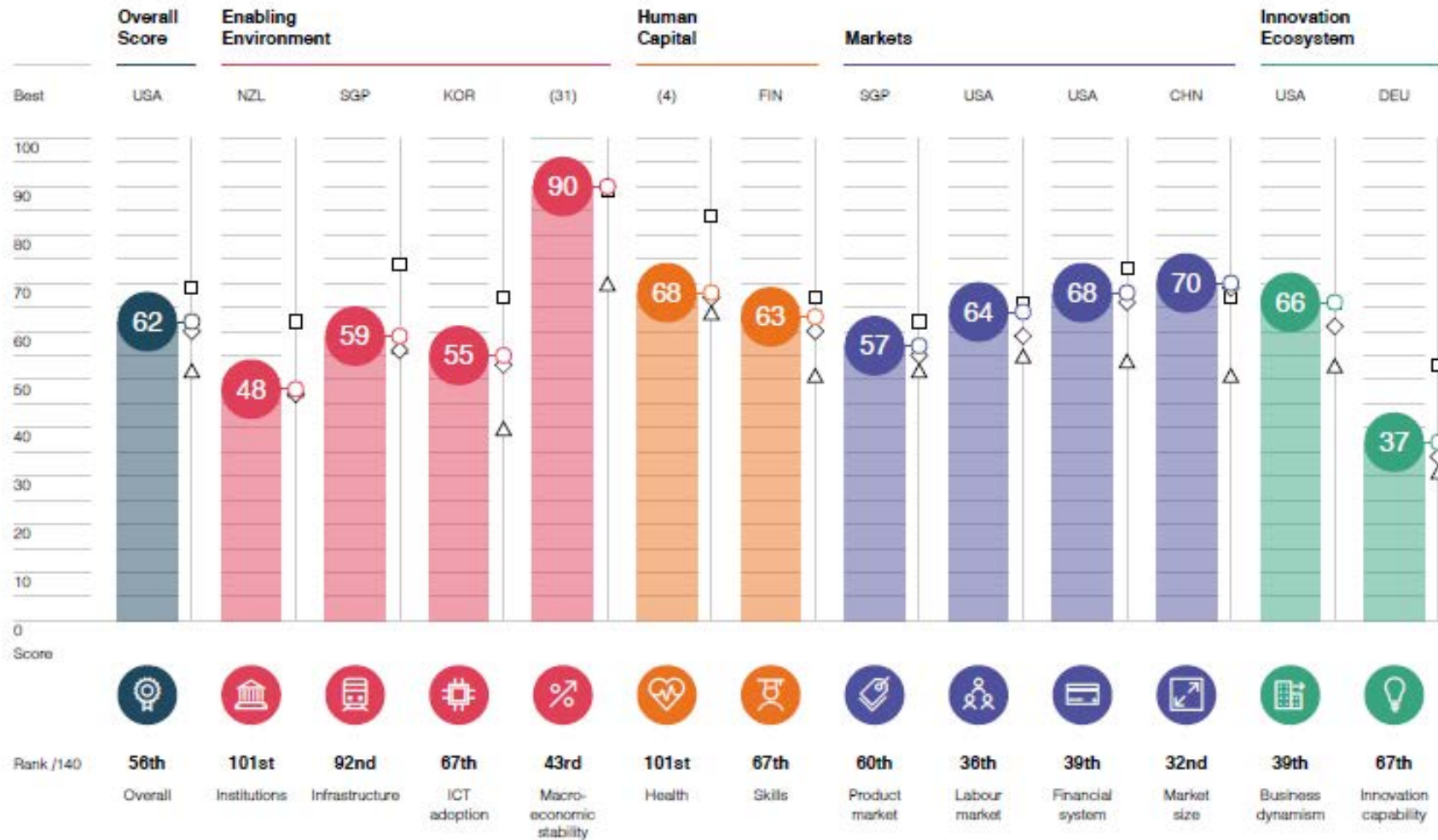
  

	Score/Value	Rank
 Business sophistication.....	35.3	44 ◆
 Knowledge & technology outputs.....	26.9	49 ◆
 Creative outputs.....	21.0	92

Efficiency 0.62

Source WIPO 2018

# Global Competitiveness Index



Source WEF 2018

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# ICT Development Index

IDI 2017 Rank

**101**

IDI 2016 Rank

**100**

IDI 2017 Value

**4.67**

IDI 2016 Value

**4.52**

Regional  
IDI 2016  
Rank

**15**

IDI ACCESS SUB-INDEX

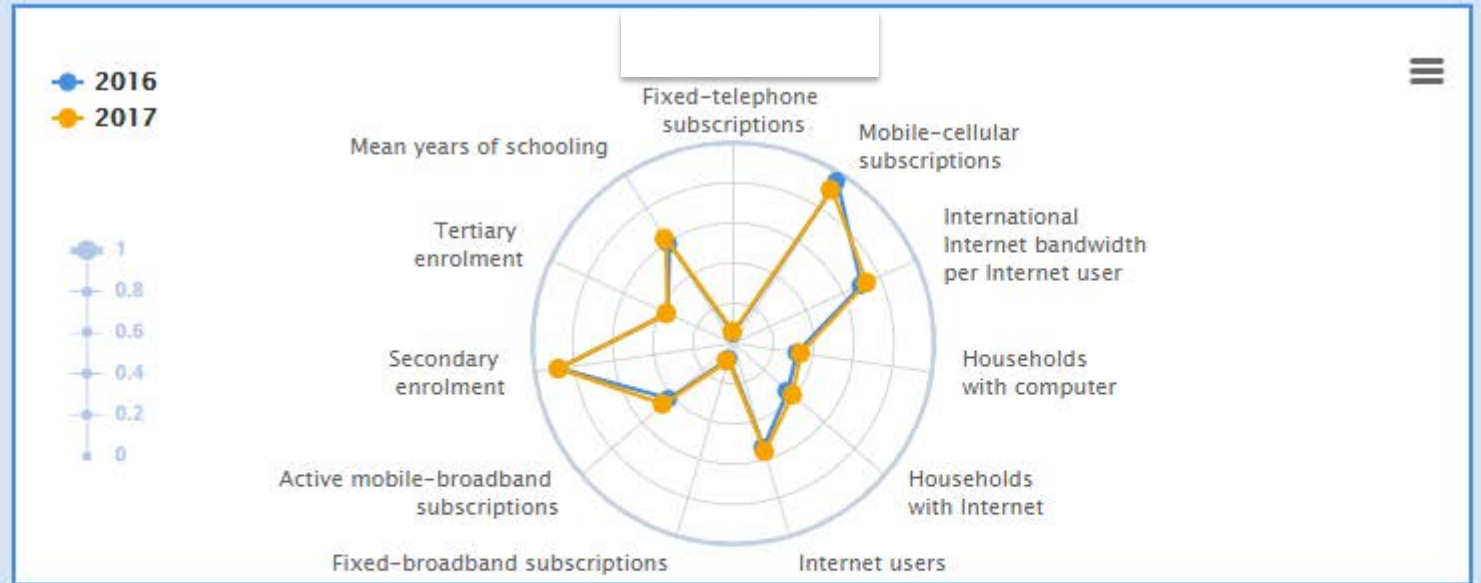
**4.87**

IDI USE SUB-INDEX

**3.70**

IDI SKILLS SUB-INDEX

**6.20**



Source ITU 2017

# Global Entrepreneurship Development Index

Overall GEI score:



Individual score:

entrepreneurial qualities of the people in the ecosystem

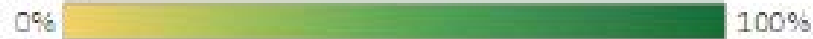


Institutional score:

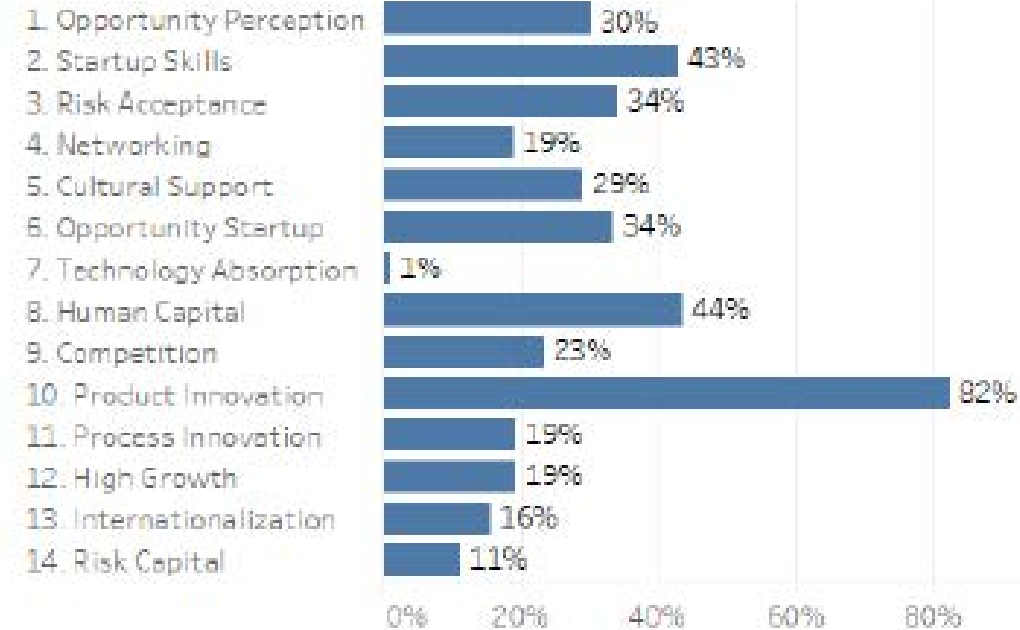
quality of the institutions that support entrepreneurship



Scores



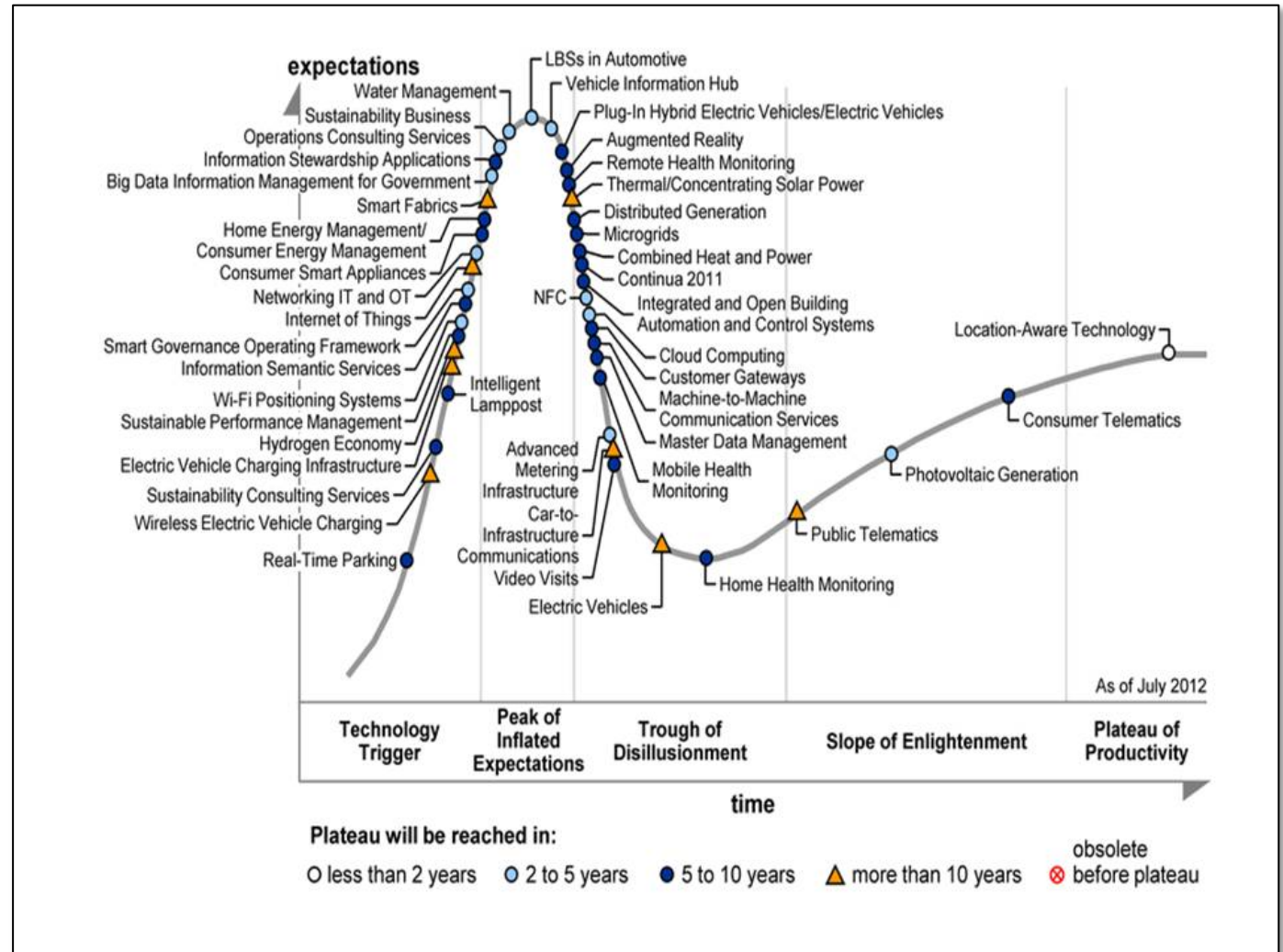
Component scores



Source: Global Entrepreneurship Network  
2017-2018

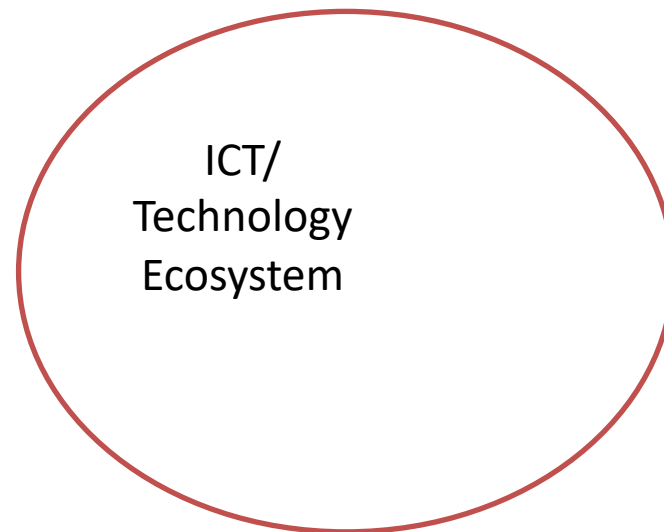
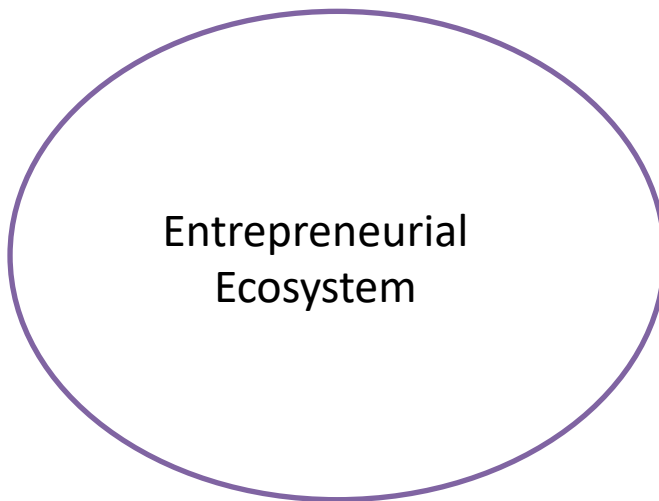
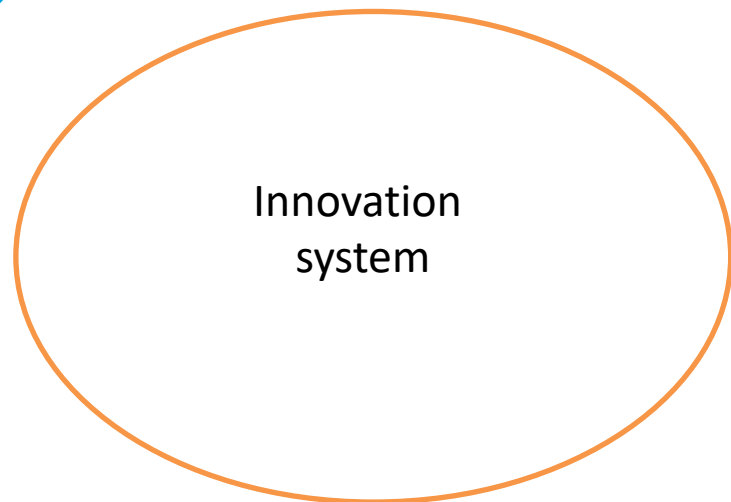
# Technology is always changing

To navigate it, an ecosystem of stakeholders need to absorb it and solve the problem of the country



Source Gartner Hype Cycle

# Three growth engines must come together to address issues



Stakeholders



Entrepreneurs



Support Networks



Financiers



Governments

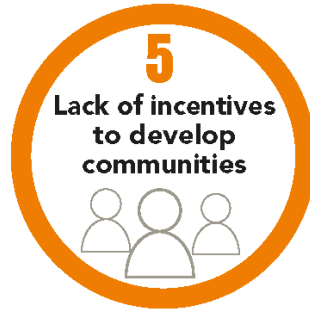
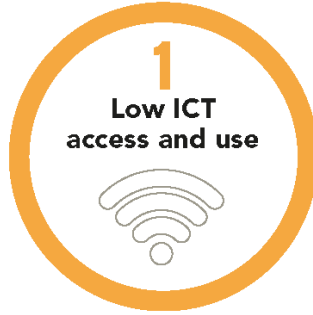


Corporates

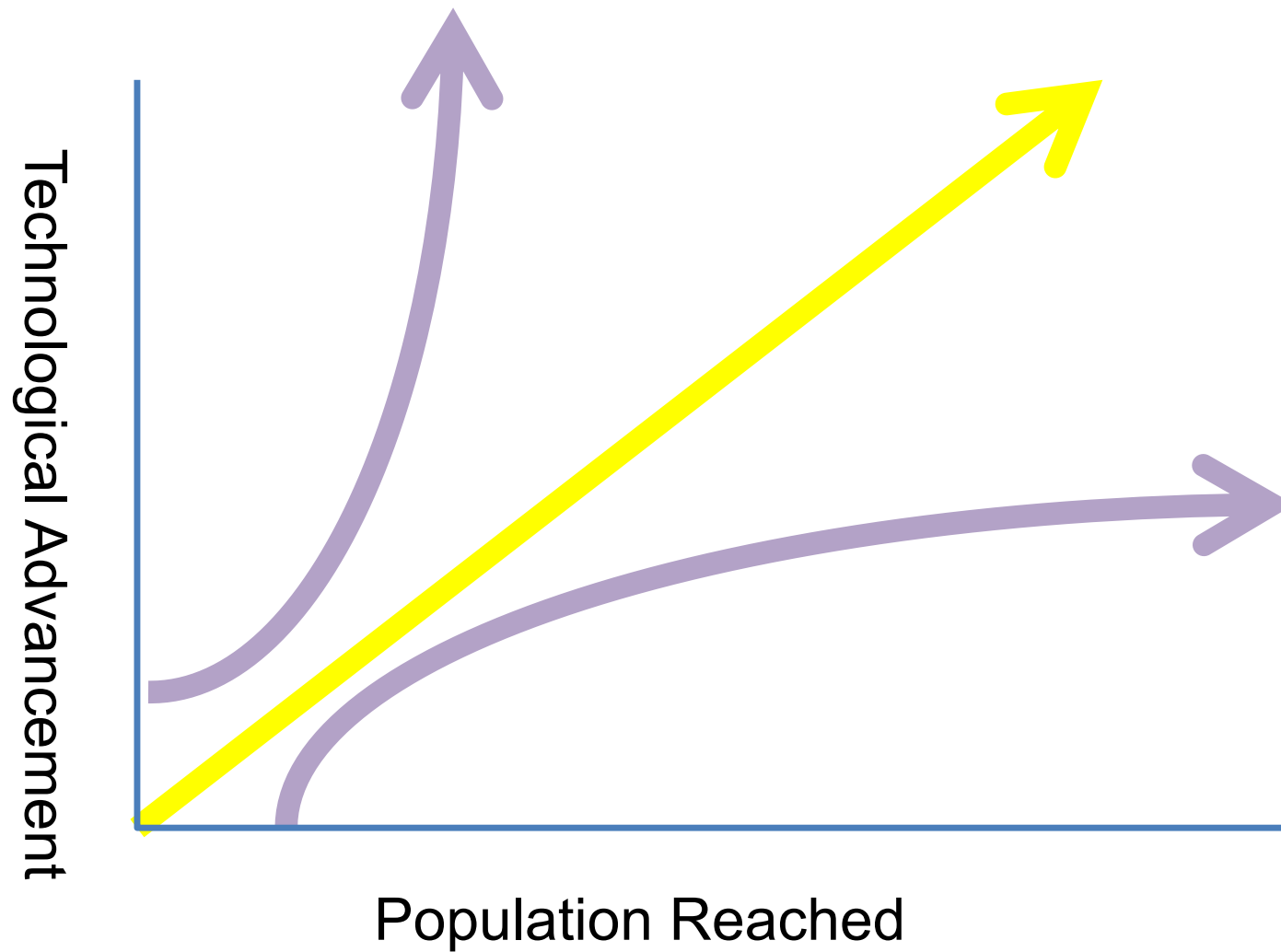


Academics

# Symptoms of misaligned engine of growth



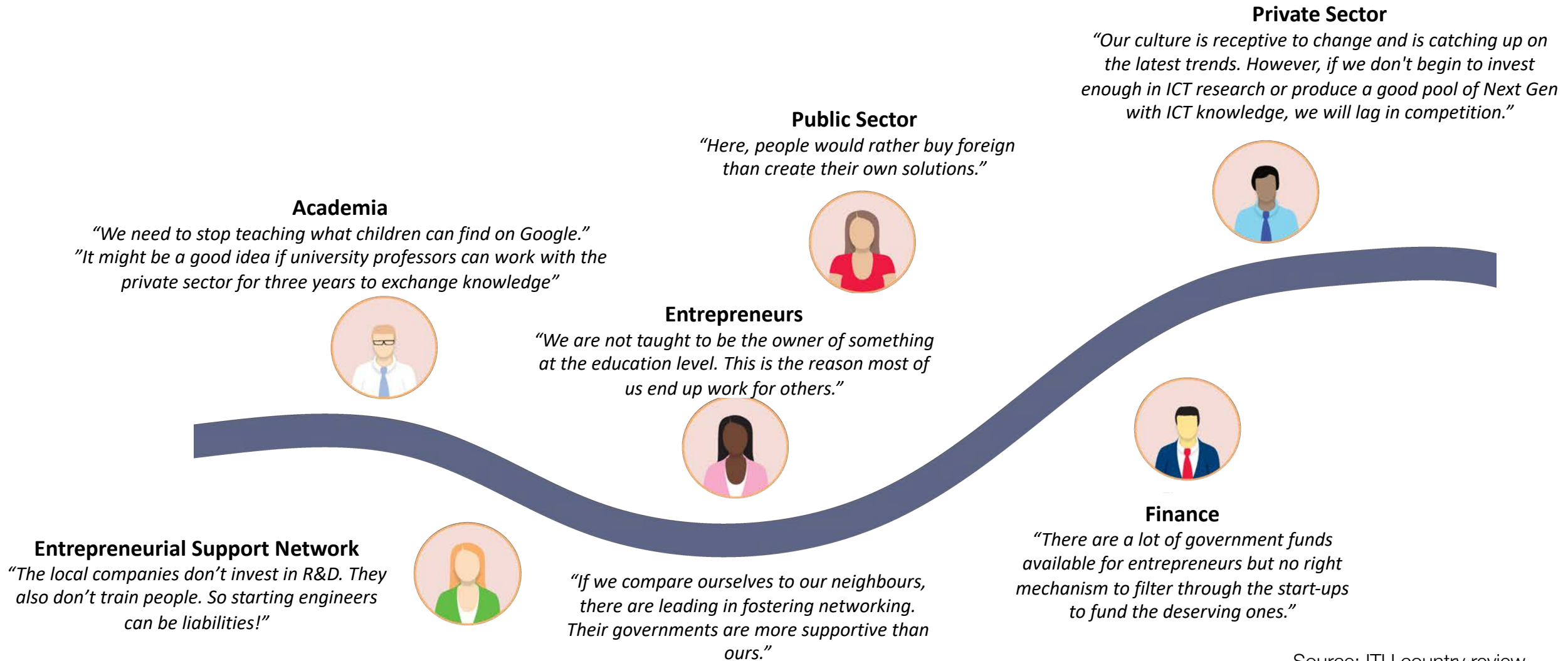
# Technology absorption capacity is key



Source: ITU



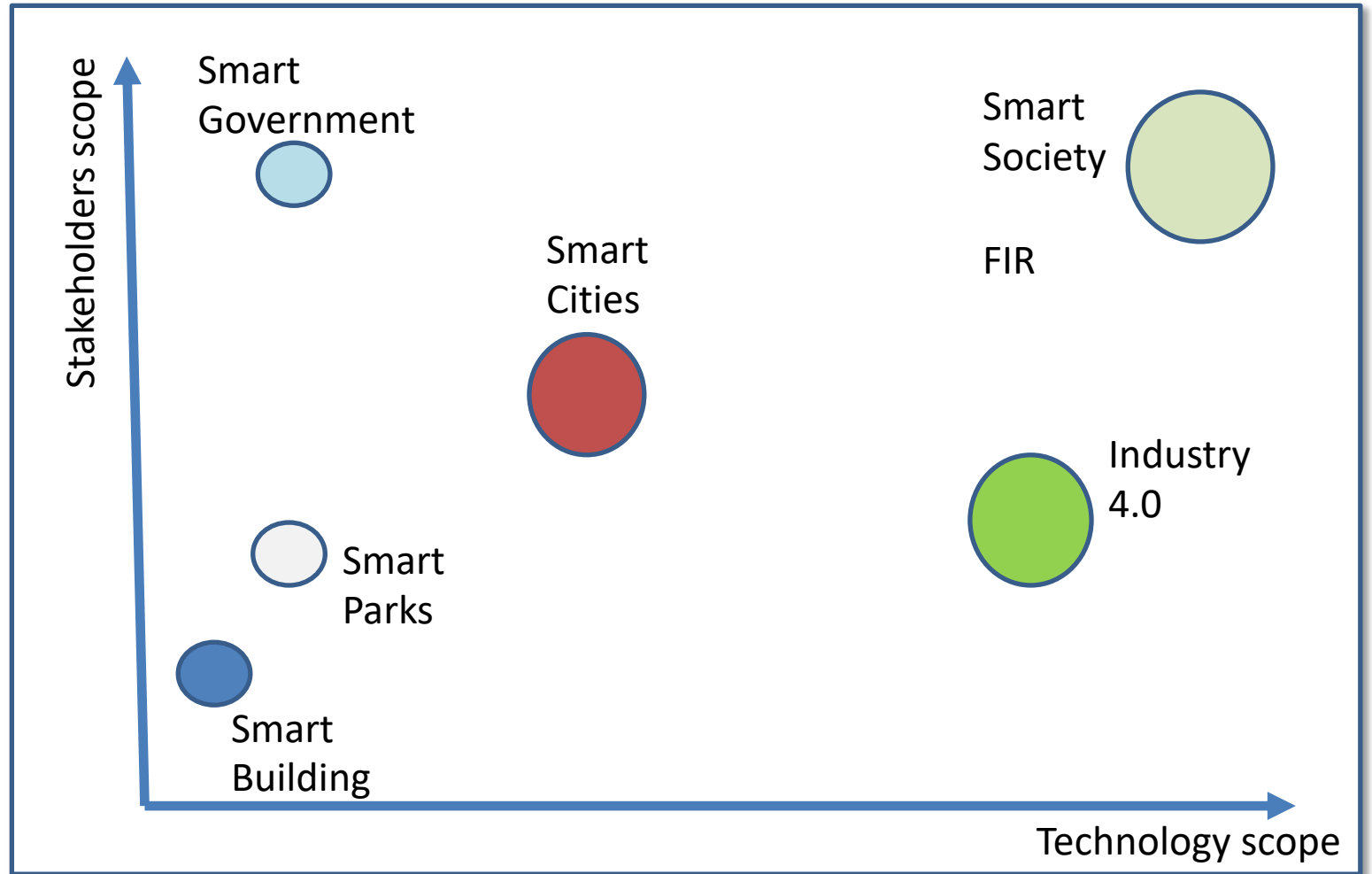
# Stakeholders in the ecosystem are struggling



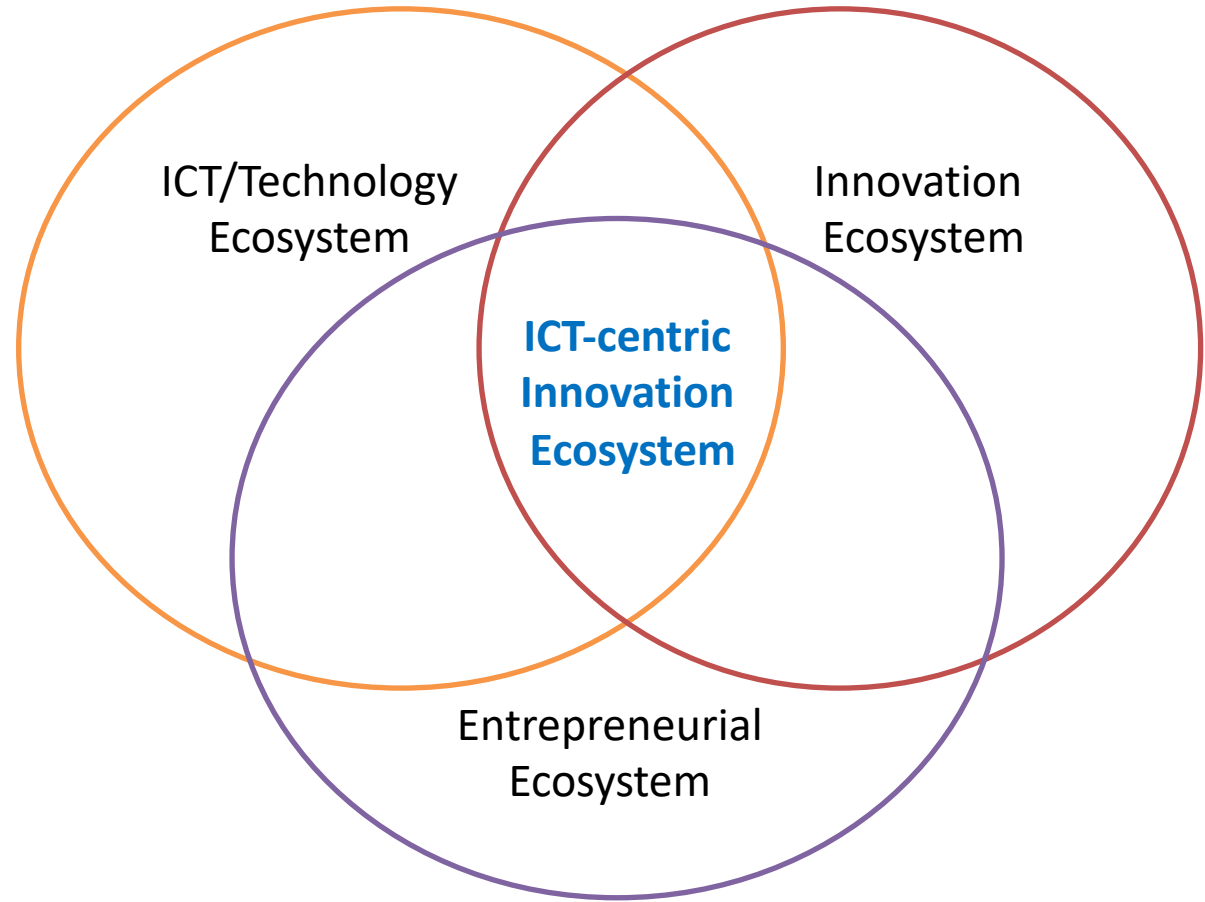
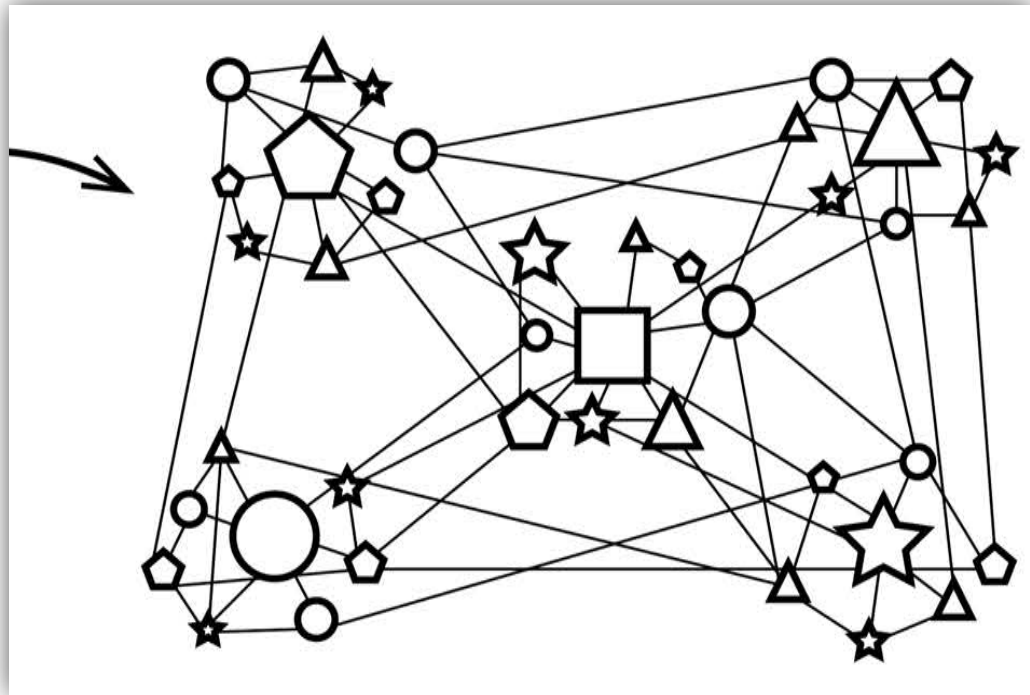
Source: ITU country review

# They may have different visions but the mission is same

Mission:  
Sustainable  
Digital  
Transformation  
of Society

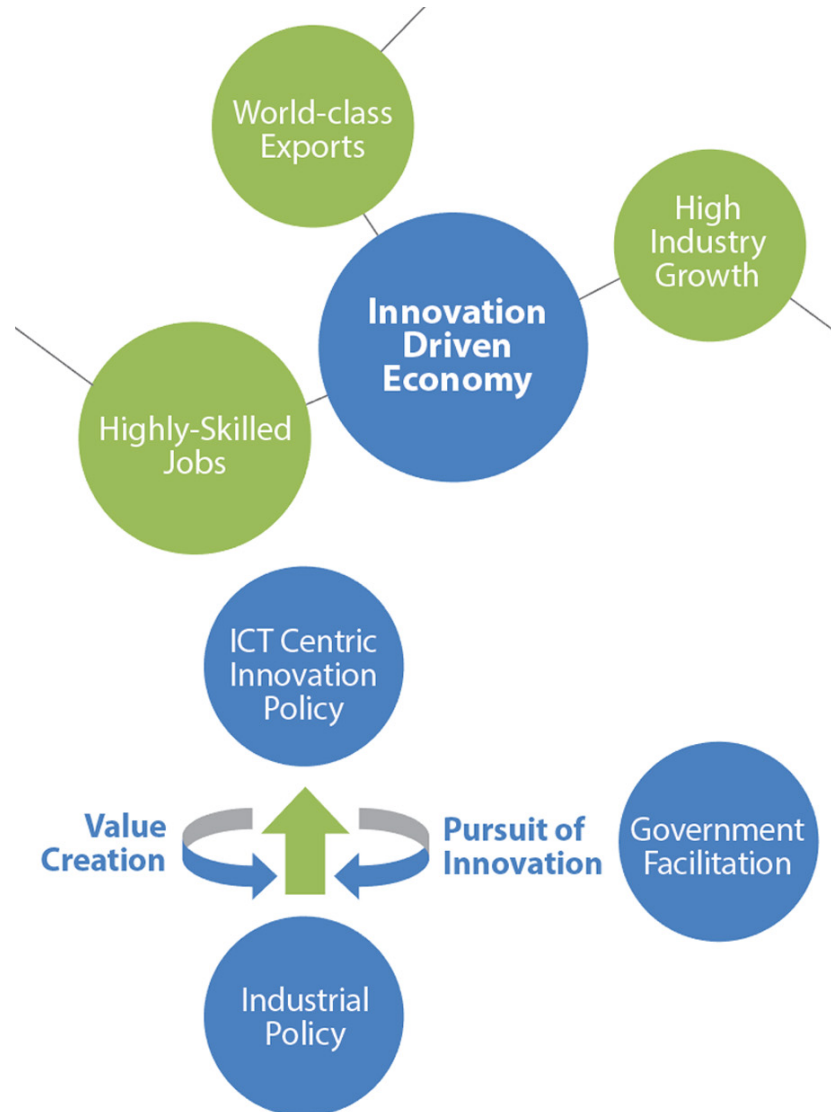


# They need new paradigms



A Platform for partnership in the digital ecosystem

# The key is the ecosystem



# A Common Language

**“An innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations.”**

Source: OCED, Oslo manual

**“Digital transformation is what happens when innovation is applied to solve problems through the use of ICT/telecommunication technology.**

**The benefits to a country and its people are immense: significantly increased productivity, economic growth and greater employment opportunities.”**

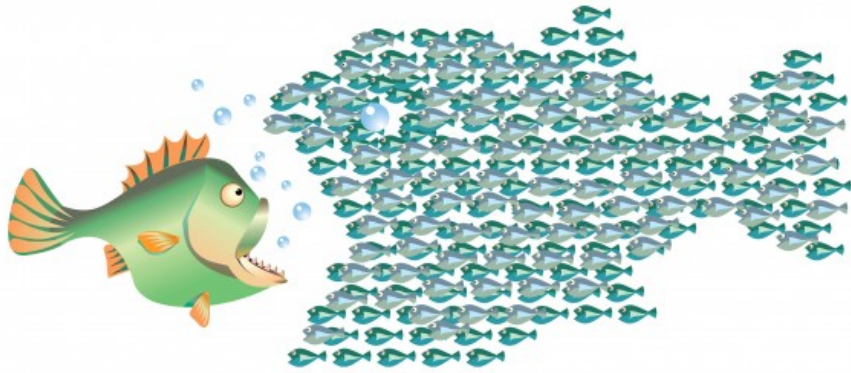
Source ITU

**“An ecosystem is a system or network of interconnecting and interacting organizations and stakeholders, from multiple sectors, who come together and address the problems people are facing within their communities.”**

Source ITU

# Change is inevitable

Your Ecosystem



A stronger Connected Ecosystem





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## Thoughts and reflections

- What is threatening the dreams in your environment?

# SESSION 1 – KEY TAKEAWAY

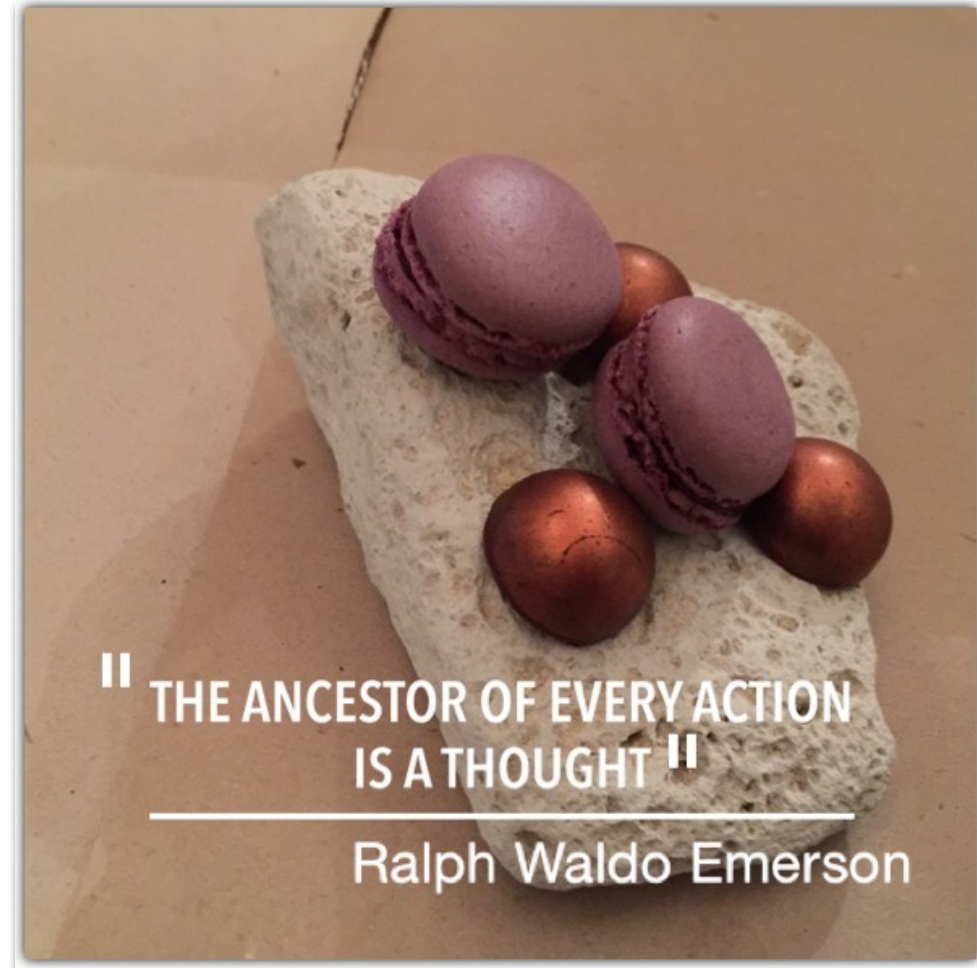
## Understanding the innovation divide & its challenges

- Pros and Cons of each case studies
- Basic understanding of the innovation divide
- Basic understanding of the ecosystem










## Session 2:

# How to make Digital Innovation Work

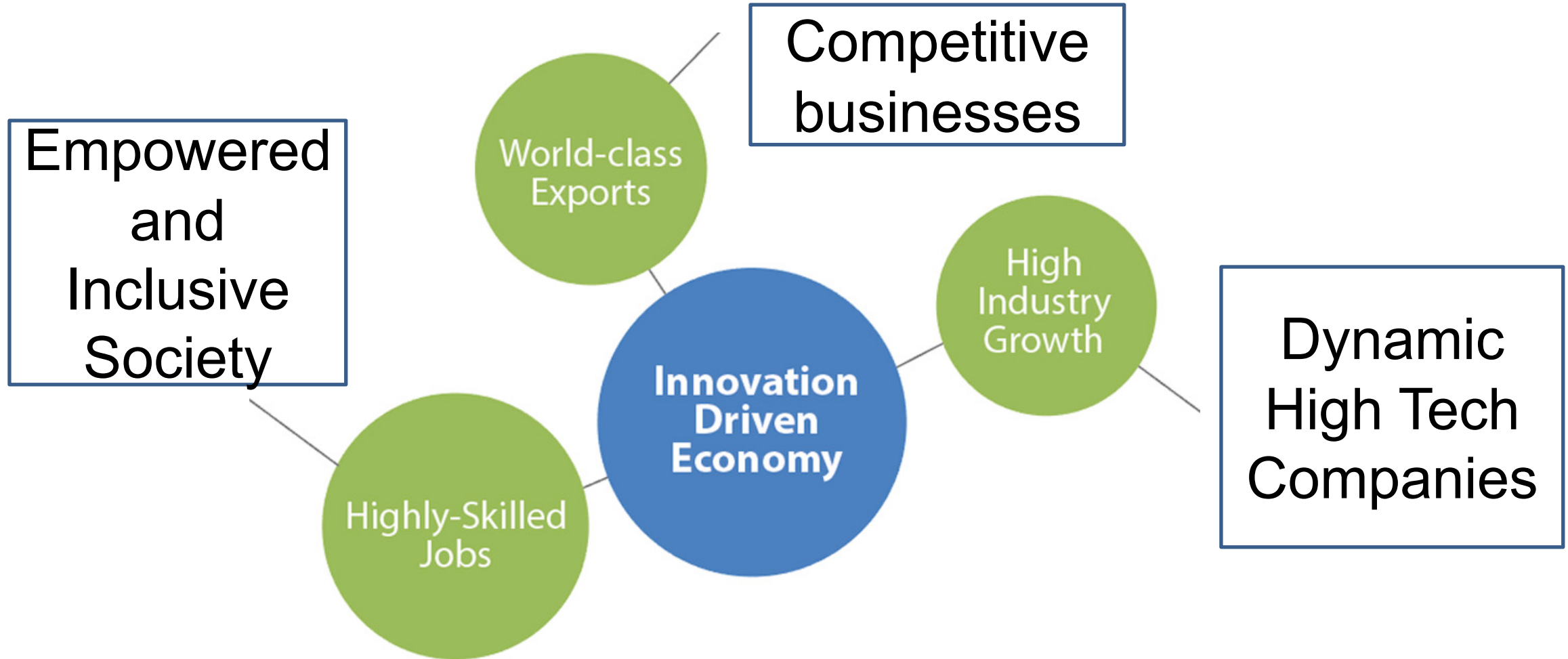


# Enablers For Digital Transformation

PILLARS	 Vision & Strategy	 Capital	 Market	 Infrastructure	 Talent	 Culture	 Policy
ISSUES	Scope and objectives	Appropriate Demand side resources	Integration of economic sectors	Inclusive digital infrastructure	Talent appropriateness	Sustainable culture of entrepreneurship and innovation	Comprehensive and grassroots innovation policies & programs
	Aligned Digital strategies	Continuum of Supply side resources	Market access domestic and international	Resilient & secure broadband Infrastructure Soft infrastructure	Champions	Communities	Legal frameworks

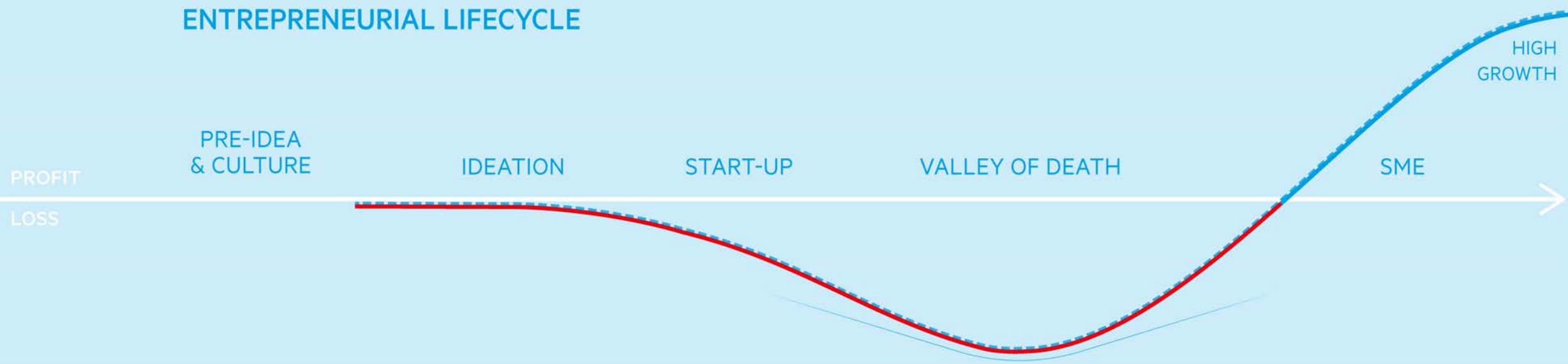
All stakeholders in the ecosystem need to understand their potential for making a difference, as well as their very real capabilities – as they engage in digital transformation.

# Why Is It Important to you?



# The Job To Be Done

## ENTREPRENEURIAL LIFECYCLE



# The Opportunities Are Endless

High digitization



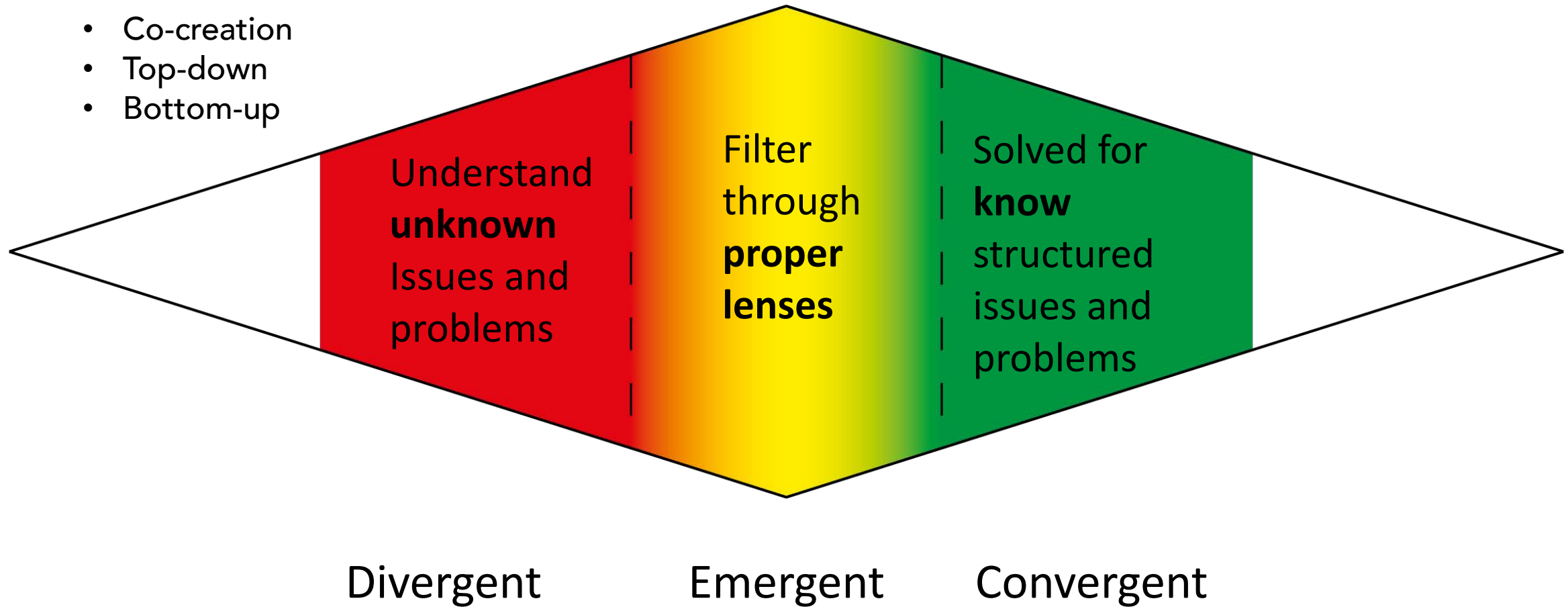
Low digitization

Source adapted from Mckinsey Global Institute report : Digital America

SECTOR	DIGITIZATION
ICT	High digitization (Dark Green)
Media	High digitization (Light Green)
Professional Services	High digitization (Light Green)
Finance and Insurance	High digitization (Light Green)
Wholesale Trade	High digitization (Light Green)
Advanced Manufacturing	High digitization (Light Green)
Oil and Gas	High digitization (Light Green)
Utilities	High digitization (Light Green)
Chemicals and pharmaceuticals	Medium digitization (Yellow)
Basic goods manufacturing	Medium digitization (Yellow)
Mining	Low digitization (Red)
Real Estate	Medium digitization (Yellow)
Transportation and warehousing	Medium digitization (Yellow)
Education	Medium digitization (Yellow)
Retail trade	Medium digitization (Yellow)
Entertainment and recreation	Low digitization (Red)
Personal and local services	Medium digitization (Yellow)
Government	Medium digitization (Yellow)
Health care	Medium digitization (Yellow)
Hospitality	Low digitization (Red)
Construction	Low digitization (Red)
Agriculture and hunting	Low digitization (Red)

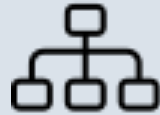
# Solving Complex Problems is Hard

- Quantitative
- Qualitative
- Co-creation
- Top-down
- Bottom-up



# The 4 Inhibitors of An Innovation Culture

Inability to manage **hierarchies** to align priorities and rewards



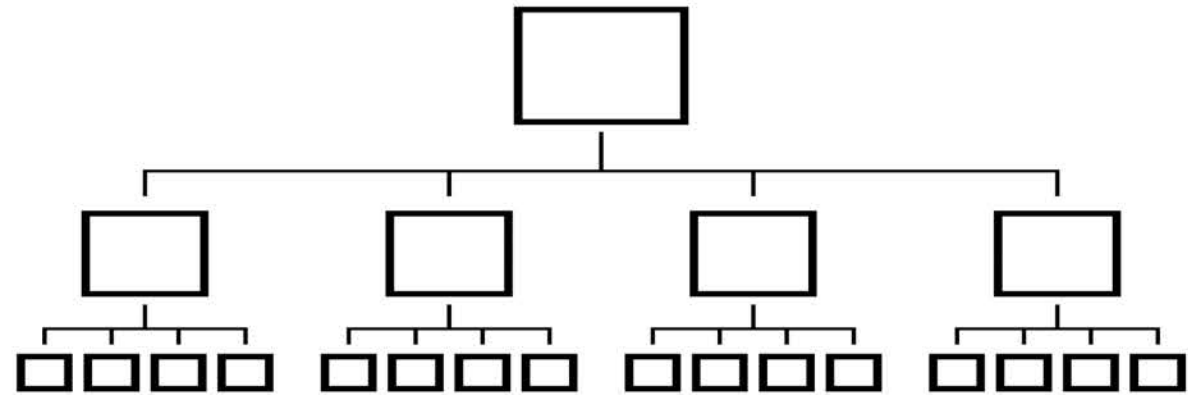
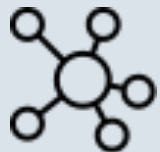
Wrong **communication** approach to persuade



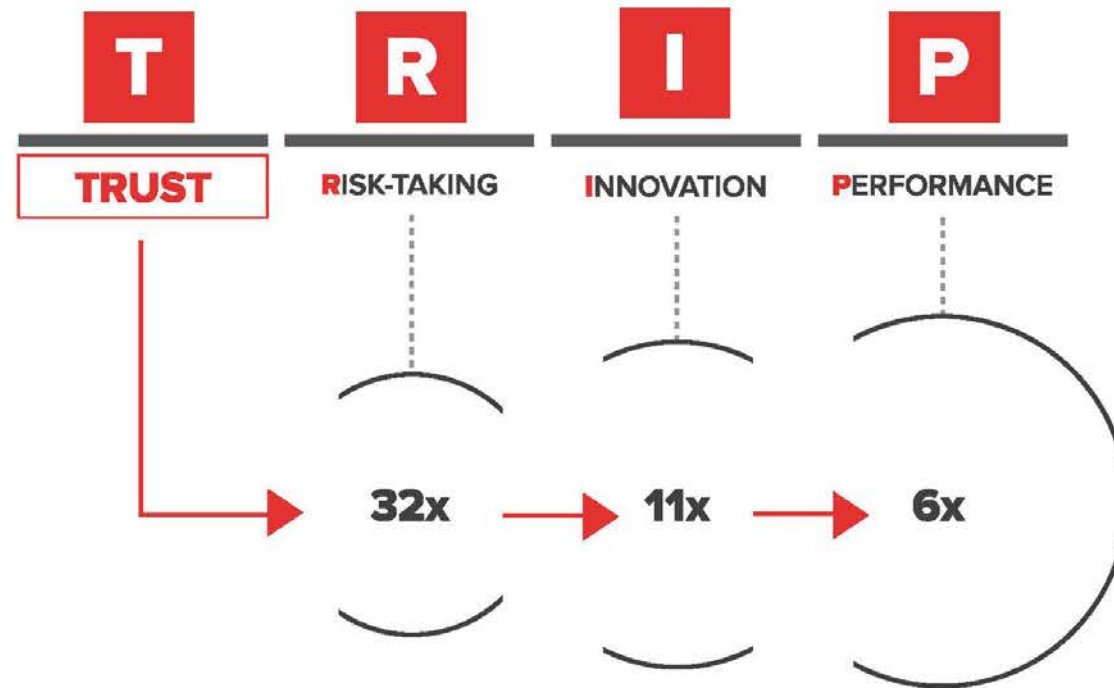
Strong **tensions** between stakeholders



Lack of efficient informal and formal **networks** to drive change



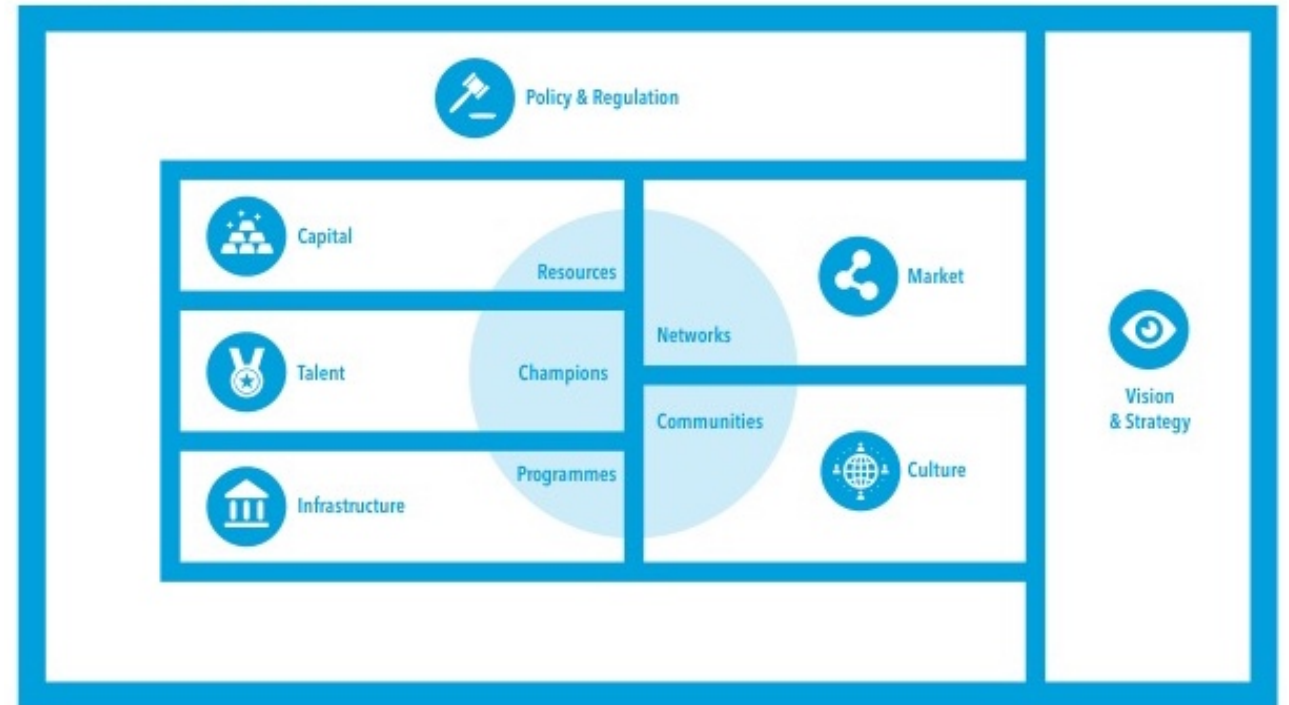
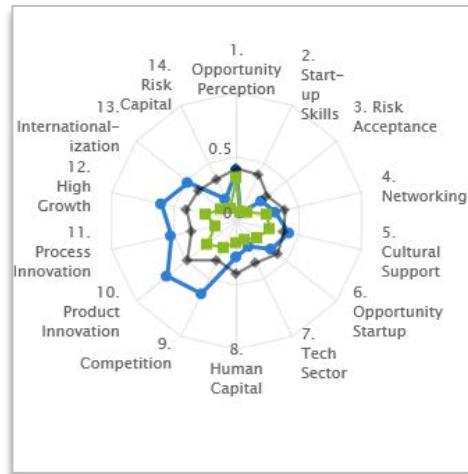
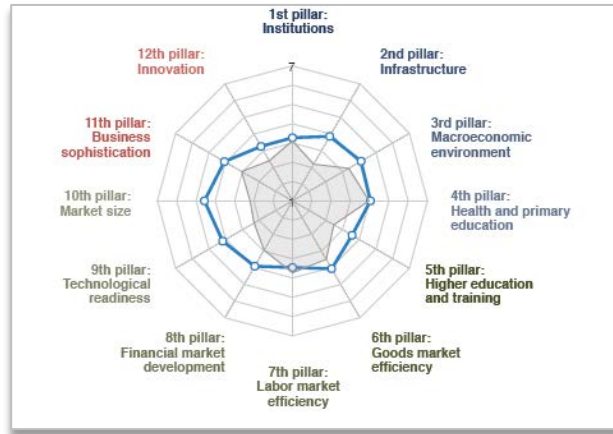
# Agile Based Organization Are Self-Organizing And Better Performers



Self organizing, source How Report, LRN 2016

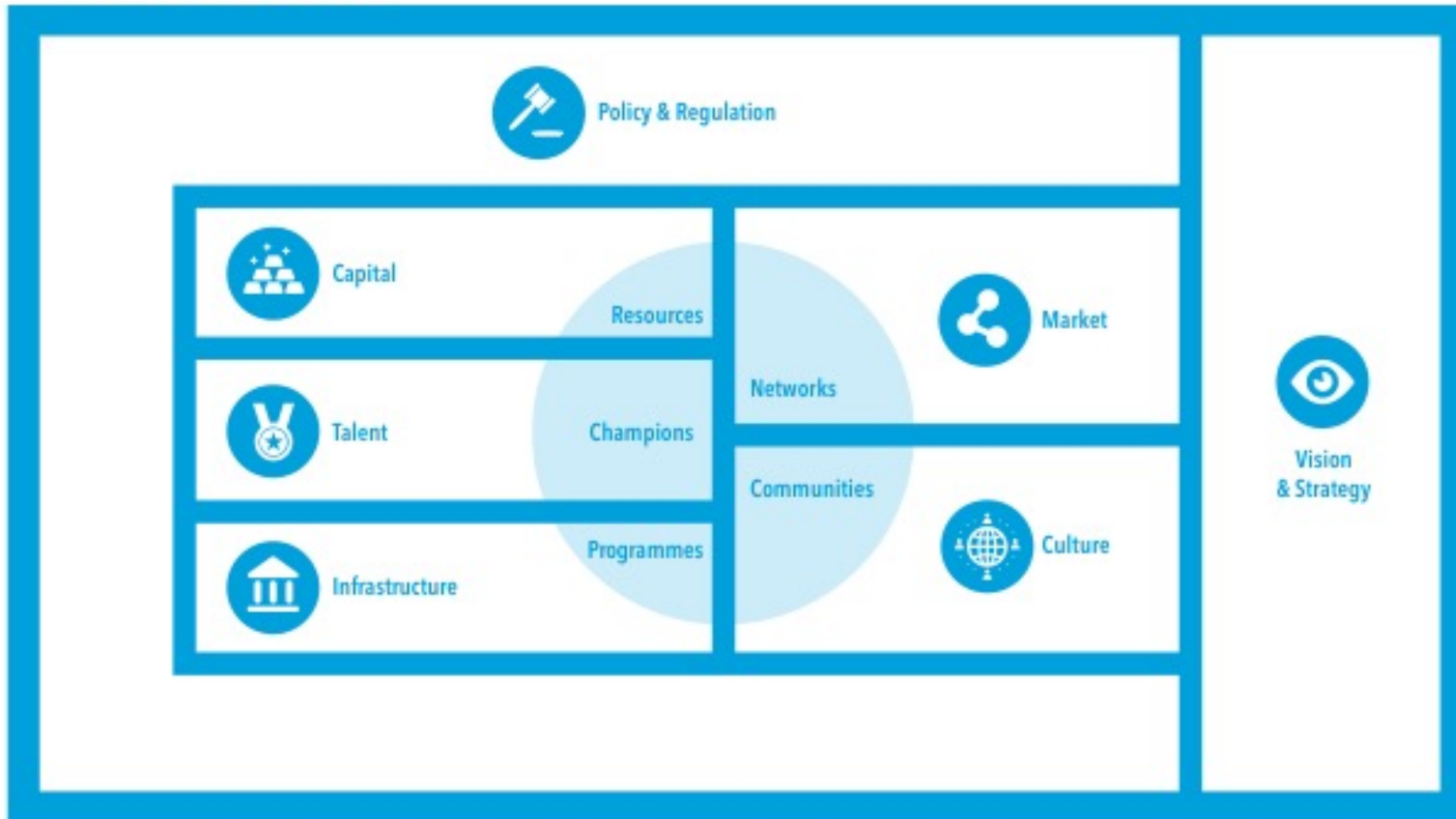


# Assessing An Environment For Digital Transformation Readiness



Leading or lagging indicators ?

# Understanding Their Environment



Source: ITU

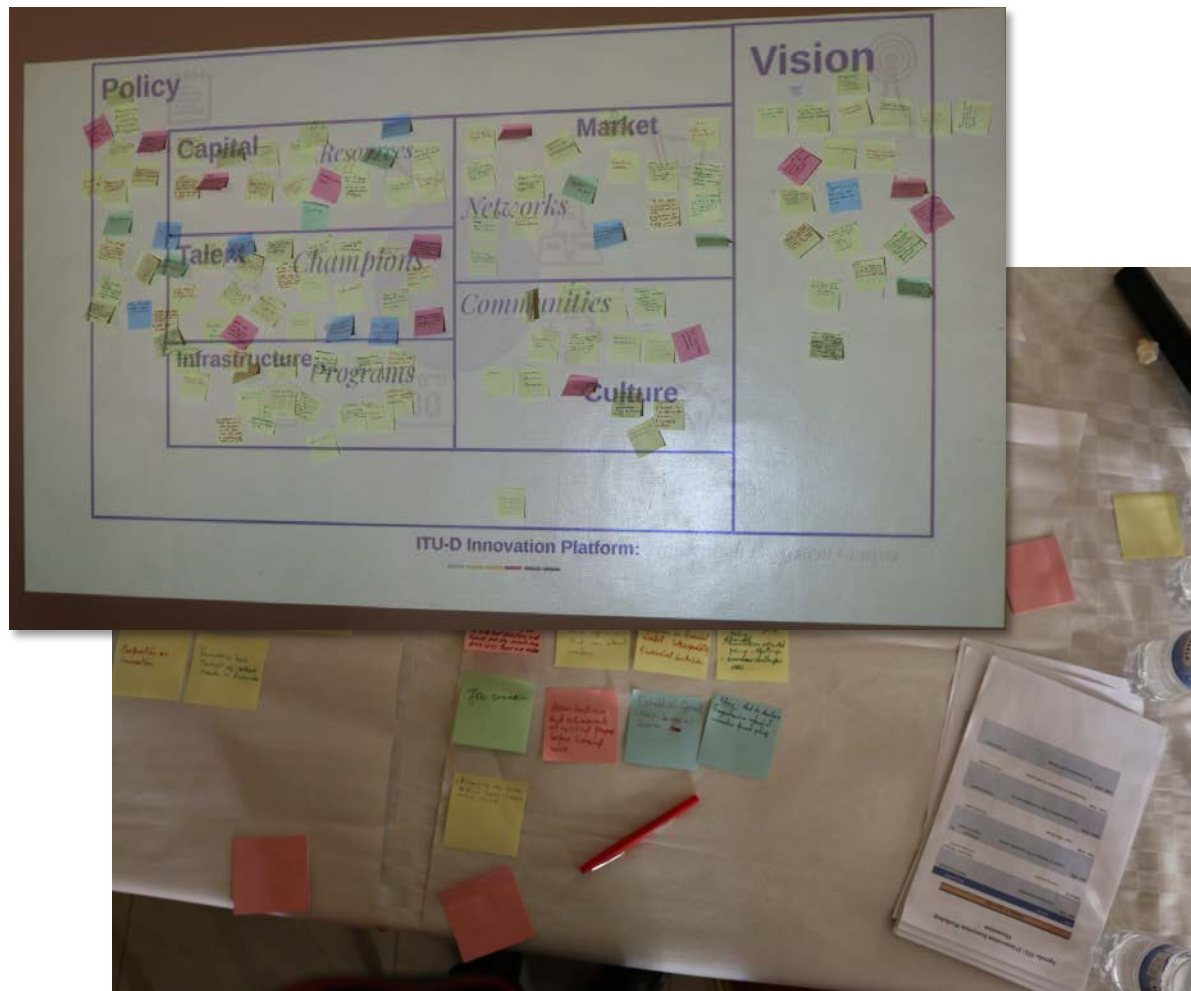
# Understanding Stakeholders Actions

"People run in different directions, there is no common strategy to my knowledge"

Source: ITU country review-Ecosystem Maturity Map

Entrepreneurship Phase	Pre-Idea	Ideation	Startup	The "Valley of Death"	SME
Entrepreneurs	<b>Entrepreneurial Interest</b>	<b>Engage with problems</b>	<b>Develop Business Models</b>	<b>Build Collaboration</b>	<b>Expand</b>
Finance	<b>Research Funding</b>	<b>Seed Funding</b>	<b>Angel Investment</b>	<b>Venture Capital</b>	<b>Business Finance &amp; Loans</b>
Entrepreneurial Support	<b>Entrepreneurial Events</b>	<b>Hackathons &amp; Competitions</b>	<b>Co-working &amp; Support</b>	<b>Incubators &amp; Accelerators</b>	<b>Business Association</b>
Private Sector	<b>Success Stories</b>	<b>Research Programs</b>	<b>Lab programs</b>	<b>B2B &amp; Support Services</b>	<b>Skill Training Programs</b>
Academia	<b>Entrepreneur Community</b>	<b>Basic Research</b>	<b>Spin Offs</b>	<b>Soft skill trainings</b>	<b>Human capital</b>
Public Sector	<b>Vision &amp; Strategy</b>	<b>IP &amp; R&amp;D Support</b>	<b>Tax Support</b>	<b>Public Procurement</b>	<b>Trade Policy</b>

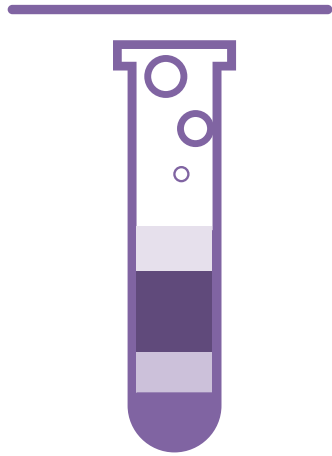
# New Principles Are Needed To Navigate Change



- User centric approach
- Private sector led Innovation
- Efficient resources utilization (e.g. find and invest in working good practices)
- Replicable every year with fast changing ICT context
- Common language between all stakeholders (e.g. common understanding)
- Everyone should have skin in the game (e.g. engaged)
- Sustainable and predictable (e.g. Stability),

# New Policy Paradigm Needed

## Emergent Policy



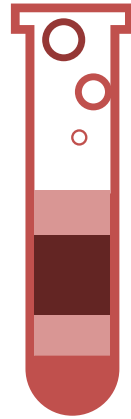
Policy Agility

Experimentation  
Sandbox

Leadership and  
roadmap

+

## Working with Good Practices



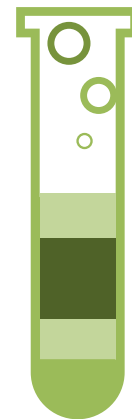
Know how, not  
tech transfer

System's  
Approach

Inclusive and  
Open innovation

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## All stakeholders are important



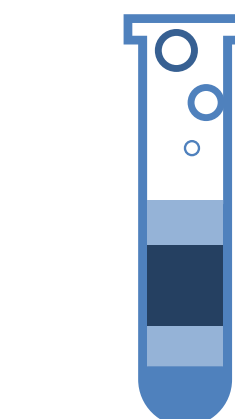
Engaging all key  
owners

Common  
Language

Skin-in-the-game

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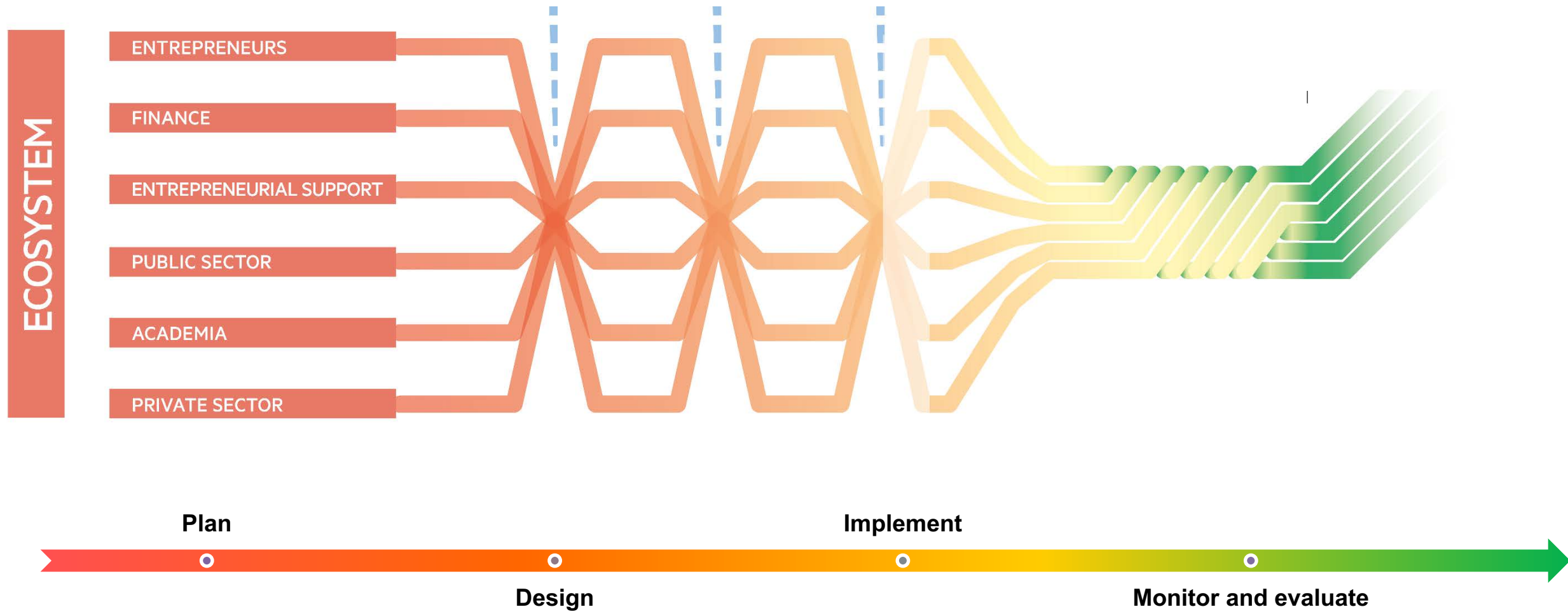
## Digital Transformation Capacity



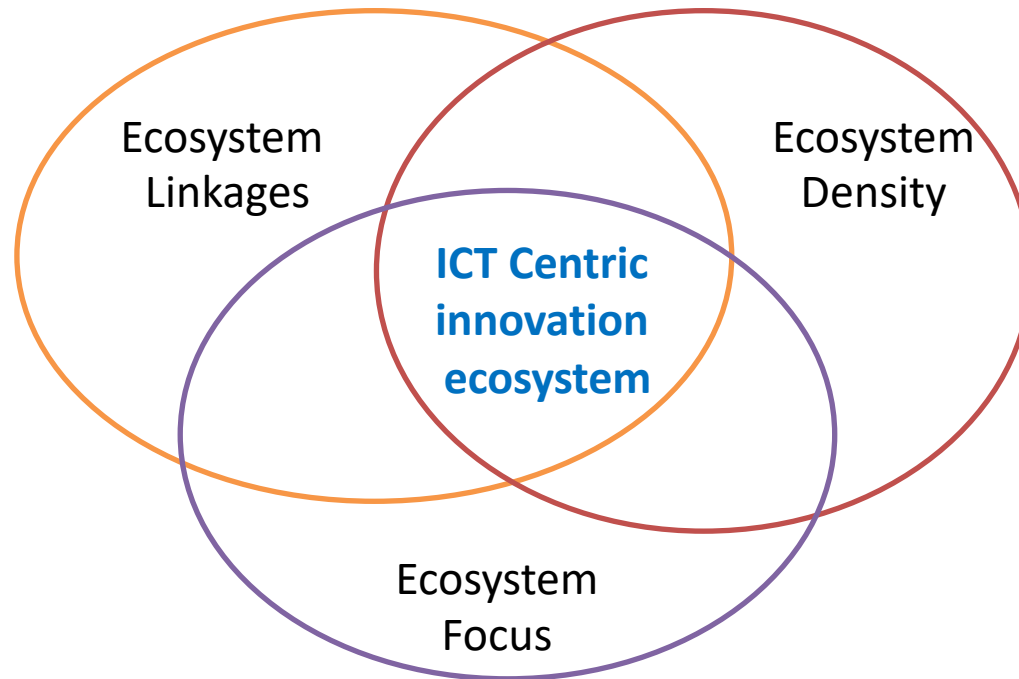
ICT Centric  
Innovation  
Policy

Confidential

# The Next Frontier Is All About Nurturing Ecosystems



# KEY TO A WIN-WIN



# SESSION 2 – KEY TAKEAWAY

## UNDERSTANDING ACTORS & INTERACTIONS

- Common Language on Innovation
- Systems of Innovation
- Innovation Capacity
- Innovation Inefficiencies
- Innovation Principles
- Ecosystem
- Stakeholders
- Avoiding Bad Practices





The journey of a thousand  
steps begins with one step.  
Lao Tzu

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