# 2015 Global Commercialization Conference for Innovative Development

## Institute for Information and Communication Technology Promotion

# OPPORTUNITY ON TECHNOLOGY COMMERCIALIZATION AND COLLABORATION BETWEEN KOREA AND INDONESIA

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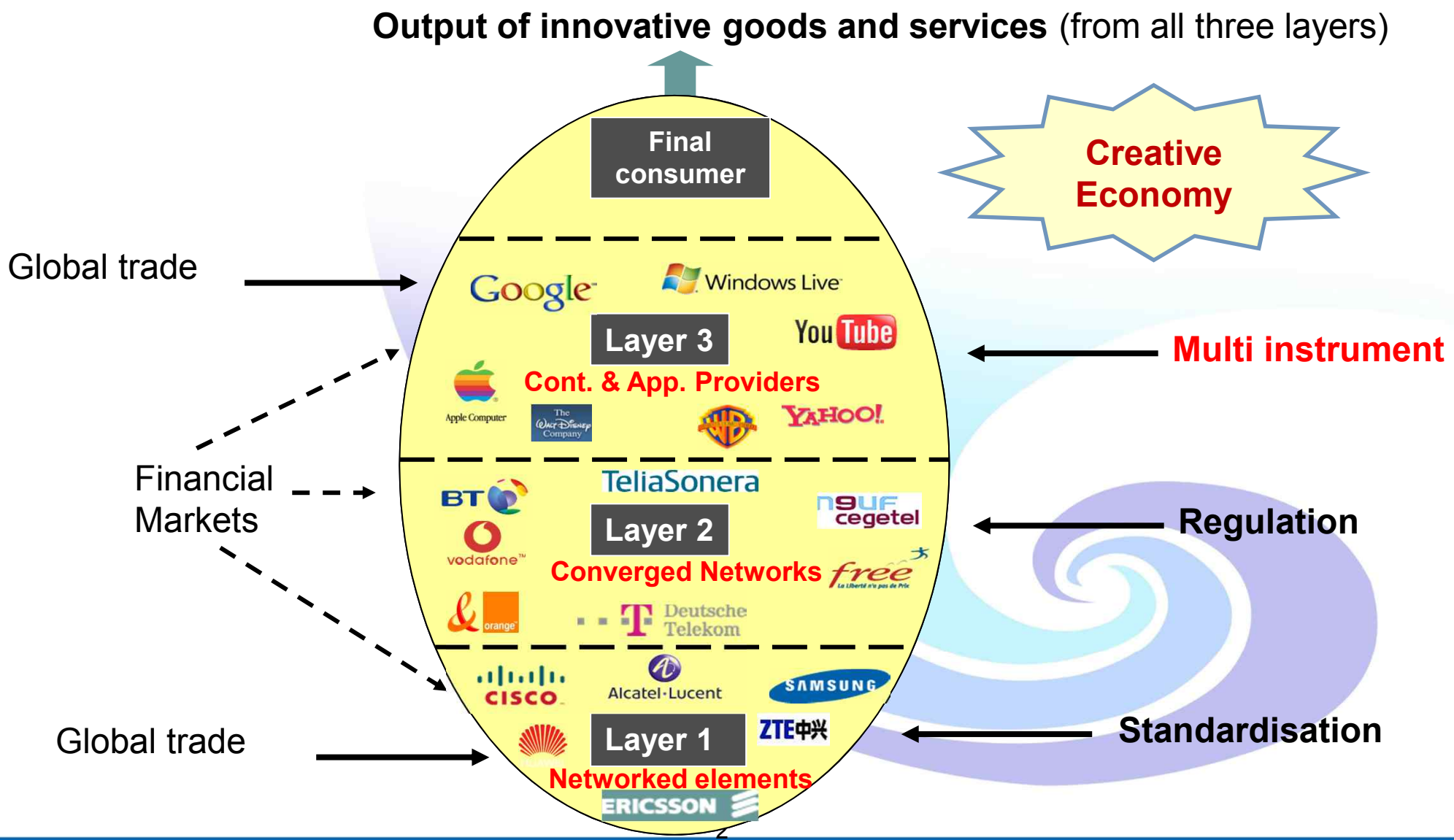
# Ecosystem Layer Model




*Source: Martin Fransman, The New ICT Ecosystem: Implications for Policy and Regulation, 2010*

# IT and Telecommunication as Growth Engine

## Direct economic impact

| | |
|---|---|
| ~$3.3 trillion in revenue | Revenues of global value chain in 2014 |
| >$1.2 trillion in mGDP | Mobile's contribution to GDP in the six countries evaluated |
| 11 million jobs | Jobs in global value chain |
| $1.8 trillion in investment | R&D and capex investments from 2009 through 2013 |
| $37 billion in funding | Venture/start-up investments in 2014 |

## Enabling benefits for SMEs

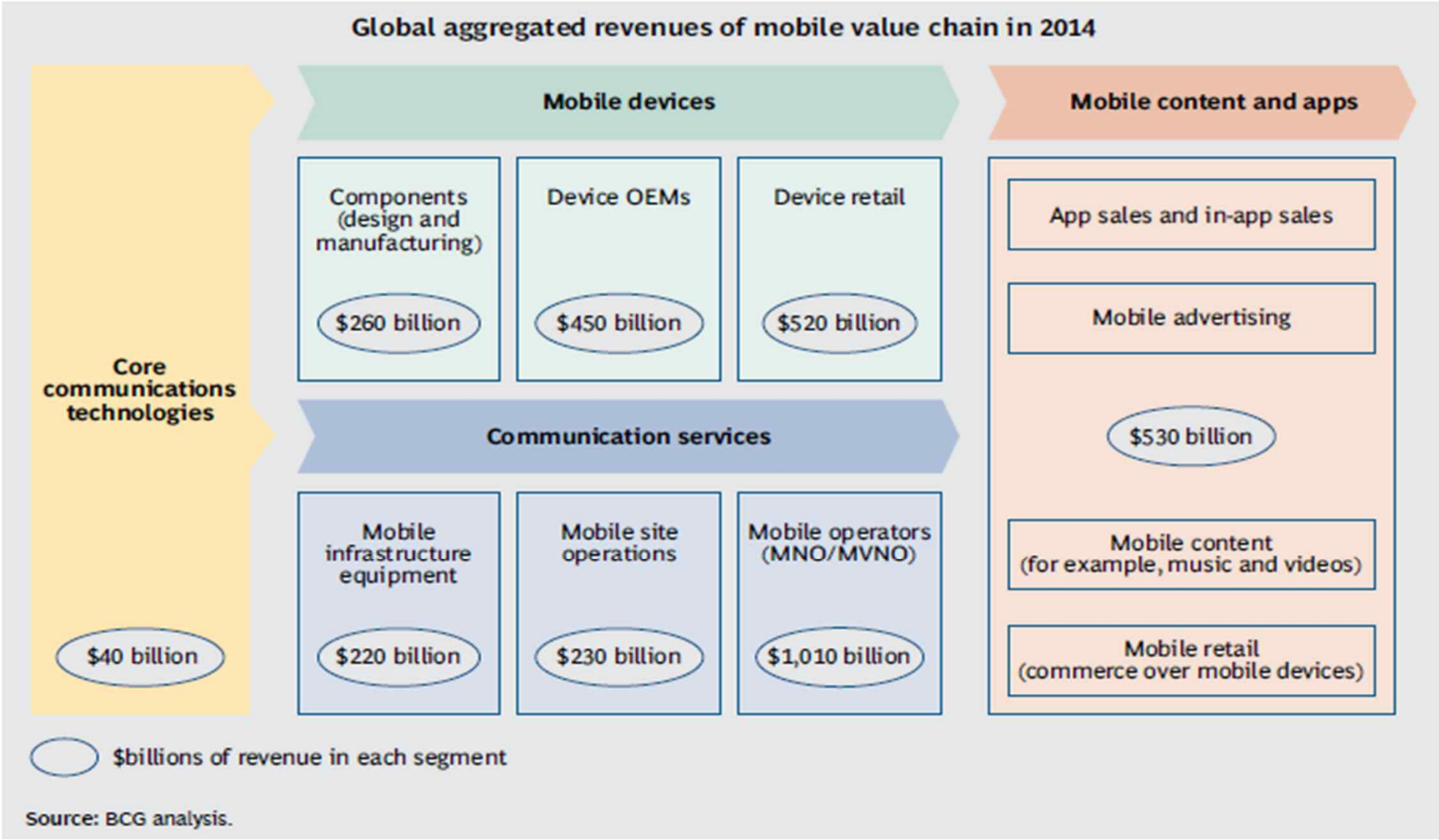
| | |
|---|---|
| Up to two to eight times faster growth | Comparison of revenue and job growth between mobile leaders and laggards |
| 7 million added jobs | Jobs created by closing SMEs' mobile divide in the six countries evaluated |

## Enabling benefits for consumers

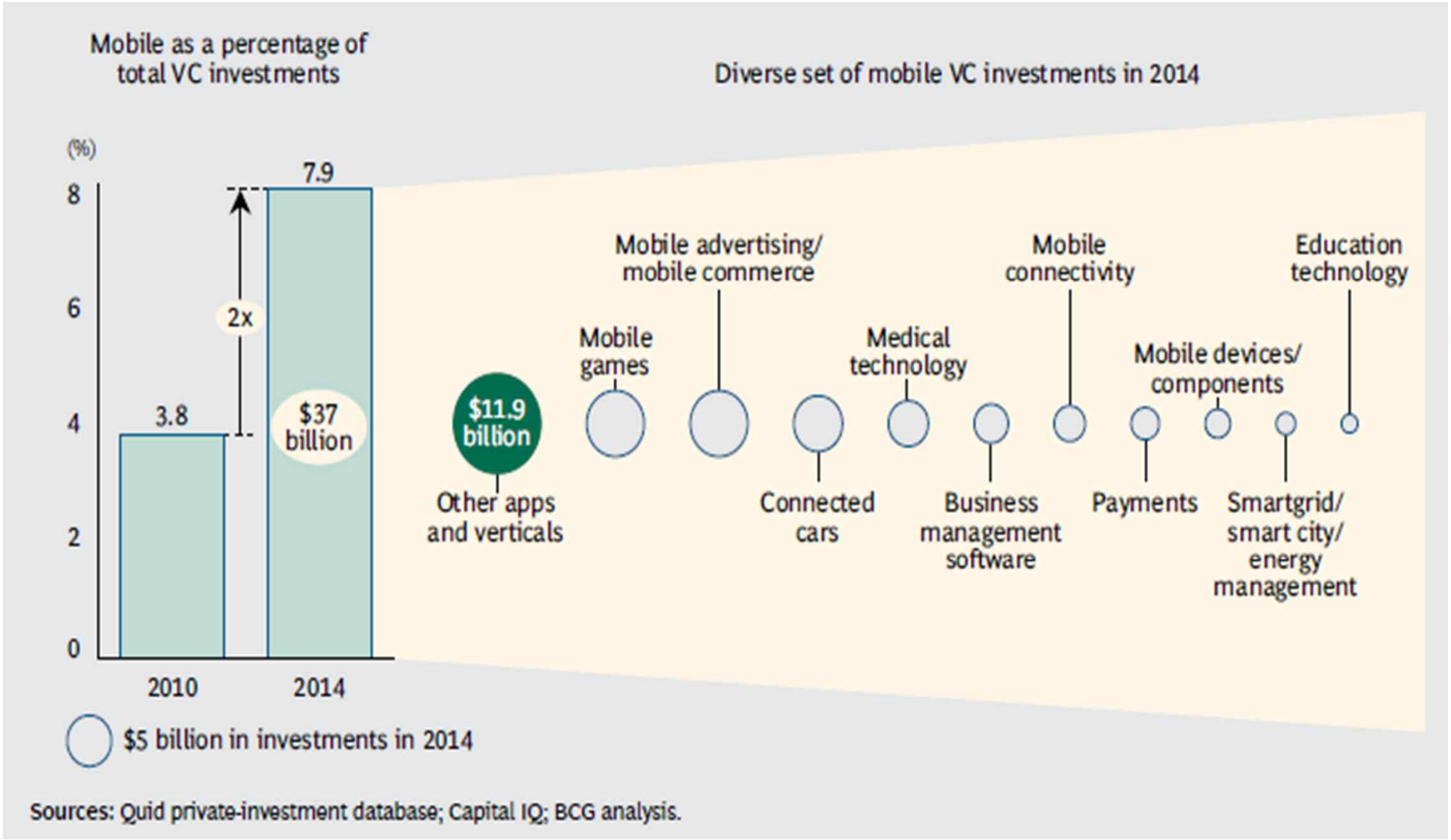
| | |
|---|---|
| 11 to 45 percent of income | Consumer-reported value of mobile technologies as a percentage of income |
| $6.4 trillion in surplus | Consumer surplus created in the six countries evaluated |

Source: BCG analysis.

# IT and Telecommunication Technology Revenue in 2014

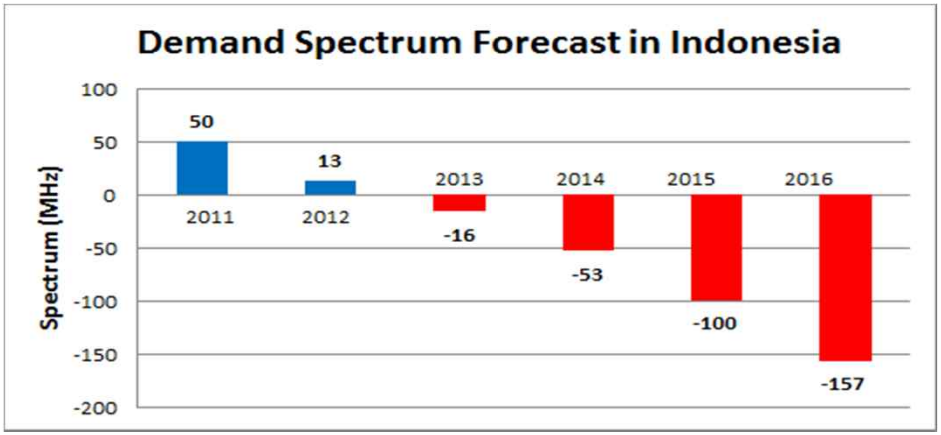


# Venture Capital Investment in ICT and Telco Technology




Sources: Quid private-investment database; Capital IQ; BCG analysis.

# The spectrum scarcity

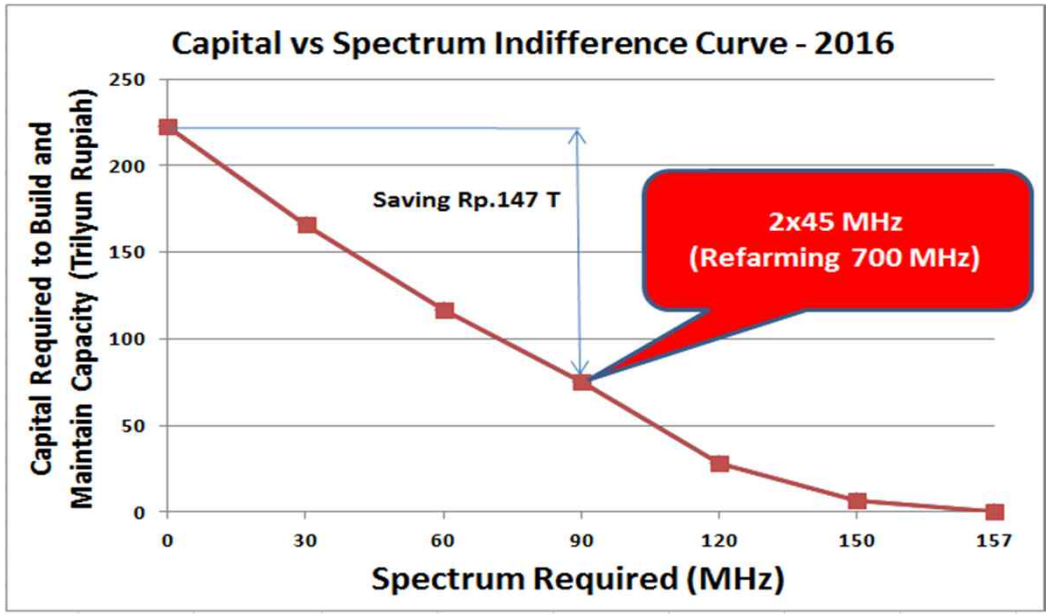



*Source : Author*

To overcome the "spectrum crisis" caused by mobile broadband traffic, there are three solutions:

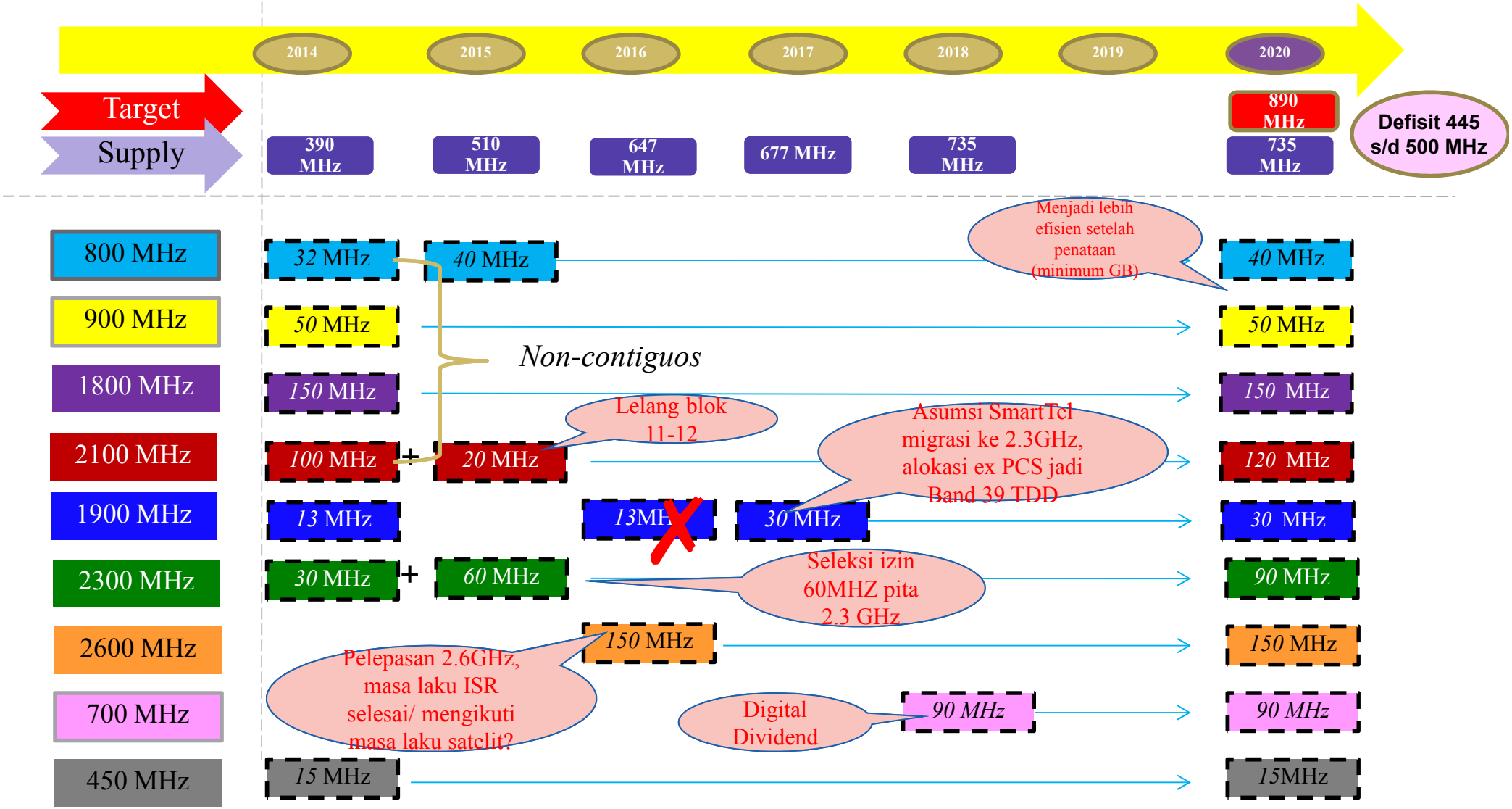
- add bandwidth spectrum
- improve spectrum efficiency by upgrading technology
- increase the number of tower

Traffic-related problems continue to increase. The greater frequency spectrum which can be allocated to mobile broadband will save more costs on Capex and Opex.

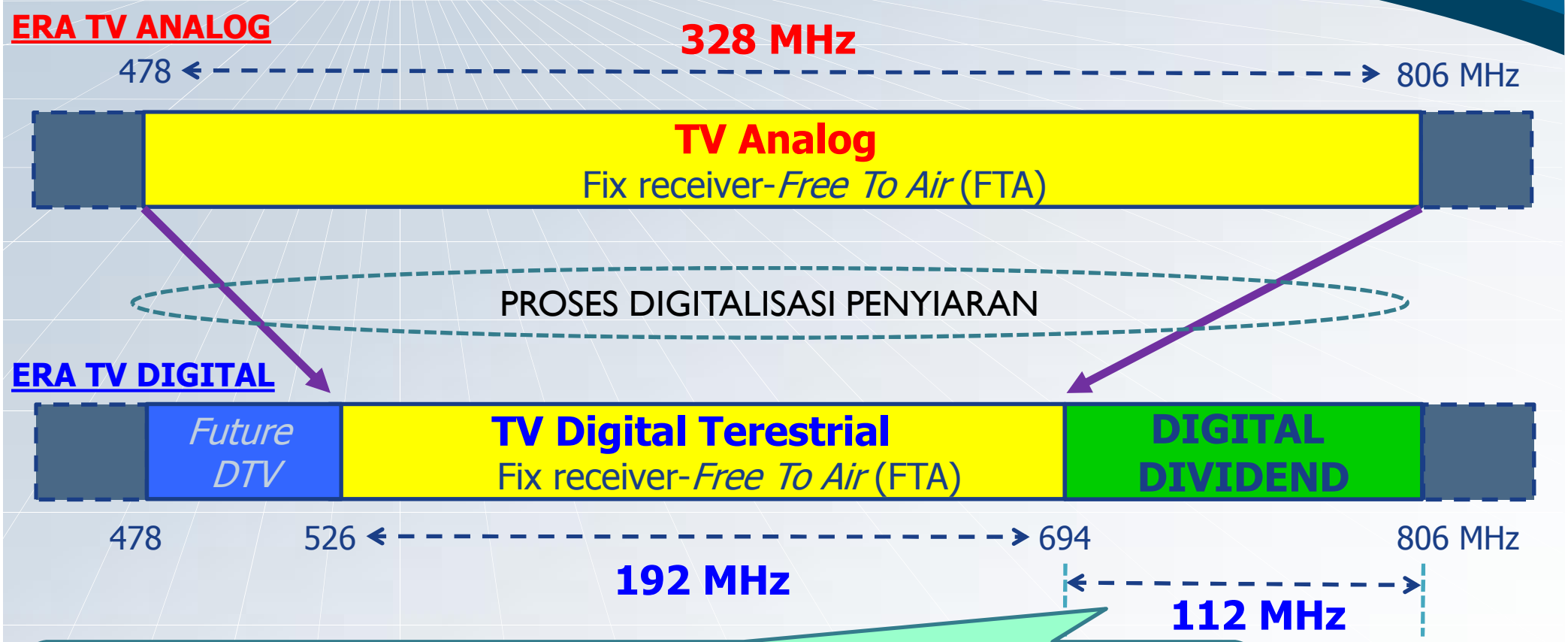



*Source : Setiawan, D (2013)*

# ROADMAP FOR SPECTRUM REFARMING IN INDONESIA



# DIGITAL DIVIDEND 700 MHz




- **LTE 700 MHz is very useful for the acceleration of Broadband in Rural Areas, especially in the Corridor of MP3EI along with the existing BTS**
- **It can be implemented after the digital switchover at the end of 2017**

# E-Fisheries Program

Smartphone Apps:
- tracking
- broadcast
- weather, etc

Smartphone connected to SSB Radio via Bluetooth

- SSB Radio
- Smartphone

Ship to Shore Communication

- SSB Radio
- Smartphone

Ship-to-Ship Communication

Up to > 100 km

internet

Server

SSB Base Station

- SSB Radio
- Smartphone

Shore

# Focus of Current and Future Cooperation

## On going program :

1. Government Data Center
2. Root CA
3. Cyber security
4. Internet safety : Black list and White list

## Opportunity for future collaboration :

1. Creative economy – MSIP and Kocca
2. Cyber army
3. Others

# Program Indigo (Indonesia Digital Community)

**Pengembangan meliputi aspek *People*, *Planet* dan *StakeHolder Participation***

Creative Industry Ecosystem Development

## 1 People

Pengembangan Digitalpreneur (Startup) melalui Program Indigo

Sejak 2013, **lebih dari 1500 startup** Indonesia telah berpartisipasi
Berikut startup terpilih dalam program Inkubasi dan Akselerasi Batch 1-2015:

Inkubasi

Akselerasi

## 2 Planet

Penyediaan 21 fasilitas kreatif di 12 kota Indonesia

## 3 Participation

Kolaborasi Quad Helix untuk pengembangan Digitalpreneur

**A**cademic + Research institute

**B**usiness

**C**ommunity

**G**overnment

# People

**Lebih dari 1500 Startup berpartisipasi dan ribuan Talent tergabung dalam Komunitas Indigo serta beberapa startup telah siap masuk ke market**

**1546 Startup Berpartisipasi sejak 2013,**
**46 Startup mengikuti program Inkubasi Indigo**

Jumlah Startup yang diinkubasi:
- **Thn. 2013**: 439 proposal dan terseleksi 14 Startup
- **Thn. 2014**: 398 proposal dan terseleksi 17 Startup
- **Thn. 2015**: 709 proposal dan terseleksi 15 Startup

## Member Komunitas

DI·LO 1634 | Bandung digital valley 2669 | Jogja digital valley 3695 | Jakarta digital valley 1179

## Penghargaan untuk Startup Indigo

**INAICTA 2014 Winner & Special Mention**

PORA LAKE RESCUER – TOBA digital valley

**Juara Hackaton Merdeka 2015**

PasarLaut – Bandung Techno Park

**Aplikasi Desa Broadband**

***INAICTA 2015 Nominator***

Layer Farm Manag – Xigent Pre-secure Yourself

## Startup Program Indigo

## Startup Indigo yang masuk ke market

Implementasi 11.000 toko online UKM di Jarvis Store

[redacted]
Cloud ERP untuk 6 manufakturing menengah

cerita perut – Aplikasi Kuliner Top 10 Kuliner di 16Kota

Xigent Pre-secure Yourself – Implementasi **Panic Button** untuk Bandung dan Haji Umrah

Aplikasi Kakatu pre-installed di 1 juta Samsung Galaxy Tab 3V

[redacted]

[redacted]
Implementasi Augmented Reality Museum Kebangkitan Nasional dan menyusul 2 museum lainnya.

# Planet : From Creativity to Commerce

**Program Indigo, *from digital creative to digital commerce*, semenjak penyiapan talent sampai dengan *venturing* merupakan program menyeluruh dalam pengembangan Digitalpreneur**

- Co-working space,
- Workshop & Mentoring
- Pre-Incubation

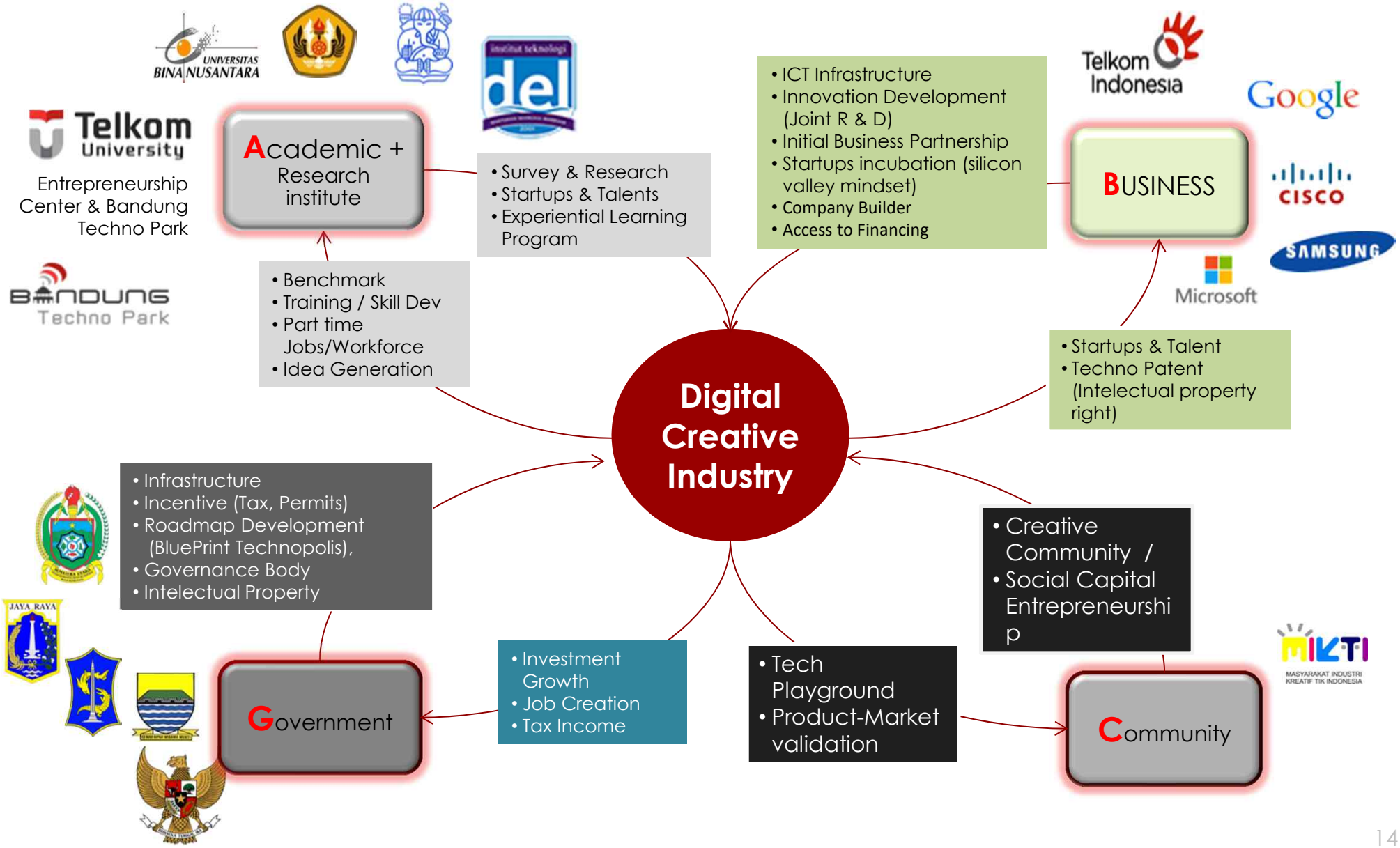
- Co-working space
- Mentoring
- Incubation: 6 months
- Incubation Fund upto Rp 250 Juta

- Co-working space
- Mentoring
- Marketing & Channeling
- Market Access
- Acceleration Fund upto Rp 2 Milyar

- Company Builder
- Follow on funding
- Multiple funds with best investment partner
- Direct investment
- Fund > Rp 2Milyar

# Participation

**Quad Helix – Program Indigo melibatkan para stakeholder terkait meliputi Akademik, Bisnis, Komunitas dan *Government* (Pemerintah)**



# Thank you