



# TECHNOLOGICAL REVOLUTION

## Redefining New Skills & Traits of The Professional Accountants

November 2015

Dr. Irwan Djaja  
PT First Media Tbk



ANGGOTA IAI

**Identitas**  
profesionalisme  
Akuntan Indonesia



## Table of contents

1. **The Global : New Age ....**
2. **Indonesia : Unleashing Age ....**
3. **Accountants : Responsive Age ...**





## Global New Age....

### The Convergence in TMT...



#### Dynamics Nature ..

- 4 aspects: technology, competition, consumer behavior, and legal
- High capex, short product cycle, unjustifiable investment
- Wind of change .....

#### Technology and Service Convergence..

- Led by robust internet through various platform
- A quad play offering (mobile, fixed telephony, internet and Tv)
- Customers only need one bill
- Redesign Business Model (Amazon, Alibaba, Dish..)
- Net Neutrality .....

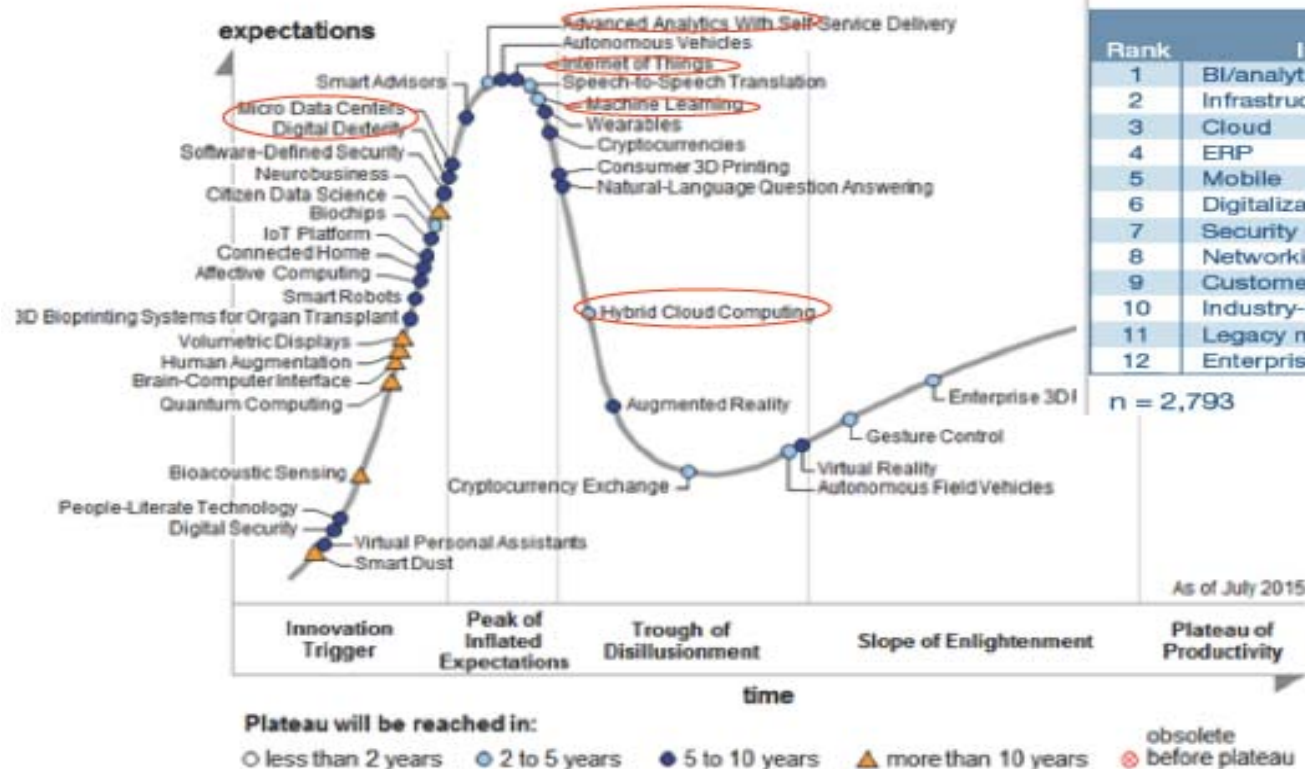
#### Industry Consolidation..

- Global TMT M&A deals = \$296 bio 2014.
- Technology led, recording 479 deals valued at \$166 billion (56%).
- AT&T and Direc Tv USD 65 bio, Facebook & whatsapp (USD 16 bio), Liberty and Ziggo (USD 11 bio), Charter & Bright House Networks (\$10.4 bio), Telefonica UK & Hutchison Whampoa Limited (\$15.299 billion), Frontier Communications-Verizon (\$10.54 bio)

3

## Global Trends ....

### Hype Cycles for Emerging Technologies, 2014...



### CIO technology priorities for 2015

Rank	Investment priority	2015	2014
1	BI/analytics	41%	50%
2	Infrastructure and data center	31%	37%
3	Cloud	27%	32%
4	ERP	26%	34%
5	Mobile	24%	36%
6	Digitalization/digital marketing	17%	11%
7	Security	13%	11%
8	Networking, voice and data comms	12%	12%
9	Customer relationship/experience	11%	8%
10	Industry-specific applications	9%	10%
11	Legacy modernization	7%	7%
12	Enterprise applications	6%	2%

n = 2,793

### Global Trends..

- Intertwine : Physical and Digital Lives
- Technology disruptive but just a tool
- Has to respond to human and emotional needs
- Hyper competition : Open Source .. Receipts available & can be imitated
- Compete on Business Model Innovation



## Top 10 New Technologies..

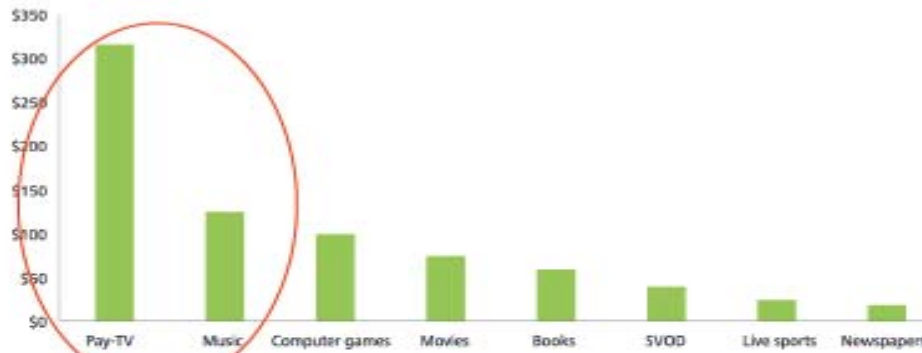
2012	2013	2014	2015
Big data	Strategic big data	Smart machines	Smart machines
Extreme low-energy servers	Integrated ecosystems	Web-scale IT	Web-scale IT
Next generation analytics	Actionable analytics	3D printing	3D printing
App stores and marketplaces	Enterprise app stores	Software-defined anything	Software-defined applications/infrastructure
IoT	IoT	IoT	IoT
In-memory computing	In-memory computing	Cloud/client architecture	Cloud/client computing
Mobile-centric applications/interfaces	Mobile applications/HTML5	Mobile apps and applications	Risk-based security/self-protection
Cloud computing	Hybrid IT/cloud computing	Hybrid cloud & IT as a service broker	Advanced pervasive/invisible analytics
Media tablets and beyond	Mobile device battles	Mobile device diversity/management	Computing everywhere
Contextual/social user experience	Personal cloud	Era of the personal cloud	Content-rich systems

Source: Gartner (2015)



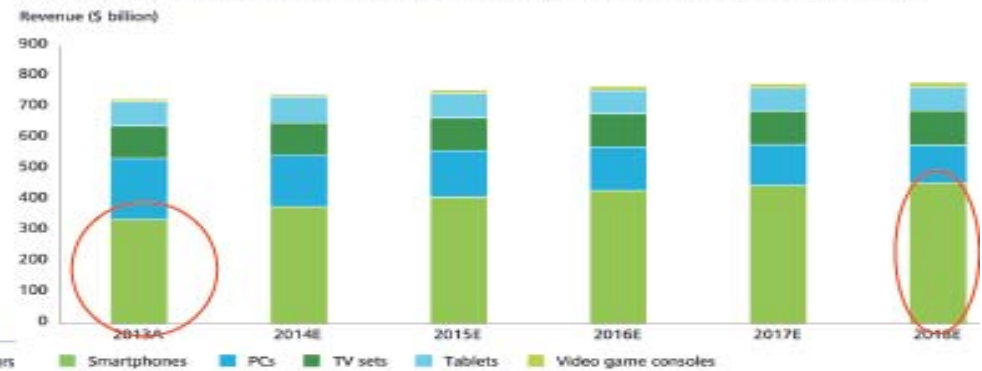
# Global Statistics .. TMT

Figure 1. Millennials' \$750 spend on media content in 2015



Source: Deloitte, 2014, based on multiple sources

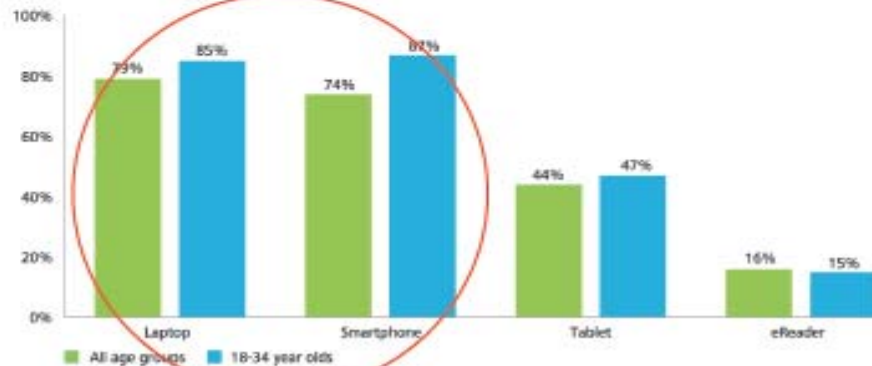
Figure 3. Combined global sales revenue of PCs, smartphones, tablets, TVs and video game consoles, 2013-2018



Source: Deloitte, 2014, based on multiple sources

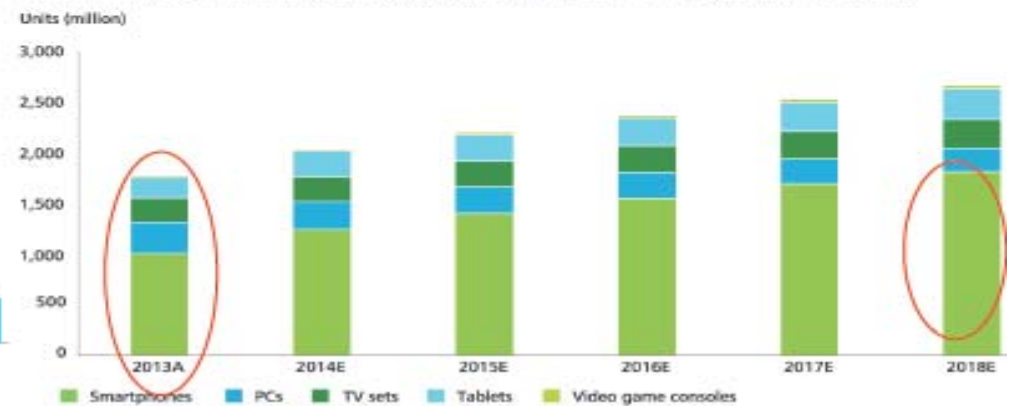
Figure 2. Device ownership by millennials and all age groups

Q: Which, if any, of the following, do you own or have ready access to (Laptop, smartphone, tablet, eReader)?

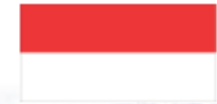


Source: Deloitte Global Mobile Consumer Survey, Developed countries, May - July 2014

Figure 4. Combined global sales units of PCs, smartphones, tablets, TVs and video game consoles, 2013-2018



Source: Deloitte, 2014, based on various industry sources



## Indonesia: Unleashing Age.....



Consumer driven economy, with private consumption making up 55% of GDP<sup>(1)</sup>

### Indonesia Today

Large economy with robust growth

- US\$878 billion GDP
- 5.8% GDP growth<sup>(2)</sup> - Indonesia 15<sup>th</sup> largest today

Large population base

- 254 million people (grow 2.9 million per year)
- 4th largest population country in the world

Young population

- 60% of population < 30 years of age. One of the youngest population in the world

Growing middle class

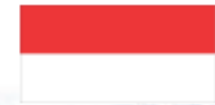
- 55 million members of the consuming class, growing by the population of Singapore every year

### Indonesia at 2030

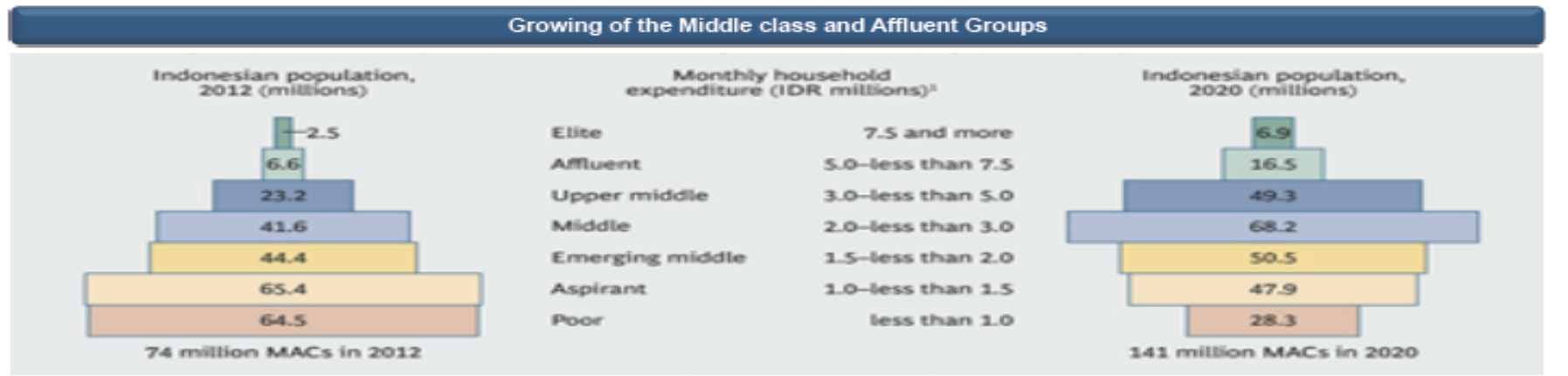
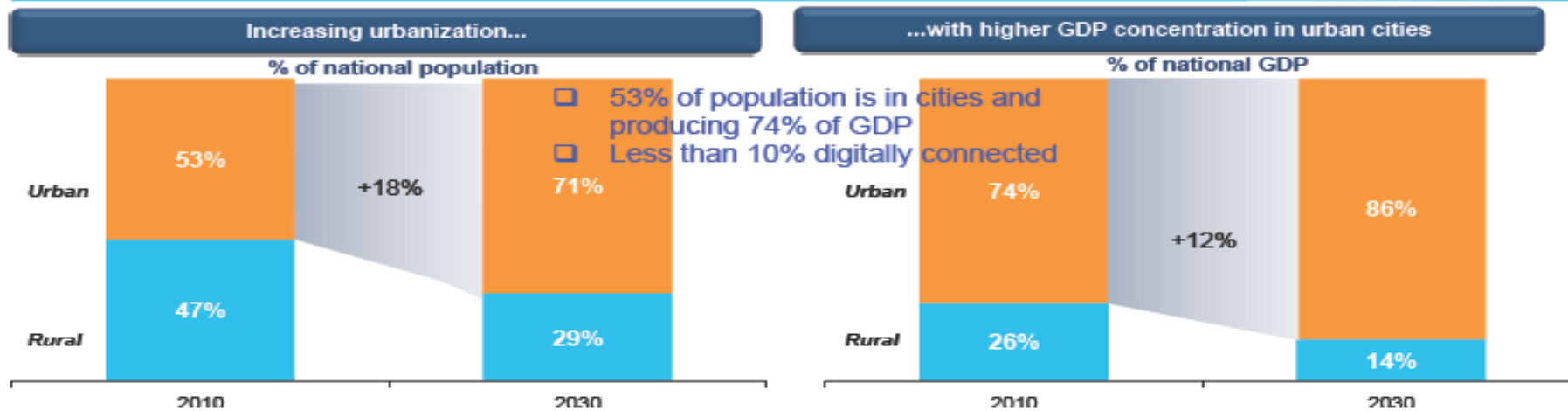
- Forecasted to be 7<sup>th</sup> largest economy in the world
- 135 million members of consuming class will drive growth
- Rapidly urbanizing nation, fueling rise in income and discretionary spending
- Expected to account 40% of ASEAN growth by 2030

1) 2010 – 2013 average: Source McKinsey Global Institute, CIA Factbook

2) GDP CAGR% forecast for 2014 – 2019: Source Media Partners Asia



# Increasing urbanization and rising middle class & affluent groups



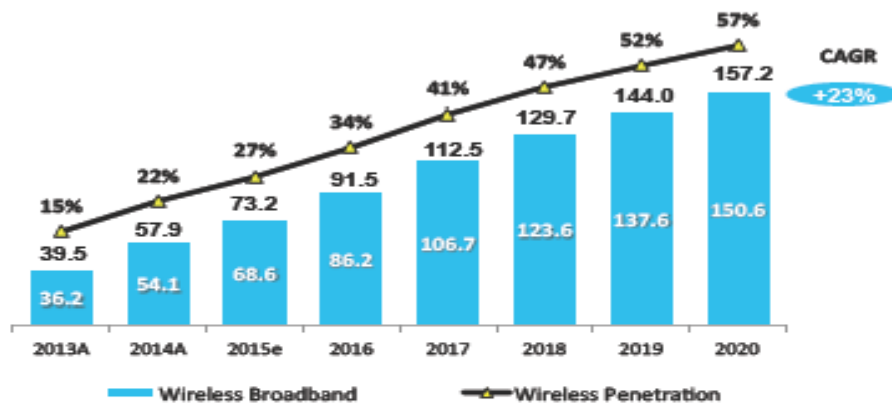
Population and Households Expenditure Database 2012: Source McKinsey Global Institute, BCG





# Broadband supply in midst internet boom

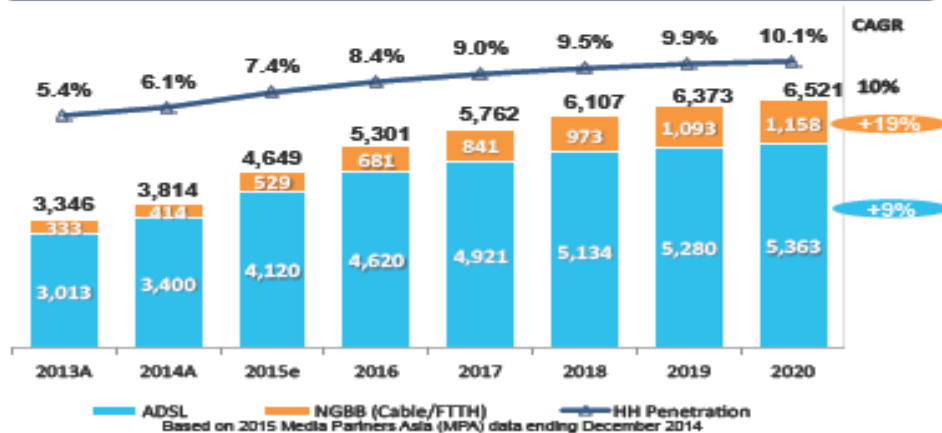
### Wireless Broadband Subscribers ('000)



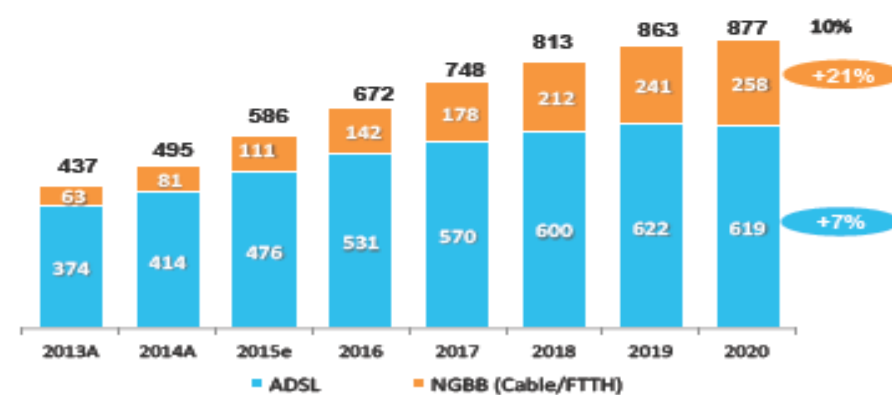
### Strong Demand, Low Supply

- Under-penetrated market ~ **22% Wireless, 6.1% Fixed** today
- (Fix NGBB) Projected **CAGR 19%** driven by growing middle class demanding for stable internet at home, shared across family
- (Wireless) Projected **CAGR 23%** driven by high upsides in 4G conversion (increase consumers crave for better Mobile Data connection alternative)
- Pre-dominantly PREPAID market, and research stated considerable **ARPU US\$ 8.5 per month**.

### Fixed Broadband Subscribers ('000)

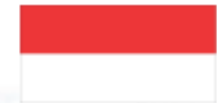


### Fixed Broadband Revenues (US\$ mn)



Based on 2015 Media Partners Asia (MPA) data ending December 2014

Based on 2015 Media Partners Asia (MPA) data ending December 2014



## Population are data hungry resulting in explosive data growth

### Data in urgent Needs

Mari Pangestu (2012):

- Creative economy : the fourth wave economic growth
- Creative economy unseperated from technology internet and social media
- Internet contributes 1,6% of GDP, equivalent to over Rp 115 Triliun. It is estimates Internet will contribute to 2,5% of GDP in 2016.

*The Indonesia Group Against Digital Divide (IGADD):* when Indonesia broadband internet PR = 20%, every 10% then will lead to additional growth by 1,3%

### Indonesian highly "addicted" to Internet



- **84 million** internet users (33% of the population)  
Avg. 1.5 hours a day



- **4<sup>th</sup> largest** Facebook market (93 million accounts)



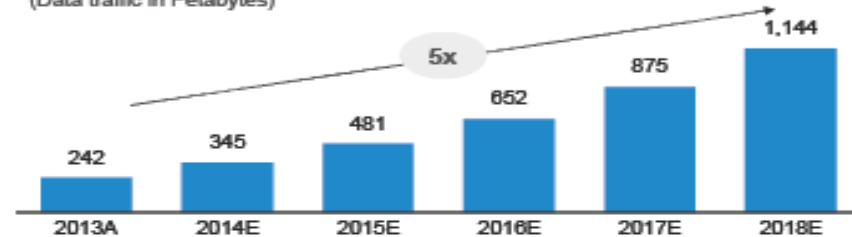
- **5<sup>th</sup> largest** Twitter market (29 million accounts)



- **71%** cellphone ownerships (**50%** to access internet)

### Indonesia monthly data traffic expected to increase **5X**

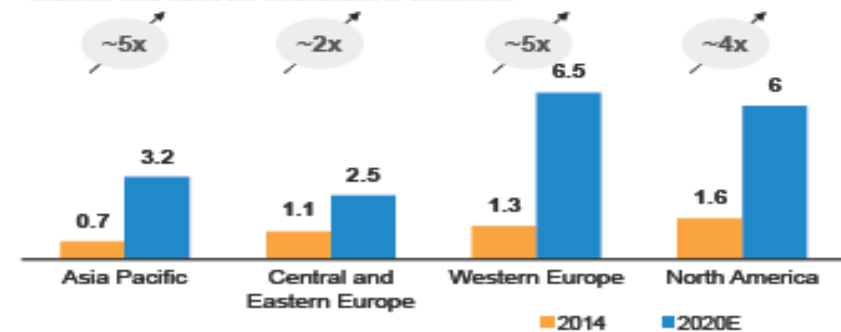
(Data traffic in Petabytes)



- Mobile data traffic to grow 3x fixed IP traffic from 2013-2018<sup>(1)</sup>
- Mobile IP traffic as % of total IP traffic to grow from 10% in 2013 to 34% in 2018<sup>(1)</sup>

### Exponential data traffic growth in Asia Pacific with room to reach developed markets scale

(Monthly data traffic per smartphone in GB/month)

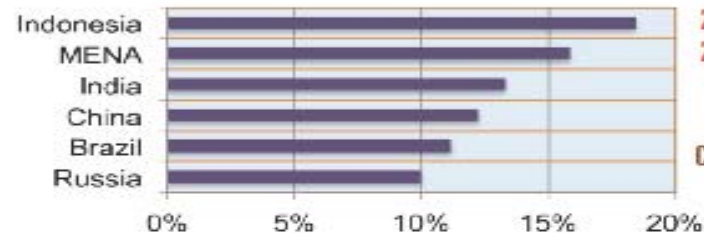


Source: AC Nielsen, Mary Meeker report, Cisco VNI, Ericsson mobility report and Equity research  
(1) As per Cisco VNI data



## Media Market in Indonesia ....

### Emerging Market Media & Entertainment Spending (CAGR 2013 - 2017)



Source: Redwin Asia, The evolution of the Indonesian TMT sector, July 2013

### Global Media & Entertainment Market

CAGR  
2012 - US\$1.7 Trillion  
2017 - US\$2.1 Trillion

CAGR 5.6%

Source:

### Indonesia TV Market

Fastest growing market  
2017 - US\$1.7 Billion

CAGR 21%

Source: PricewaterhouseCoopers



### Indonesia's US\$10 Billion Media Market

1. The Internet has overtook print and radio for the first time in 2012 in terms of reach
2. Television is still the dominant medium with near-100% monthly reach
3. All the media conglomerates are currently either implementing or conceiving online digital strategies
4. The young and tech-savvy consumer base is highly social media aware, and supports a huge advertising market that will soon exceed US\$10 billion.

Source: Redwing Asia

### Indonesia TV Market (Ads & Subs Revenue)

2011 - US\$1.5 Billion  
EBITDA - US\$510 Million

CAGR 18%

Source: Five Years

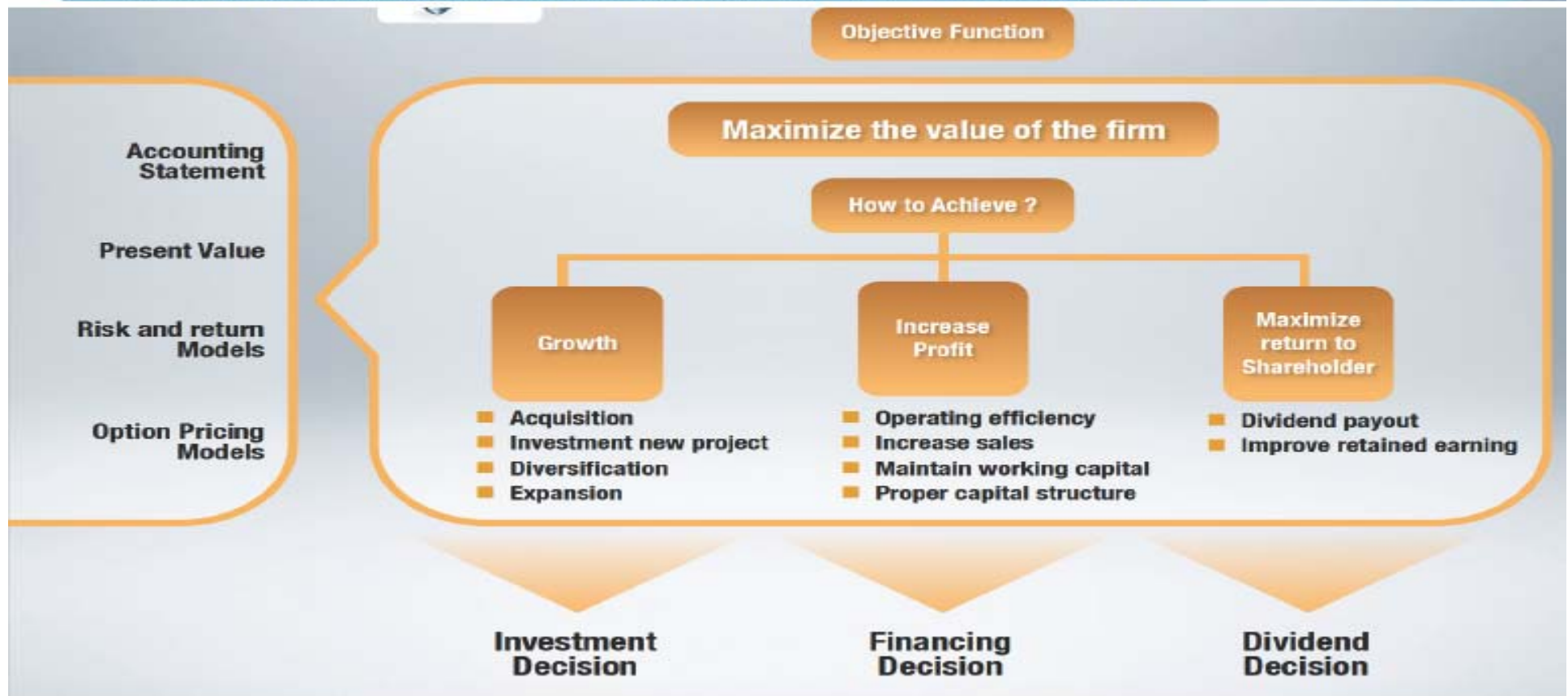
2016 - US\$3.3 Billion



Source: Media Partners Asia, Indonesia's Television Industry: The Next



## Finance professionals and Accountants: Back to Basics...





## Financiers and Accountants : Responsive Age ...

Core competences

1

### Agile and has sense of responses

- Adapt to changes
- Take quick responsive actions vs ignorances..
- Lead and provide sense of direction based on data analytics

2

### Strategic as New Base Line

- Move the role as feeder of financial information to strategic advisor role to CEO
- Strategy formulation and execution
- In an environment where "commercials" will change quickly, deep business experience = valuable

3

### Managing Risk

- The risks businesses face will grow, change, and become more difficult to calibrate and manage.
- A significant role to play in balancing vs potential risk impacts and plan out the different scenarios
- Understand better risk modelling skills

4

### Technologically adept

- Coming together of social, mobile, and Cloud technologies revolutionize day-to-day business practices.
- Use software to increase automation, better workflow, plug-and-play , and access to real-time information
- Use data many ways and offer an immediate, integrated view of business performance.

5

### Brilliant Investor Relation

- Telling story
- Keep shareholders informed with transparent story
- Need to "talk the same language" across a wide range of stakeholders

6

### Customer centric

- Understand the needs of different consumers and develop a culture that is customer-centric.
- Customer savvy, so taking on roles that provide greater customer understanding will be key.
- Changes in attitude towards serving broderless customers

Technical Competences



IKATAN AKUNTAN INDONESIA



Thank you!

**"MY JOB IS TO NOT BE EASY ON PEOPLE.  
MY JOB IS TO MAKE THEM BETTER."  
STEVE JOBS**