



# OTT Services : Impacts on Market and Network Operators

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# Agenda

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1. Introduction and Types of OTT Services
2. Impacts on Traditional Businesses
3. Impacts on Content Market
4. Impacts on Network Operators

# What is OTT?

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- There is no clear definition of OTT (over-the-top)
- Delivery of contents or services via the Internet and bypass traditional distribution, without requiring users to subscribe to a line dedicated to the delivery of the contents or services
- Services that come over the top are most typically related to media and communication and are generally, if not always, lower in cost than the traditional method of delivery.

# What is OTT? (2)

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- A variety of services are included in OTT such as YouTube, Line, Twitter, Facebook, Skype, and etc.
- Users can enjoy them with multiple devices such as PC, smart phone, tablet and other gadgets
- OTT providers offer their services through websites, software, applications and gadgets

# Why should we care about OTT?

2015 [edit]

This *Financial Times Global 500*–based list is up to date as of June 30, 2015. Indicated changes in market value are

1996–1999 [edit]

Click to reveal information for 1996–1999

This *Financial Times*–based list is up to date as of 31 March 2000.<sup>[52]</sup>















Rank	Name	Headquarters	Primary industry	Market value (USD million)
1	Microsoft	United States	Software industry	586,197
2	General Electric	United States	Conglomerate	474,956
3	NTT DoCoMo	Japan	Telecommunications	366,204
4	Cisco Systems	United States	Networking hardware	348,965
5	Wal-Mart	United States	Retail	286,153
6	Intel Corporation	United States	Computer hardware	277,096
7	Nippon Telegraph and Telephone	Japan	Telecommunications	274,905
8	Exxon Mobil	United States	Oil and gas	265,894
9	Lucent Technologies	United States	Telecommunications	237,668
10	Deutsche Telekom	Germany	Telecommunications	209,628

Third quarter <sup>[N 1]</sup>		Fourth quarter <sup>[N 2]</sup>	
	Apple Inc. ▼611,300.0		Apple Inc. ▼586,900.0
	Alphabet Inc. ▲441,500.0		Alphabet Inc. ▲535,100.0
	Microsoft ▲356,300.0		Microsoft ▲443,200.0
	Berkshire Hathaway ▼320,000.0		Exxon Mobil ▼324,500.0
	Exxon Mobil ▼308,300.0		Berkshire Hathaway ▼323,400.0
	Wells Fargo ▼262,800.0		Amazon Inc. ▲316,800.0
	Johnson & Johnson ▼258,300.0		General Electric ▲314,900.0
	General Electric ▲254,600.0		Facebook Inc. ▲296,000.0
	Facebook Inc. ▲253,000.0		Johnson & Johnson ▲284,200.0
	Amazon Inc. ▲240,100.0		Wells Fargo ▼277,700.0


# Types of OTT Services


OTT	Examples	Minimum Speed Req.	Challenge for the Network Operator	Implication for the Network Operator
<b>Content</b>	VOD such as Netflix, YouTube, Apple TV, Game online	4-10 Mbps	Substituting TV	Not in direct competition/Loss of audience (hence advertising) for traditional TV services
<b>Messaging and Voice Services (Communication Service)</b>	VoIP, Skype, Whatsapp, Wechat, Line, Viber	1 Mbps	Fixed and mobile telephony substitutes, SMS substitutes	Competition, loss of value of traditional services offered
<b>Other Applications</b>	Social Network, Facebook, Cloud, Twitter, LinkedIn, Ecommerce app, Amazon, airbnb	1 Mbps	Another medium for communication	Competition, loss of revenue of traditional services offered

# OTT Business Models

Business Model	Explanation	Examples of OTT Services
Advertisement	Revenue from selling targeted ads to corporations via multi-sided platform model	  
Subscription	Charge membership fee	  
Transaction	Charge per unit of services	  
Freemium	Basic feature sets are free and advanced functions have to be paid	  
Donation	Crowd funding platforms	 

# Impacts on Traditional Businesses

-  **amazon** has now surpassed Walmart in terms of market capitalization, not to mention about disrupting Barnes and Noble and Circuit City businesses

-  became the largest hotel chain without owning a single hotel

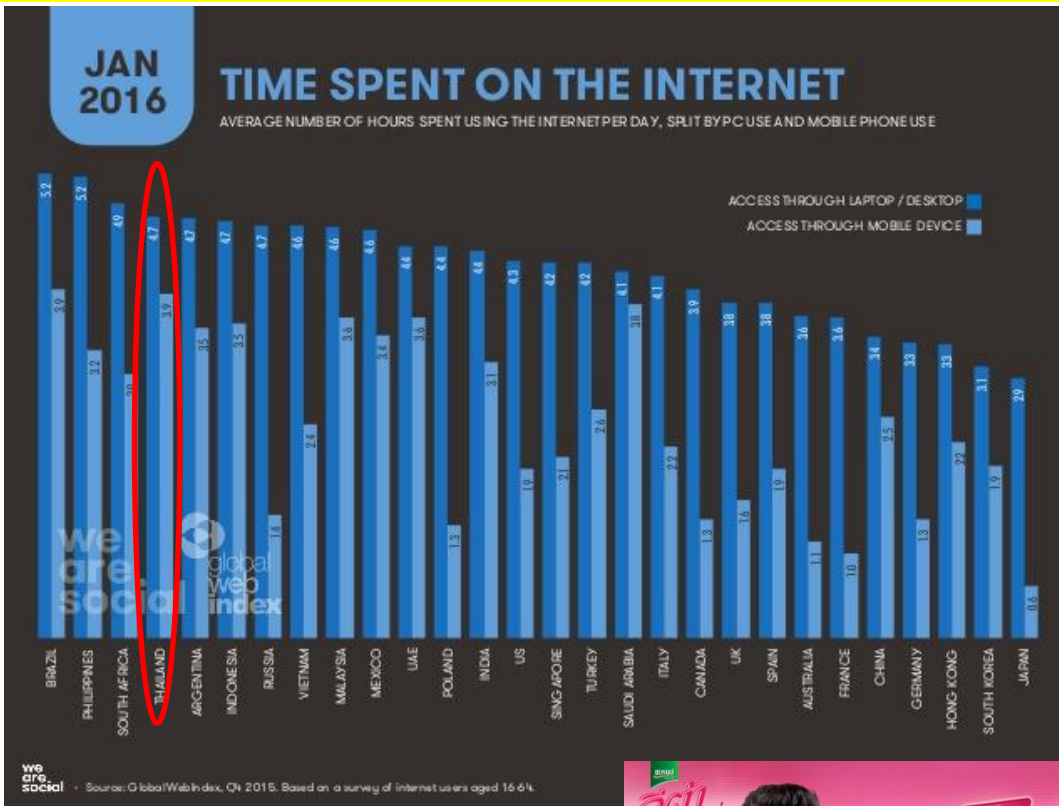
-  is revolutionizing taxi industry



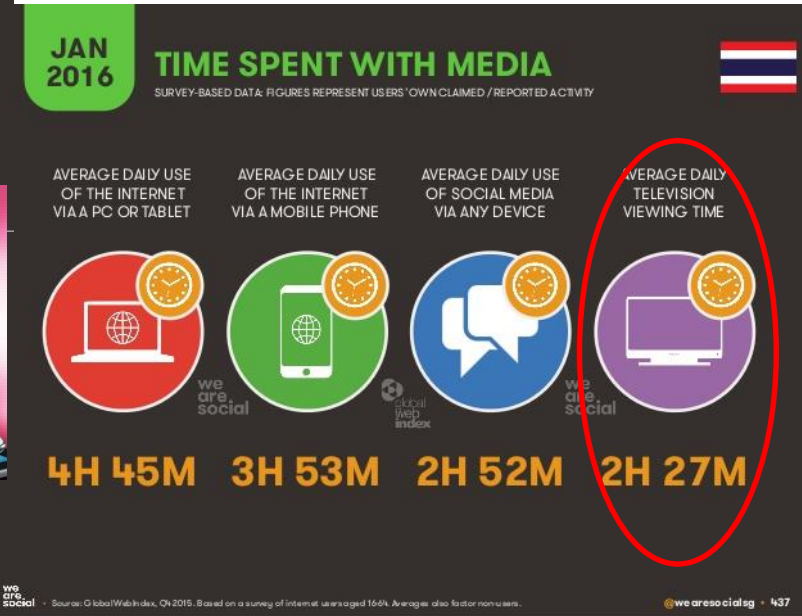
# Digital in Thailand



# Time Spent on the Internet

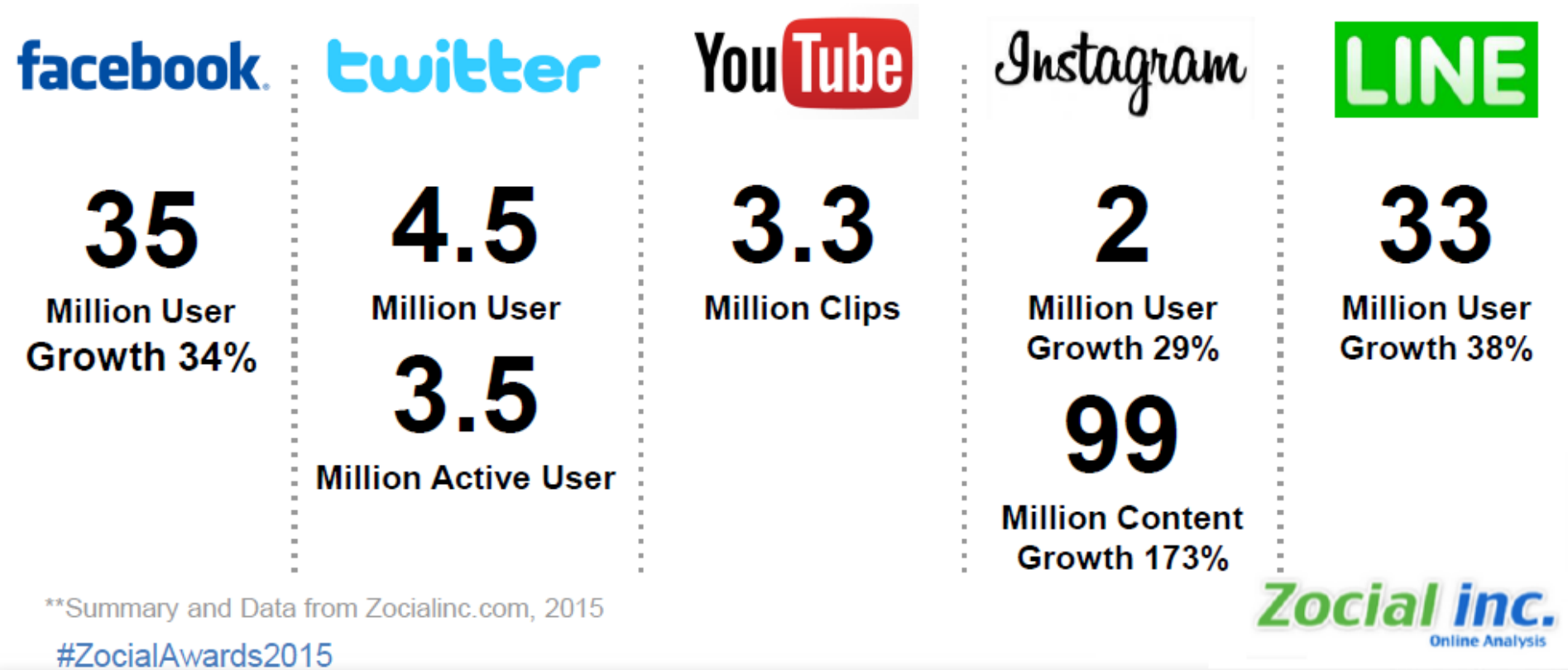


Thailand are 4<sup>th</sup> in the ranking of spending time on the Internet in a day behind only Brazil, Philippines, and South Africa



# Social Media in Thailand

## Summary Social Media in Thailand



# Impacts on Content Market

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- Advertisement
- Music/Video On Demand Subscription

# Advertising Budgets on Different Media

YTD Dec 2015 VS YTD Dec 2014 BAHT MILLIONS

MEDIA	2015	SOV %	2014	SOV %	DIFF	% Change
ANALOG TV	57,526	47.03	63,777	53.88	-(6,251)	-(9.80)
CABLE/SATELLITE	6,055	4.95	7,232	6.11	-(1,177)	-(16.27)
DIGITAL TV	20,930	17.11	8,581	7.25	12,349	143.91
RADIO	5,675	4.64	5,610	4.74	65	1.16
NEWSPAPERS	12,332	10.08	13,182	11.14	-(850)	-(6.45)
MAGAZINES	4,227	3.46	4,931	4.17	-(704)	-(14.28)
CINEMA	5,134	4.20	4,349	3.67	785	18.05
OUTDOOR	4,265	3.49	3,974	3.36	291	7.32
TRANSIT	4,478	3.66	3,813	3.22	665	17.44
IN STORE	639	0.52	1,964	1.66	-(1,325)	-(67.46)
INTERNET	1,058	0.86	950	0.80	108	11.37
TOTAL	122,318	100.0	118,364	100.0	3,954	3.34

Advertisement via traditional media such as analog TV, cable, Satellite, and printed ones are decreasing, while **online advertising is increasing**

# Advertising on the Internet by Discipline

	2011	2012	2013	2014	FC-2015
Display	48.1%	41.5%	41.0%	28.1%	27.2%
Search	14.7%	18.9%	20.2%	21.2%	19.7%
Facebook	Not measured	5.3%	6.0%	16.0%	16.5%
Video	Not measured	10.9%	11.1%	14.0%	15.6%
Creative production	25.5%	12.9%	12.2%	9.1%	9.7%
Social media	10.3%	6.7%	6.2%	5.6%	4.4%
Instant Messaging	Not measured	Not measured	Not measured	3.6%	4.5%
Mobile marketing	0.8%	1.8%	1.9%	1.6%	1.2%
Others	0.7%	1.9%	1.6%	0.9%	1.1%
Total	100%	100%	100%	100%	100%

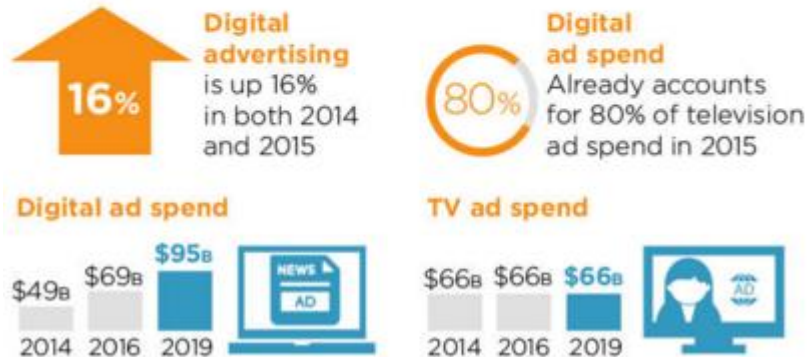
Online Advertising via display (banner) is decreasing while increasing on Facebook and Video ad. ➔ More Targeted Advertisement



# Trends in Advertising Budgets

## DIGITAL ADVERTISING TO OVERTAKE TV

Digital advertising is expected to become the biggest media category in 2016, overtaking television. TV spend, is projected to stay at current levels.



## MOBILE WILL BE THE FASTEST GROWING SEGMENT

Mobile is expected to be the fastest growing advertising segment in 2016.

The channel already accounts for



year-over-year growth in digital video ad spend

## KEEP AN EYE ON DIGITAL VIDEO

Digital video advertising has grown by more than a third year-over-year, and now accounts for \$5 billion in spend.

Facebook's share of U.S. online time:



1 out of every 6 minutes spent on the Internet are spent on Facebook.



More than 1 out of every 5 minutes spent on smartphones are spent on Facebook.

# YouTube

## YouTube Thailand 2014

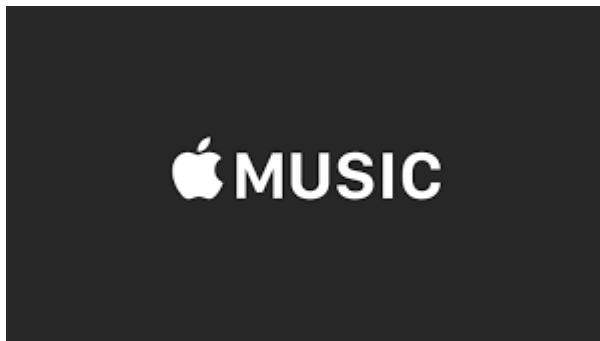


\*\*Data from Zocialinc.com, 2015

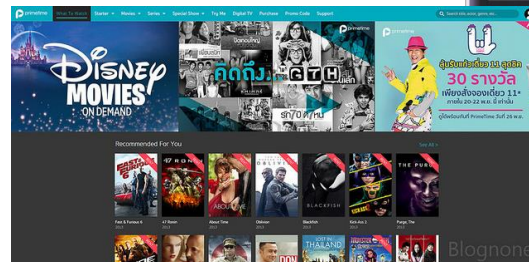
\*จาก 1,000 คลิปแรกที่มียอด View สูงสุด ที่ถูกอัปโหลดในปี 2014



# OTT Players in Music Market



# OTT Players in the VOD Market



# Why it draws attention to Network Operator?

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- Focus is shifting toward network capacity hungry applications and services such as video content delivery
- So, in a sense, it can be regarded as delivery of video content through Internet rather than traditional broadcasting channels
- It is because a “free-rider” problem is more serious in the supply of these services

# OTT services involve conflict with network operators

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- Free rider of Internet
- Conflict occurred between network operators' service and OTT services
  - Skype – free voice and video communication
    - more attractive services than operators' pay voice and video communication services
- A negative impact on network provider
  - OTT ↑ → Speed and capacity of network ↓ → Quality ↓
    - Investment ↑
    - Cost ↑

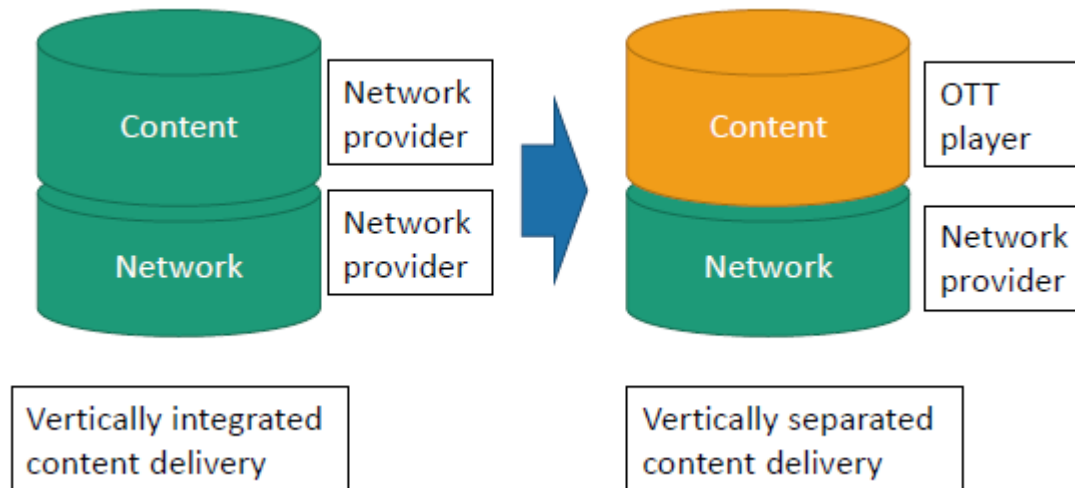
# Why OTT should be regulated?

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- Network providers present their complaint that OTT damages their business and will lose incentives to invest because
  - OTT doesn't pay for the network.
  - OTT services can be regarded as a new form of “cream skimming.”
  - OTT services affect customers using other services as OTT may flood the network with their services.

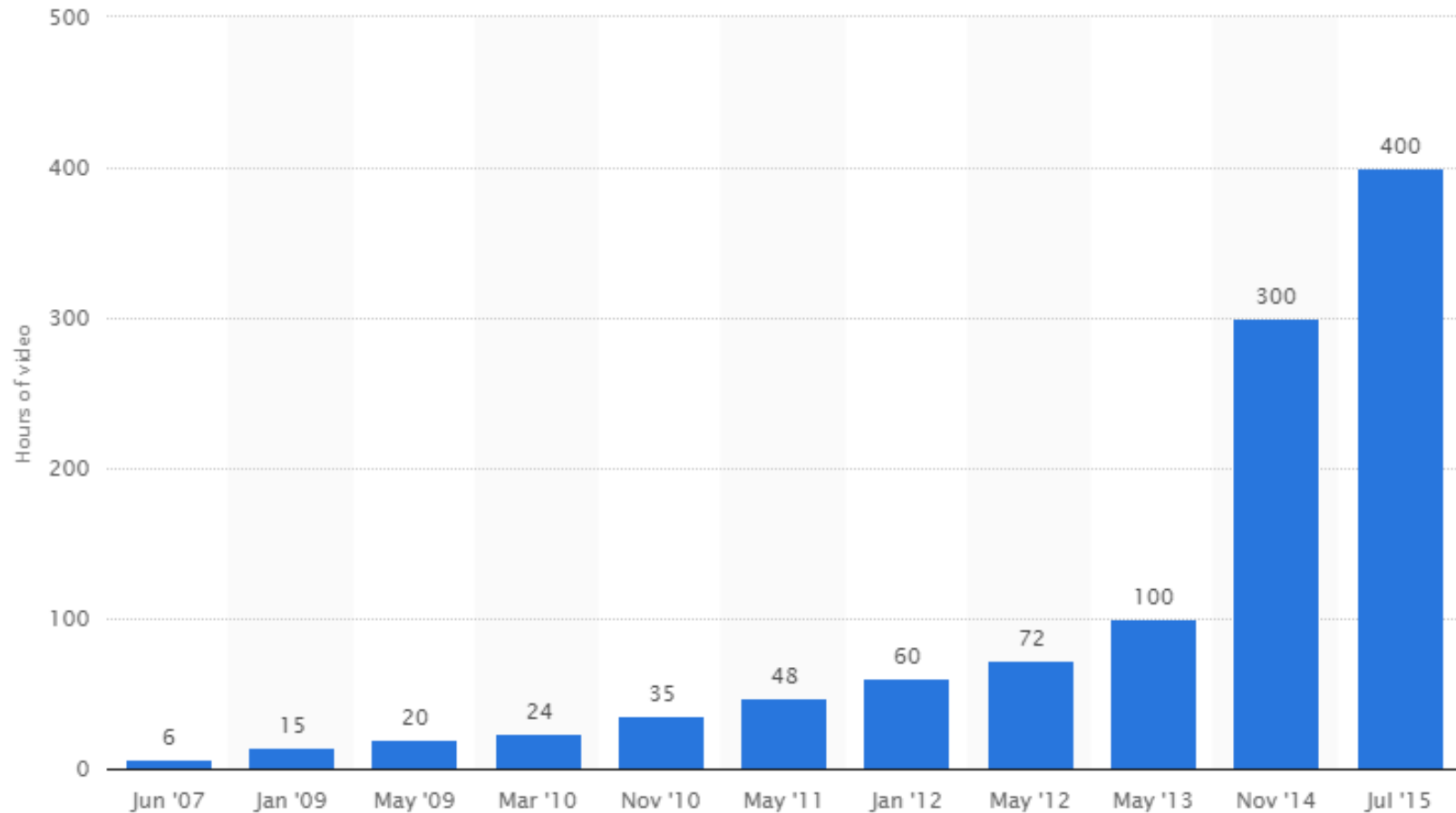
# Network can be a dumb pipe

- Due to the dominance of OTT in the content market, network provider only play the role of infrastructure



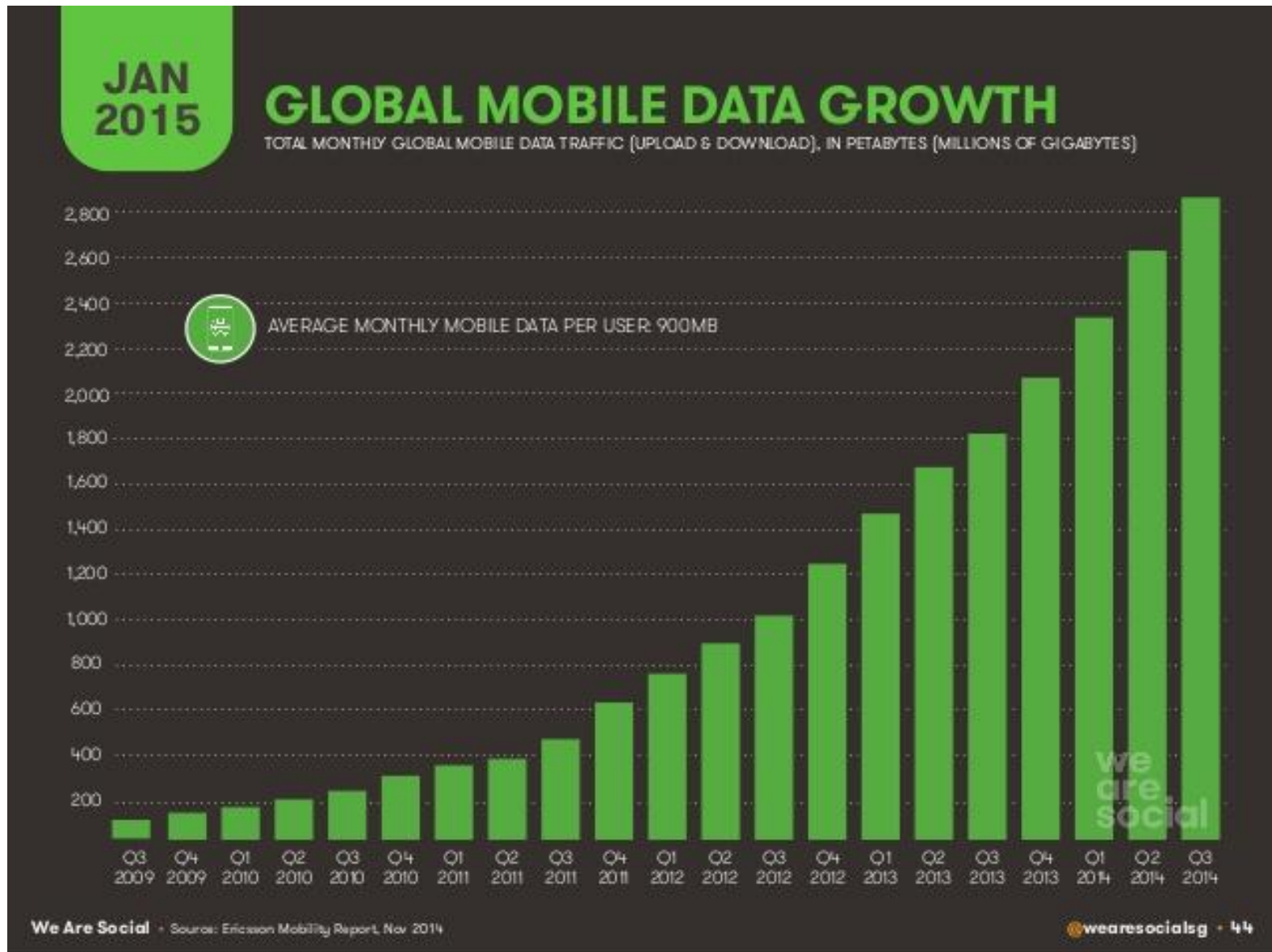
# Burdens on Network Operators

Hours of video uploaded to YouTube every minute as of July 2015





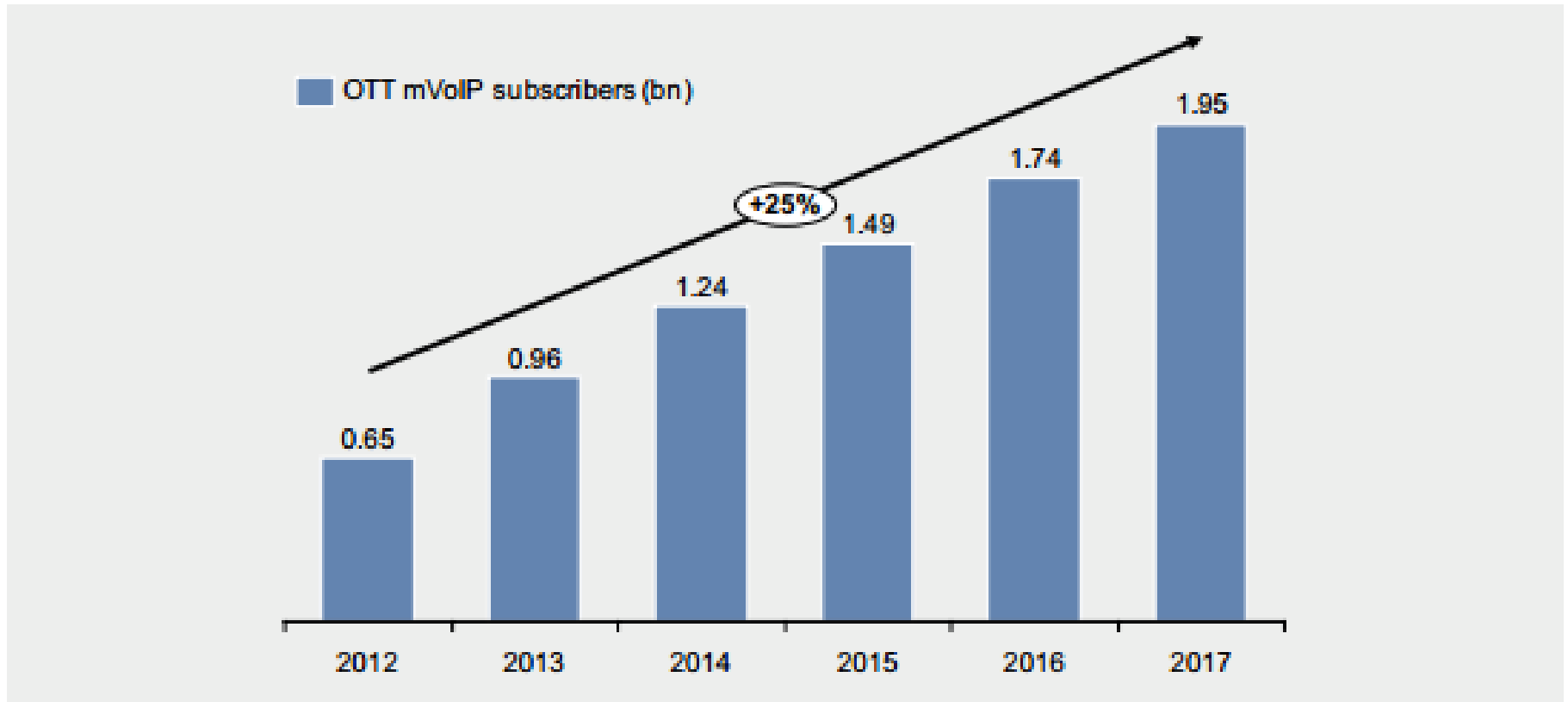
# Burdens on Network Operators (2)





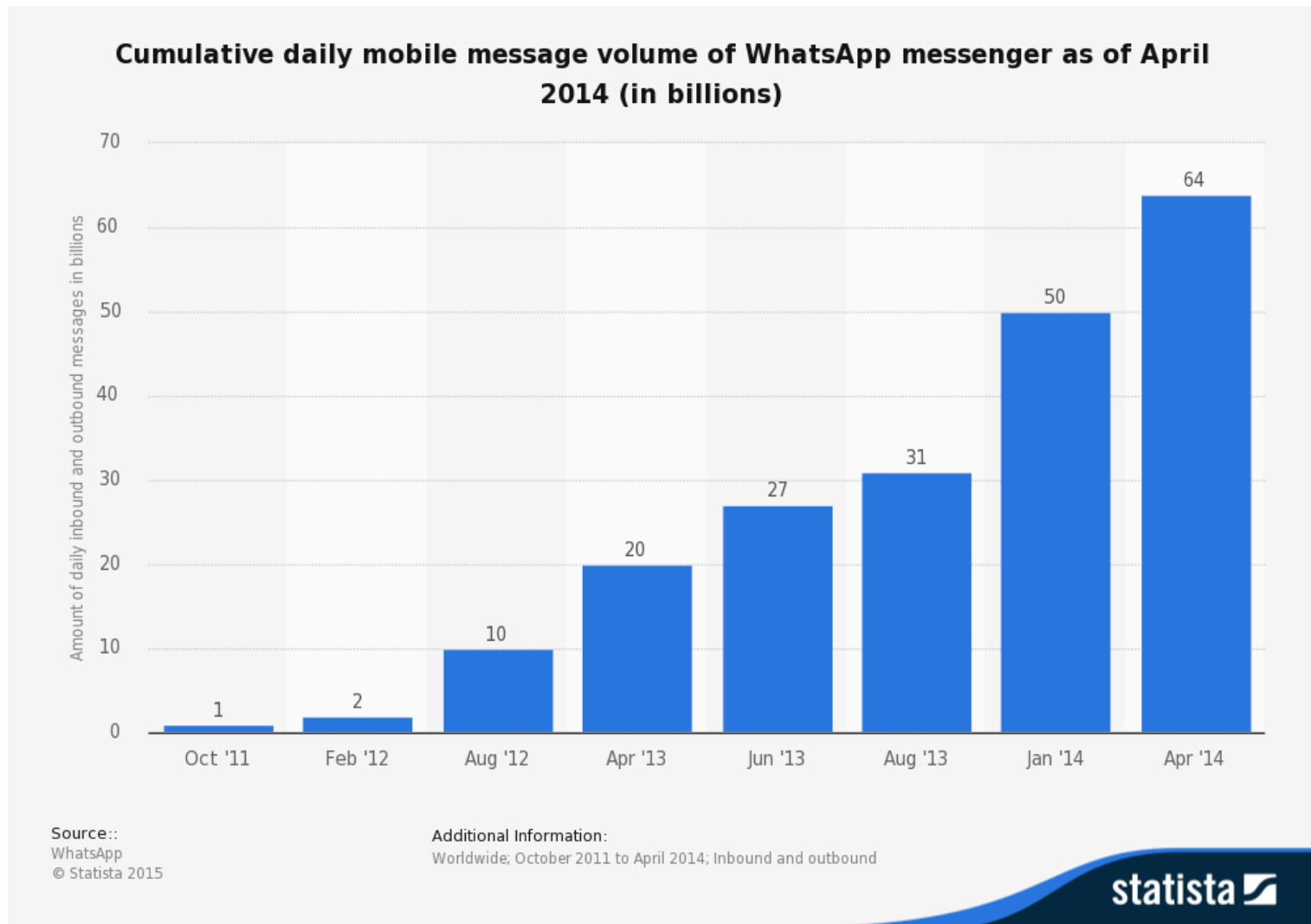
# Impacts on Network Operator (1)

## Global OTT mVoIP subscribers



As more people use VoIP, voice revenues to operator tend to decrease

# Impact on Network Operators (2)



More OTT messages mean fewer SMS or MMS

# What happened on New Year 2016?

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- **AIS** – Data usage up by **226%** over average day and by **3 times** compared to last year, while SMS and MMS down **53%**
- **DTAC** – Internet Usage up by **200%** over last year
- **True** - Data usage up by **6 times** compared to last year, while SMS down **50%**
- All these due to OTT services such as Facebook, Line, Instagram, Twitter, and Whatsapp

# Social Media in Thailand

facebook

**35**

Million User  
Growth 34%

twitter

**4.5**

Million User

**3.5**

Million Active User

You Tube

**3.3**

Million Clips

Instagram

**2**

Million User  
Growth 29%

**99**

Million Content  
Growth 173%

LINE

**33**

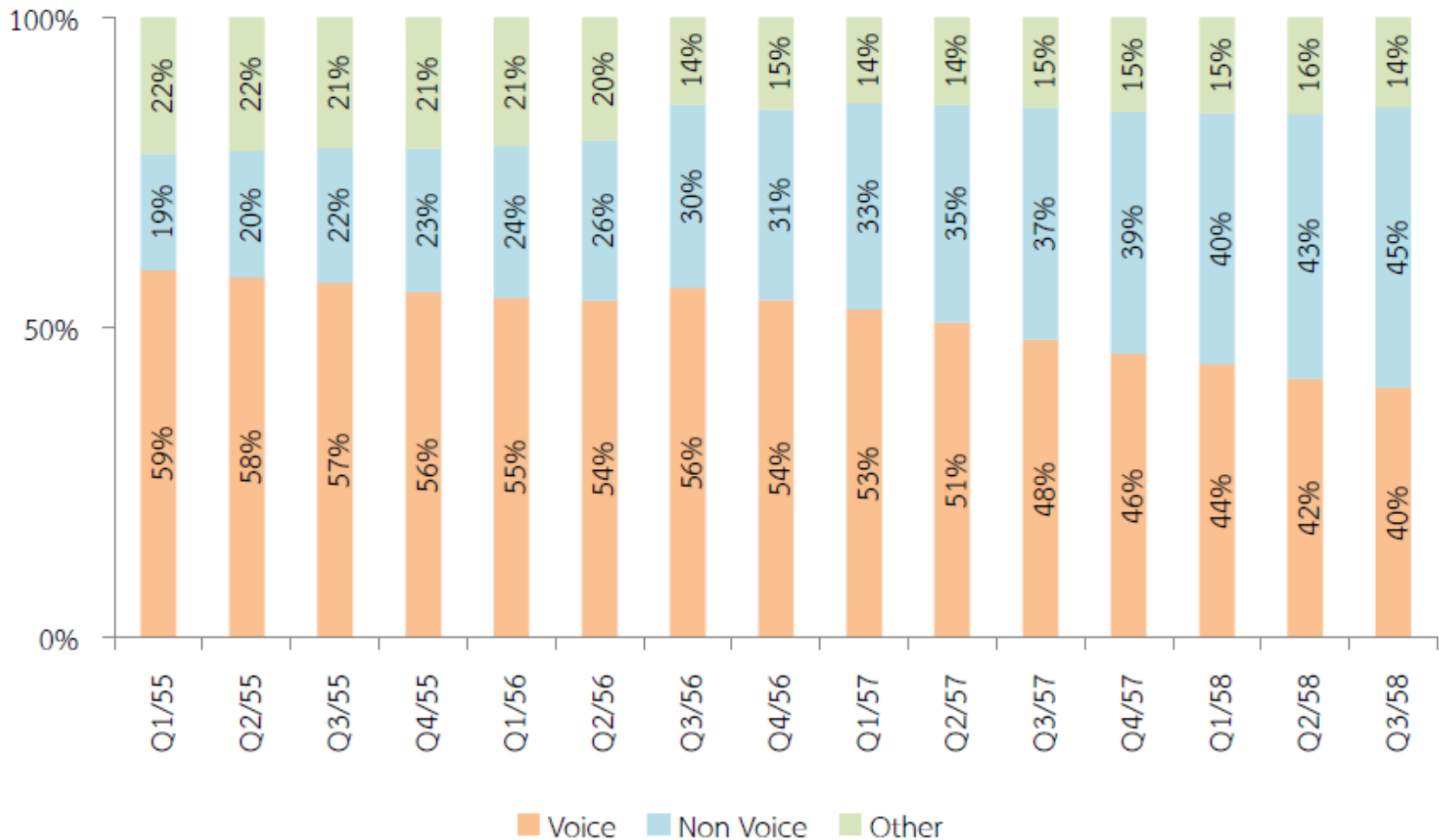
Million User  
Growth 38%

\*\*Summary and Data from Zocialinc.com, 2015

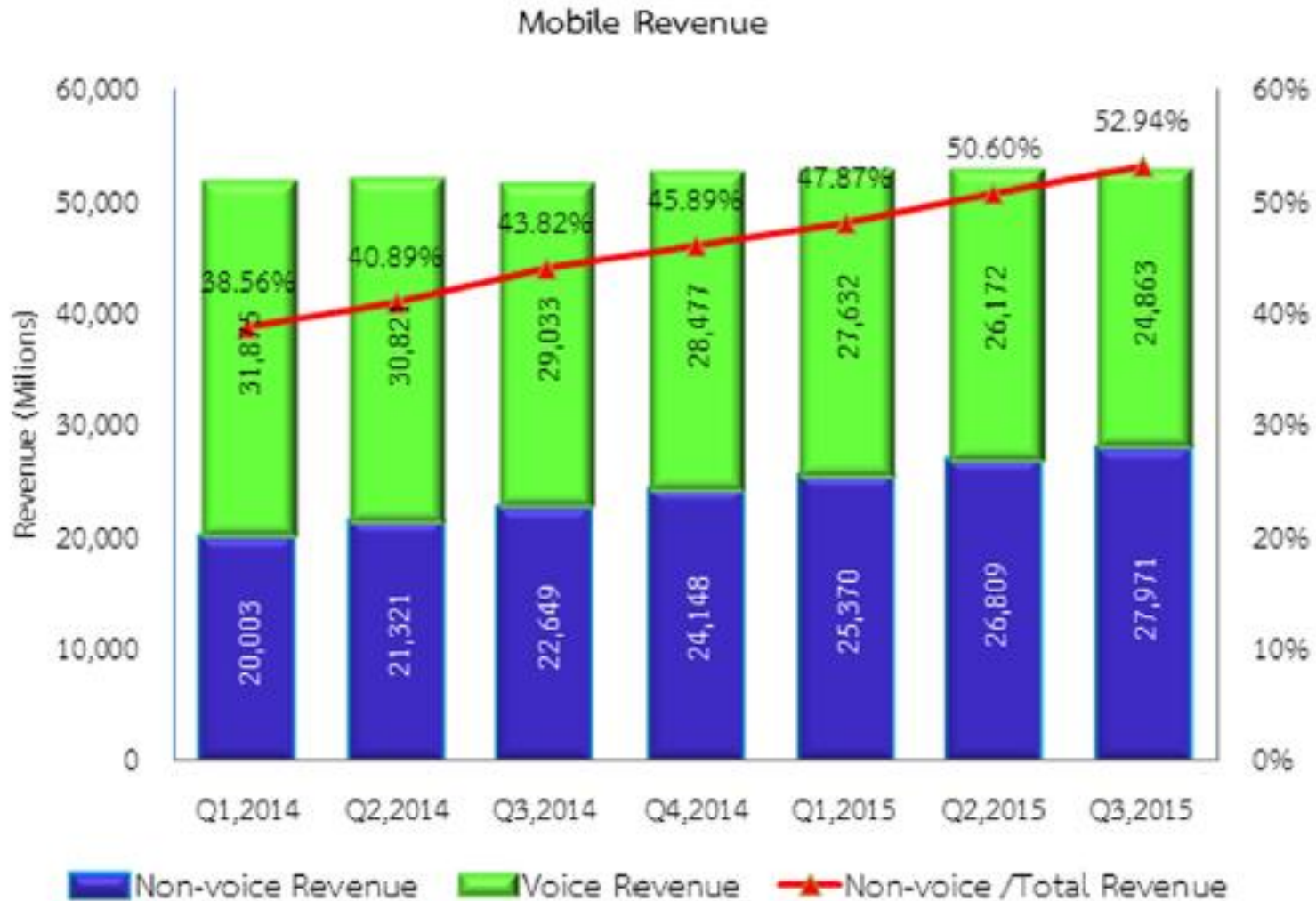
#ZocialAwards2015

**Zocial inc.**  
Online Analysis

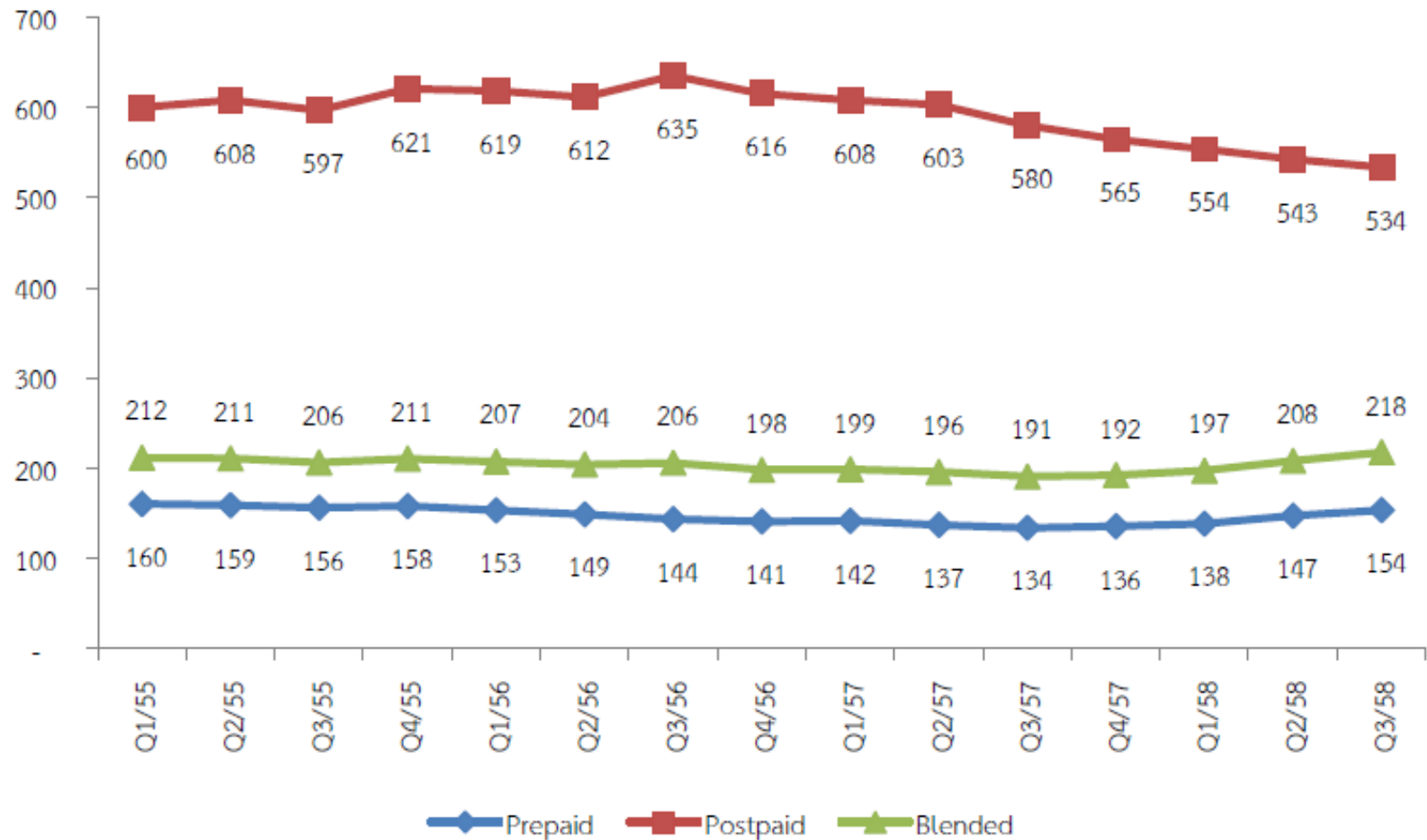
# Revenues by Service Types in Thailand



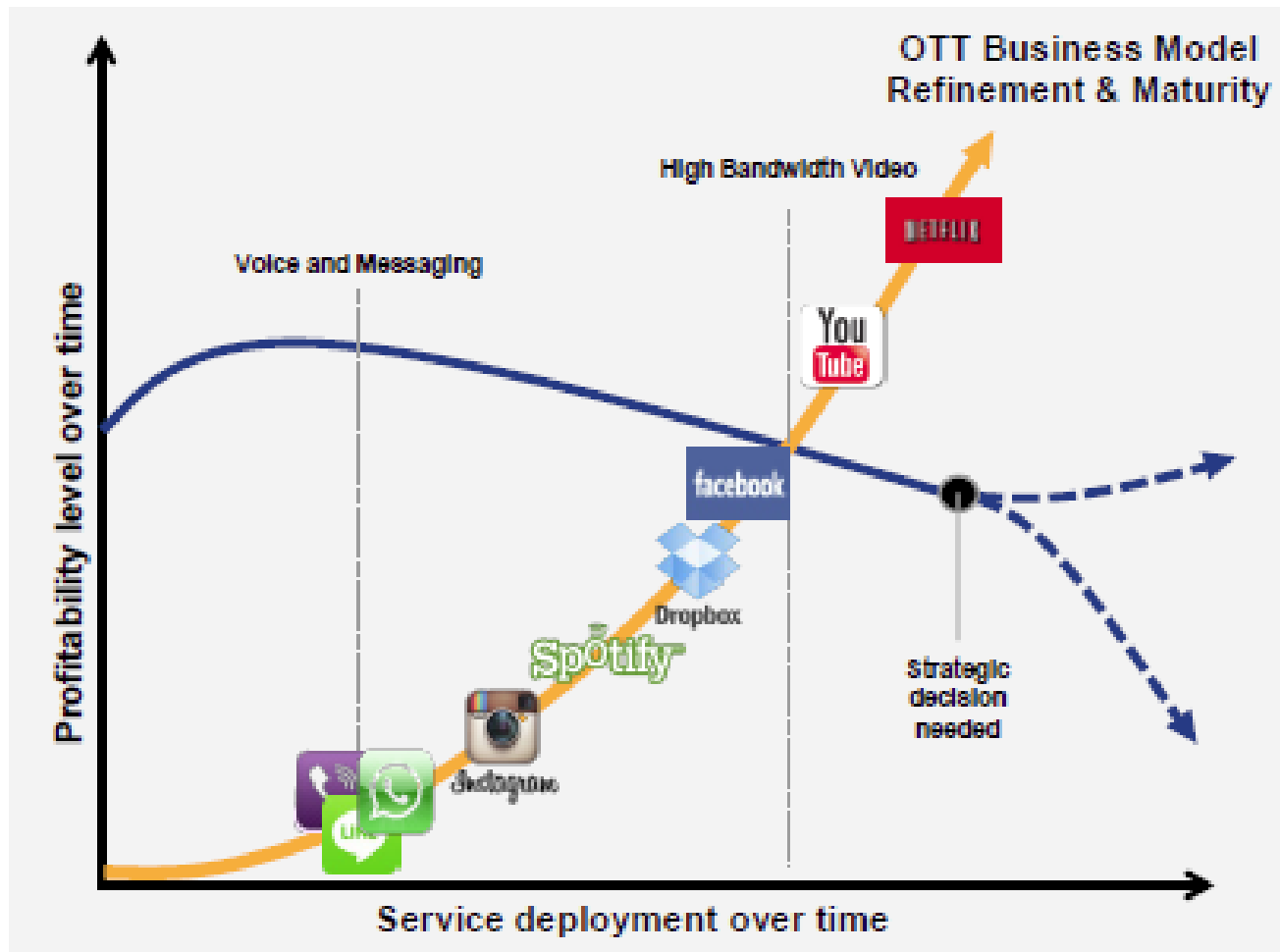
# Mobile Revenue



# Average Revenue Per User



# Operators face a crossroad regarding OTT impact on their business





# The Unlevel Playing Field

Regulation	Network Operators	OTT Players
<b>Licensing</b>	Subject to license and license fee	No license required
<b>Quality of Service</b>	SLAs included in the license	No quality requirements
<b>Interconnection</b>	Interconnection mandated	No interconnection required
<b>Universal Service</b>	Usually subject to USO	Not subject to US regime
<b>Consumer protection</b>	Subject to consumer protection policy	No or little enforcement power
<b>Legal interception</b>	Usually license condition	Country dependent
<b>Taxation</b>	Subject to national tax regime	Service dependent

# Options for Network Operators

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- Do Nothing
- Focus on the network business
- Block some OTT services or make the services unattractive
- Come up with new OTT services and offer to their customers
- Partner with OTT players
- Maybe finance to startup companies to come up with new services (becoming a Venture Capital)

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Thank you very much for your attention!

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