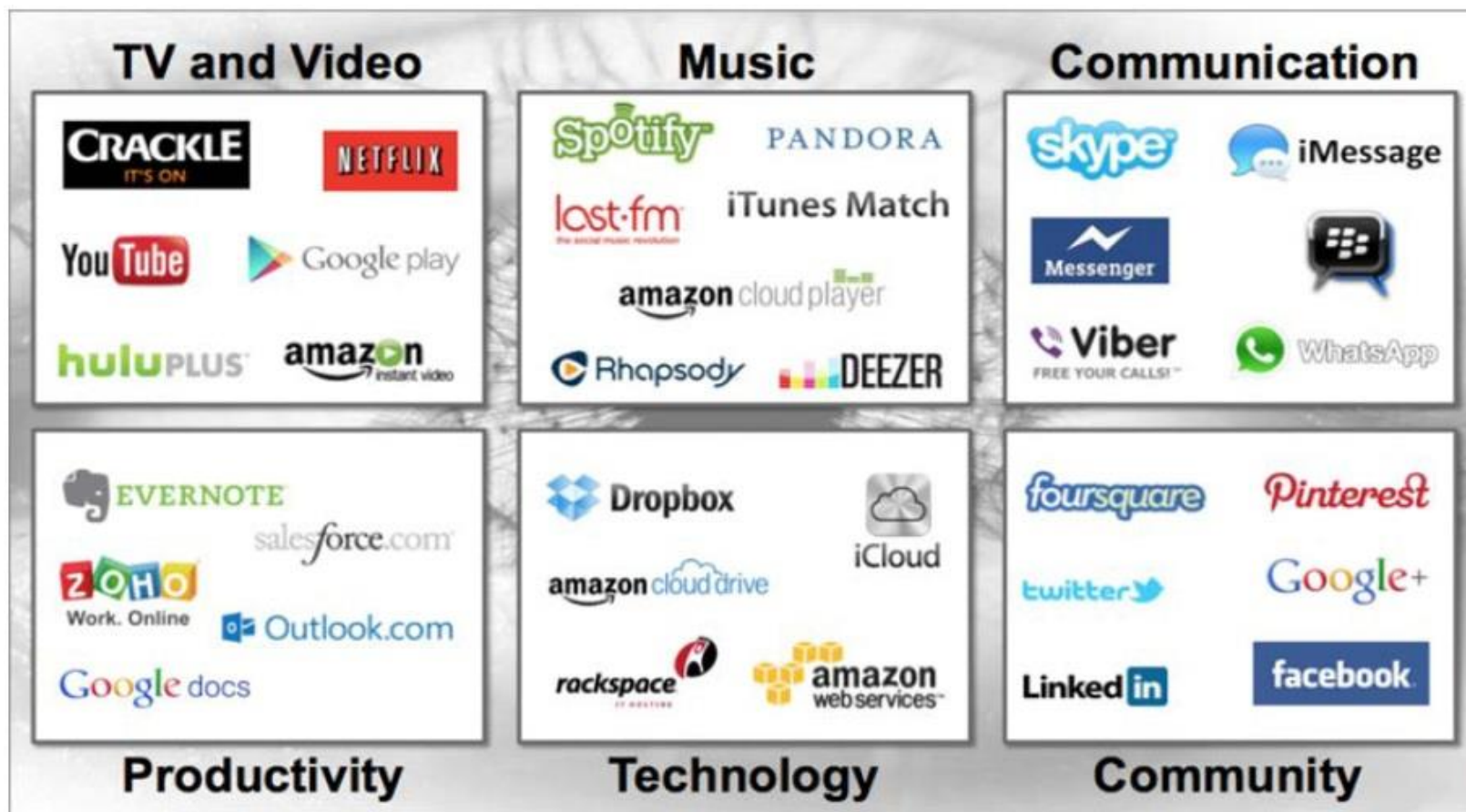


IBB and OTT Media Services in the Asia-Pacific

New Delhi, India
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Definition of OTT



Any Content and Applications Provider (CAP) providing online services that can be regarded as potentially substituting for traditional telecommunications and audiovisual services such as voice telephony, SMS and television¹

Source: <http://ottsource.com/ott-blog/>

¹Directorate General for Internal Policies, EU: OTT Players, Market Dynamics and Policy Challenges

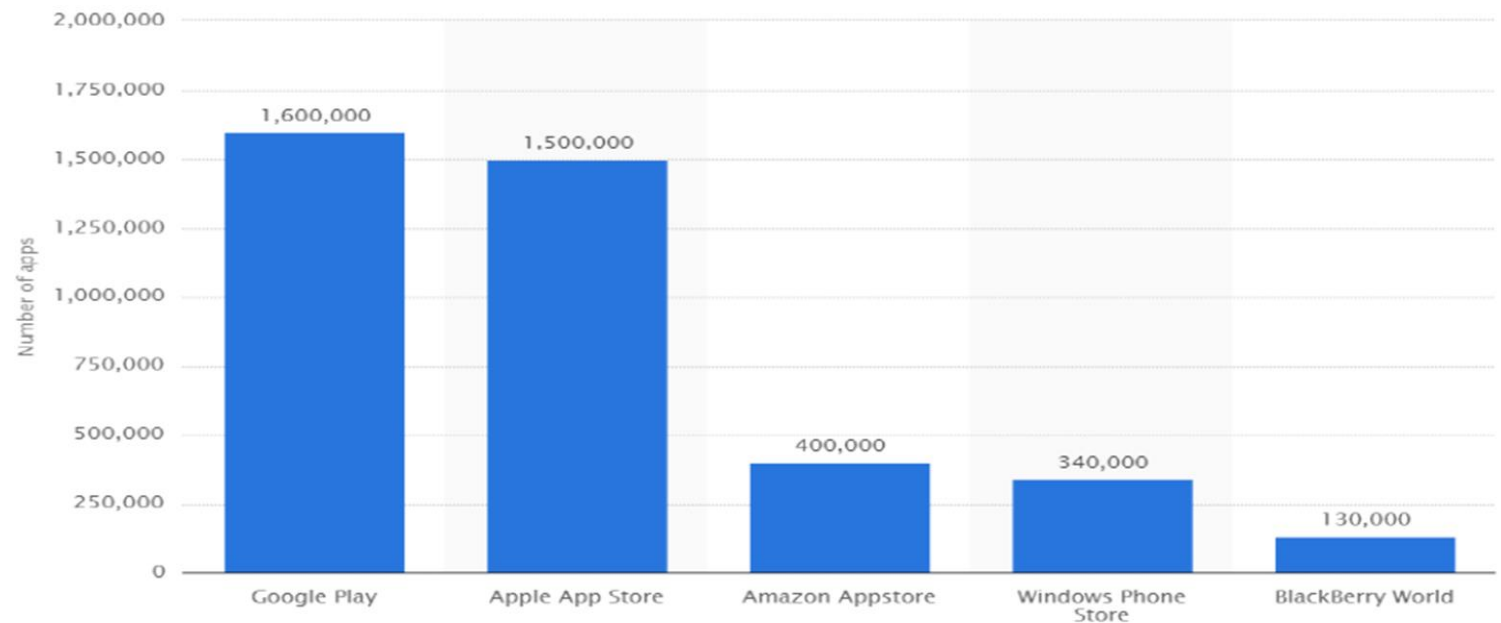
What is App Economy ?

The app economy has unleashed a 'virtuous cycle', transforming multiple economic and social activities on its way, opening up new channels of innovation, productivity and communication. The rise of the app economy and ubiquity of smart mobile devices create great opportunity for companies who can leverage global scale solutions and systems.

Technology design deployed by disruptive app companies – such as Uber or Airbnb – reduces transaction costs while allowing for increasing economies of scale. The outlook for both network operators and over-the-top providers (OTTs) is bright as they benefit from the virtuous cycle – as the ICT sector outgrows all others, innovation continues to power ahead creating more opportunities for growth.

The app economy is defined as the sum of all economic activity, products and services, required to deliver app functionality to end users via mobile broadband services.

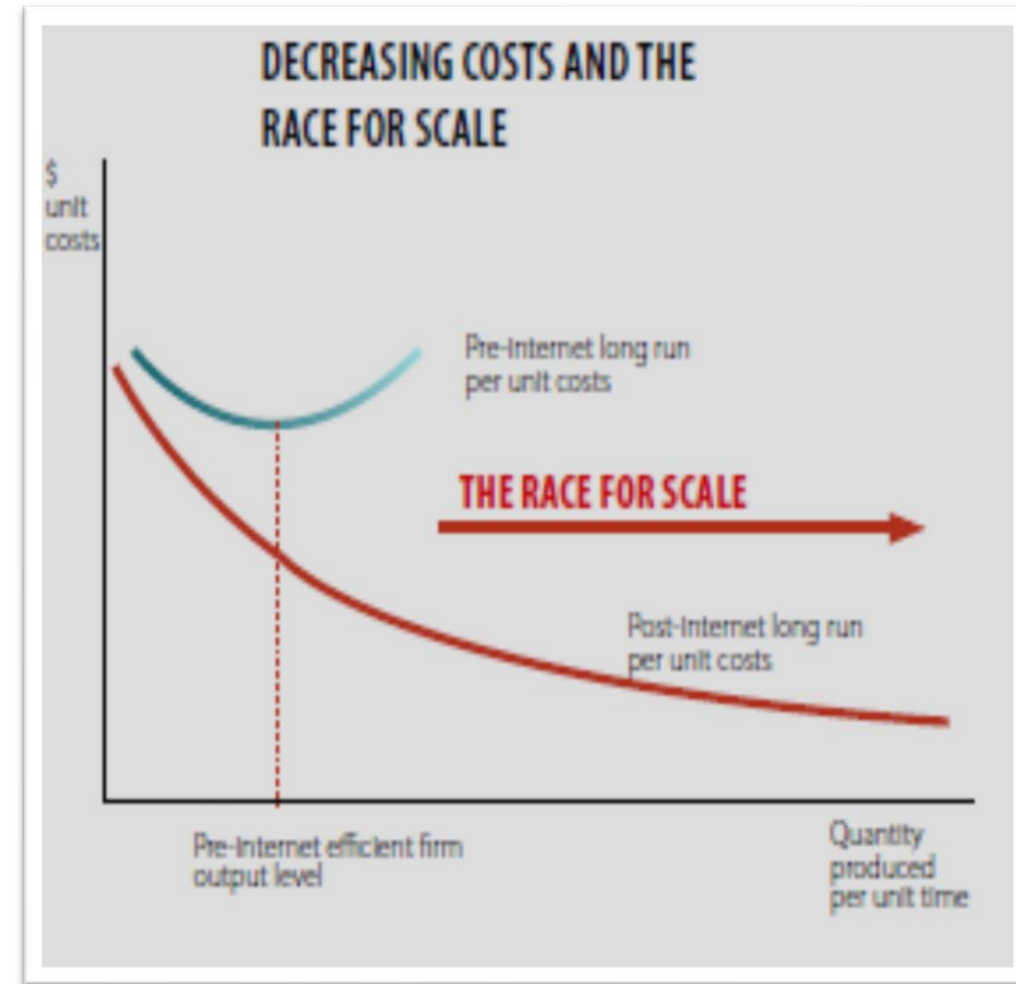
Figure 2: Number of apps available in leading app stores as of July 2015



Source: www.statista.com/statistics/276623/number-of-apps-available-in-leading-app-stores/ (accessed 26/12/15)

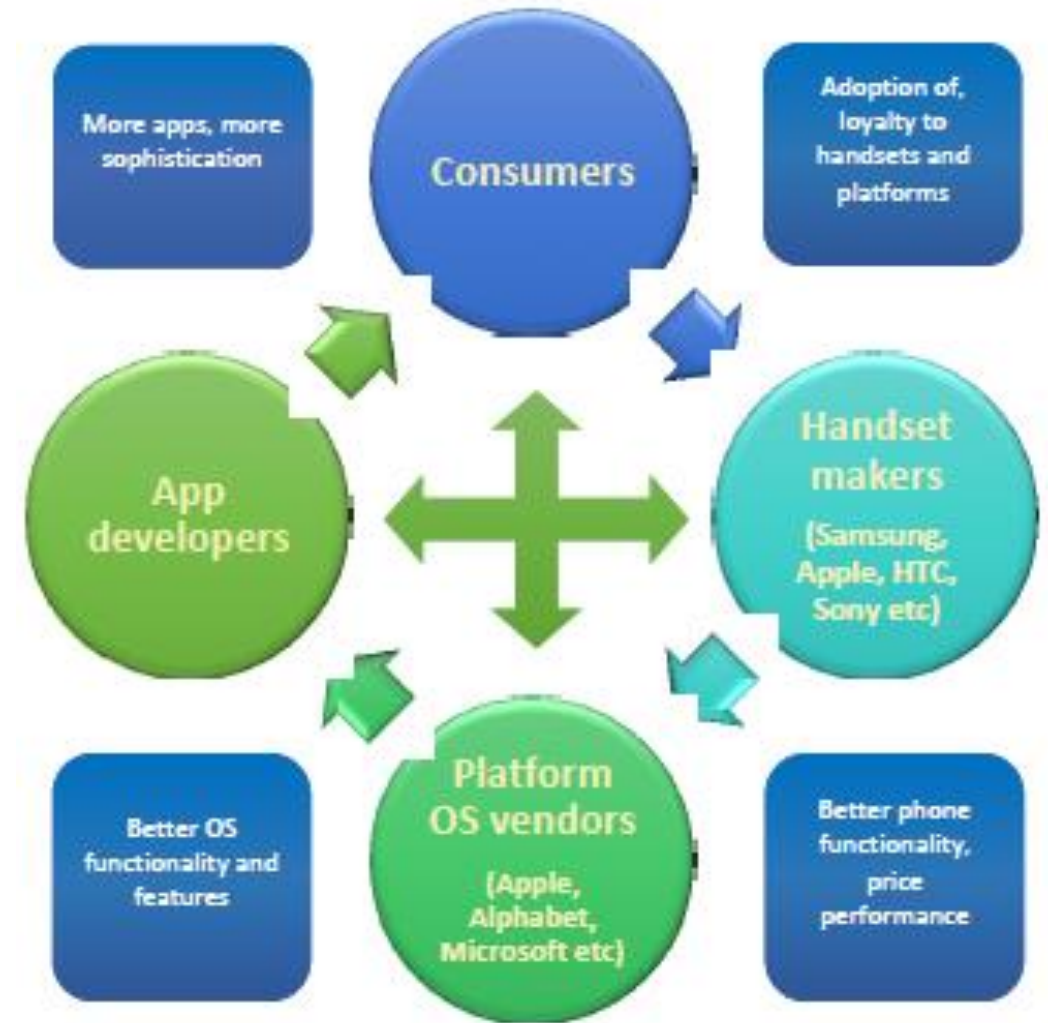
OTTs and Race for the Scale

- The rise of the app economy and ubiquity of smart mobile devices create great opportunity for companies who can leverage global scale solutions and systems.
- The growth of OTTs is driven by falling transaction costs, falling organizational costs and increasing economies of scale.
- Businesses featuring physical products, stores and factories cannot grow indefinitely since their physical assets will become too large to manage effectively and unit costs will rise.
- Economists characterize this as ‘diseconomies of scale’ (represented by the upward slope of U-shaped blue curve in Figure here). The point at which unit costs start to rise marks the ‘maximum efficient scale’. While this maximum efficient scale is small compared to the entire market size, there will be room for several large firms to compete in the market.
- In the digital world, the traditional long-run cost curves are superseded by long-run cost curves that see unit costs continue to fall regardless of production levels (the red curve) – i.e. diseconomies of scale never set in. Under such conditions, firms that identify new business models are in a global race with competitors. As companies like Uber or Airbnb pull ahead of the competition, their unit costs fall and competitors can no longer keep up.



The APP Economy Ecosystem

- The app economy ecosystem is an interacting set of handset makers, platform owners, app developers and consumers in a highly competitive and dynamic technological environment
- It is characterised by interacting sets of network effects:
 - More consumers per platform, the more profitable will be app development for that platform
 - More apps and better apps will attract more consumers
 - Handset manufacturers achieving greater scale will lower unit costs, fine tune production value chains, enabling more competitive handset market
 - Better handsets mean more consumers and so on...



Regulatory imbalances between traditional and OTT operators

Areas of Regulation	Network Operators	OTT Players
1. Applicable laws	Domestic law or in Europe EU regulations	Home jurisdiction maybe; many gaps in applicable laws
2. Taxes	Local and domestic taxes	Located in low cost locations and tax havens
3. Licensing	Must be granted or acquire licence from national Governments	Mostly exempt
4. Operating Area	Only serve customers within the jurisdiction	Serve any user globally
5. Infrastructure/ Network	Investing in new technology networks to deliver services to end users	No investments in networks that reach end users while telcos must deliver competitors services
6. Competition	Strict rules applying including ex ante & per se rules, M&A restrictions	Mostly exempt except M&A if OTT subject to domestic competition law
7. Fees	Customers' charges contribute to the costs of network provisioning	<ul style="list-style-type: none"> Services offered without any relationship to the underlying costs; two sided markets
8. Quality of Service	License requirements include SLAs and/or mandatory QoS standards	<ul style="list-style-type: none"> No QoS guarantee QoS issues blamed on network provider
9. Inter-connection	<ul style="list-style-type: none"> Required as part of regulatory regime Additional costs 	OTTs have no interconnection requirements for calling or messaging
10. Net neutrality	<ul style="list-style-type: none"> If applicable, best effort data transport without discrimination, independent of source or nature of data. Only typically traffic management permitted 	No obligations (control over content and freedom of choice concerning customers) OTTs could be affected if Network operators apply traffic management restrictions
11. Emergency services	Mandatory provisioning as part of licence conditions	Typically no such obligations
12. Interception	Strict regimes with costs borne by operator	Typically no such obligation

Areas of Regulation	Network Operators	OTT Players
13. Retail Prices	Regulators' approval is typically needed in advance	No need for approval and maybe free for users
14. Universal Service	<ul style="list-style-type: none"> Mandated USO contributions as a percentage or network revenues 	No contribution
15. Spectrum fees	Required to acquire in an auction or pay market based fees for usage	No additional costs for OTT
16. Privacy	Strict data protection and privacy requirements for users	Practiced on a limited and generally voluntary basis
17. Number Portability	Obligation to offer number portability between providers	OTT service independent from mobile number

Source: Moktar Mnakri, Regulating "Over-The-Top", Services - Need and Efficiency, Arab Regional Forum on "Future Networks: Regulatory and Policy Aspects in Converged Networks". 19-20 May 2015 as augmented and modified by Windsor Place Consulting.

ICT Regulators at the forefront of dealing with new challenges : OTTs and OSPs

Box 17:

WHAT REGULATORY TREATMENT FOR OTTs? THE EU RESPONSE

Following the adoption of the EU Digital Single Market strategy in 2016, the European Commission proposed a new European Electronic Communications Code which merges four existing telecoms Directives (Framework, Authorisation, Access and Universal Service Directive), which also cover OTTs.

The new Code proposes that new online players who provide equivalent communications services to those provided by traditional telecoms operators are covered by similar rules, in the interest of consumer protection. However, the Commission has been careful that such regulation is not extended unduly.

Communications services which use numbers to enable all end users to reach each other (i.e. to call phone numbers/be reachable via a phone number) are very similar to traditional telephony and SMS services. The new Code clarifies that such services will have to provide contractual information to their customers, and also the switching and emergency call rules apply. End-users will also be able to call harmonized numbers with an important social value (e.g. missing children helplines).

On the other hand, over-the-top (OTT) services that do not use numbers (e.g. WhatsApp) will be subject to more focused obligations. They will have to make sure that:

- their servers and networks are secure
- disabled users have equivalent access to their services
- their users can reach the EU emergency number 112 if there is evidence it is needed for public safety reasons and that the technical standards are available.

Source: European Union.

Seventeen ICT regulators have so far been assigned to deal with the new and challenging areas of over-the-top (OTT) players and online services providers (OSPs), such as Google, Facebook and Alibaba. From the start these areas were not clearly defined and their monetization potential was largely underestimated. The issues involved in regulating such areas are certainly complex and multi-faceted and for the time being there is no universal agreement on what would constitute good OTT/OSP regulation. National views on issues like net neutrality, content regulation and even the definition of regulated services or relevant markets diverge significantly. The 17 countries which have assigned ICT regulators to take on these challenges include Australia, Bulgaria, Canada, Iran, Trinidad and Tobago, and Viet Nam. The current EU approach to regulating OTTs is highlighted in Box 17.

Panelists will Discuss

- Key issues facing the industry and the regulators
- Practical aspects of implementation from global deployments and challenges
- Addresses some successful implementation from Asia-Pacific region and role various stakeholders are playing to make it happen
- Standards and best practices
- Possible approaches for consideration

ITU : I Thank U