



MOBILE INDIA 2015

Session 4

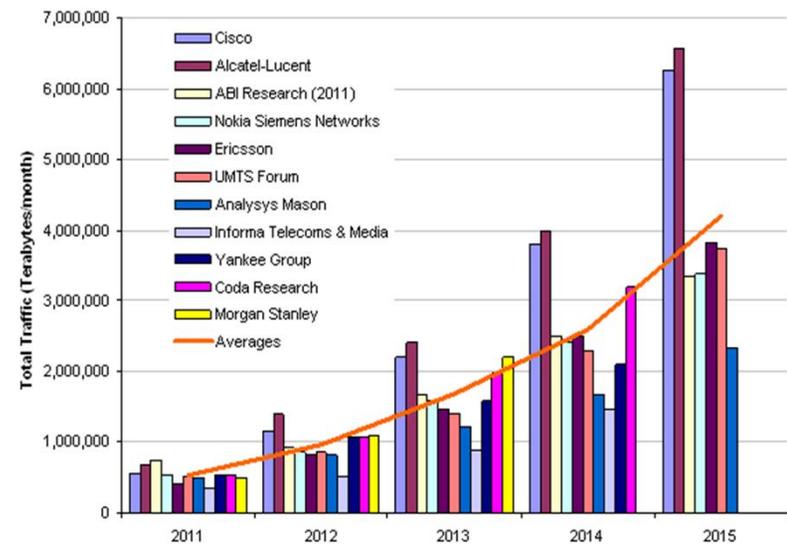
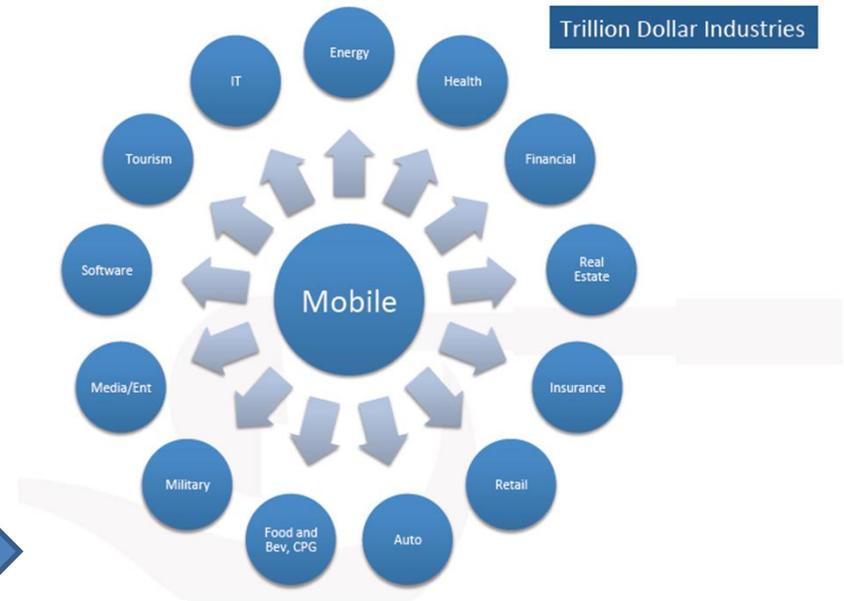
% Regulation and Policy: Power of OTTs vs. Telcos+

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Data transforming Service and Application value chain

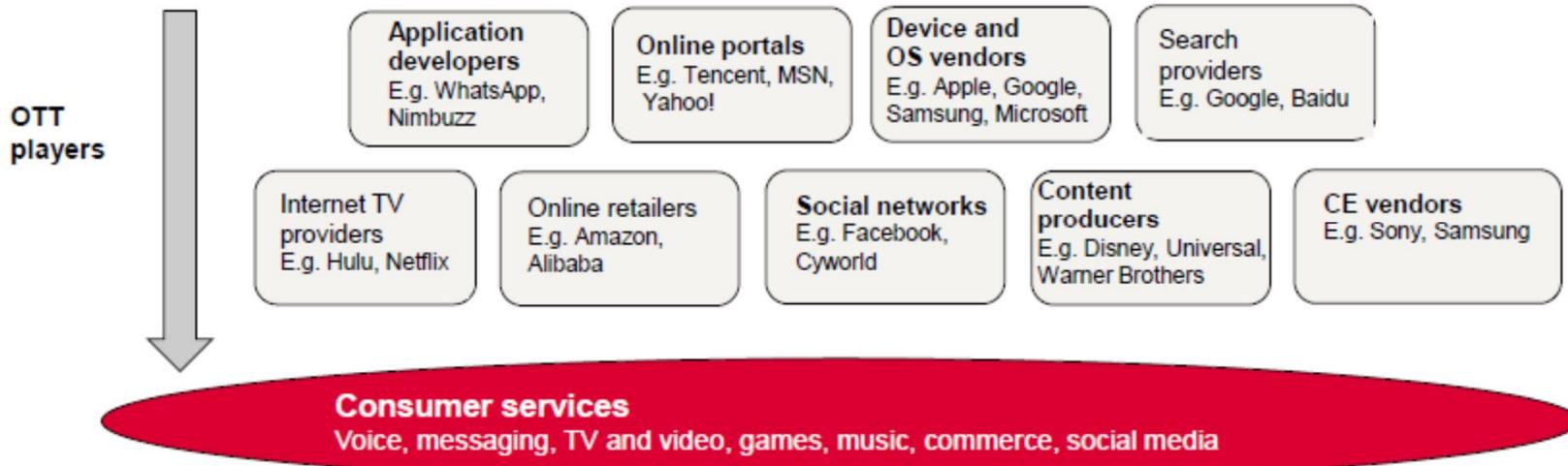
- “ Move from traditional networks towards a **IP based transport infrastructure** with integrated services
- “ Rapid technological development-greater bandwidth availability, development of more applications-**easier for customers to go online.**
- “ Horizontal integration across **connected devices and services** is growing in importance
- “ **Services as applications** executed in the terminal devices
- “ Services and Application revenue (consumer & enterprise) growing rapidly
- “ Fierce competition from OTT players in various fields
- “ Operators have to lead innovation and adapt to keep pace with transforming customer needs.



Multiple research agencies point to explosive data growth

Who are OTT players?

OTT players are companies that **create and deliver digital content and services** to consumers using internet and web technologies



OTT players are diversifying across services

Consumer services	Google	Amazon	Facebook
Connected devices	✓	✓	✗
Applications	✓	✓	✓
TV & Video	✓	✓	✓
Music	✓	✓	✓
Consumer cloud services	✓	✓	✓
Location based services	✓	✗	✓
Voice	✓	✗	✓
Messaging	✓	✗	✓
Productivity	✓	✗	✗
Social Media	✓	✗	Foundation service
Commerce	✓	Foundation service	✓
Search & discovery	Foundation service	✓	✗

What issues arise in the absence of Net neutrality

“ Much of the net neutrality debate centres around the management of Internet traffic by operators and what constitutes **reasonable traffic management**.

“ Blocking and throttling

- **Unfair traffic management practice** - such as blocking file sharing, media streaming and VOIP calls
- **Weakening the competition** . such as limiting access to VoIP services.
- **Impact on innovation** - Content and applications developers may reconsider their investments due to discrimination. Weakening these players might remove the incentive for ISPs to improve and innovate their own products which are challenged by OTT applications.
- **Degradation of QoS**
- Operators do not openly publicise information regarding **traffic management practices**

“ Privacy Issues

- Internet Protocol header information enables operators to **identify the subscriber and apply specific policies** e.g. routing the packet through a slower or faster link
- **Deep Packet Inspection(DPI)** enables operators to access the data payload, use may which can become un-reasonable.

What do Telcos say?

- “ OTT do not own or run networks themselves, but leverage on Telcos networks to deliver service, work as Service-based Operators (SBO)
- “ Telcos deliver similar services to consumers over their own networks. Substitution effects between different services of OTT and Telco is destroying their business
- “ As per Ovum around \$52bn revenues lost to OTT VoIP globally in 2016, it goes up to \$71bn (or 9% of total voice revenues) before 2020 . Estimated \$32.6bn SMS revenues lost to OTT social messaging in 2013.
- “ Mobile voice substitution by VoIP will accelerate after proliferation of all IP-based LTE network, e.g. VoLTE
- “ OTT services stimulates inexorable rise of video traffic that demands network investment. Mobile data traffic tsunami threatens sustained development of mobile network.
- “ One of the main objectives behind the use of traffic management is the reduction of network congestion resulting from this outstanding growth in data traffic

Related legal/licensing /competition issues?

“ Network operators’ business model is determined by regulatory requirements

“ Uneven level of regulation, e.g. QoS, interconnection, pricing, universal service, convergence, Roll out obligation, penalties etc.

“ License fee, spectrum charge, regulatory reporting

“ Personal data and privacy issues hardly addressable by national regulation and Security concerns hardly controllable

“ Reported cases of OTT tax evasion and collection problem

“ Issue is how to facilitate innovation while addressing consumer protection and competition issues if any?

Regulation	Licensed Service Provider	OTT Player
Licensing	Subject to License and licence fee based on earned revenue. Spectrum fee in addition.	No licence required and no licence or spectrum fee to be paid
Quality of Service	SLAs included in licence and issued time to time by TRAI . Penalties for not meeting QoS.	No QoS requirements
Interconnection	Interconnection mandated and at prices fixed by TRA	No Interconnection requirement
Roll out obligation and Universal Service	Rollout obligation and Universal Service fee as 5% of earned revenue	Not subject to Universal service fee
Consumer Protection	Need to comply with all consumer regulations of TRAI. Penalised for not following.	No such enforcement
Legal Interception	Condition in the licence. Lawful Interception Monitoring mechanism to be set up for security requirements	No such requirement
Taxation	Subject to National tax regime	Service dependent . Lack of clarity in collection and taxes



TRAI pre-consultation in Sep,2014 on VNOs; shortly coming with consultation on OTT

Country	Legal and Regulatory position	Behaviour in mobile networks
US	<ul style="list-style-type: none"> “ FCC issued a net neutrality policy statement in 2005 to promote the open Internet. In a case related to Comcast court vacated FCC’s order in 2010 “ FCC’s then issued Open Internet Order 2010 setting three principles to comply with (transparency, no blocking, no unreasonable discrimination). Court strikes it down in January 2014 except for Transparency clause. However, it upheld the Commission’s authority to generally regulate broadband “ In May 2014 allowed ISPs to charge at higher speeds if commercially reasonable. “ President Obama urges FCC to frame Net Neutrality rules by bringing ISPs under Title II of Telecommunication Act 1996 	<p>Some operators have blocked certain devices or functions but were fined for doing so by the FCC .</p> <p>Netflix accused of using fast lanes to block competitors. FCC writes to Netflix in December,2014.</p>
Europe	<ul style="list-style-type: none"> “ The European Parliament passed net neutrality bill in April 2014 “ The European bill must be approved by leaders of EU countries at a Council of the European Union meeting before it becomes law. Consensus yet to be arrived. 	<p>Mobile operators have warned of dire consequences if net neutrality is enacted in all European countries. So far, only the Netherlands and Slovakia have adopted strong national net neutrality legislation.</p>

Country	Legal and Regulatory position	Behaviour in mobile networks
South Korea	The KCC has announced that it will allow mobile operators to charge extra for allowing OTT traffic over their networks	Most operators have complained that OTT players have destroyed their revenues and have decided to block them
Chile	Net neutrality principles have been introduced in the National Telecommunications Act. Banned zero-rating+recently (w.e.f 1 st June 2014)	Mobile operators do not seem to operate any form of blocking or throttling, except related to traffic management (network congestion)
Peru	ISPs cannot arbitrarily block, interfere with, discriminate, or restrict the rights of any user to use an application or protocol, regardless of its origin, destination, or type	No significant evidence of blocking or throttling over mobile networks in Peru. Mobile data plans only appear to differ in the monthly amount of data offered to customers

Conclusion

- “ Open internet promotes innovation. Consumers benefits from both service innovations and investment in networks. Issues of both OTT and Telcos need to be addressed keeping consumer at the centre.
- “ There is a fragile balance between ensuring the openness of the Internet and the reasonable and responsible use of traffic management by operators.
- “ Regulator will have to frame rules to prevent anti-competitive discrimination or will have to invoke existing instruments to deal with dominance and anti-competition
- “ Net neutrality rules for
 - Safe-guarding consumer rights protection
 - Promoting innovation and incentivise investments
 - Fair and equal playing field for competition between Telcos and OTT players
- Policy-makers are finding different paths to balancing innovation, investment and competition.