Future of Media: A Two Sided Market Perspective

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IEEE Technology Time Machine: Symposium on Technologies Beyond 2000

Panel on *Future of Media*

**23-25 May 2012, Dresden, Germany**

24-May-2012

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Agenda

- Characteristics of Future Media

- Media as a two-sided market/ platform

  - Media Platforms and Cross-side network effects

  - Subsidy side and money side

- Characteristics of Media Platforms of the future

  - Authenticity, integration, anonymity, language support

- Implications for Policies

  - Copyrights, litigation
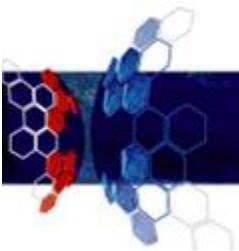
Characteristics of the Future of Media

1. Democratized and Two-Way: contrary to broadcasting

2. Mobility: Media will be consumed more on the move using smart devices
   - In-vehicle devices; wearable devices;

3. Local information seekers

4. Shelf-Lives: Shorter; however takes longer for completeness and hence the burn

5. Interactivity and Multi-touch: To replace the newspaper holding experience; two-way interaction

6. Subscription based: Buying and owning likely to decrease; potential to reach larger sections of the society

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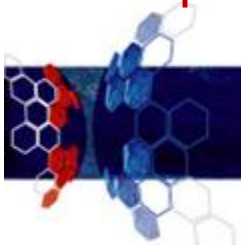
Democratization of Media

- More than 250 Million tweets per day: posts and reply to news

- Democratization of media and citizen journalism

  - Wael Ghonim's famous tweet on 11 Feb 2011 on the resignation of Hosni Mubarak in Egypt

  - Flash of terror attacks in Mumbai, India on 27 Nov 2008 in Twitter and Flickr

  - Twitter and Facebook as life lines during the earthquake and Tsunami in Japan on 11 Mar 2011

- The shelf lives

  - About 3 hours in social networks; About half-a-day for newspapers; About half-a-month for magazines; About half-a-year for journals; May be one year for books

- What about digital books and magazines

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Media on the Go (Google, 2011)!
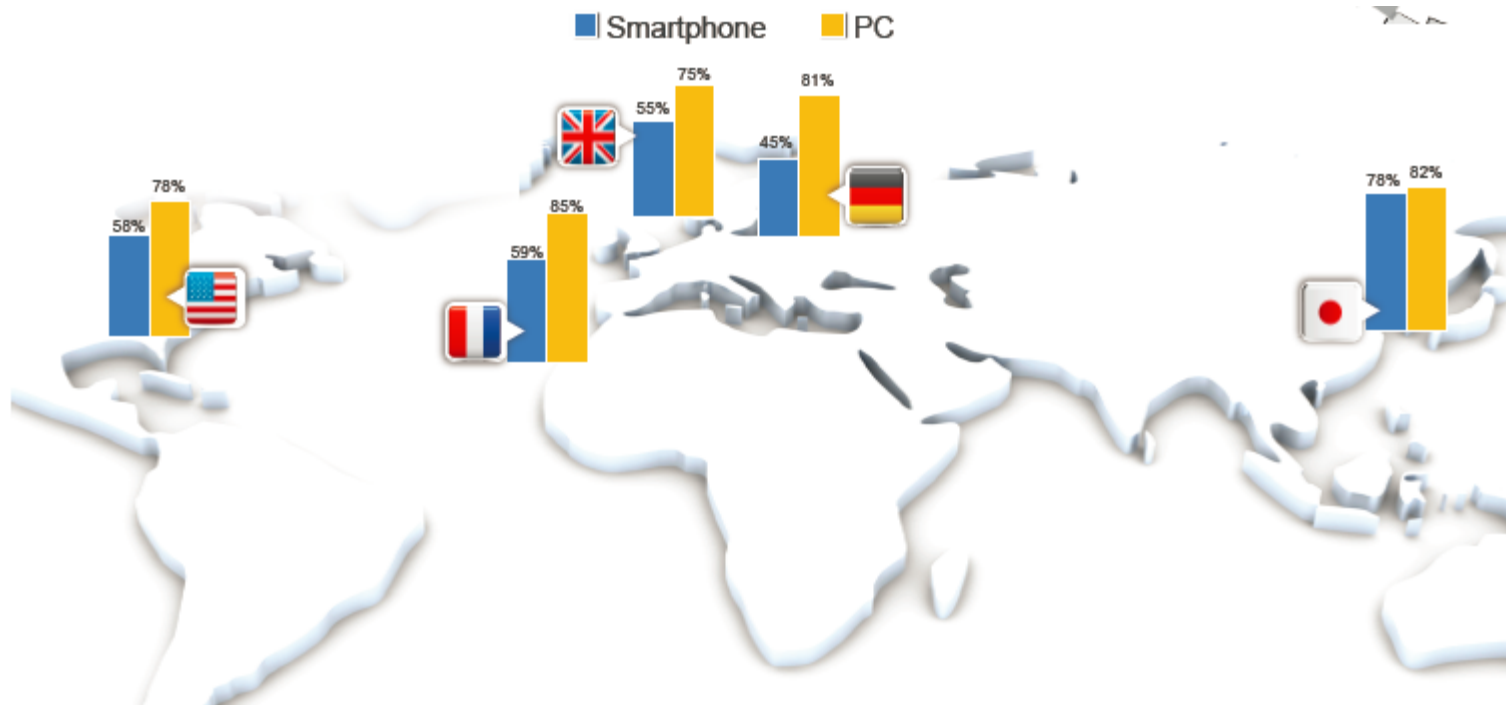
- Powerful Smartphones and Tablets associated with High Speed Broadband Networks enable access to media on the go!

  - In Vehicle, wearable devices

How about the Next Billion! : Feature Phones are the norm; Network Capacity is a constraint

Mobile is the way to go!

- **More than 1.5 Billion mobile users in India and China**
  - In India: The PC penetration even in urban households is just about 30% while the Internet user base stands at a poor 7% of the population
  - Mobile is the only channel to computing and the digital world
    - More than 40 percent of Internet users in India use only Mobiles to access
- **Digital media can potentially bridge the digital divide**
  - e-Books and e-Journals have reduced the time to access from nearly one month by snail mail to seconds across the world
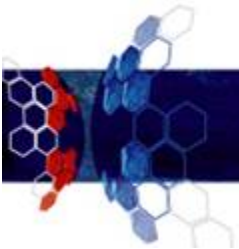 - The effect is profound in developing countries where physical transport infrastructure lags behind

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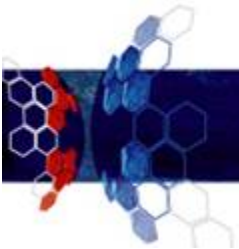
Local Information Seekers (Google, 2011)

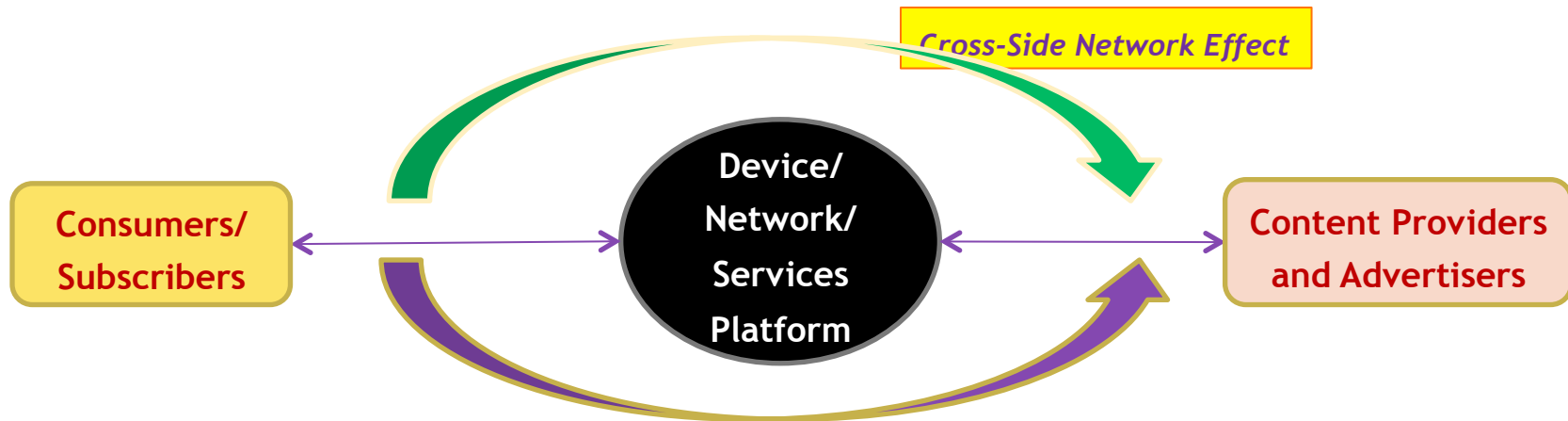81%   85%

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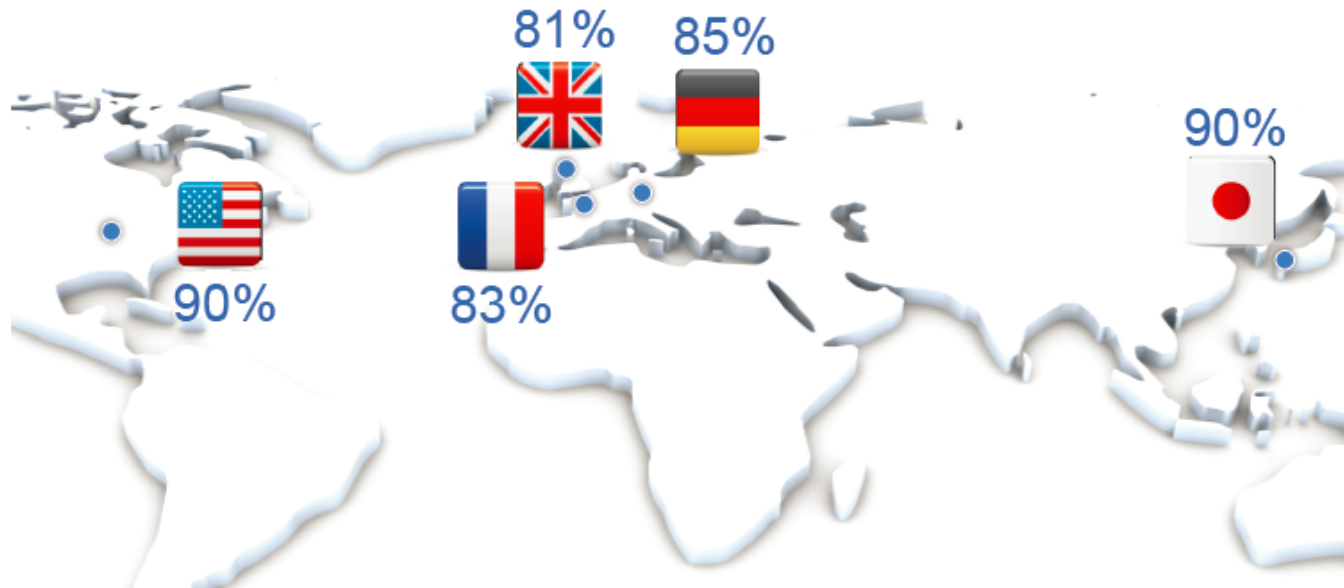
- Users seek local information

  - Local content relevant

  - Content coming-in in multi-languages from across the world

    - To be distributed in many languages in various forms to consumers

Local Content in Local Languages in easily accessible and searchable form

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Media as a 2-Sided Platform?

Cross-Side Network Effect

Consumers/ Subscribers

Device/ Network/ Services Platform

Content Providers and Advertisers

Sarnoff's Law: $V \propto N$: One-way Broadcast Networks
Metcalf's Law: $V \propto N^2$: Two-way Telecom Networks
Reed's Law: $V \propto 2^N$: Multi-cast Social Networks

- **The two sides need each other and one cannot exist without the other**
  - who can't get together easily on their own and hence need a platform

- **For which a platform makes both sides better off by harnessing *positive indirect network effects***

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Characteristics of Future Media Platforms

- Platform shall enable connecting network of networks of user generators and consumers

- Collate and Provide immersive personalized experience
  - Mash-ups to provide completeness
    - Newsmap.jp; mash-up of stories and videos overlaid with simple user interface

- Authenticity of content
  - Democratization leads to huge inflow of content with very short shelf-life
  - Platform authenticates using big data analysis and provides filtered information
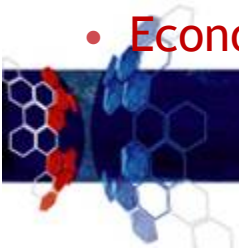
- Manage syndication

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The Monetization Models

- Which side to charge and how much: One possible model

  - **Advertisers to be charged – at premium rates**

  - **Content generators to be incentivized**

  - **Consumers to be charged – at subsidy**

- Interactive location based advertisers to pay for the content

  - Newsmaps

- Too much advertising causes negative network effects

  - Platform to sense the mood of the readers to channel the ads appropriately
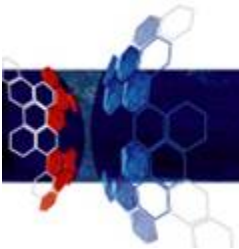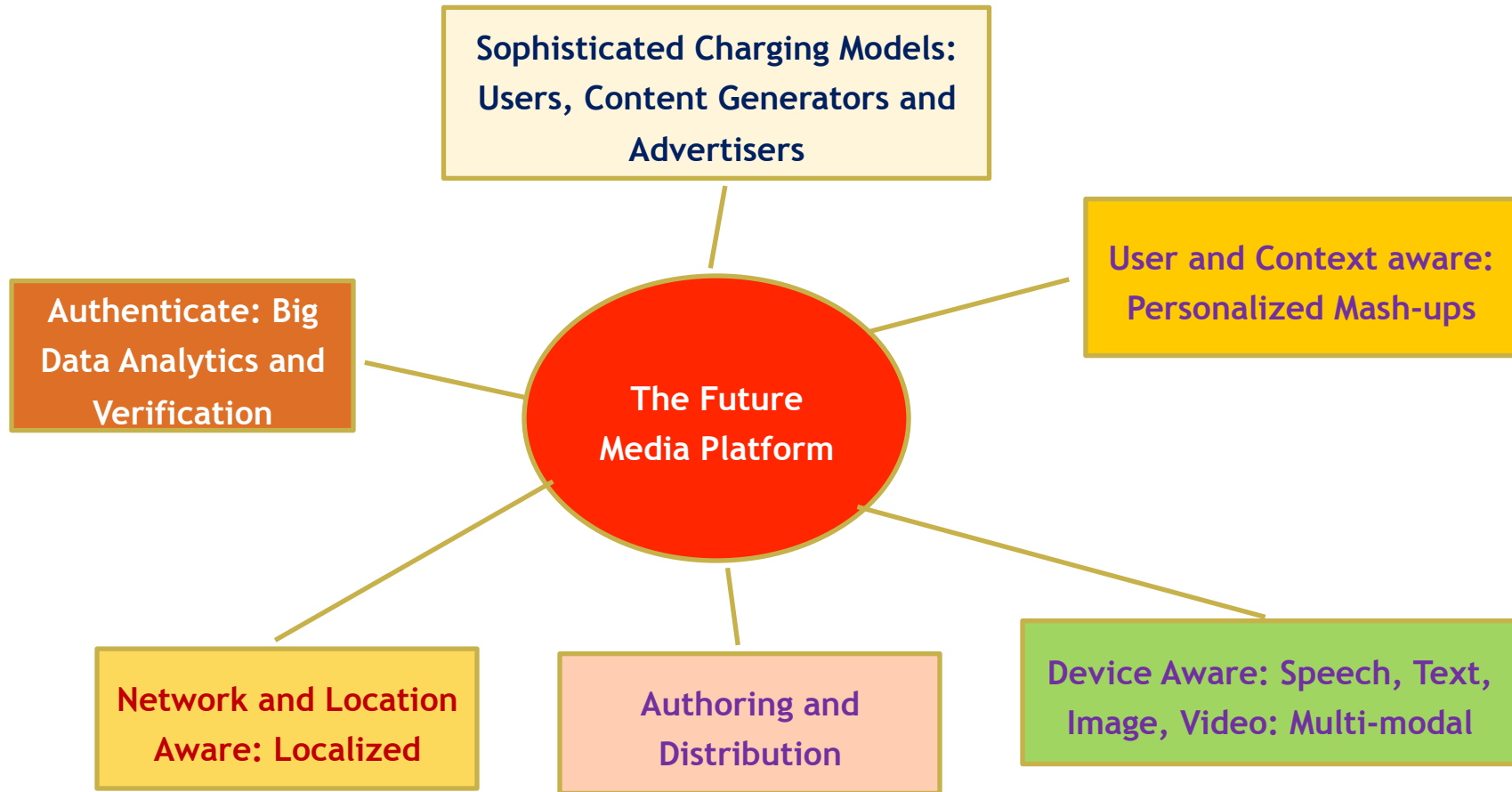
Requirements of the Next Billion

- How to address the next billion?
  - Huge user base to generate media content
    - However in different languages using various formats
  - Consumer devices are not very smart
  - Consumers are semi-literate
  - A very price conscious market
- Interactivity and user experience
  - Most of them have never seen/used the computer – hence the web mental model is completely missing such as typing on keyboard or meaning of a URL
- Possible solution: Provide through multi-modal interfaces: image, video, speech and text in a synchronized way
- Economies of Scale should drive down prices of devices for media delivery

The New Architecture for the Media Platform

Sophisticated Charging Models: Users, Content Generators and Advertisers

User and Context aware: Personalized Mash-ups

Authenticate: Big Data Analytics and Verification

The Future Media Platform

Network and Location Aware: Localized

Authoring and Distribution

Device Aware: Speech, Text, Image, Video: Multi-modal

# *Video Analytics* enable new class of application across vertical

- Automated alert assisted Video Surveillance

- Data analytics in retail stores (intelligent digital signage, consumer pattern analysis etc)

- Video baser driver assistance in cars

- Traffic management (Congestion, license plate detection, parking managment etc)

- Health care: Remote monitoring and alert generation

Implications on Policies: Copyrights

- Copyright of content

  - Authors Guild suit against Google for its ambitious digital books project

  - Should we move to copy-left arrangement much like what is practiced in the software industry?

  - What should be the tenure of copyright ownership for digital media?

  - Who owns the content – user generators or media platform provider?

    - What about licensing arrangements between Platform and Authors?

  - What about copyright enforcement across geographies

    - Low Cost Editions of printed books not to be sold outside the defined territories
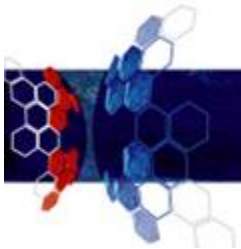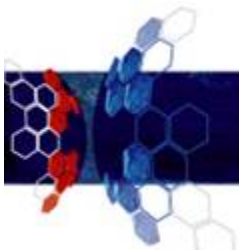
Implications on Policies: Anti-Trust

- Two sided markets are often oligopolies

- Access-tiering

  - Ownership of both content and platform ownership

  - Preferential treatment of content by the platform provider

    - Selective delivery and associated legal disputes

- Recent case of Viocom programmes to be delivered by Time Warner on iPads

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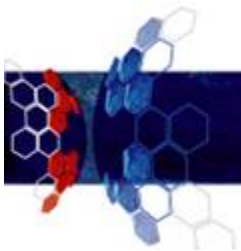
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Thank You
Questions