Investigating Limits to Innovation and Peer Production in India's Mobile apps economy

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THE CENTRE FOR internet & society

CIS' Pervasive Technologies Project
Researching IP environment for low-cost mobile technologies in India and China

Research Questions

What is the relationship between the production/deployment of pervasive technologies (hardware, software and content layers) and IP, and what are the policy levers that may be employed to protect access to these technologies?

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What lessons does this hold for the future of both IPR and A2K? Do these technologies have a future under Indian and Chinese IPR laws?

Research Outputs
List of Chapters

Patent Landscaping for the Indian Mobile Device Market	**IP in Mobile App development in India**
Competition Law and SEP regulation in India	Music on Mobile: Copyright Management

Factors influencing the Mobile apps ecosystem

Decreasing cost of smartphones

Increasing Internet Penetration

Failure of Mobile Value Added Services (VAS)
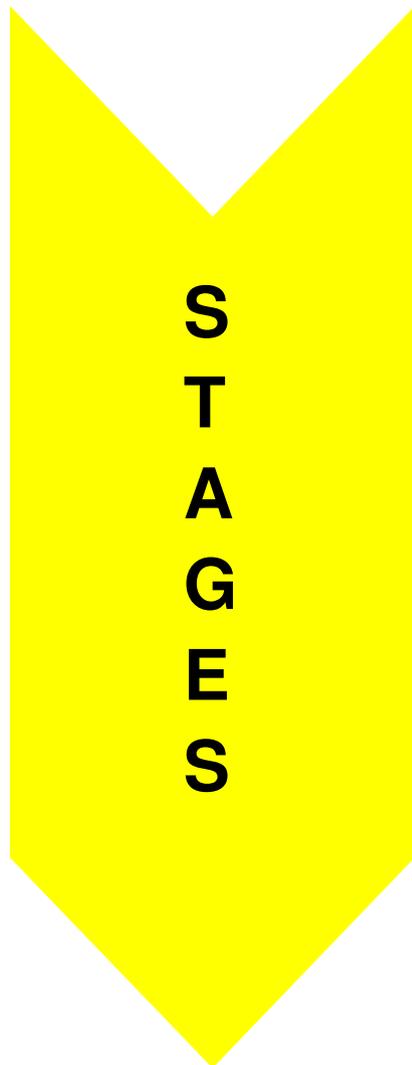
Rapidly growing talent pool

IP in Mobile App Development in India
Key Exercises

> Survey of 267 Indian developers in 2013

> Interviews with 40+ Indian developers

> Submissions to the government's policy for Computer-Related Inventions <u>resulted in the adoption of a stiff legal standard designed to restrict software patenting and protect innovation in the Indian software industry</u>

Key Findings

Stages of Innovation

Concept / Market research

Development / Design

Testing / Demo

Market Distribution

Evolution / Scaling up

STAGES

Nature of Innovation

> Nascent

> Highly networked and interdependent

> Occurring within lean organisations

> A tale of two business models: Development services and Mobile app products

> Concentrated in Bangalore

> Target market for majority firms is India

> Majority firms prefer creating apps for Android OS

Practices in Innovation

> Dichotomy of services and product based business models

> Bootstrapping v. Venture Capital funding

> Knowledge sharing v. Proprietary / secretive approach

> **Peer production**

> Licensing practices of tech and content

> Presence of limiting contractual arrangements in developer-client relationships

> Revenue generation mechanism

Implications on Open innovation

> Sub-par presence of peer-production

> Cultivating critical IP through internal and external means – Low focus on securing legal protection

> Dominant practice of transferring product ownership and knowledge to the client – IP Management

> Active participation of VCs and high labor mobility

Thank you very much.

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