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Capitalizing on Emerging Monetization Tactics on Innovation. A need for standards?

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Executive Summary

Standards set the beginning of a new era where economically rational actors are given a variety of mechanisms to appropriate value from their innovations. They support an innovation system fuelled by the open exchange and diffusion of ideas.

Standards can lead to the diffusion process of high technology products & lead to the creation of large networks of users. If an innovation gains significant market share, a virtuous cycle is set in motion such that consumers will have even more incentive to use it.

Standards enhance the value of a network as they attract more users & generate positive feedback mechanisms to network size. These advances actively alter the competitive landscape.

There is a need to support developing country innovators through adequate standard setting. Further research is needed to study which innovations from developing countries could benefit from such a boost.

AGENDA

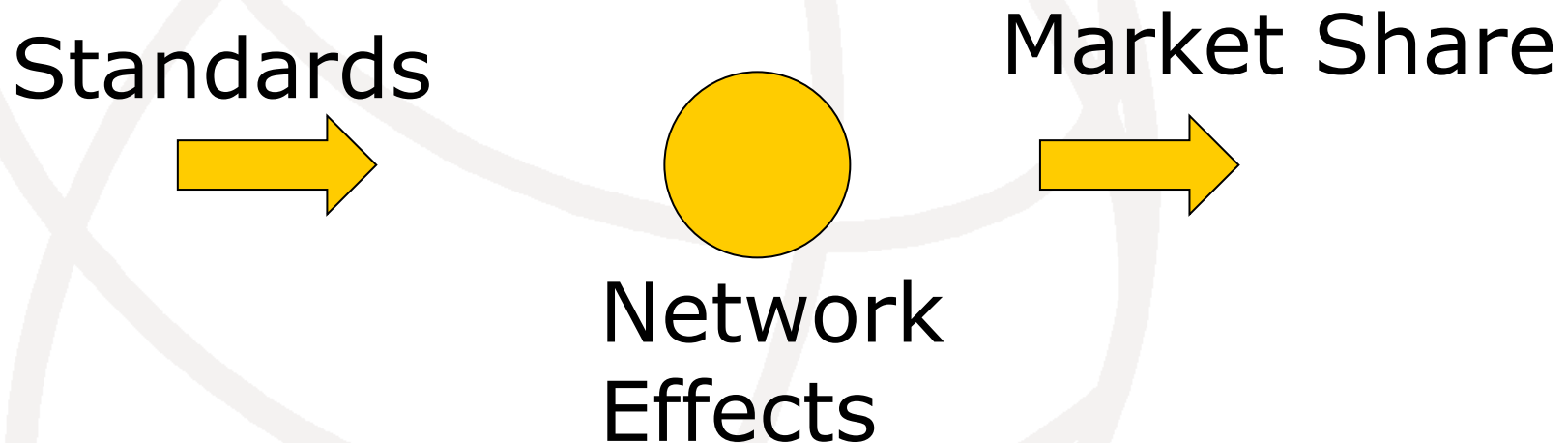
The Economics of Standards

Business Formation based on Standards

Standards Instead of Development Aid

Standards allow to Appropriate Value from Innovation

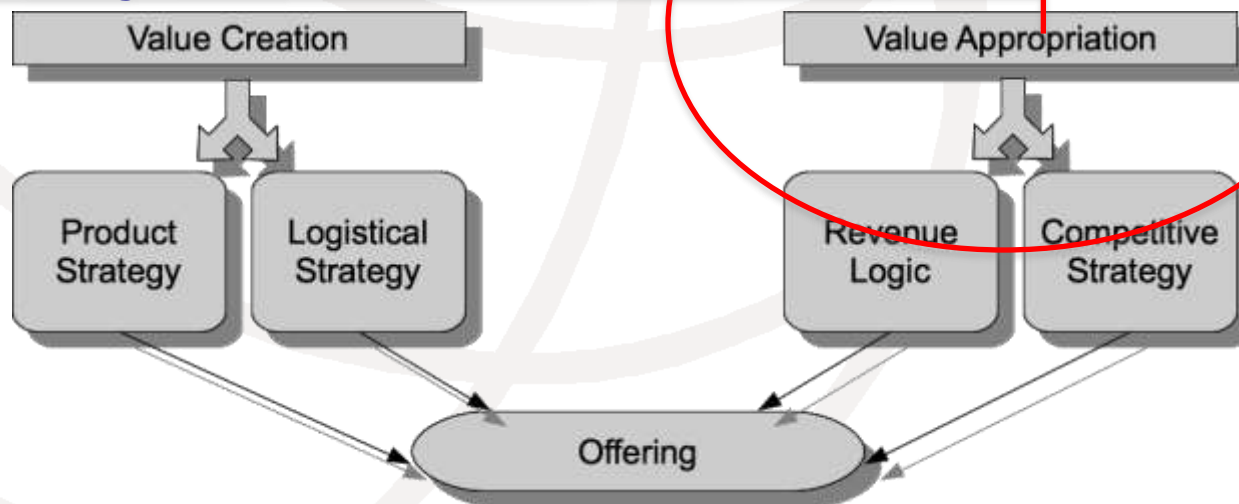
- Innovation = transformation of an existing idea into a new product or the improvement of an existing product or operational process.
- Value capture governed by Increasing Returns to Adoption



Standards create positive feedback loops

- Value capture takes place through demonstration effects
- Sets a virtuous cycle giving consumer incentive to use innovation
- Leads to increasing returns to adoption of technology
- Secures competitive position of the innovators & boosts innovation itself (incentive to improve as consumption increases)

Value appropriation: licensing strategies, market analysis, standard spreading



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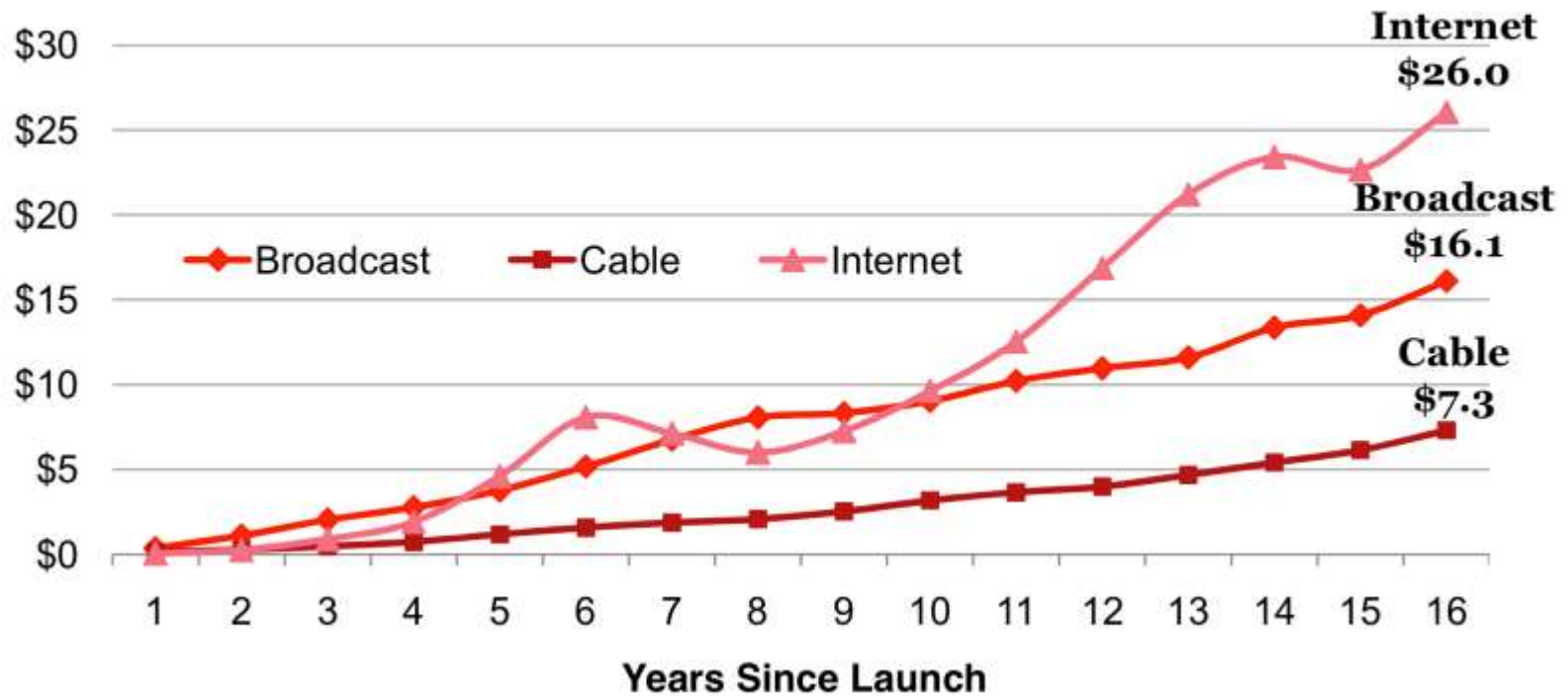
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Recognize Opportunity

Annual Advertising Revenue — First 16 Years (In billions)



Source: PWC Advertising Report 2011

NETFLIX

Innovative model

- On-demand digital content subscription service
- Content recommendation system based on user ratings

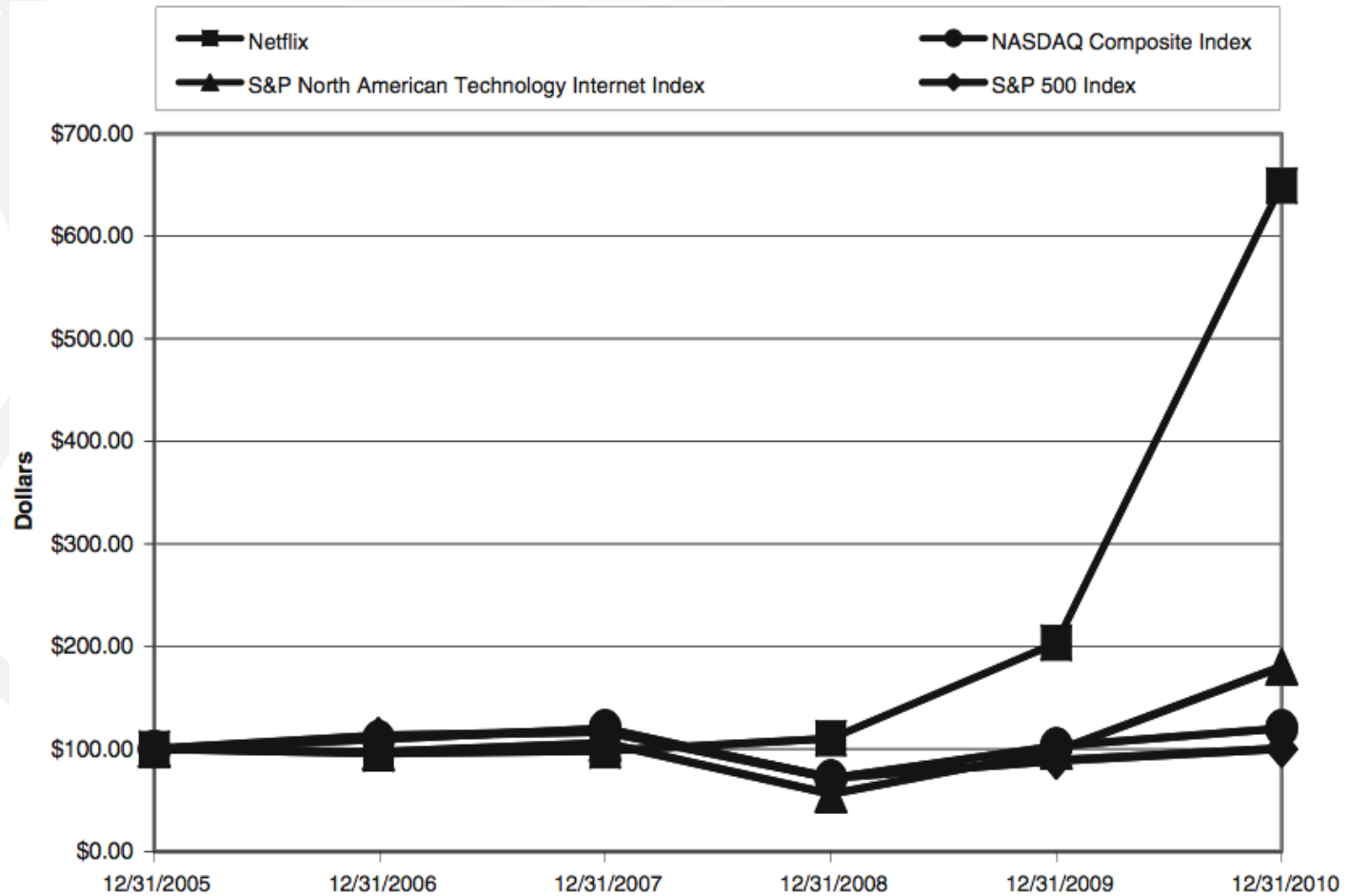
Networks

- Digital technologies enable content storage and delivery at marginal cost
- Online portal for navigating content, viewing recommendations and submitting feedback

Value Capture

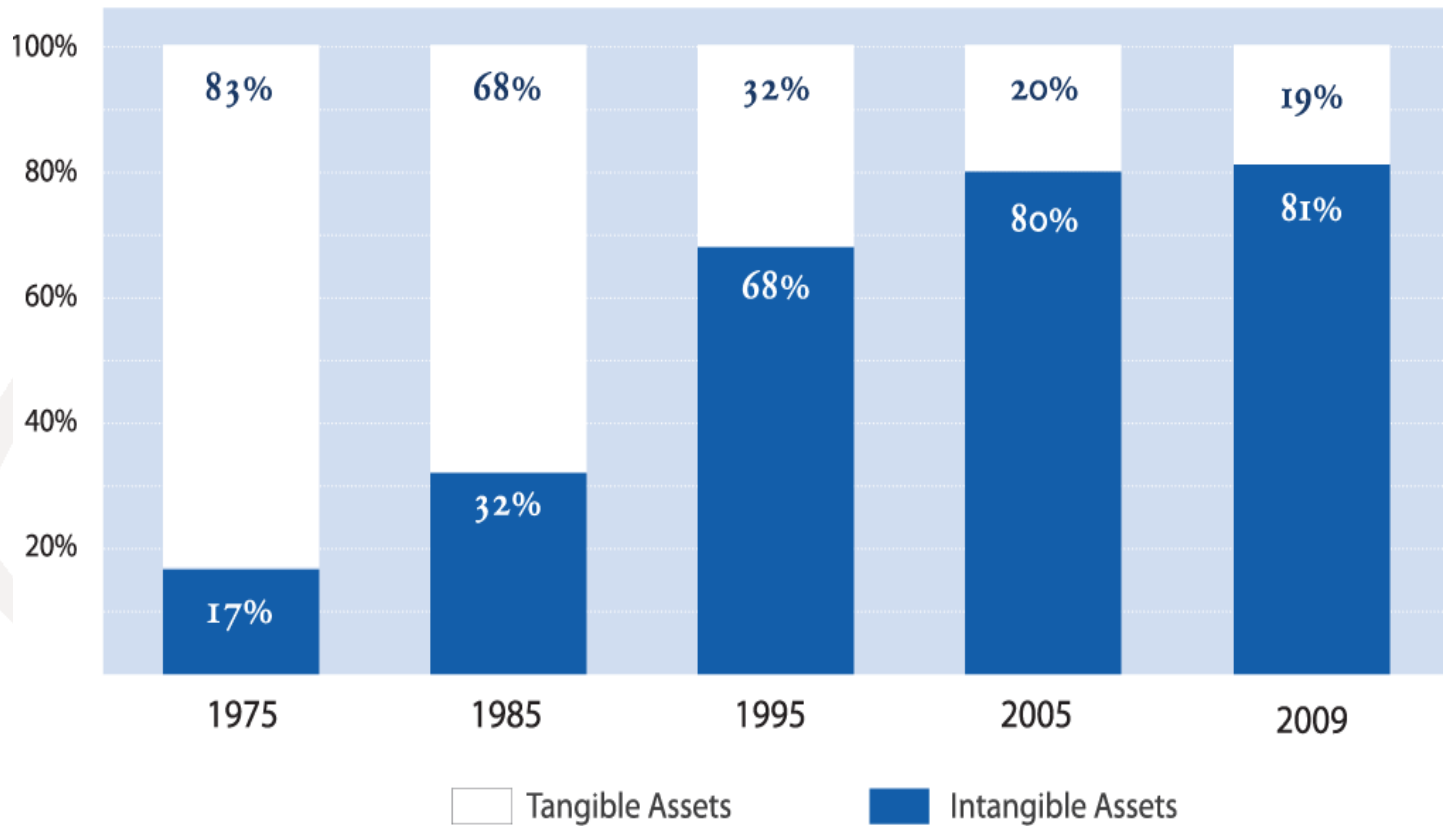
- Flat fee subscription-based service offering unlimited access to content repertoire
- Undercut video rental market due to economies of scale and price possible using technologies – minimize cost of content distribution
- Interoperability of service on multiple devices
- Recommendation system accumulates information about demand preferences and guides user choice

Capture Value



Recognize Opportunity

Components of S&P 500 Market Value



Source: Ocean Tomo

Innovative model

- Real-time exchange of standardized non-exclusive patent licenses
- Intermediary services provided to facilitate the exchange of specially designed ULR contracts

Networks

- Real-time updates on exchange transactions and encryption-protected online data rooms
- Match buyers and sellers efficiently via scale of user base

Value Capture

- Leverage non- or under-utilized patent rights to generate greater value from IP assets
- Extract revenue from exchange administration and transaction fees
- Ensure dispersion and adoption of new technologies
- Improve liquidity in the patent market while promoting growth and transparency in technology markets
- Enable start-up firms to access capital and reduce need for complementary assets


AGENDA

The Economics of Standards

Business Formation based on Standards

Standards Instead of Development Aid

Given enough eyeballs, all bugs are shallow



Given enough standards all actors can innovate?

- **Developing Countries:**
Moving from Standard Followers to Standard Leadership?

Conclusions and Recommendations

'Standards not Aid'

- Where are most valuable opportunities for standardization in developing country contexts?
- Case studies of telecommunication innovations in the developing world should be gathered, their potential for standardization evaluated and future technology trends assessed
- Most valuable opportunities for standard setting should be grasped