

# Convergence, Franchising, and Net Neutrality in Telecoms

Johannes M. Bauer  
Quello Center for Telecommunication Management & Law  
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## Overview

- Convergence
- Platform competition
- Video franchising
- Network neutrality
- Choices ahead

## Convergence

- Slow arrival of the future ...
- Technological convergence
  - Migration to fully digital platforms (IP-based)
  - Multifunctional devices (e.g., i-Phone)
- Market (service) convergence
  - Multi-play, “next play” (price bundling)
  - Integration of services (product bundling)
- Organizational convergence

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## Ambiguous competitive effects

- Convergence in substitutes
  - Former separate services become closer substitutes (POTS-VoIP, cable-IPTV)
  - Tends to *intensify* competition (all other things equal)
- Convergence in complements
  - Formerly complementary services become more closely integrated (e.g., fixed-mobile)
  - Tends to *reduce* intensity of competition (all other things equal)

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## Challenges and responses

- Economic challenges for service providers
  - High sunk costs (assets, forgone options)
  - Contestability of market segments
  - Risk of service commodification
- Strategic responses of service providers
  - Bundling of services
  - Differentiation and diversification
  - Integration and consolidation

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## Platform competition

- Platform markets will be concentrated
  - Dominance/duopoly at core (telco, cable)
  - Competitive fringe (wireless, powerline)
  - Heterogeneous patchwork of competition
- Effectiveness of competition
  - Barriers to exit after investment sunk
  - Small competitive fringe may exert significant competitive pressure
  - Some vulnerability to forms of collusion

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## Video franchising

- Easier market entry desirable
- Likely evolution of competition
  - Will be uneven across the state
  - Entry in small, rural communities slow
  - But faster than in status quo scenarios
- Potential effects of reforms
  - Difficult to quantify due to many contingencies
  - Existing studies based on strong assumptions
- Importance of monitoring

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## Network neutrality

- Do players (telcos, cable companies, Google, Yahoo, upstarts) have incentives to abuse ownership of platform or content?
- What are the overall performance implications of the governance principles adopted for next-generation networks?
  - No specific regulation (contracts, antitrust)
  - Non-discrimination principles (MFN, ...)
  - Detailed regulation or prices and conditions

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## Arguments against specific rules

- Suppliers are not myopic, understand complementarities between platforms + services
- Contributions from content and applications providers needed to recover investment cost
- Differentiated service/price tiers will
  - allow content and application service providers to configure higher-quality services
  - help manage congestion caused by bandwidth-intensive applications (e.g., BitTorrent)
- Fear of intrusive, old-style regulation

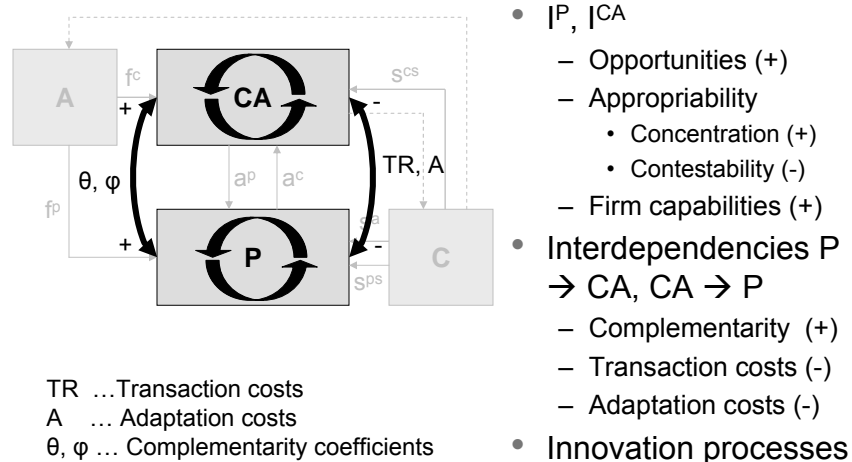
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## Arguments for specific rules

- Vertically integrated platform owners have incentives to disadvantage competitors
- Network layer discrimination slows innovation at the application/content layer and in the economy
- A non-neutral network could
  - lead to tipping in favor of inferior applications
  - lock in existing and delay migration to new usages
- Neutrality continues end-to-end design principles that have enabled the Internet
- Free speech and democracy require neutrality

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## Simplified innovation system



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## Historical experience

- Dial-up Internet
  - Developed faster and is more diverse in countries with more open platforms
  - Incremental infrastructure investment needs
  - Challenge of finding sustainable business models for content and applications
- Mobile Internet
  - Most successful examples in Japan (i-mode<sup>®</sup>) and South Korea (Nate<sup>®</sup>)
  - Europe, US collaboration relatively limited

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## Possible solutions

- Due to highly dynamic interaction, many outcomes are possible
- Not certain that problem exists, but also not certain that NO problem exists
  - Could wait and see if any problem arises
  - Caveat: once problem visible, it may be too late to find reasonable remedy
- Best approach: commitment to openness, regulatory power to intervene if necessary

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## Legislative actions (selected)

Initiative	Key provisions on net neutrality	Status
Internet Non-Discrimination Act of 2006	Prohibits blocking or modification of data in transit, common carrier rules for subscriber network operators	Pending
Communications, Consumer's Choice, and Broadband Deployment Act of 2006 (COPE)	National video franchise, minimal net neutrality rules, denies FCC authority to promulgate specific rules	Passed 321-101 on 6/8/06
Network Neutrality Act of 2006	Intended to amend COPE with stricter network neutrality provisions	Defeated
Communications Consumer's Choice and Broadband Deployment Act of 2006 (CBDA)	Allows tiering, directs FCC to issue annual reports on how carriers transport information but does not give FCC power	Mixed success in Senate
Internet Freedom Preservation Act of 2006/2007	Bans blocking, degradation, and selective Quality of Service deals	Pending
Internet Freedom and Non-discrimination Act of 2006	Declares discrimination against web traffic, blocking or degrading of specific content, etc., violations of Clayton Act	Approved by Senate Committee

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## Choices ahead

- Convergence changes patterns of competition
- Competition at the platform level eases some but not all of the possible problems
- Incentives in next-generation networks are complicated: no clear evidence that there IS problem nor that there will be NO problem
- In case of doubt favor market solutions but establish ex ante safeguards
- Strong monitoring program highly desirable

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Presentation available at

<http://quello.msu.edu/bauer-mi-forum-2007.pdf>

or e-mail <bauerj@msu.edu>

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