

# Management and Policy Challenge for Next-Generation TV

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- **is there something special about management in the media field?**  
*After all we don't teach or write about home appliance management or cosmetics management.*
- **So why 'media management'?**

# **US Media and Media Information Industry Sector 2015**

- World Total ~\$5 Trillion**
  - ~5.9% of World GDP**
- 

**3 (includes double counting)**

- **As a share of ‘discretionary income’, closer to 20% of world GPD**
- **As a share of ‘discretionary time’, closer to 30%.**
  - **About 2,100 hours, which adds up to 5.7 hours a day, some of it multitasking ( music etc), so about 3 hs of focused use**

- All businesses have major commonalities
  - Raise funds, select projects, hire employees, arrange for inputs, control costs, create outputs, price them, market them, account for the results, etc

- But media and information industries have several special characteristics that make media management different
- We must understand what they are

**What is unusual or  
different about  
managing in the media?**

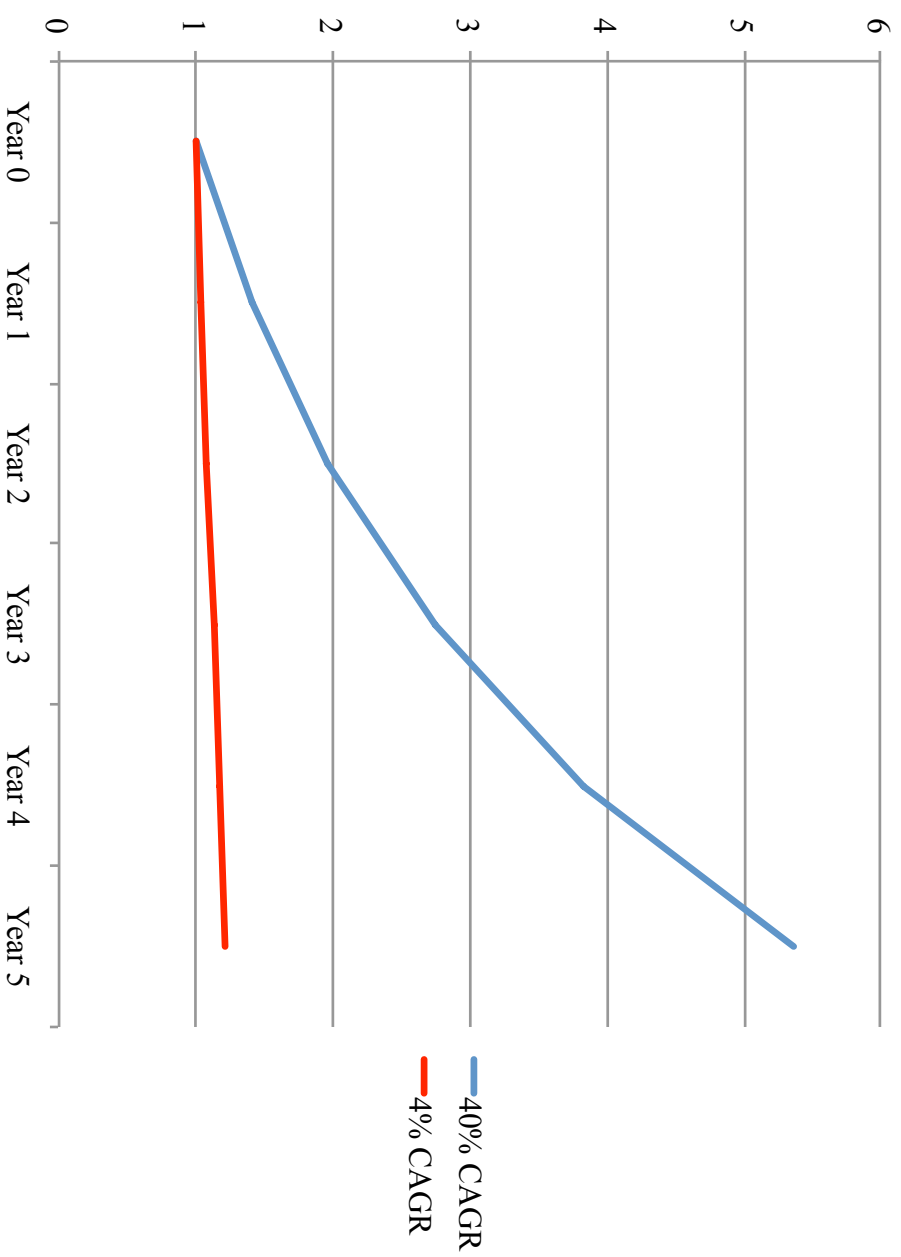
- For example, the fact that in this sector, a lot of participants operate without a profit motive. They just like to produce and distribute content on a volunteer basis. They just give it away, for fun and ego and creativity and community and whatever.
- Nobody makes and gives away refrigerators for fun. Nobody produces toothpaste on a volunteer basis.
- So in this industry, a commercial company must compete against a lot of little volunteers



# Another unusual feature of management in media

- 2-sided markets
- Consumers, Advertisers
- Give away product for free. What other industry does that?

# Moore's Law vs. Tech Progress in TV



# Technology Elements for Video

- *Virtual Reality*
- *Interactivity (from video games)*
- *Artificial Intelligence*
- *Individualization based on Big Data Analysis*
- *Branching video story lines*
- *A.I. Real-time Rendering*
- *Participation through Avatars*
- *Glasses-free 3D*
- *Cables crisscrossing the globe*

# **Technological Acceleration Leads to New Types of Content**

# Content Models

- Marketing
- Experiential Video
- Fantasy
- Interactive and Immersive Adventure
- Participatory Romance/Game

**The new style of TV creates  
new types of media  
companies**

# Some Positives of an online video system

- **Media Use Will Move From Passive Consumption to Active Experience**
- **Socialization, Education, Training, and Therapies Will Be Improved**
- **Communications Infrastructure Will Be Rapidly Upgraded**
- **Technological Innovation**
- **Opportunities for Young People**

# Regulatory Issues

- **National Culture, Sovereignty, and Industry**
- **Anti-social behavior**
- **Societal Inclusion**
  - **Role of Public Service TV**
  - **Affordability**
  - **Fragmentation**
  - **Children and Traditional Morality**
  - **Consumer protection**
  - **Information Integrity**
- **New Copyright Issues**



# Regulatory Issues

- **Network Upgrade**
  - **Wireline**
  - **Wireless**
- **Access**
  - **Net Neutrality**
  - **Usage Caps**
  - **Network Control Devices**
  - **Societal Inclusion: Reach and Affordability**
- **Data Security and Privacy**
- **Technical Compatibility**
- **international Harmonization of Regulation**

**• But the major problem is global media power, which is inherent in the medium's fundamental economics.**

# Summing up

- For reasons of ec of scale, scope, distance, data, network effects, compliance, verticality—
- There are fundamental factors that lead to highly concentrated markets.
- Few of today's hopeful entrants into online video will survive on their own.

- **The question arises, what are the implications for the management of companies that are part of this sector?**
- **How does one manage in this sector effectively?**

# *14 Fundamental Economic Properties of Media and Information*

# Fundamental Economic Characteristics of Media and Information Markets

1. High fixed costs, low marginal costs
2. Network effects
3. Radically divergent cost trends in value chain
4. Accelerating returns (Info growth cumulative and exponential)
5. Distance insensitivity
6. Economies of data
7. Excess supply
8. Price deflation
9. Convergence of technologies and of industries
10. 2-sided markets
11. Non-maximizers of profit
12. Non-normal distribution of success
13. Intangibles/Intellectual assets
14. Public goods and governmental role

# Management Implications of Scale

- Markets are oligopolistic
- Important to be big
  - Incentives to acquire large size by mergers
- Competitive prices often unprofitable
  - Price competition is ruinous
  - Incentive to price discriminate among customers

# Management Implications of Network Effects

- Invest in creating interactive networks of users
- Limit ability of outsiders and other platforms to interconnect
- Raise the loss to consumer for leaving the network, this will help create “lock-in” of consumer
- Invest in gaining market share.
- First-entry is important



# Management Implications of Radically Divergent Cost Trends in the Value Chain

- Rising conflict vertically across the value chain
- Incentives to vertical mergers
- Specialization at content side, generic platforms on distribution side
- Regulation

# Management Implications of Accelerating Returns

- Firms must adapt faster
- Knowledge assets last shorter
- Adaptation to new knowledge becomes essential
- Experience becomes less important

**Characteristic # 5 of  
Digital Activities:  
Distance-Insensitivity**

# **Economies of Distance**

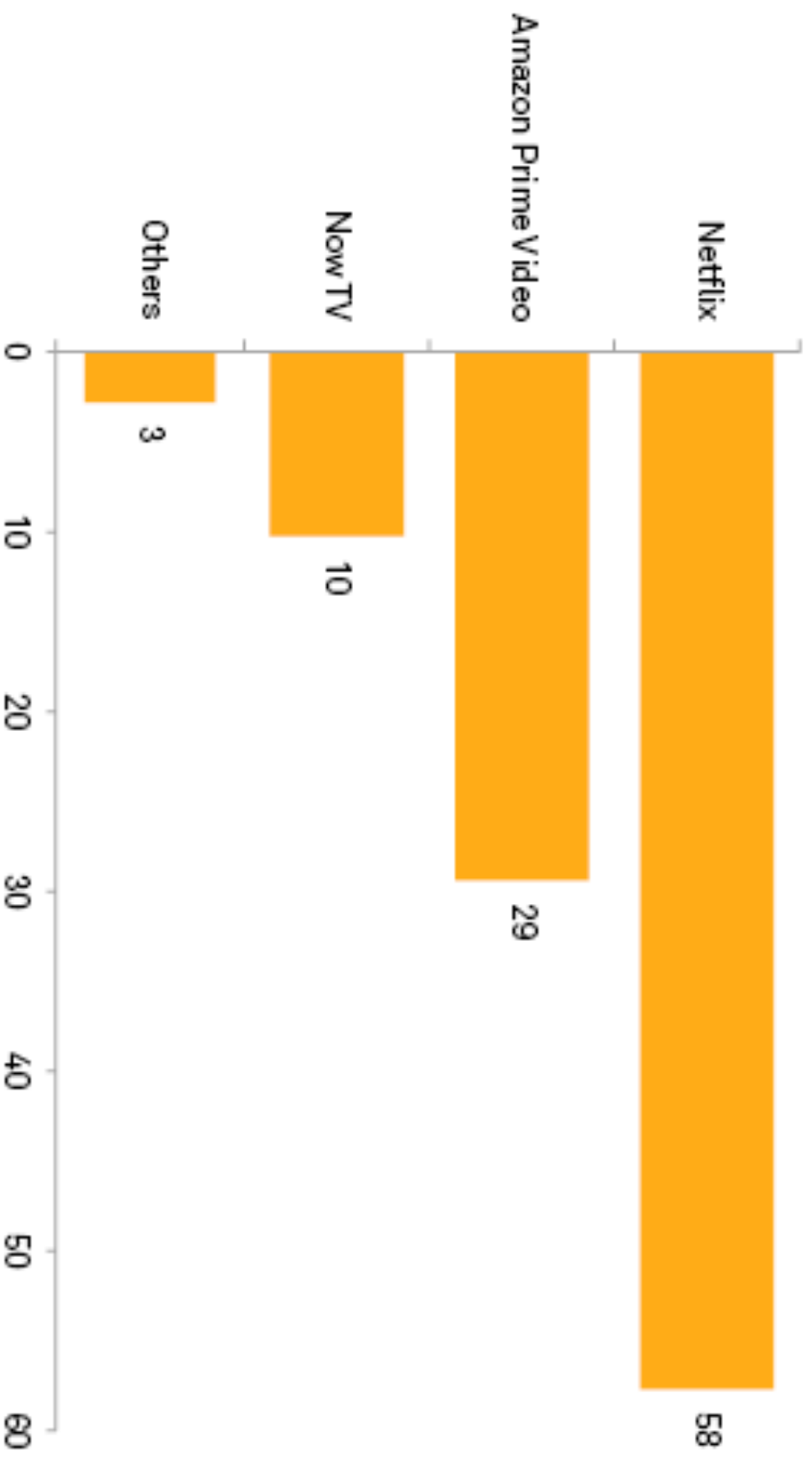
Average fully allocated cost of transmitting a 90 min HD film: per 1,000 km \$0.001.

New York to Rome: 1 cent

# UK Netflix Market Share 2018

## 58%

UK OTT video subscriptions market share, 2018 (%)



# Japan

- Subscribers:
  - Amazon 66%
  - Netflix 21%
  - Hulu 19%

Management implications of  
Distance insensitivity

- Global expansion of foot-print of activity
- Vulnerability to distant competitors with scale and other advantages

# Management Implications of Economies of Data Operations

- Expansion into other business activities to leverage data
- Privacy regulation conflict
- Ability to fine-tune marketing
- Ability to fine-tune pricing and price differentiation
- Ability to individualize content



# Management Implications of Excess Supply

- Leads to increase in specialization & customization of media content
- Requires increase in production & marketing effort
- **Put together: costs rise per use.**

# Management Implications of Price Deflation

- The main managerial response is to try to avoid price competition

# Strategies to avoid price competition.

- through product differentiation
- price discrimination
- consumer lock-in strategies
- industry consolidation

# Management implications of technological convergence

- Incentives to conglomerate firm  
across several media

# Management Implications of 2-Sided Markets

- Seek to maximize number of consumers, (weighed by their quality)
  - gaining market share
  - And then leveraging it for advertisers.
- **Implications: subsidize the user**

Management implications of the strong presence of non-maximizes of profit

- Need to compete by creating a product through quality, reputation, credibility, professionalism.
- Not through opinion. Opinion is cheap to create and everybody does it.

- **Need to create content that is technologically more advanced and complex. That cannot be easily be created by an amateur with a video camera.**
- **So the strategy has to be a premium product.**

# Non-Normal Distribution of Success

- Most projects a failure
- Attractive to risk takers for big payoff. Or, to players who do not understand or who underestimate the risk
- In other words, it attracts the gamblers and the dreamers



- For other types of companies, risk containment and reduction become a key management task
- A major function of media firms is to lower the risk of individual projects

# Management Implications of Intellectual Assets

Central element for media firms:

- How to create?
- How to price?
- How to protect?
- How to value

# Management Implications of Public

## Good Characteristics:

- Difficult to charge for information
- Difficult to protect property rights
- Implications: under-investment in information with strong public good externalities
- Strong need to manage government relations



# Management Implications of Digital Activities

- **Type 1 companies**
  - relatively small and specialized.
  - competes in price, and in innovation.
  - follows basically the model of a competitive firm that we learn about in economics
  - It provides specialized services and technology to companies of **Type 2**.
- Its business goal is to either become a company of Type 2, or to be acquired by a company of Type 2

# Type 2 Companies

- Large 'tentpole companies' that integrate many products and services, and serve many customers, product markets, and geographic markets

- **Type 2 companies basically, seek market imperfection**
- **In the digital economy, market imperfection is not a “bug”, it is a feature.**

# Management Strategies of Type 2 Companies

- Avoid price competition
- Seek price discrimination
- Generate a consumer “lock in”
- Seek to create a “walled garden” ecosystem
- Generate network externalities



# Expansion

- Expand globally
- Integrate vertically through expansion and acquisition
- expand to other product lines to benefit from economies of scope

- Seek premium product brand
- Greatly expand marketing
- Invest in government relations
- Create product portfolios to lower risk

- These are management activities to undercut market competition
- They all make perfect sense in business terms
- And they are mostly perfectly legal
- But what they do create, or seek to create, is market power.
- And most of them are not some dark conspiracy but a perfectly logical and lawful activity.
- It's just that we don't necessarily like the outcome
- And this is a public problem.
- Which requires a public solution

**Public Policy  
Implications?**

- The first and most obvious option is *Governmental regulation*:
- It is typically triggered by negative episodes that lead to public and political pressure.
- An example is the harsh critique that fake news affected the last US presidential election
- This then leads to a beating up of Facebook, and to calls for its breakup, because it was too powerful

# 1. Structural Policies

**Example: Break-up of  
Online Companies?**

# 2. Behavioral Policies: Regulation



- Political reaction will usually be an *over-reaction*
- Fortunately, governmental regulation is constrained by constitutional limitations, antitrust laws, and the rights of free speech.
- and by government's need to balance also other societal interests and stakeholders

# 3. Delegation of Regulation

**Government therefore  
delegates regulation to the  
large platform companies and  
mandate self-regulation**

- **Platforms shift from being responsible for nothing, to being responsible for everything.**

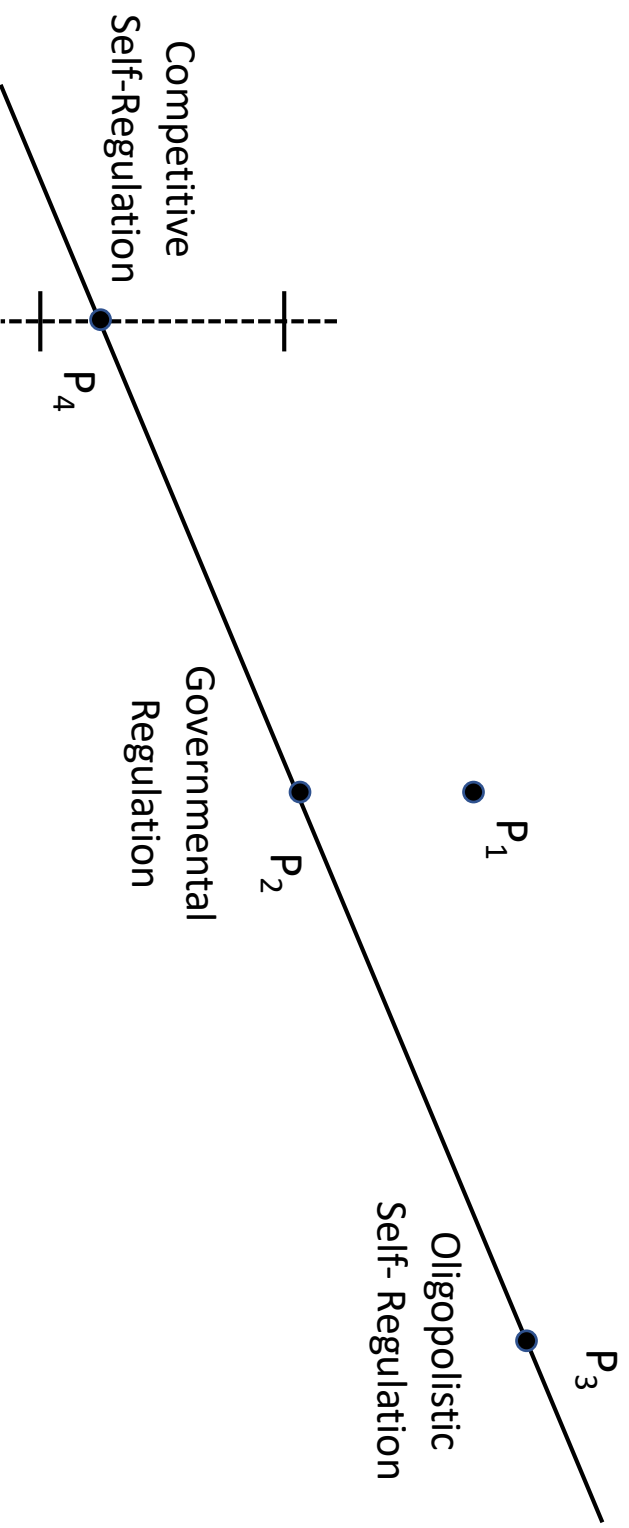
- This is the direction things have been going.
- Governmental and political pressures on platforms
- And the platforms are going along, because they become important part of keeping order,
- and in return they are left alone. Or hope to. That is the deal. We will clean up, and you leave us alone

# It's a poor system

- No due process
- No constitutional protections
- Based on political and marketing considerations not to offend hypersensitive users
- Affected by rules of other countries' governments that might be much more restrictive

- A schematic mapping of the differences in regulatory outcomes
- On the verticals regulatory strictness
- On the horizontal, market concentration
- $P_1$  is the strictness where government would like to regulate
- But constitution and politics move it down to  $P_1$

**Regulatory  
Strictness**



**Market  
Concentration**

## ***Oligopolistic self-regulation:***

- Will be stricter, less interoperational, less public interest oriented, than governmental regulation**
- Will slow down technology, innovation, culture, and global diversity**



- ***2. self-regulation in competition:***  
**Will be on a spectrum from strict to loose.  $P_4$**
- **But really, a whole band of strictness**

- *Except in some egregious and clear-cut cases, this will be ineffective, inefficient, and slow. Instead, We should be much more imaginative here.*
- *And try to help create an intermediate layer of organizations that support users.*
- *This alternative I call the Open Video System*
- *It is based on access, not on antitrust breakup*

**Alternative: Establish the  
Open Video System**

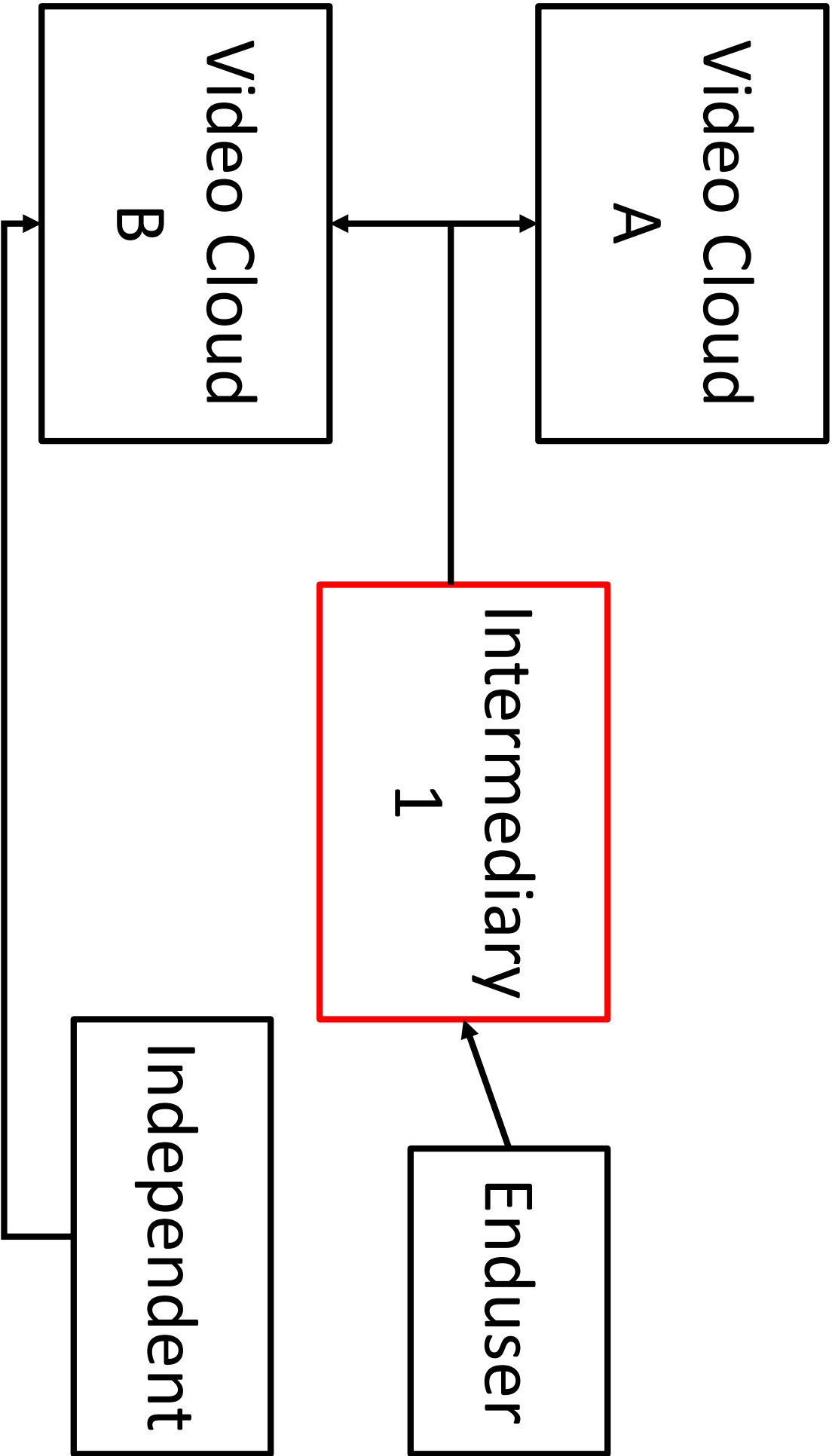
**Details in my paper. Here  
are general points**

**1. Access rights to  
infrastructure and  
platform elements,  
where significant media  
market power exists**

**2. Such access would be accomplished through APIs that must be offered by platforms to data management intermediaries**

# “APIs”: Applications Program Interfaces

- Basically a way to let independent software that meets technical requirements interoperate with the platform’s software





## **Intermediaries**

- Picked by users, to conduct in their behalf**
- Content search**
- Data privacy control**
- Content filtering**
- Selection algorithms**
- Maybe preference to ads**

- This creates user choice in search, algorithms, data control, and content filtering

- *But a lot of people have come out against user choice, by basically outlawing the option of consumers giving up privacy rights in return for some benefits. One cannot give up such fundamental rights, especially if you are poor, and weak.*
- *Paternalistic. So instead of taxing the big users of data and giving the money to the poor, we make it more expensive or ineffective for poor people to use digital services. Let them eat privacy.*
- *But by establishing intermediary data managers for consumers, one can overcome the gap in the bargaining strength, and in the level of expertise, and empower consumers.*

**3<sup>rd</sup> element of the  
system: self-  
administration and  
arbitration**

- And the whole thing would be run by a consortium of the major stakeholders from the corporate and NGO side.
- Access would not be free. It would be priced on the basis of most-favored nations.
- Access would not be to every element, only to those elements that have significant media market power.

- So this is the open video system for online video platforms.
- It does not touch platforms without market power
- It does not break up
- And it does not require platforms to act as the policemen for governments to do things that governments have no right to do themselves.
- But it gives access rights to the interoperation of software modules of intermediaries who act in behalf of the endusers.

- *We should therefore generate an industry structure in online video that includes intermediaries that corrects the imbalance between the individual and the giant data-driven companies, and reduce the need to fall back on governmental control*

- This does not solve all problems, but it reduces the problem of the global market power of the platforms.
- And it does so without the inefficiency and anti-innovation aspects of other approaches.
- So we should give our attention and thinking to establishing such a system.
- It would be the foundation of media industry and of media policy, for a long time. And the time to start working on it is here and now.
- I hope that we can work on this together to refine it.





# End of Lecture!

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