

# **Impact of Internet on Business: Internet Value Chain & Value Webs**

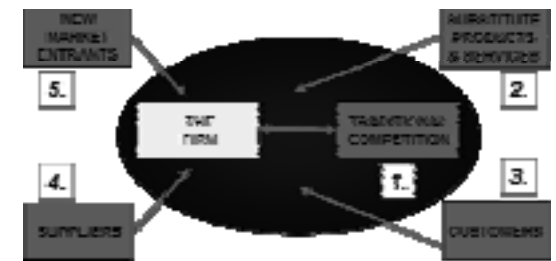
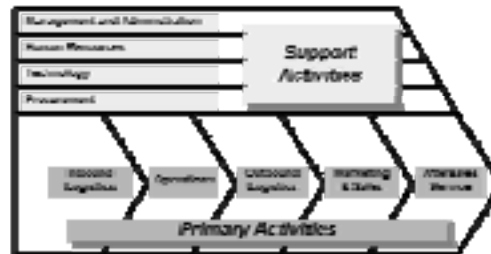
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# The Impact of Internet on Business

- Reader: articles
  - Porter: Strategy and the Internet
  - Tapscott et al.: Digital Capital (Business Webs)
  
- Important background concepts to understand
  - *First-mover advantage*
  - *Partnering, sourcing*
  - *Sustainable competitive advantage*
  - *Industry structure (and entry barriers)*
  - *(Dis)intermediation*
  - *Value proposition*
  - *Operational excellence*
  - *Trade-offs in decision making*
  - *Strategic fit and integration*
  
- Important background concepts to understand (ctd.)
  - **Value chain and competitive forces models**
  - *Switching costs*
  - *Transaction costs*
  - *Network effects (network externalities)*
  - *Cost leadership vs. differentiation vs. focus (forms of competition)*
  - *The role of (Internet) standards*
  - *Channel conflicts*



# Background Concepts (1/3)

- ***Switching costs***: effort or difficulty for a customer to switch to another supplier
- ***Transaction costs***: costs relating to letting other companies doing things for you (compared to doing it yourself)
  - Fundamental problem of economic market theory: why not just one-person companies if free market is ideal?
- ***Network effects***: cumulative effect on usefulness when an innovation is adopted by more individuals ( $>$  linear, e.g. exponential)

# Background Concepts (2/3)

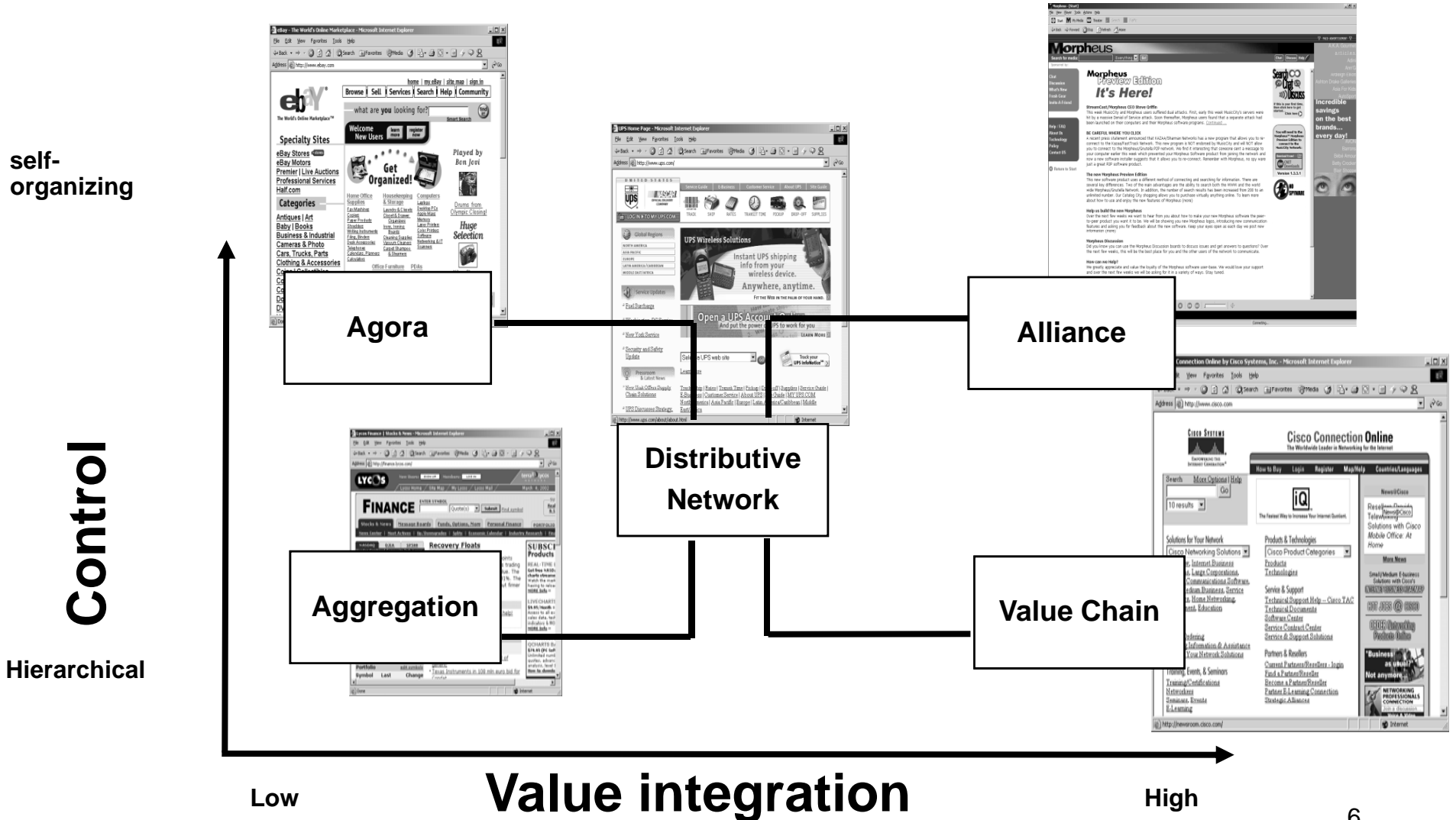
Different generic competitive strategies:

- ***Cost leadership***: consistently producing cheaper than your competitors, and so achieving a price advantage
- ***Differentiation***: producing with special difficult-to-imitate product features, so that you can command a premium price
- ***Focus***: concentrating on very specific markets that you know better or have easier access to than your competitors (niche strategies)

# Background Concepts (3/3)

- Role of (Internet) *industry standards*:
  - + standardization makes it easier for your industry sector *collectively* to create or grow markets as a whole
  - – standardization makes it easier for your competitors to imitate or bypass your proprietary solution that enables **customer lock-in** by you *individually*
- ***Channel conflicts***: conflicts of interest to be handled by a producer, if its products are simultaneously marketed via different distribution and sales channels
  - e.g. physical stores as well as direct online

# Tapscott: Classification of b-webs (1/2)

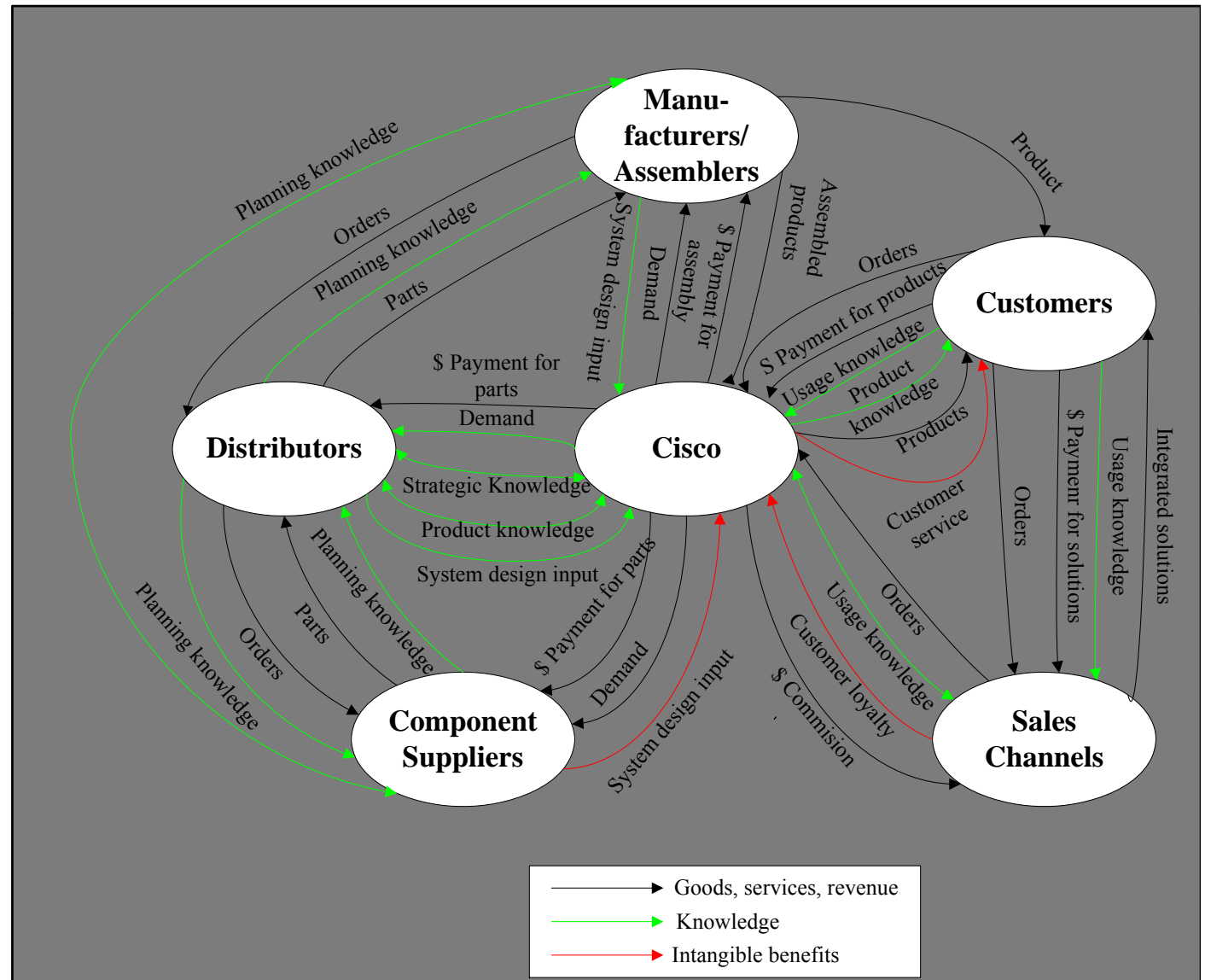


# Tapscott: Classification of b-webs (2/2)

	<i>Agora</i>	<i>Aggregation</i>	<i>Value chain</i>	<i>Alliance</i>	<i>Distributive networks</i>
<i>Main theme</i>	Dynamic pricing	Selection & convenience	Process integration	Creativity	Allocation & distribution
<i>Value proposition</i>	Liquidity	Optimization of selection,...	Design & delivery of integrated product	Creative community supporting shared goals	Exchange & delivery of information, goods & services
<i>Customer role</i>	Market player	Buyer	Value driver	Contributor	Sender/recipient
<i>Knowledge focus</i>	Timing, market intelligence	Market segmentation, supplier offerings, fulfillment	Innovation, supply-chain management	Community, creativity, standards & roles	Network optimization, visibility & transparency
<i>Key process</i>	Price discovery	Needs matching	Product design, supply-chain management	Innovation	Distribution

# Tapscott: Techniques to describe b-webs

- Value maps
- Shows who exchanges:
  - Things
  - Knowledge
  - Intangibles

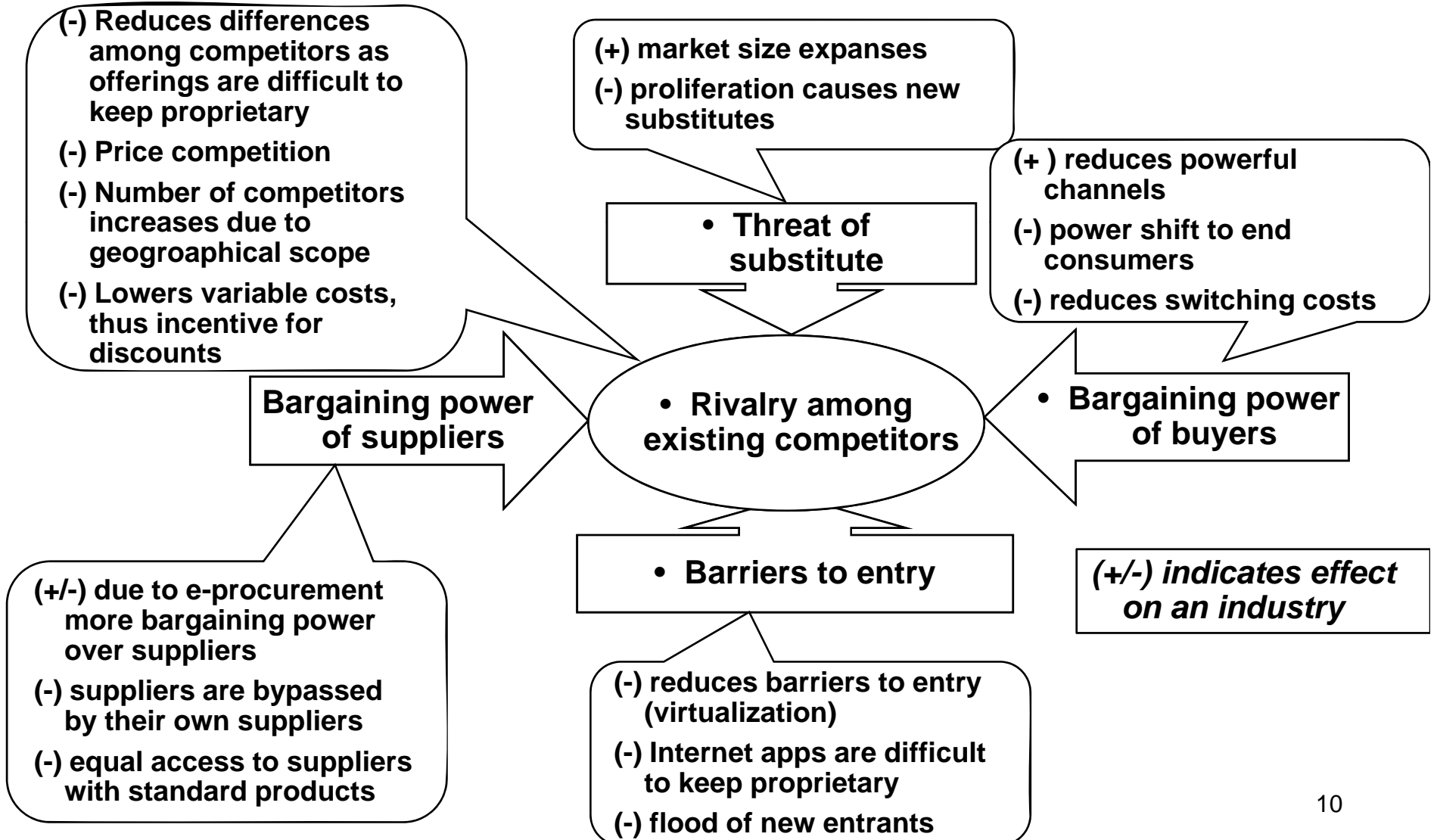




# Porter: Strategy and the Internet

- Industry clearly showed ( $\leq 2001$ ) how eCommerce / eBusiness does not work:
  - Revenues are not realistic: subsidy of sales, transactions due to curiosity (and not consumer value)
  - Expenses are not realistic: at buy-side subsidized inputs, subsidizing information provisioning (Yahoo) by sellers, payment of employees by stock options rather than salary
  - Other, non value related metrics: click-rate, page-views, market share potential

# Porter: Competitive Forces and Internet



# Porter: Conclusion on Internet and Value Creation

- Statements:
  - Many enterprises have artificial profits
  - There are no new rules of competition
  
- Companies that use the Internet (so not just technology providers) should be able to create economic value with it. Key factors are:
  - Industry structure
  - Sustainable competitive advantage

# Some reactions on Porter's view (1/2)

- Porter:
  - hardly any network effects
- Ticoll: Proven network effects (Amazon, Ariba, CommerceOne, Napster, eBay)
  
- Porter:
  - pure online brands are difficult to create
- Ticoll: new brands are *always* difficult to create

# Some reactions on Porter's view (2/2)

Partnering (often seen in Internet business):

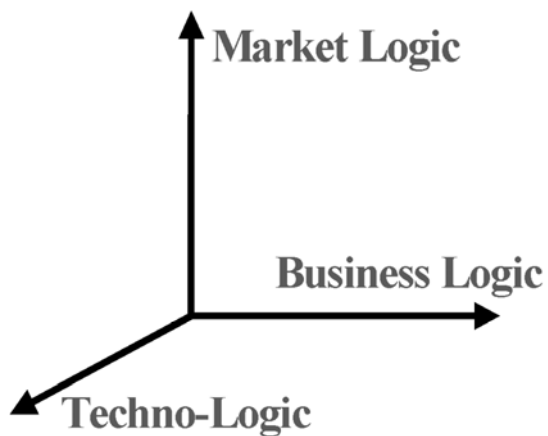
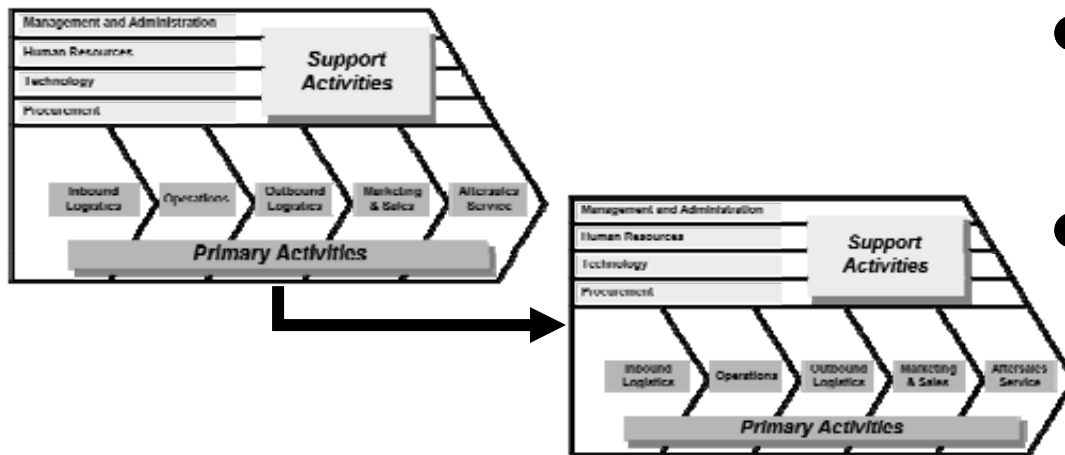
## ■ Porter:

- Partnering requires product standardization, so in the end it depresses profitability. So vertical integration is the preferred strategy (over virtualization/partnering)

## ■ Ticoll:

- IBM and MS show counter-argument: here standardization spawned off a significant industry
- Choice between one company versus many small ones is determined by transaction costs. Internet resulted in decrease of transaction costs and thus partnerships emerge (with focused enterprises that can exploit economies of scale)

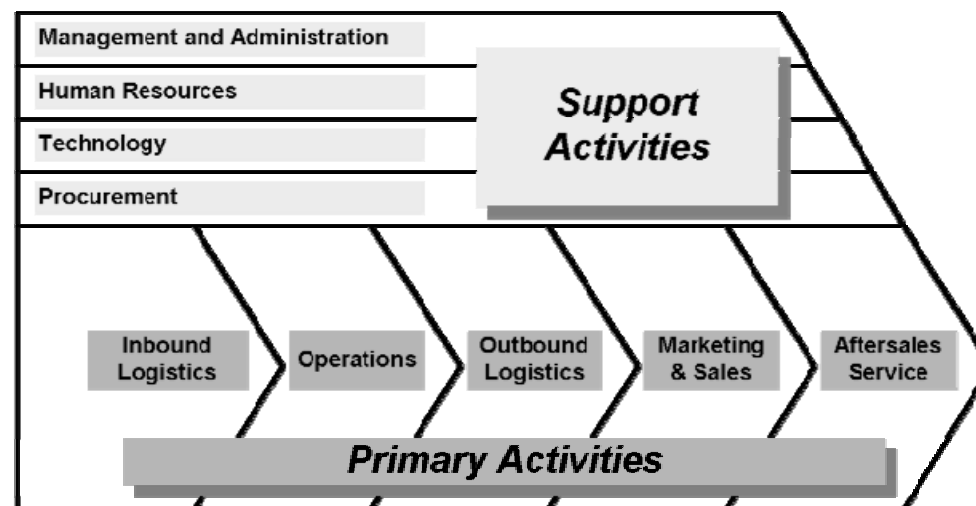
# Networked Business Models: The Logics of Value Creation



- Value chains become networked
- Emergence of networked business models: Value webs
- Analyze cross-company offerings, business models, workflows
- Role of customer increases in service-based Information Society

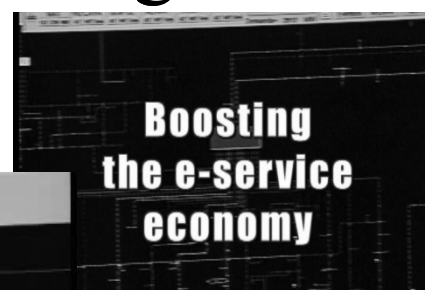
# Arguments about Internet Value Chain

- Note 1: underlying worldview of Porter is the well-known industrial production line
- Note 2: E-business: not linear chain, but (dynamic) network – connected and enabled by ICT and IS
- Note 3: ICT as strategic factor, not just cost cutting



# Case Examples for Discussion (by videoclip)

- Digital content: online music, video, news
- Universal connectivity
- Energy: smart homes and smart grids
- ....
- Requires out-of-the-box thinking





# **Key points:**

## **Know and remember these!**

- Internet impact on value chain, value networks
- Value chain change due to ICT and e-business:
  - Connectivity of chains
  - From value chain to value network
  - Interacting drivers: business, market, technology
  - Role of Information Systems (IS) to enable
  - Increasing role of customer (and interactivity)
- Porter vs. Tapscott et al.: differing views on how fundamental Internet impact on business is

# Assignment A3: Classroom Debate

## – Porter versus Tapscott!

### ■ Porter:

- Internet no more than complement of business as usual
- Network effects are absent
- Partnering is economic nonsense
- Internet branding is failure
- Internet standards destroy competitive advantage
- First-mover advantage is phantasy
- Strong vertical integration is best strategy

### ■ Tapscott et al.:

- *Cheers!* for the Internet as disruptive innovation of existing businesses
- Network effects are present
- Partnering creates new economic opportunities
- Successful e-brands exist
- Internet standards help create new industry and market
- Successful and sustainable first movers do exist
- Loose aggregation and other new business models work