Organization, Platform, and Ecosystem

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Agenda

- Focus on Platform – an organizational lens

- Platform Ecosystem – a framework

- Key Characteristics and Perspectives – more than business model issues

- Policy Implications – new measures?

- New Challenges – new emerging species and typology

The Elephant in the Room

- Platform: is it a thing that we can ignore?
- If no, what is the first step that we should take?
- Why are we uncomfortable with platforms & ecosystems?

"I'm right there in the room, and no one even acknowledges me."
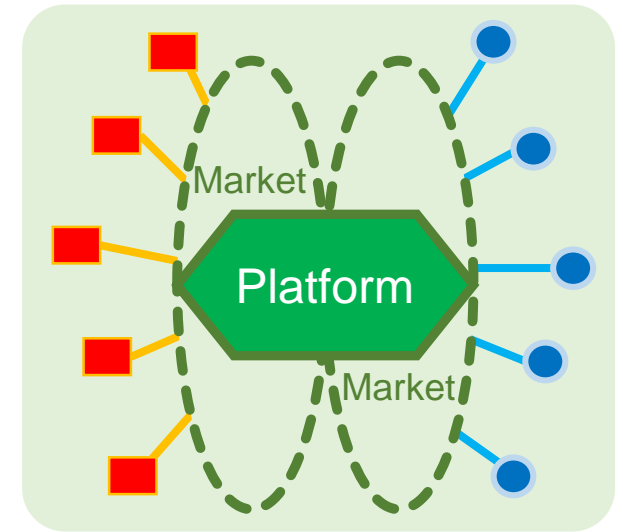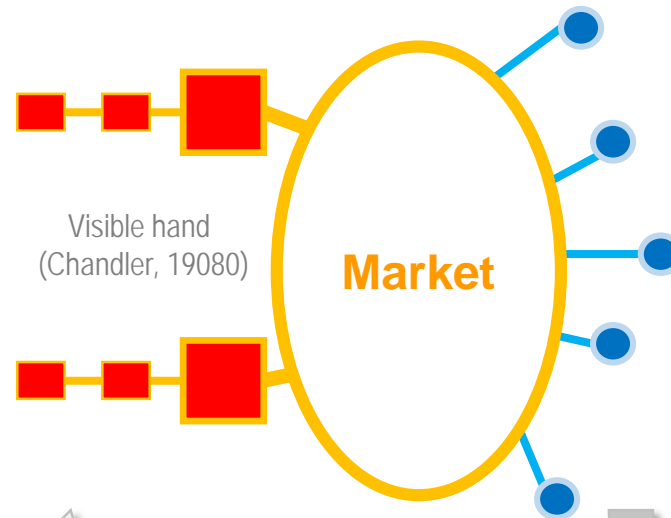
The New Yorker, 9/18/06
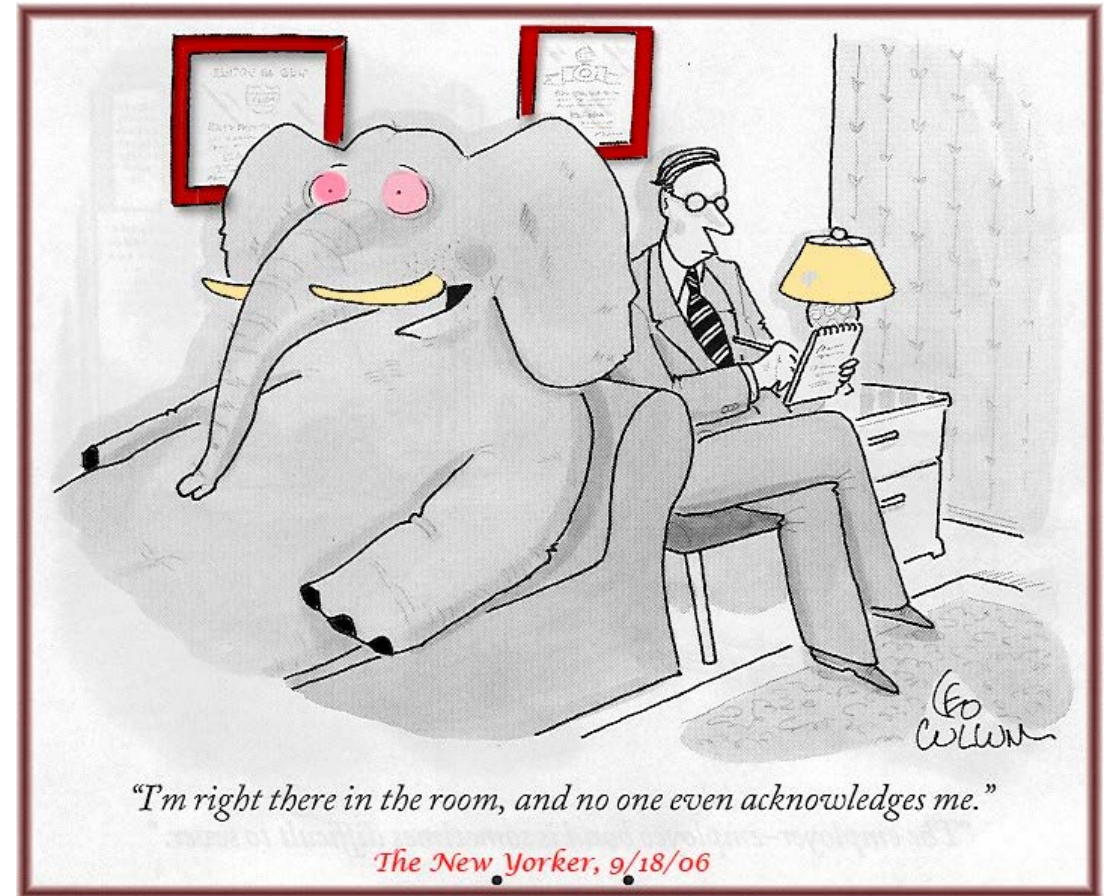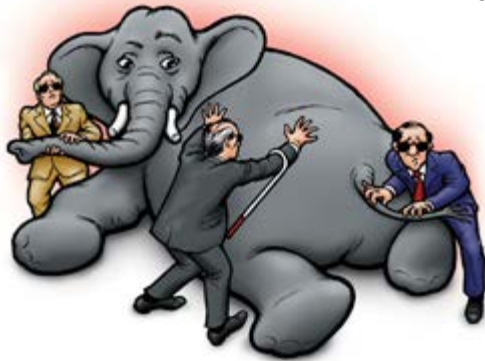
Grand Hypothesis of Mine

- Predicted on supply and demand
- Price controls trades (even clears some markets)

- Predicted on supply
- Quantities and firms are selected in their respective markets

- Supply and demand are unknown, but anyway created
- Some economy sections are selected or discarded

Market vs. Hierarchy (Coase, Williamson)   *Network vs. Ecosystem (Moore, Iansiti)*
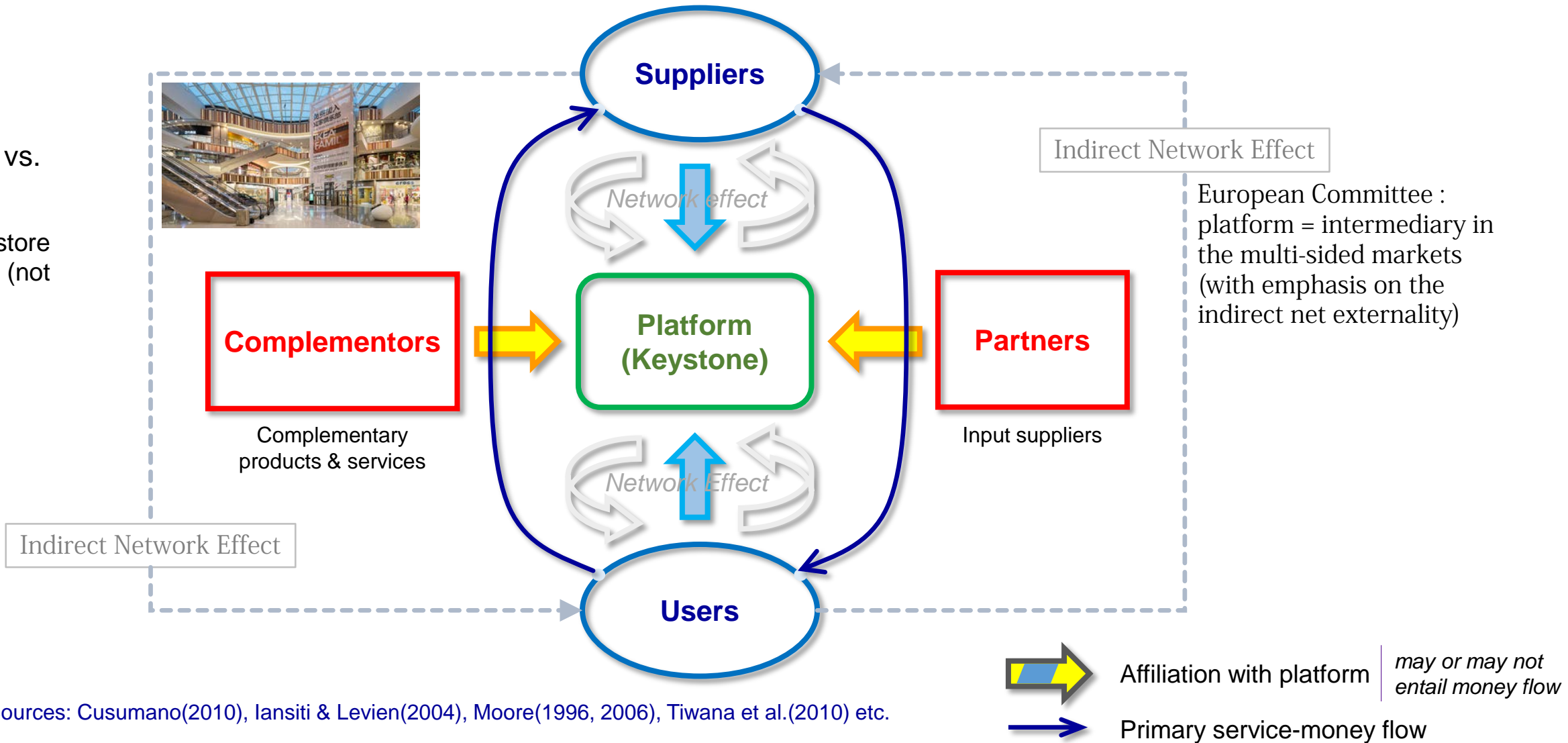
Market
bazaar
Invisible hand
(A. Smith)

Visible hand
(Chandler, 19080)

Market

Market

Platform

Market

Extended Market or Market Creation

transportation revolution, …

turmoil digital disruption

Platform Ecosystem: a Stylized, Conceptual Model

vs.

cf. grocery store as reseller (not platform)

Suppliers

Indirect Network Effect

Network effect

Complementors

Complementary products & services

Platform (Keystone)

Partners

Input suppliers

European Committee : platform = intermediary in the multi-sided markets (with emphasis on the indirect net externality)

Network Effect

Indirect Network Effect

Users

Affiliation with platform | *may or may not entail money flow*

Primary service-money flow

Sources: Cusumano(2010), Iansiti & Levien(2004), Moore(1996, 2006), Tiwana et al.(2010) etc.

Key Characteristics of Platform Ecosystem

Resellers or VI Firms	Platform Ecosystems

- aggregate resources and offer value-added serv. by verifying quality for target products

- enjoy economies of scale for high demand products
- take inventory risks and associated burden; but get greater control

- may be too slow and not sufficiently convenient for either side
    - ✓ costs of being affiliated
- growth-oriented and more capital efficient
- relatively more cost effective and less risky on various or long-tail demand

Key Characteristics Comparisons (continued)

Resellers or VI Firms	Platform Ecosystems

- focus on efficiency of internal operations – competing for dominance
  - ✓ emphasis on internal capability … resource-based view
- Shareholders' value
- Individual rationality and performance
- Control and strategy

- focus on mutual effectiveness and survival for the shared fate of their participants
  - ✓ Iansiti and Levien (2004); Moore (2006)
- Stakeholders' value
- Collective rationality and performance
- Governance and coordination

Viewpoint 1: Don't Kill the Golden Goose

- Regulating activities that may appear anti-competitive in the short-run; but those activities could be valuable to the ecosystem in the long-run
  - ✓ e.g.) incompatibility & entry barrier: Facebook's ban on data portability to Google+
- Platform is a keystone or a dominator or a landlord?

Viewpoint 2: Wolf in Sheepskin

- Most activities of keystones will be beneficial to their ecosystems and societies?
  - ✓ Actually, many keystones are in a (near) monopoly position
  - ✓ protecting rivals $\neq$ promoting competition
- How regulations (or markets) will encourage platforms to be more beneficial to the society?

The Wisdom of Solomon Needed?

- Why judging   vs.   is so difficult?
- With traditional markets & firms, monopolization or dominance can be verified by proving two points: (1) market power and (2) exclusionary conduct
  - ✓ These are valid under the assumption of profit-maximizing actors →
  - ✓ The fact that a firm may possess market power does not by itself put it under a duty to help its rivals
- What if a platform does not pursue the profit? Instead, what if the platform just wants to maintain its (location, relation, and other soft, invisible) power in the ecosystem?

New Policy Measures

- How to exercise the power of leading position indirectly and in cooperation with its participants? – This could be good or bad or both...

- Positive signs – Iansiti & Levien (2004), Iansiti & Richards (2006) + more

- Robustness
  - ✓ survival rate of ecosystem participants

- Productivity
  - ✓ ROI; total factor productivity (need to be modified due to input char.); …

- Niche creation (diversity and innovation capability)
  - ✓ availability of new funds for investment from platform or its VC partners

New Policy Measures (continued)

- Negative signs
- Investment in critical assets upon which participants depend
  - ✓ Basically, investment is a good thing
  - ✓ Idiosyncrasy could raise the hold-up issue
- Whether (and to what extent) to condone gateway (or adaptor)
  - ✓ Provides room for alleviating platform's control power on its ecosystem
  - ✓ Compatibility through ex post introduction of gateway; multi-homing;…
    - Katz & Shapiro, AER, 1985 & JPE, 1986; Matutes & Regibeau, RJE, 1988; David & Bunn, IEP, 1988; Farrell & Saloner, JIE, 1992; …

New Horizon and New Challenges

- "Why are there so many species? (and why they are so diverse?)" – C. Darwin (1859)
- "Why are there so many different kinds of organizations?" – Hannan and Freeman (1977)
- The same question applies to the platform ecosystems
- Perspective Change
  - ✓ structure – conduct – performance paradigm & adaptation ➔ selection as a mode of organizational change and emphasis on dynamics
  - ✓ emphasis on architecture (more than structure) and governance – closer to a political system than to an economic system

New Species of Platform Ecosystem

Implications – New Dimension to Focus on
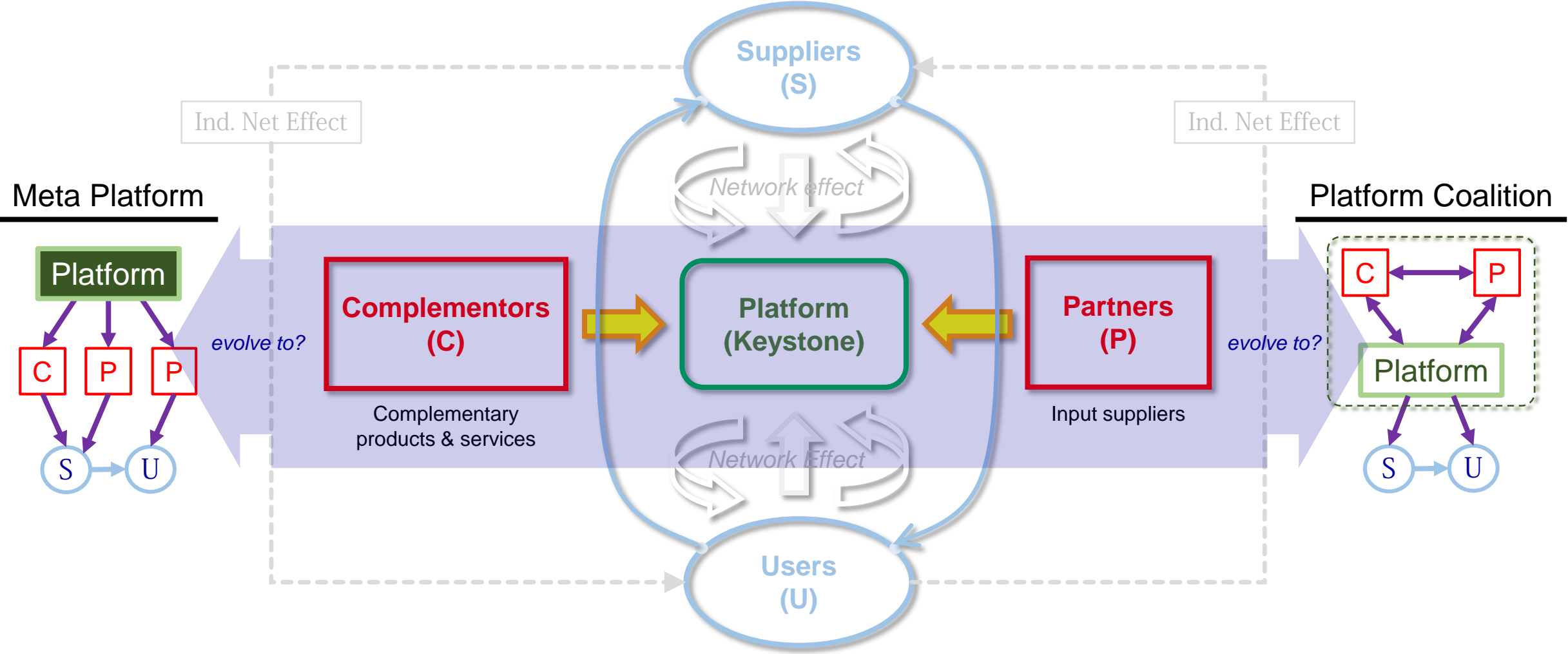
Evolution of Platform Ecosystems: Typology

Meta Platform Ecosys.	Platform Coalition Ecosys.

- Behind the scene
- Essential component
  - ✓ genesis
- Closer to (extended) VI org.
  - ✓ closed and control-oriented
- X on Apple
  - ✓ needs iPhone or iOS (→ meta platform): e.g. Apple pay
  - ✓ frontier market exploitation

- Figurehead
- Valuable component
  - ✓ leader; enabler
- Faithful to ecosystem
  - ✓ open and coordination
- X with Kakao or Facebook
  - ✓ independent of devices; dep. on partners: e.g. Kakao pay
  - ✓ market expansion w/ low margin

Wrap up

- Platform ecosystems are everywhere
- They are still evolving
- Their diversity makes it difficult (almost impossible) to design a one-size-fits-all policy or law
  - ✓ Need to develop classification systematics for the ecosystems
- They don't behave according to sheer (traditional) economic motivation
  - ✓ Sometimes they look closer to a political system
  - ✓ Governance and coordination could be key dimensions that policy (and even law) development focuses on