Comments on “The Acquisition and Commercialization of Invention in the American Economy” by J. Walsh

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New model of innovation in “the third industrial revolution”

Old model—vertical integration of invention and innovation

New model—vertical separation of invention and innovation

New model creates innovation better because division of labor allows specialization
New model

specialist firms  
suppliers, users

market for technology  
non-market mechanism

innovating firm
Comment 1. Is new model new?

➤ D. Mowery

-out sourcing of research was common in the US around 1900s

-recent trends toward vertical separation is return to the old model, with the age of big companies (visible hand) in-between?
Comment 1. Is new model new? (continued)

➢ Invention from suppliers and users different from information that lead to innovation?

- Innovation survey emphasized the importance of information from suppliers
- Hippel and other on the role of users in innovation process
Comment 2. what lies behind

- Is new model demanded by technological imperative of ICT and Bio technology, GPTs of “third industrial revolution”? 

Or

- Is new model a product of institutional change in the US, such as stronger patent protection, weaker Antitrust, changing higher education system?

- If the former is the case, would it be necessary to promote new model in order to promote ICT and Bio tech industries?
Comment 3. Is new model better?

- Can market for technology work?
  - transaction cost of technology (information) can be substantial despite stronger patent system
  - market price in this market seems to be not a good guide of resource allocation for invention

- Empirically, old model did fairly well
  - big pharma introduced quiet a few blockbusters
  - IT?