Computerization and its effects in the U.S. residential real estate industry

AAI 11/05

In 1995, less than 2% of real estate agents used a computer for work. In 2004, more than 97% admitted to using a computer for work. This is computerization.

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In ~30 minutes

1. Perspective (5)

2. Approach (3)

3. Six findings (9)

4. One issue (1)

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Perspective

= Theories + Beliefs:

-> Legal

-> Political
- Political Economy

-> Economical

- Economic Sociology (freakonomics)

? Sociological (Institutional)

- **Socio-technical**

? Technological & others

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1855

Perspective

From 1970s', the number of ATMs has grown steadily, with no sign of leveling-off.
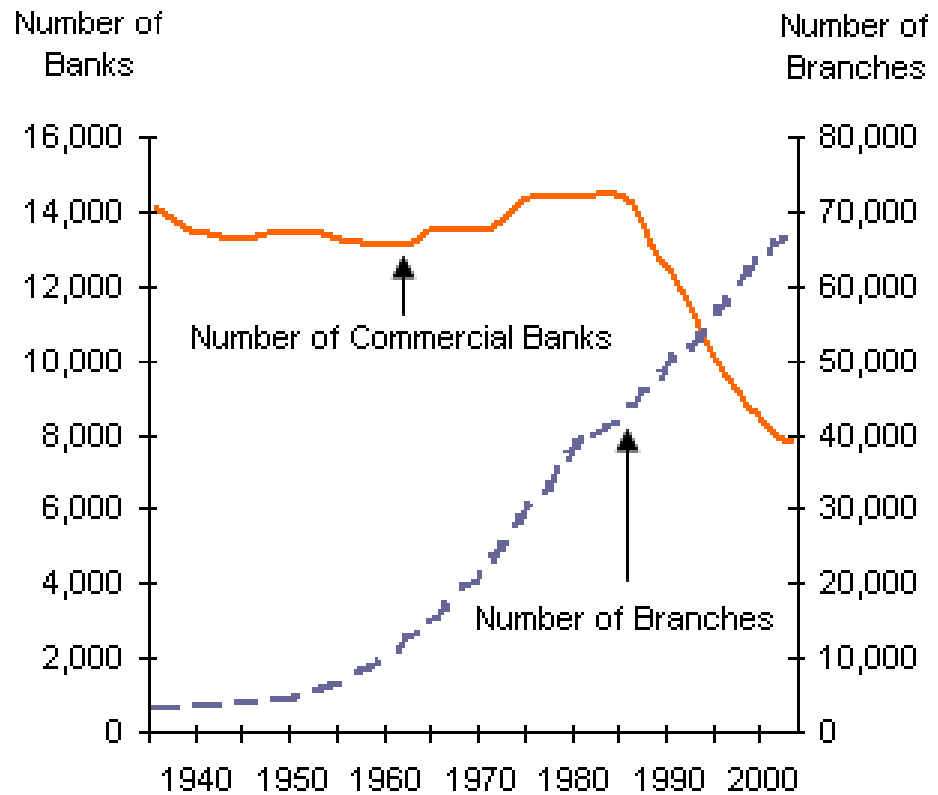
Q. What has happened to the number of branch banks?

    a. Risen

    b. No change

    c. Fallen

    d. All of the above

    e. None of the above

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A. Risen

Over the Long Term, the Number of Banks Has Declined and the Number of Branches Has Increased

Number of Banks

Number of Branches

Number of Commercial Banks

Number of Branches

Source: FDIC Office Structure Information

http://www.fdic.gov/bank/analytical/fyi/2004/070904fyi.html

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Perspective

- Economical:
  - Poor at predicting changes due to take up and uses of new technologies
  - Rely on secondary data

- *"Freakanomics:"*
  - Incentives. Wow….
  - + Value -- and difficulty -- of getting good primary data
  - + Simplicity $\neq$ parsimony

Perspective

**Because
believing is
seeing**

- **Socio-technical:**
  + Social and technical bound up

  + Uses and patterns emerge
    from within activity:
      - Demands strong empirics
      - Engages changes processes

  + Focus on second-level effects
    and value choices:
      - Institutional forces matter
      - People are social actors
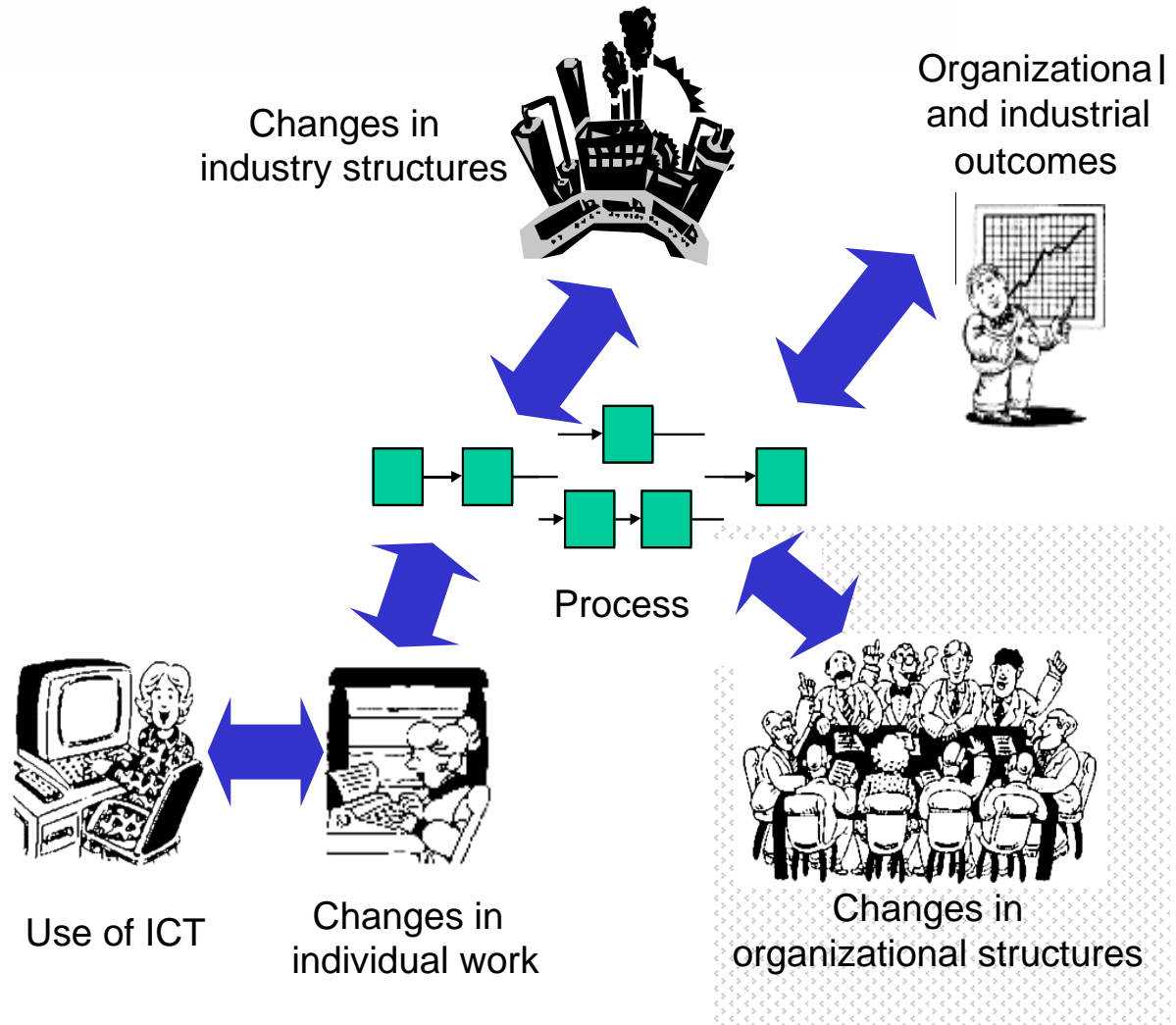   - Technologies "act," too….

Approach

- Get beyond substitution and disintermediation rants

- Work from bottom-up and top-down concurrently:
  - A happy resurgence
  - Get primary data

- Directly engage agents and their uses of information and communications technologies (ICT).

Approach

Changes in industry structures

Organizational and industrial outcomes

Process

Use of ICT

Changes in individual work

Changes in organizational structures

Approach

Eight years & three* waves

+ Two (reg'l/nat'l) surveys

(Dentistry with a hammer)

+ Interviews (in waves)

+ Observations

+ Participation

+ Secondary data

+ Literature

Six Findings

1. Agent's changing roles

2. Redefined access

3. Second-level effects

4. Competition

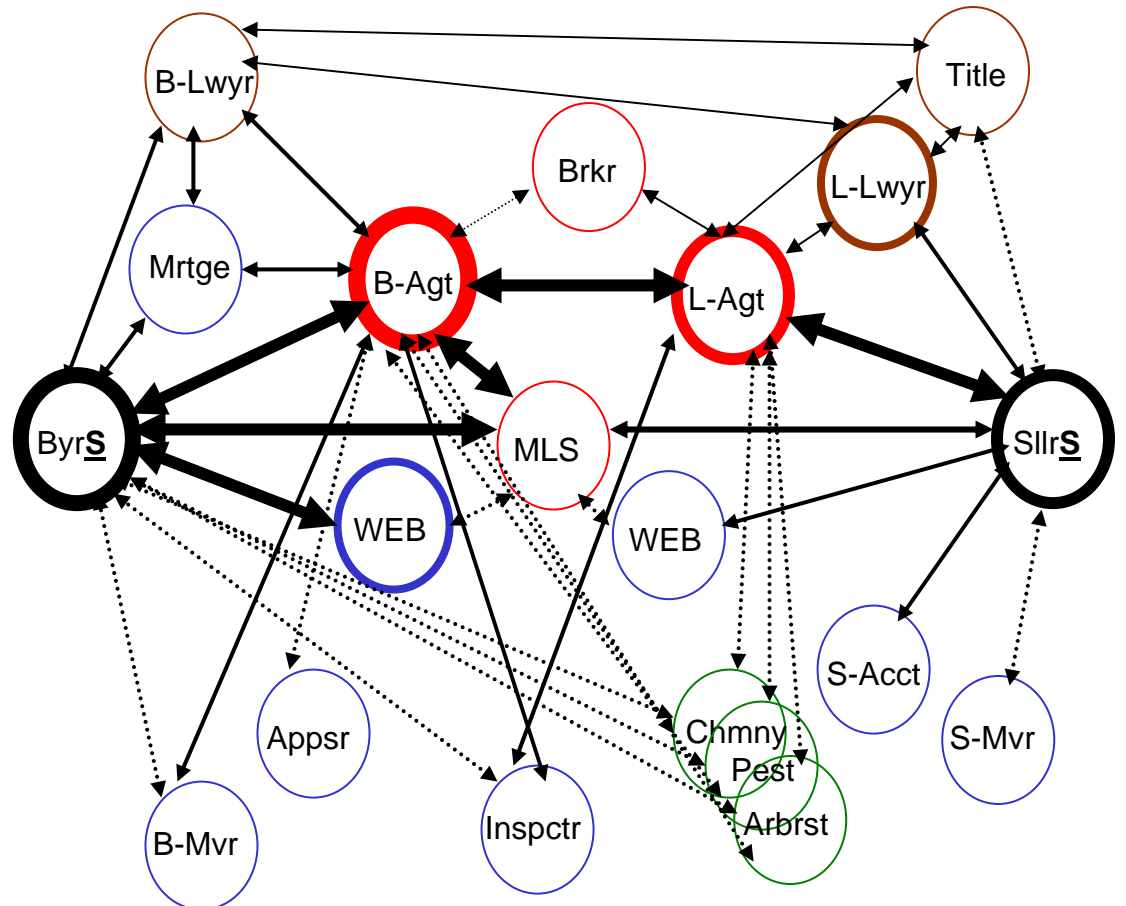5. Local market differences
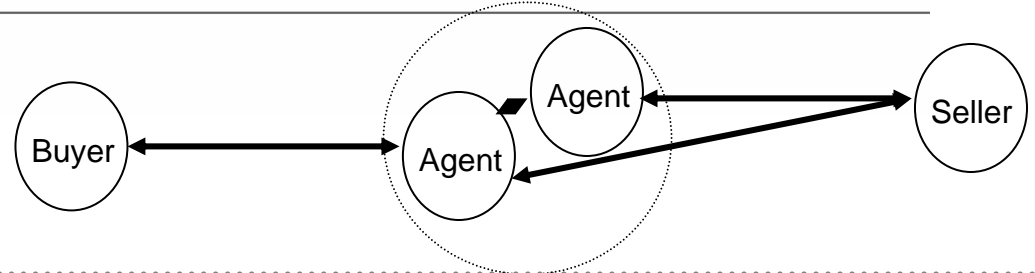
6. Institutional pressures

Finding #1:

Agent's changing roles

1. Information intermediary
   – House info
   – Weak ties

2. **Process advisor**
   – **Market making activity**
   – **Complex, *variable* process**

3. **Value-adding network**
   – **Professional strong ties**
   – **'Loaning' social capital**

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Two views of closing

Line thickness tied to _vol._ of communication.

Line color represents different roles.

Buyer Agent Agent Seller

B-Lwyr Title Brkr L-Lwyr Mrtge B-Agt L-Agt ByrS MLS SllrS WEB WEB S-Acct Appsr Chmny Pest S-Mvr B-Mvr Inspctr Arbrst

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Finding #2:

Redefined access

! The MLS is one part:

+ Mortgage information (rates)
+ Closing costs
+ Neighborhood data
+ Housing price changes
+ Livability indices
+ Job data, weather data....

- Concerns with stock and securities markets

Redefined access

Lets play the "knowledge work substitution game":

"With information available on the internet, we expect _____ to go away."

1. Real estate agents
2. Lawyers
3. Politicians
4. Economists
5. University faculty   (yikes!)
6. Clergy

Finding #3:

Second-level effects

- **Shift house search to buyer** (often done via online search prior to engaging agent)

- **Ubiquitous uses** of PC, mobile phone and fax. Increasing use of email & digital photos …

- **Semi-automation** of some process steps (digital forms, data)

- **Agent specialization** (service bundling & unbundling)

- **Changes to closing** and perhaps to agency

Finding #4:

Competition

- House-by-house, every day
- Inter- and intra-agency

- **Price _and_ service**
  - Price (and pricing)
  - **Service:**
    - **Specialization**
    - **Teaming**
    - **Value-adding services**

- Not 'just' 'theoretical' ….

Finding #5:

Local market differences

- Local market differences too easily overlooked:
  - Market share of top firms
  - Process differences
  - Ownership of top firms
  - Market growth
    - Sales, units, boundaries
    - Number of agents, listings,
  - Market rules

- Crappy data, too.

Finding #6:

Institutional pressures

- *Local agency:*
  - Start-up costs for agents
  - Increased infrastructure costs (ICT is not free)….
- *Regional politics*
  - *Local MLS, State's rules*
- **Industry issues:**
  - **Professionalization**
  - **Politics of agentry ($)**
  - **Politics of the closing**

At issue:

MY CONCERN:

narrowed perspectives

+ poor, secondary, data

+ misunderstand ICT

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Missed insight

IN DIRECT CONTRAST:

Real estate agents represent insight into future forms of knowledge-based work….