



Computerization in the US residential real estate industry



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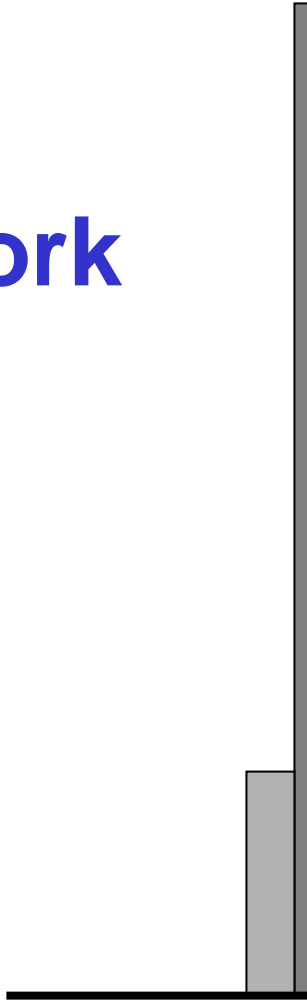
Thanks!



My work

Computerization:

- + Software developers
- + IT work & IT workforce
- + Police/public safety
- + Real estate agents (10 years)**
 - Field studies
 - Agents, brokers
 - Transactions
 - Surveys
 - Secondary data





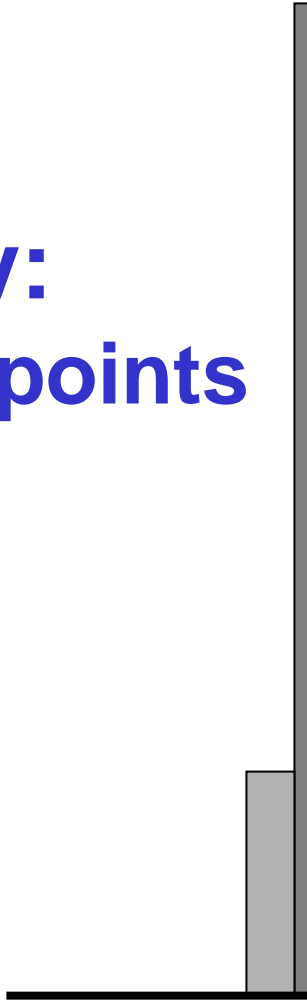
Computerization:

- ! Happening fast in real estate
- ! Its not like other industries

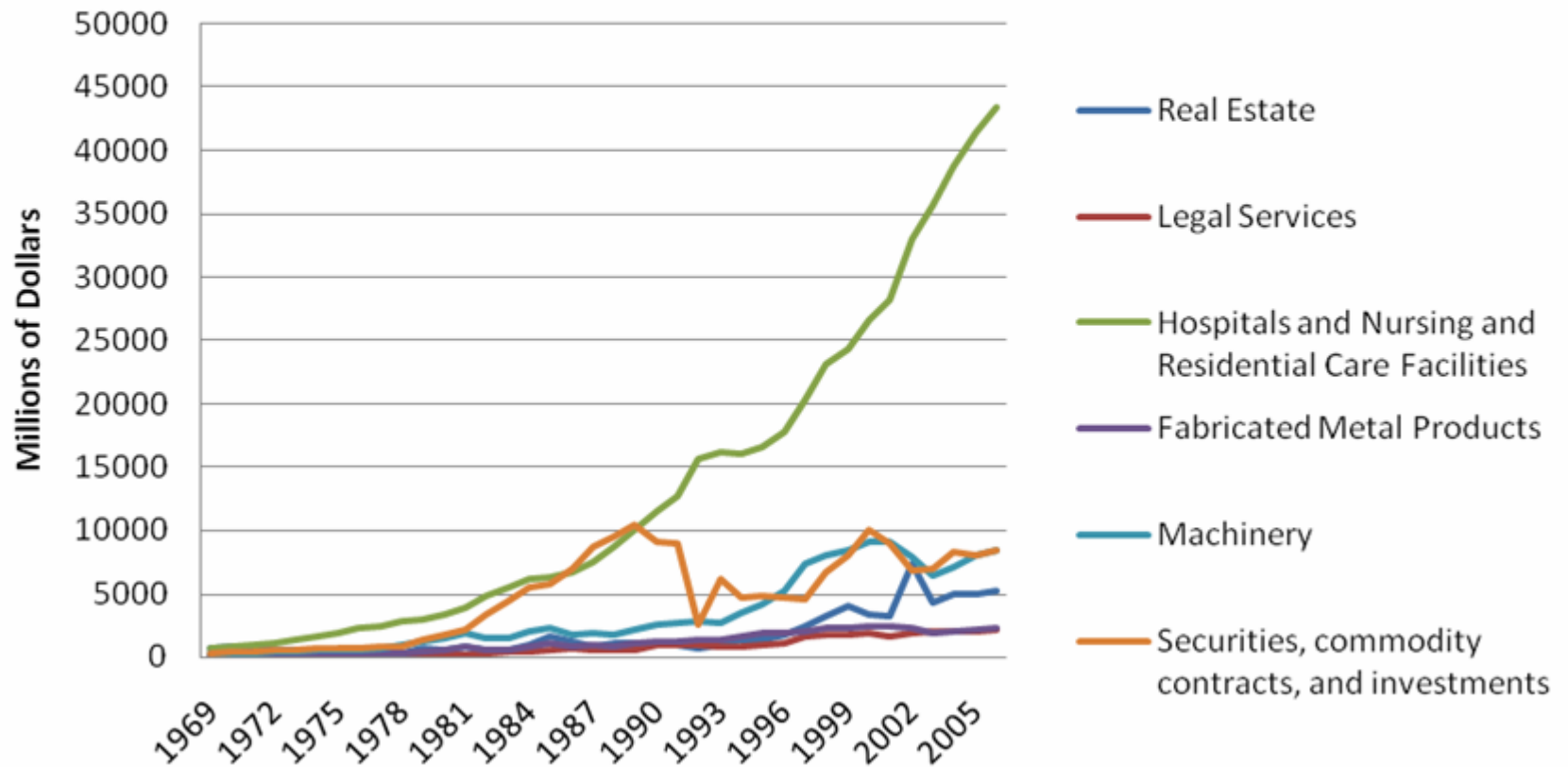
Today:
Three points

Two trends:

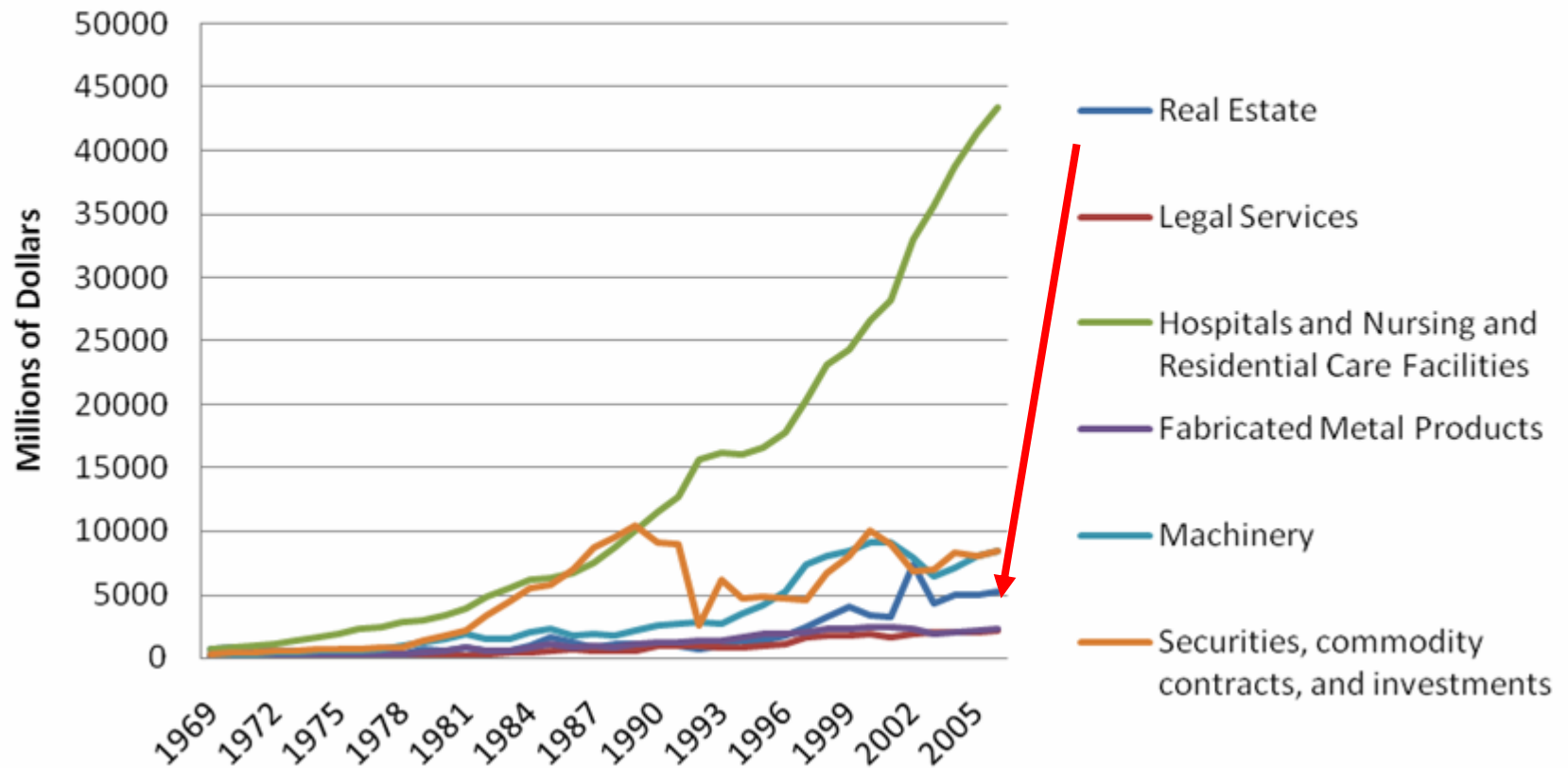
1. Making information social
2. Communicative ensembles



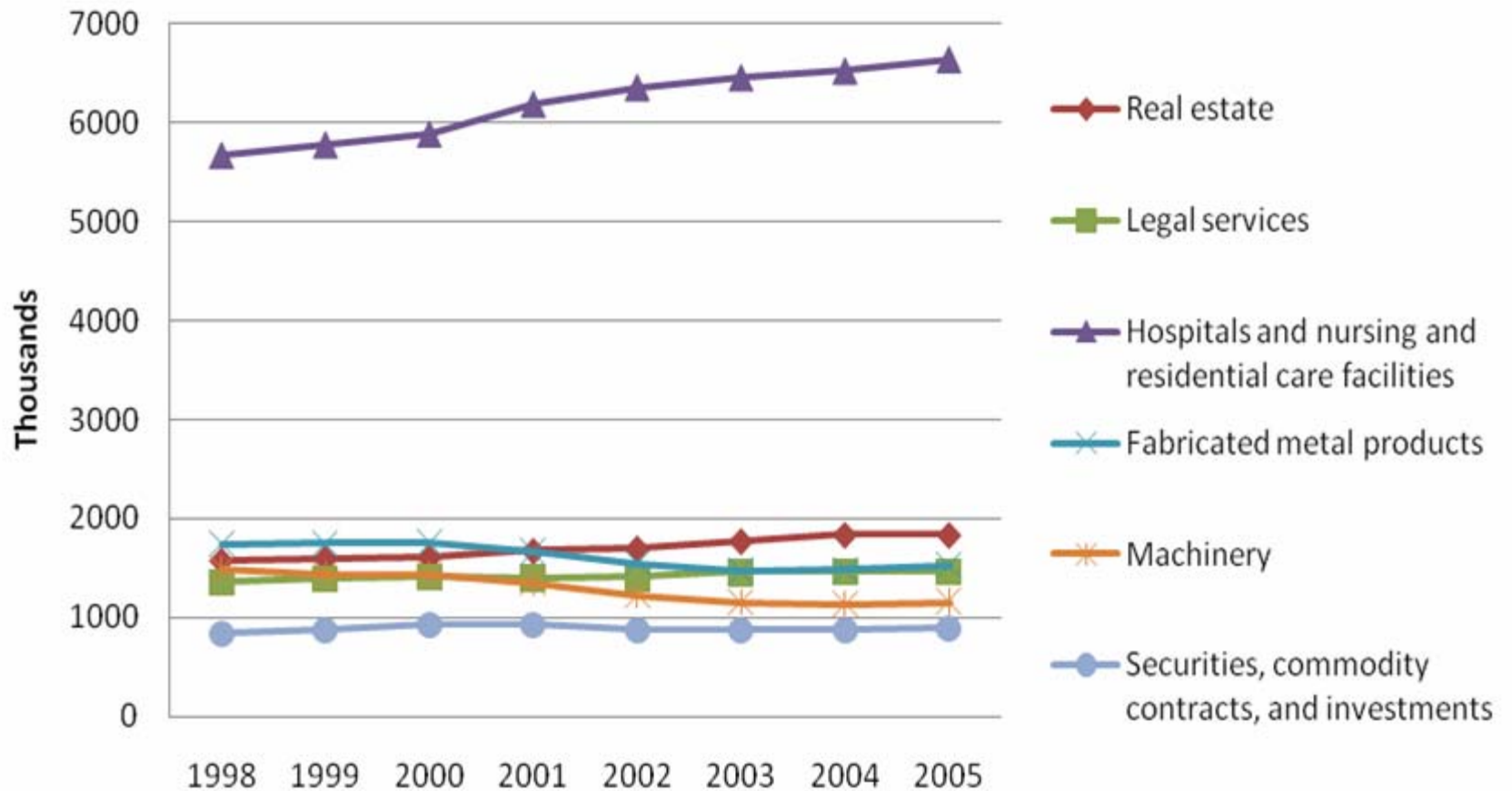
Total Information Processing and Software Investment by Industry 1969 - 2006



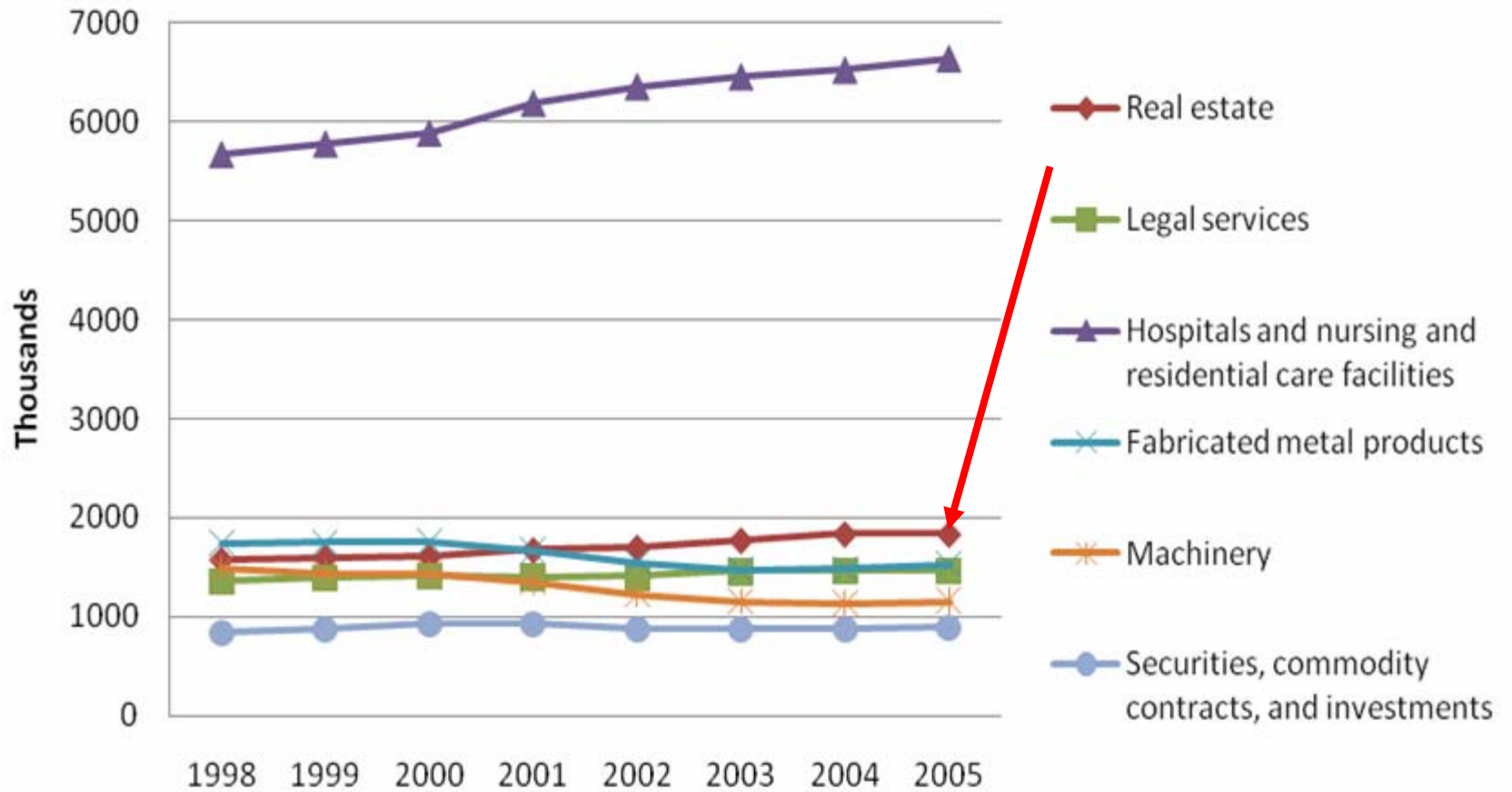
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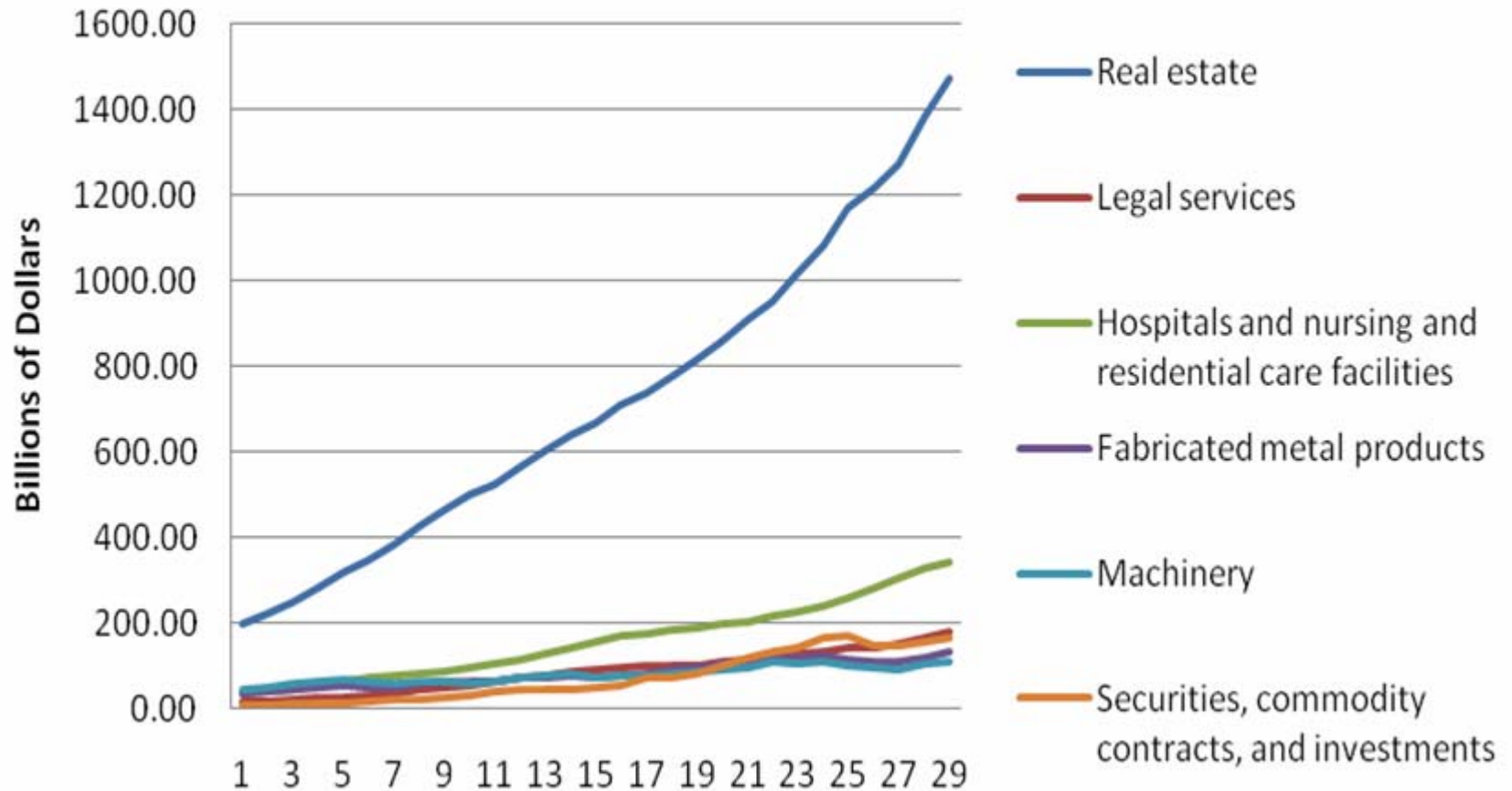
Persons Engaged in Production by Industry



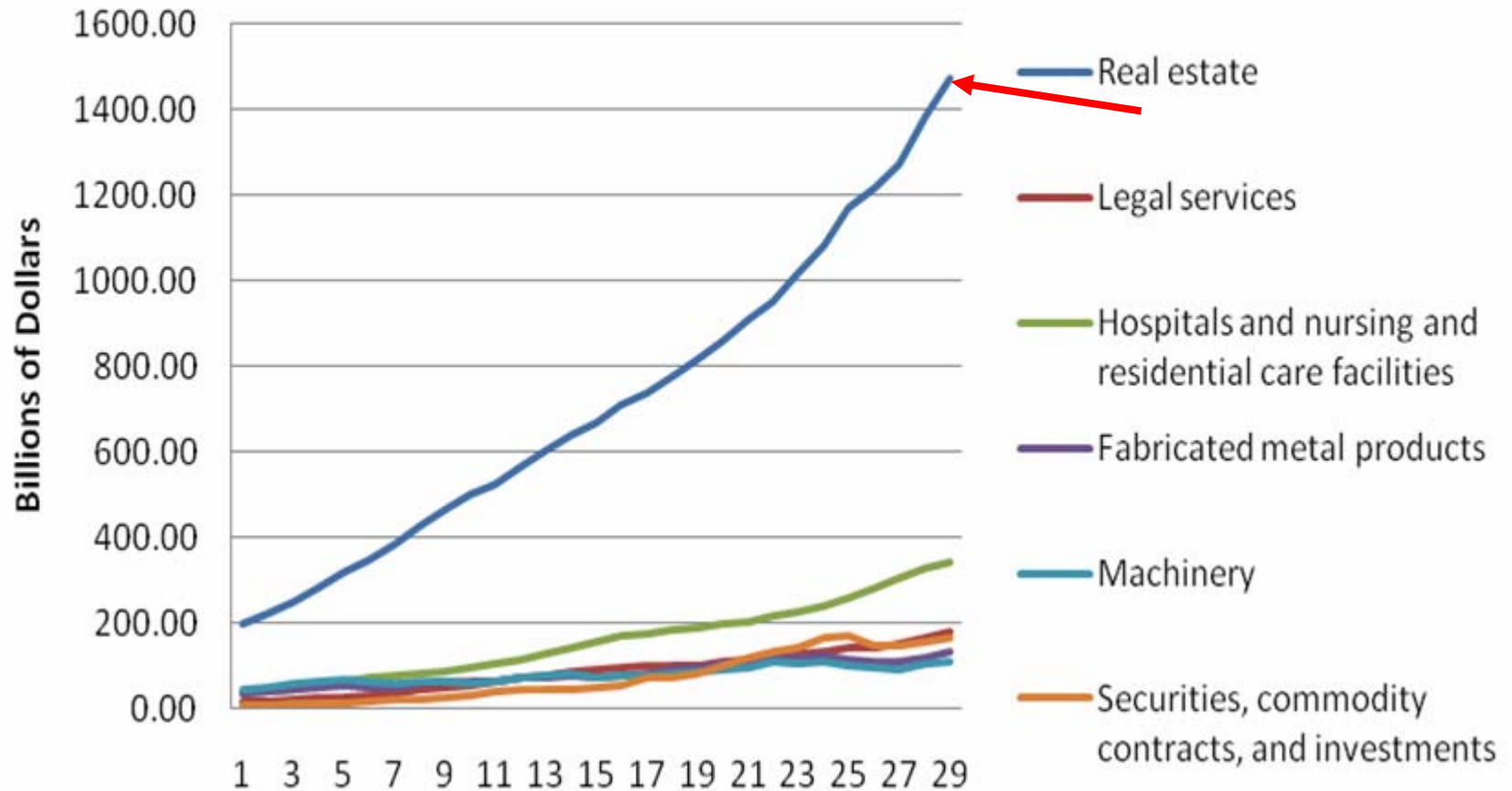
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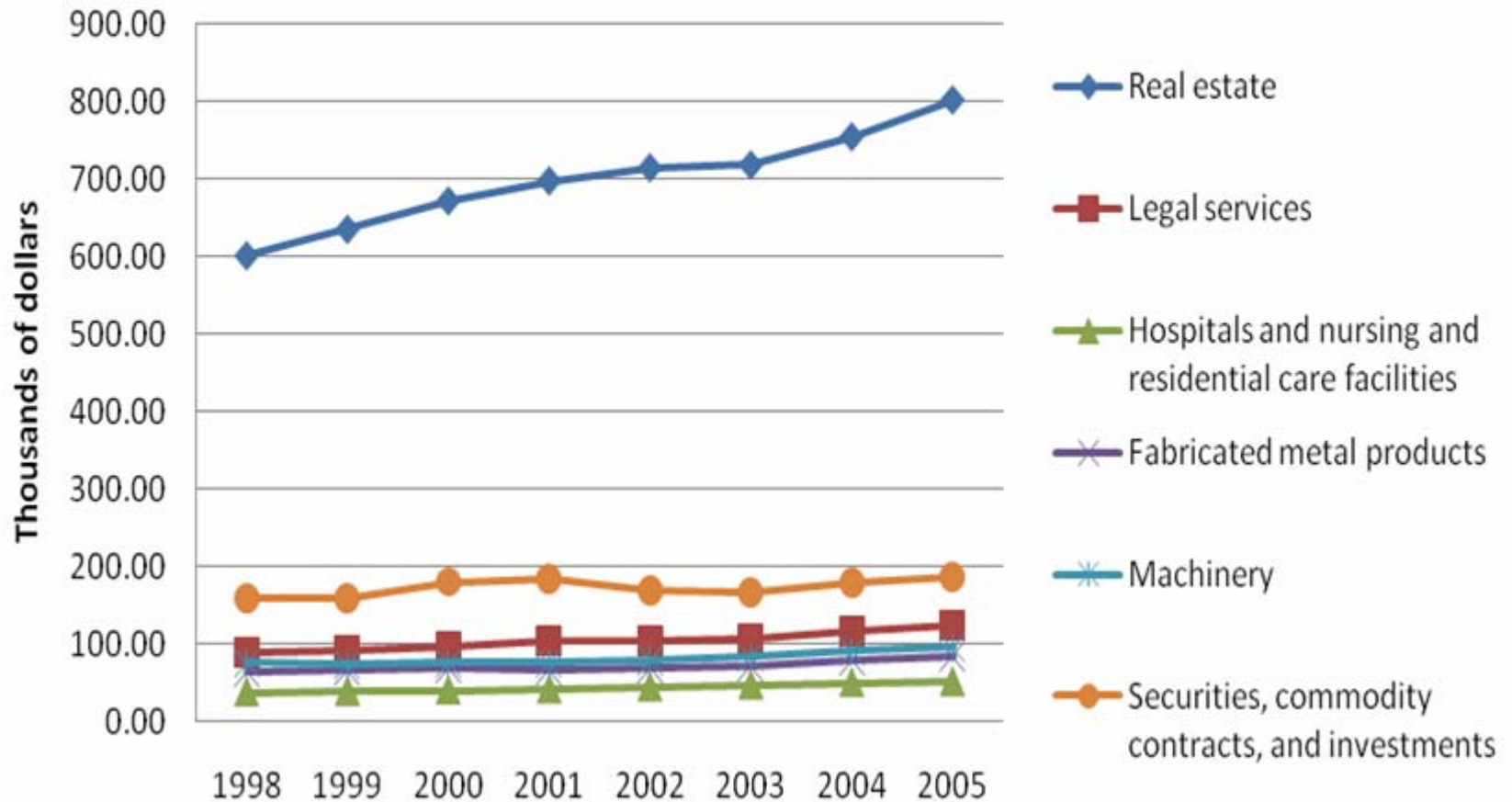
Value-added by industrial sector 1977-2005



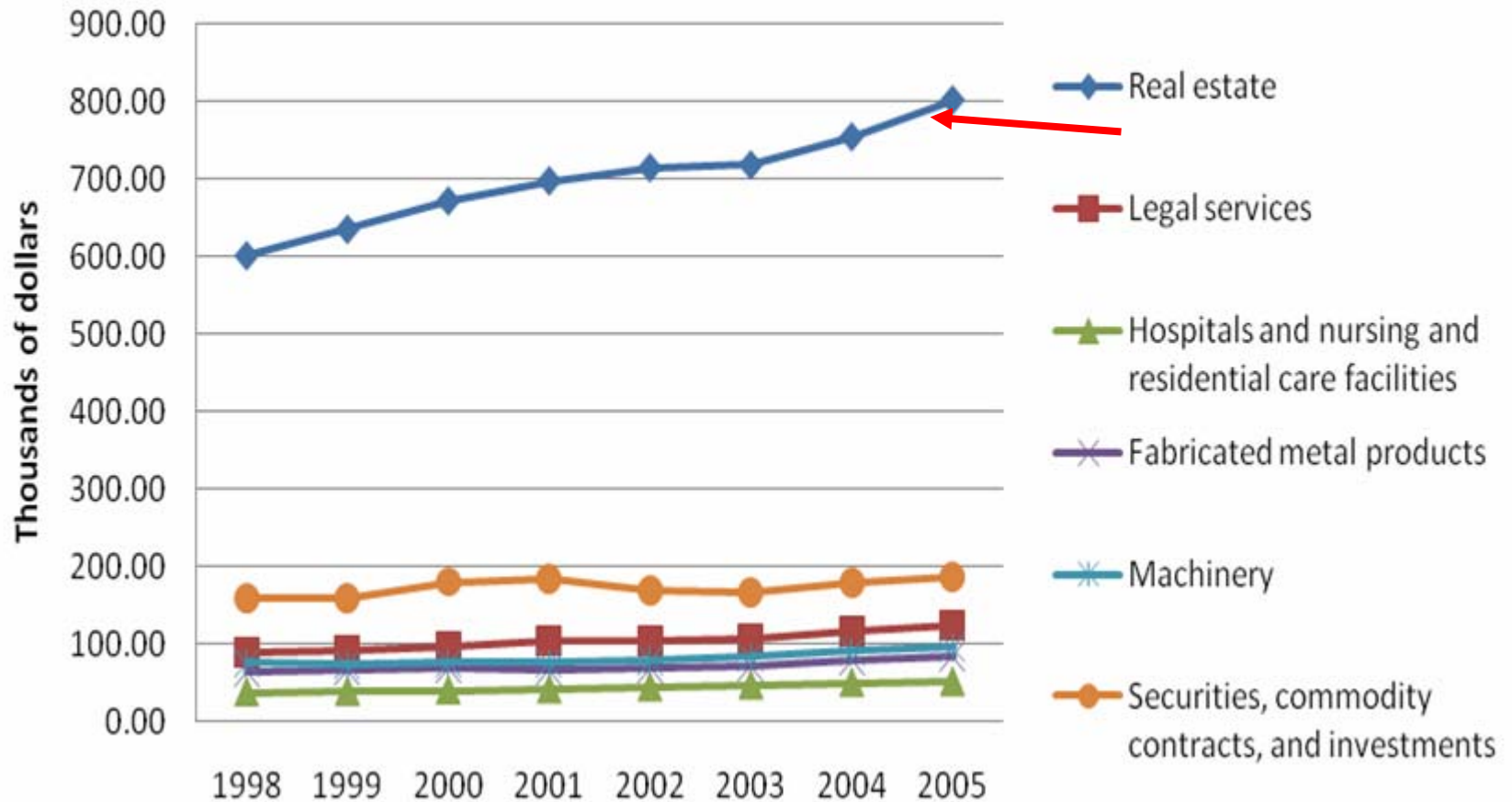
Value-added by industrial sector 1977-2005



Value-added to PEP by Industry 1998 to 2005



Value-added to PEP by Industry 1998 to 2005





Rapid Computerization!

? Slow(est) from 1969-1996

+ Fast(est) from 1997-2006

+ More, not fewer, people

? Small compensation change

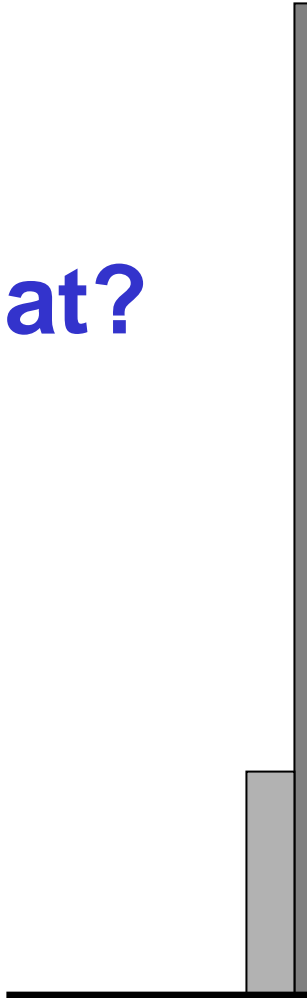
! Substantial value add

! Nothing's settled, yet

Different f/other industries

! Everyone is computing

So what?





Computing in real estate

Ad-hoc ensembles:

- + MLS (of course 😊)
- + *Other* web assets –
 - Some agency, some public
- + Email, mobile phones
 - ‘Client management’
- ~ Enterprise activities:
 - Digital lock boxes
 - Agent/agency management

Focus on sharing/talking



What can computers do for us?

1. Support production

Common purpose

2. Enhance control

Security, audit, etc

3. Access/use information

Google, MLS...

4. Do communication

Email, Myspace, Facebook

5. Provide entertainment

Halo 3, Second Life ...



Traditional focus of computing



1. Support production

Factory automation, workflow

2. Enhance control

Passwords, account reports

3. Access/use information

Databases & analyses

4. Do communication

Email, Myspace, Facebook

5. Provide entertainment

iTunes, Flickr



Connecting house data to other streams:

- + Zillow and others
- ? MLS is embedded into ...

Interacting (networking):

- + Email, phones
- + Social networking w/value

Some enterprise trends:

- + Digital lock boxes
- ? Contact management
- Agent management systems

Computing
trends in
real estate





Computing differs in real estate

1. Support production

Agency management

2. Enhance control

Agent management

3. Access/use information

Craigslist, Trulia, Redfin ...

4. Do communication

Point2, LinkedIn, and....

5. Provide entertainment

!



Data are facts

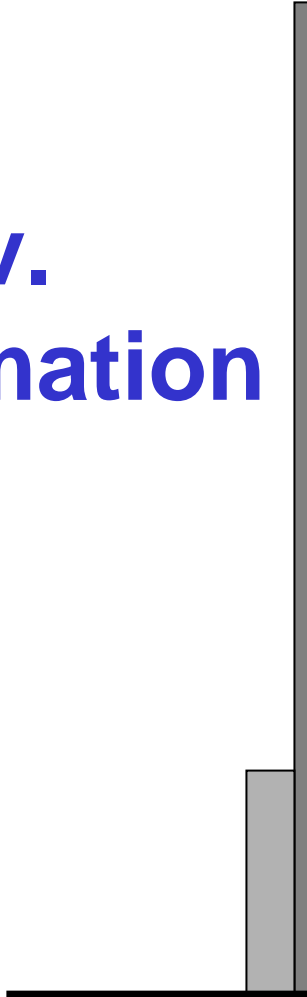
Information is data with structure added

.....

Data v. information

MLS is data or information – depends how ‘structure’ is added ...

Agents help change data to information – making information a social act!





MLS data is *but one part*:

**More access
to info. ...**

- + Mortgage information (rates)
- + Closing costs
- + Neighborhood data
- + Housing values/changes
- + Livability indices
- + School data
- + Maps, and ...

? Concerns with stock and securities markets



Agent's three roles

1. Information intermediary

- > House info
- > Weak ties

2. Process advisor:

- > Market-making
- > Meaning-making

3. Value-adding network:

- > Professional strong ties
- > 'Loaning' social capital



Getting into the flow ...

1. Listing data:

- > Historical connections
- > More details added
- > Helping ... to share w/others

2. Closing activities:

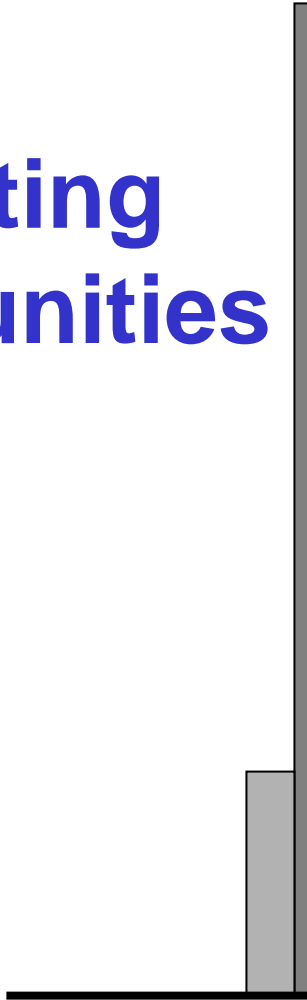
- > Digital collection (ownership)
- > Participant traces

3. Meta-data

- > Standards (open)
- > Public rating systems?



Computing opportunities



From data to information:

- + Core info/knowledge base
- + Meaning-making activities

Computing as social:

- ! The web *is* an intermediary
 - + use it to connect, not decouple
- ! Communicative emphasis
 - + relational value
- + Think flexible (e.g., mashups)
 - ? Think about more 'sensors'
 - ? Standards matter more....



Computerization:

Happening fast in real estate
& its not like other industries

**Today's
three points**

Two trends:

1. Making information social
2. Communicative ensembles

Thanks!

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