

# Disruption, innovation and R&D in the software world

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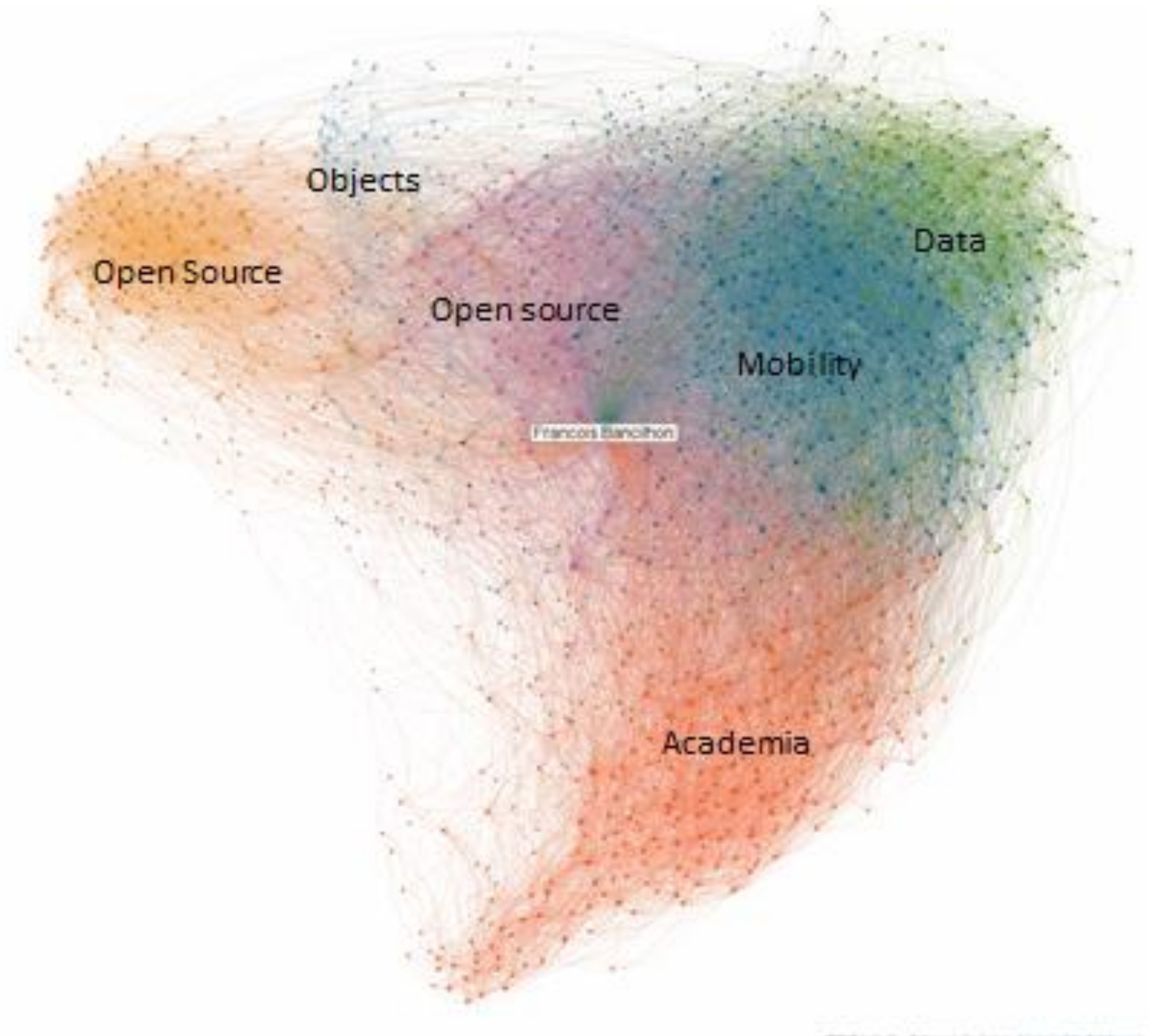
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DATA PUBLICA

# Data about me



# François Bancelhon

- Academia (1972-1989) 17 years

1. INRIA
2. University of Paris XI
3. MCC

- Start ups (1989-) 24 years

1. O<sub>2</sub> Technology (1989-97)
2. Xylème (2000-)
3. Arioso (2000-05)
4. Mandrakesoft/Mandriva (1998-)
5. Ucopia (2003-)
6. Data Publica (2011-)

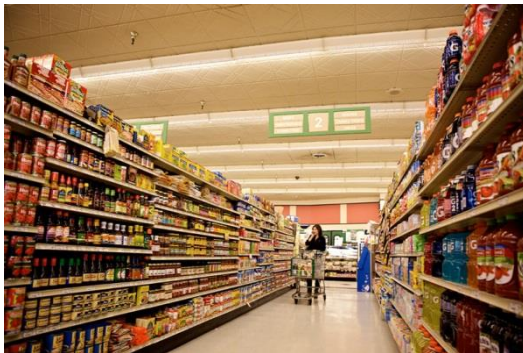
What is simple is false

What is complicated is  
incomprehensible

# Disruption

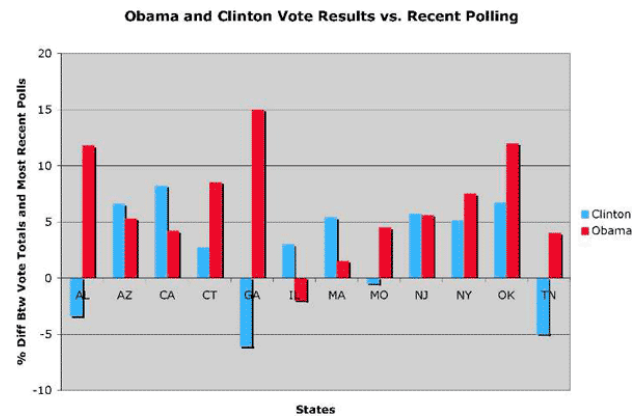
- We are living a new economic revolution
- Major disruptions caused by the Internet, the Web and social networks
- Disruption
  - Changes in the rules
  - New games
  - New players

# Disrupted





# To be disrupted



# Not disrupted

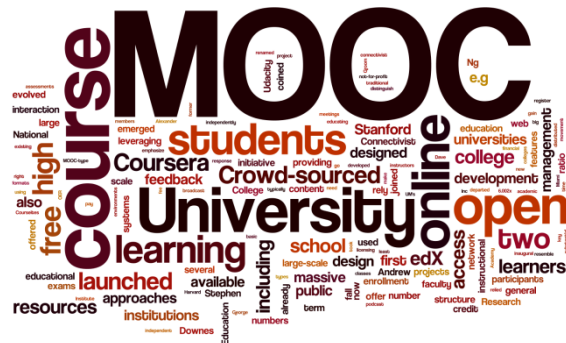




# Innovation

- Substantial improvement or creation of new products, services or internal processes
- Generating a two digit growth of the associated revenue

# Innovations



# What changed in the innovation scene (in Europe)?

- VCs
- Angels investors
- Mentors
- Incubators
- Pitch contests
- Start up programs

# What is different in the software innovation scene?

- Accelerators (3-6 months)
  - App contests (2-4 weeks)
  - Hackathons (2 days and 2 nights)
- 
- Time is moving faster



# Innovation time is getting shorter

- Start ups
  - Incubators
  - Accelerators
  - Hackathons
- 
- Accelerators are software specific

# Drastic changes in software engineering

- Between 2000 and 2010, the cost of software development has dramatically decreased
- Project development
  - Number of person.years
  - Elapsed time

# What made this progress possible?

- Open source software
- SaaS
- SaaS + open source = Mash ups
- Geek social networks
- Agile methodology
- Cloud

# Impact of those changes

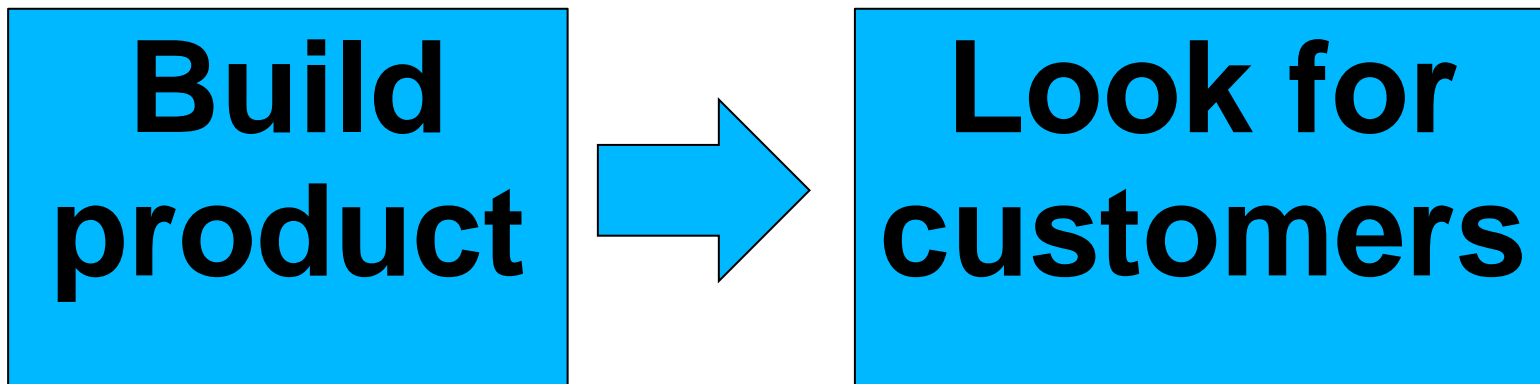
- Drastic reduction of the barrier to entry in many areas
- Cost and time
- Software development (in € and time) is not the critical resource in a software start up life anymore
- Made accelerators possible



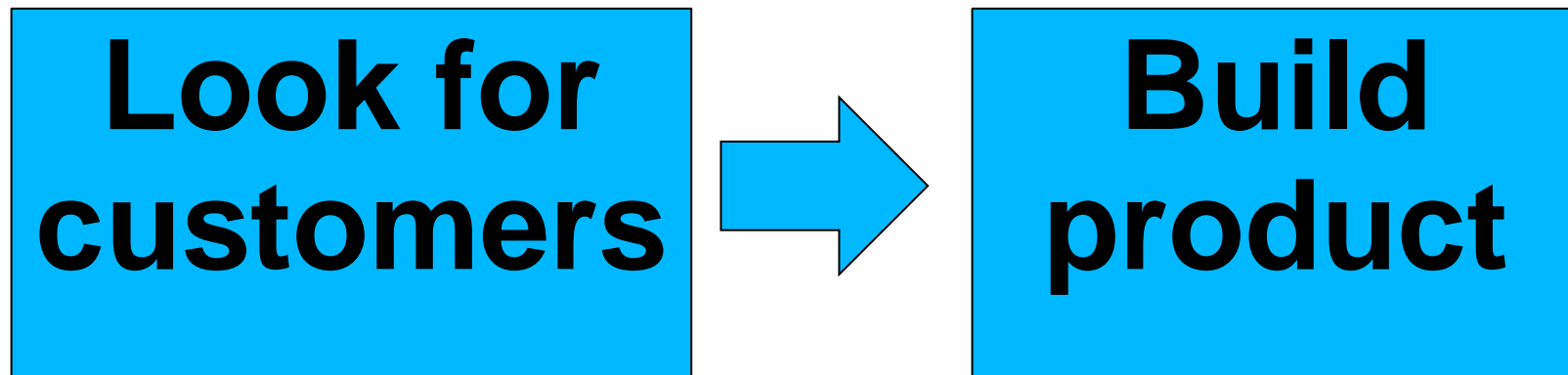
# Innovation: versatility

- The average software start up changes its business model three times in its first twelve months
- Examples in the data world
  - Data Publica, qunb, Infochimps, BuzzData, Factual, Datamarket, Scraperwiki

# Technology centric companies



# Customer centric companies



# Innovation summary

- Cycle time is short: 3 months
- Business model keeps evolving
- Customer driven reactivity
- There is currently no R&D model associated with that behavior



# Can we invent agile R&D?

# An old R&D/Innovation impedance mismatch

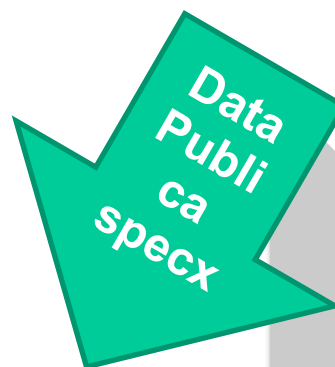
- R&D funding requires technology challenges  
« verrous technologiques »
- Need to show you are doing something difficult
- Embedded in FP proposals
- Embedded in French R&D funding
- Focuses on difficult problems

# DATA PUBLICA



Custom

Off the shelf



Open Data

Internal Datasets

Datasets Editor

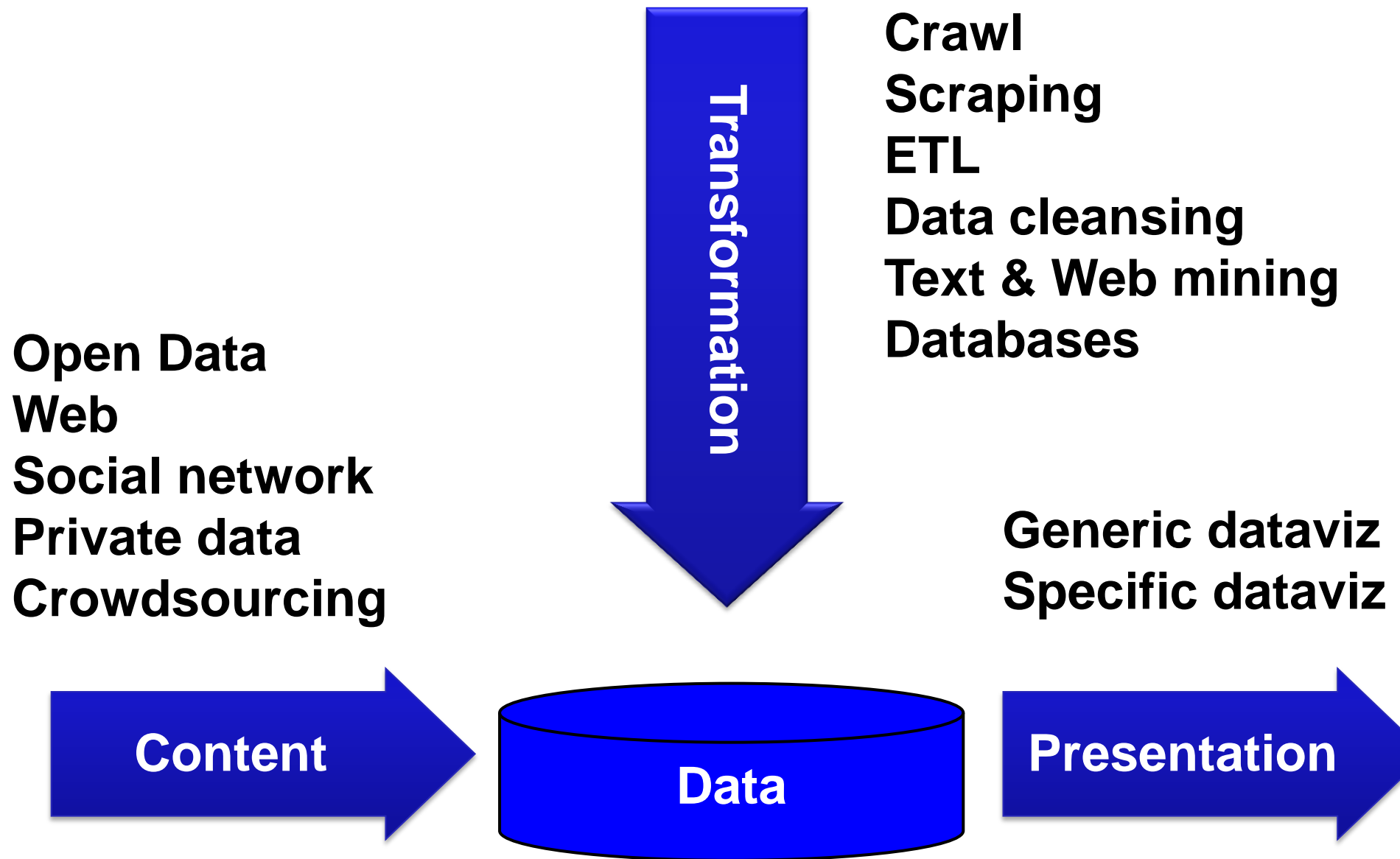
Socail Networks

Crawl  
Scraping  
ETL, etc.

Text Mining  
Structuration  
Augmentation  
...

Delivery  
Visualization

# Data Publica : expertise



# Dataset Examples

- Public Tender announcements
- Information on public organisations
- Economic activity (by vertical and by geography)
- Economic dashboard on 36,000 cities
- Employment dashboard on 300 employment zones
- Retail stores and services
- Hotel room prices
- Stores opening hours
- Electric car charging stations
- Elected officials



# Data Publica

- We surf on a new trend (data)
- We are here to disrupt major players
- We got limited funding
- We build software super fast
- Our business model keeps being refined
- Six months is long term
  
- We try to cooperate with R&D labs



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