BRIE

ETLA ELINKEINOELÄMÄN TUTKIMUSLAITOS
THE RESEARCH INSTITUTE OF THE FINNISH ECONOMY

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Rethinking labor (and capital) in the era of the cloud

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NOKIA

The Federation of Finnish Technology Industries

Tekes

Rethinking Labor (and Capital) in the Era of the Cloud*

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Technological Change and Labor/Capital

The assembly line gives you the corporate capitalist (and industrial union). The Cloud gives you the platform capitalist (and contingent labor)?

Digital Technologies

- Moore's Law (PCs→smartphones→Internet of Things
- Cloud computing (data explosion). See Zysman 2012 etc.
- Old and new platforms (Amazon, eBay, Google)
  - Facebook, Twitter, Linked-In
  - Airbnb, Uber

What Is New? What Should We Anticipate for Labor?

- Cyber panopticon
- Ability to characterize nearly everything physical digitally and then informate
- Replace much white-collar work – characterized and automated with data processing
- Connect 40, 50% of world population
- Platform = power

Labor?

- More globally biddable than ever
- Microwork – fill up working day
- Formal, e.g., taxi cab – informalized thru contractors, Uber
- Informal services such as gardening – cyber formalized, Lawnmower.com
- Online and scalable

What Is Work and Where Is It?

- Less work, more work (Brynjolfsson, Baumol, and others
- Is surfing the internet work?
- Is putting things on Facebook, Pinterest, Youtube, LinkedIn?
  - Selling on eBay?
- Writing a novel and putting in closet vs. self-publishing Amazon?

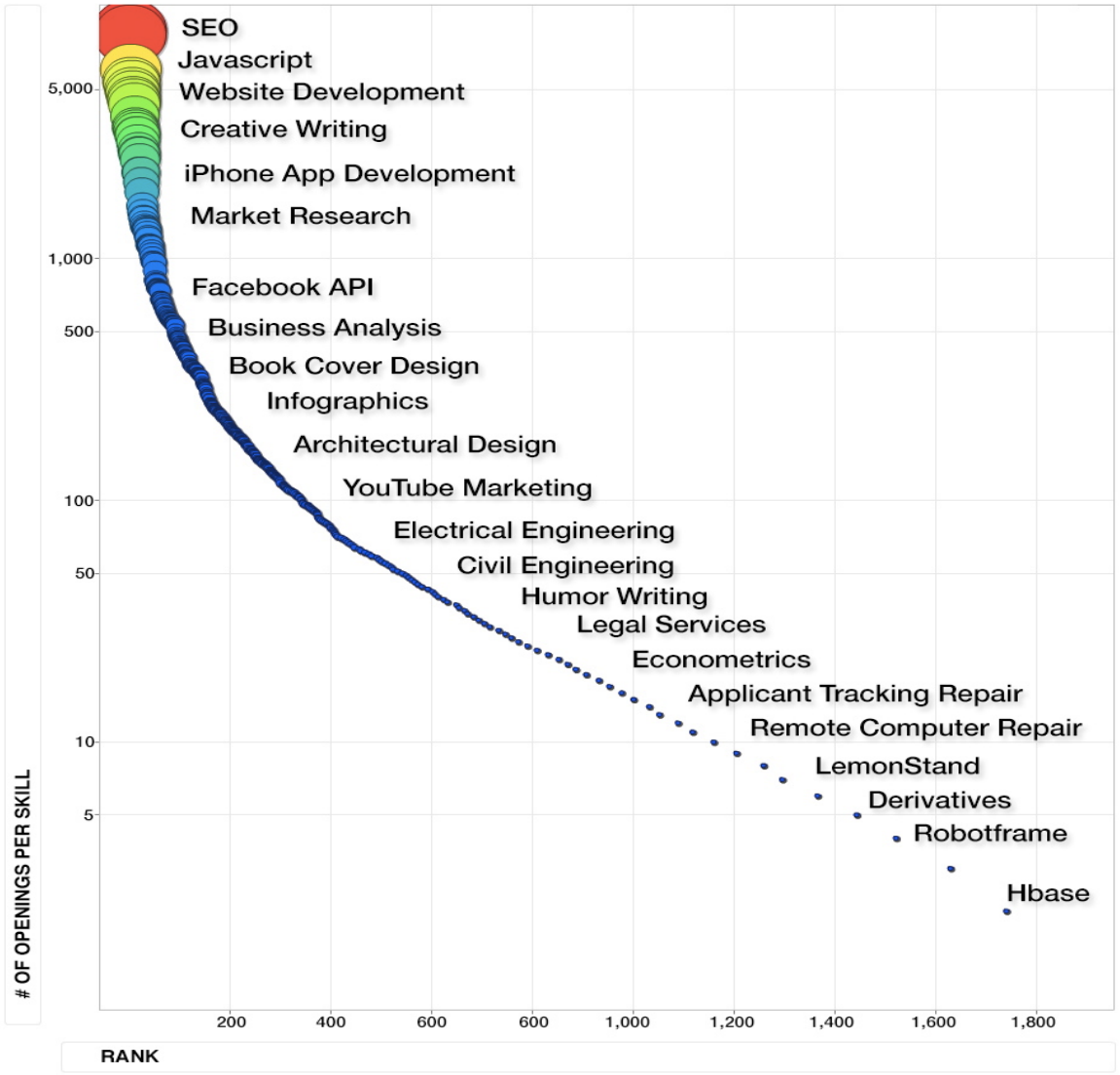
Elance – Top Hiring and Provider Nations

Top 10 Hiring Nations	
United States	1
Australia	2
United Kingdom	3
Canada	4
UAE	5
Singapore	6
Israel	7
Germany	8
Netherlands	9
New Zealand	10

Top 10 Provider Nations	
United States	1
India	2
Ukraine	3
Pakistan	4
United Kingdom	5
Russia	6
Canada	7
Philippines	8
Romania	9
China	10

oDesk Skills Visualization

An Emerging Long Tail of Specialists



Source: oDesk database. **All data represents skills listed in jobs posted during the month of May 2013,** and therefore shows one month's worth of skills on oDesk (out of the almost 2,400 skills listed over 2013). Size and color of each skill dot indicates the number of job openings that skill was listed in. For more information please visit the oConomy section of oDesk's blog for a post on this visualization at: www.odesk.com/blog/2013/07/1billion-odeskskillslongtail/

Source: oDesk 2014

Capital?

- Still needed, when?
  - Open source SW, commodity cloud computing, Github
- More available and aggregatable than ever JOBS Act
  - Angel
  - Crowdsourcing -- Angelslist, Kickstarter, Indiegogo
  - VC
- More mobile
  - Can be accessed nearly everywhere
- Winner take all
- Control of platforms?

First Wave

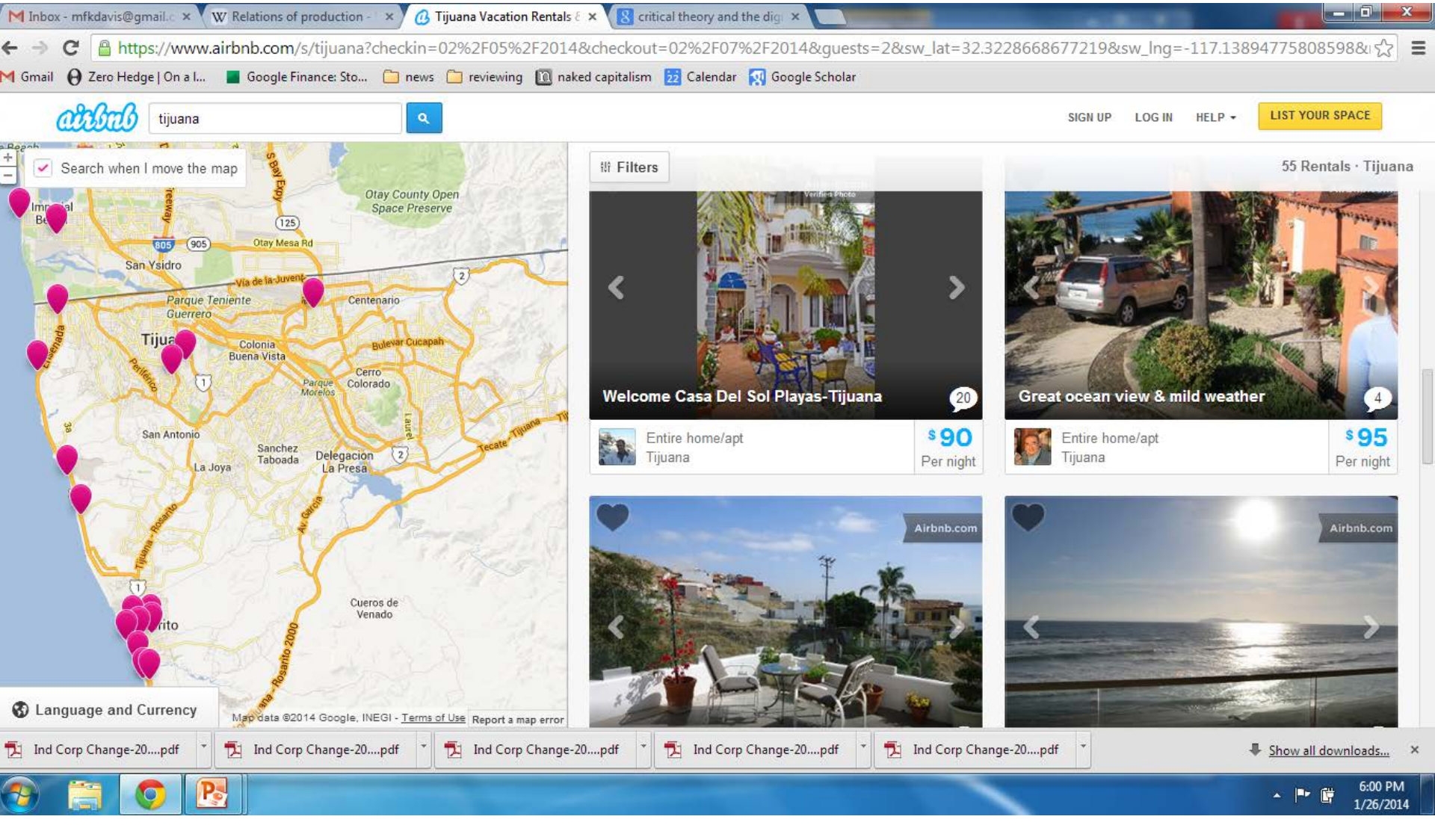
- **Amazon Stores – retailers' platform**
- **eBay – Swap meet & garage sale**
- **Craigslist – classified ads**

Welcome to the New World

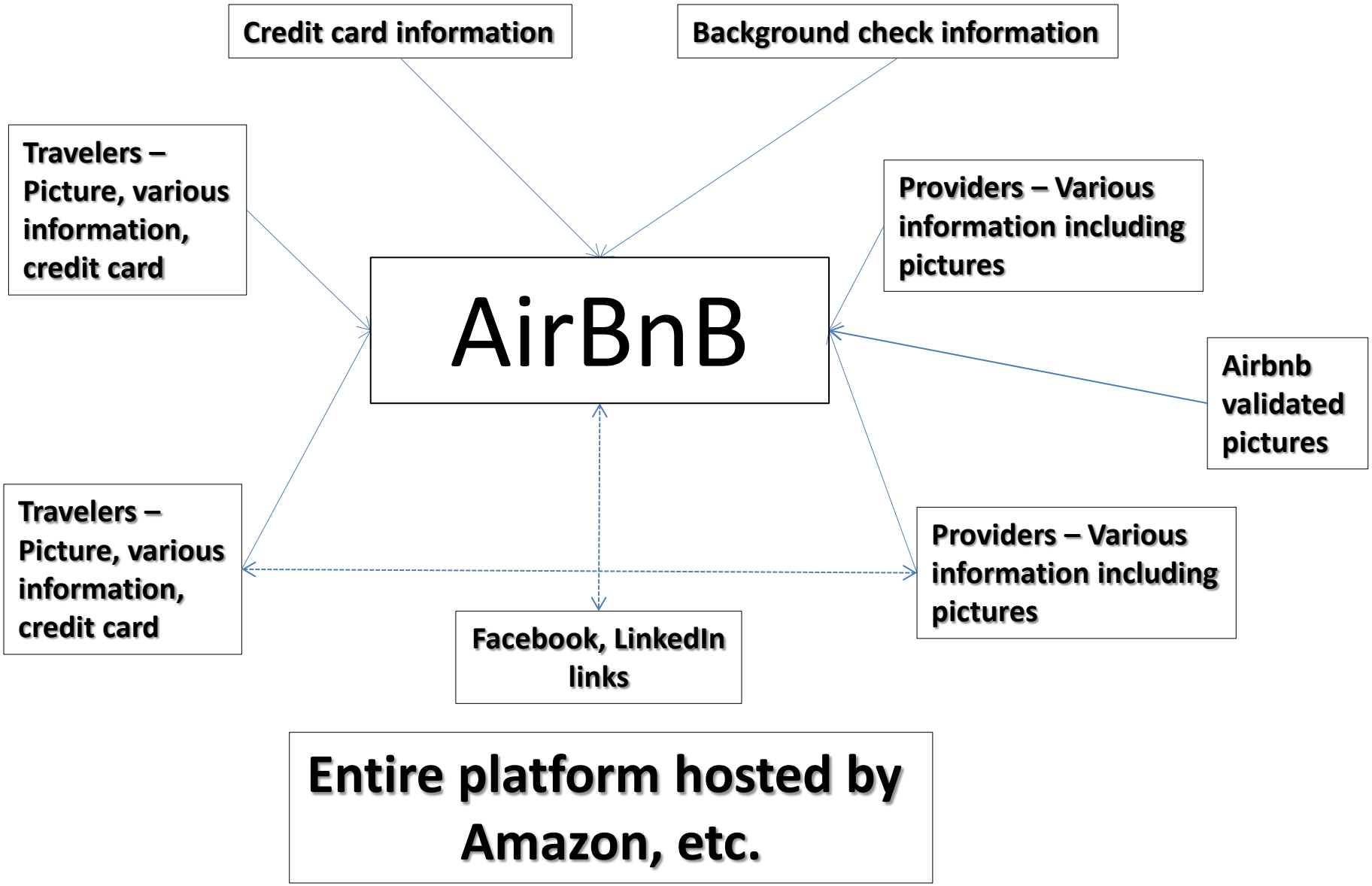
Facebook, Pinterest, Instagram	Monetize your non-work activities the social network, non-compensated value creation Your leisure activity becomes something of value
Uber, Airbnb, Lyft etc.	Monetize consumer durable assets – move them to the "capital" side of the social ledger Threat to regulated industries
TaskRabbit, Babysitter.com, Lawnmower etc.	Create platform for mobilizing informal, unorganized labor – cyber formalization?
Amazon Mechanical Turk, O-Desk etc.	Micro-work, fill pores of working day
Google, Yahoo! etc.	Attract you with their data and services, Monetize the information on the web by organizing and selling users through ads

Mechanical Turk -- Microlabor

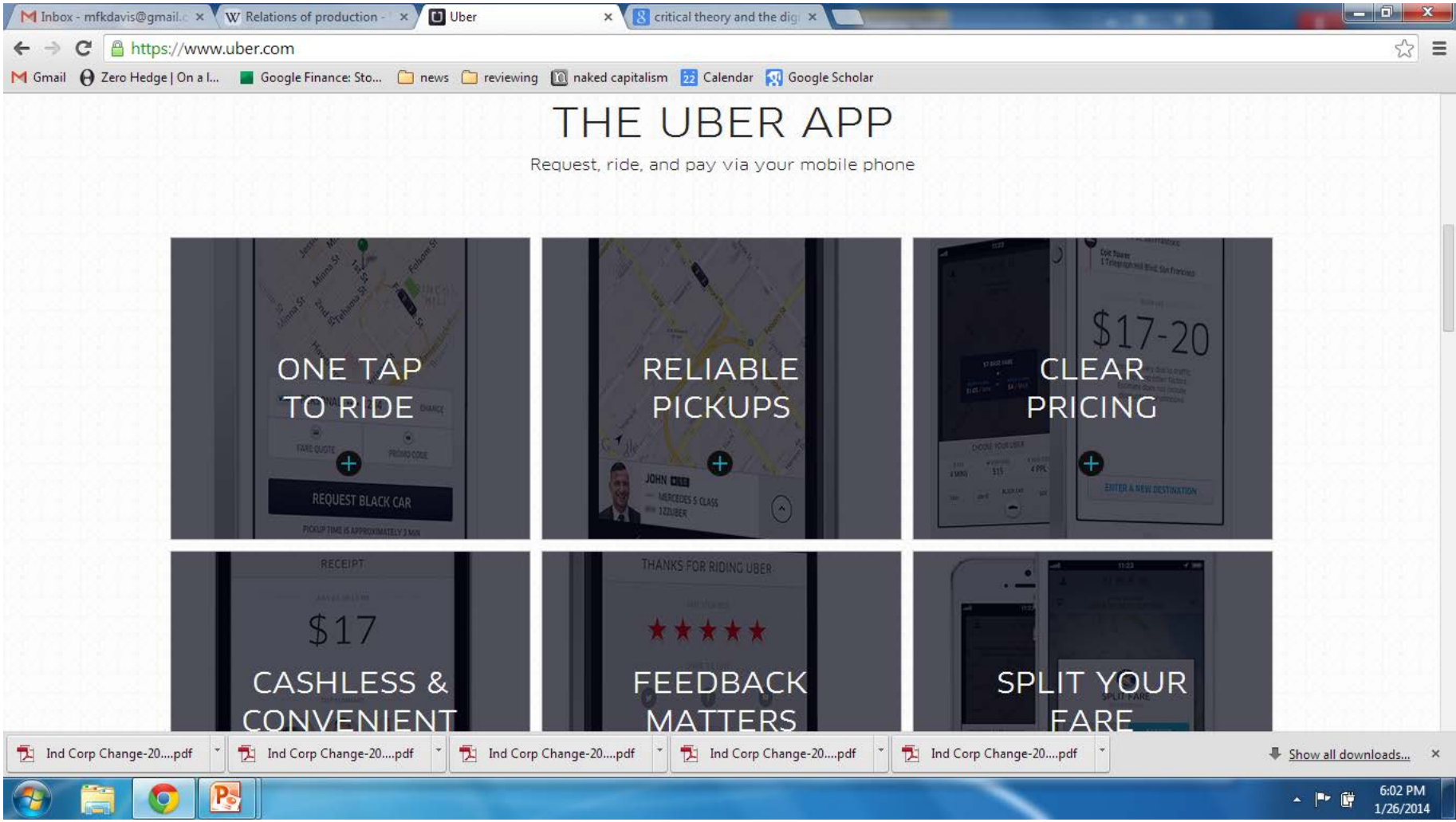
AirBnB – Monetize Excess Space



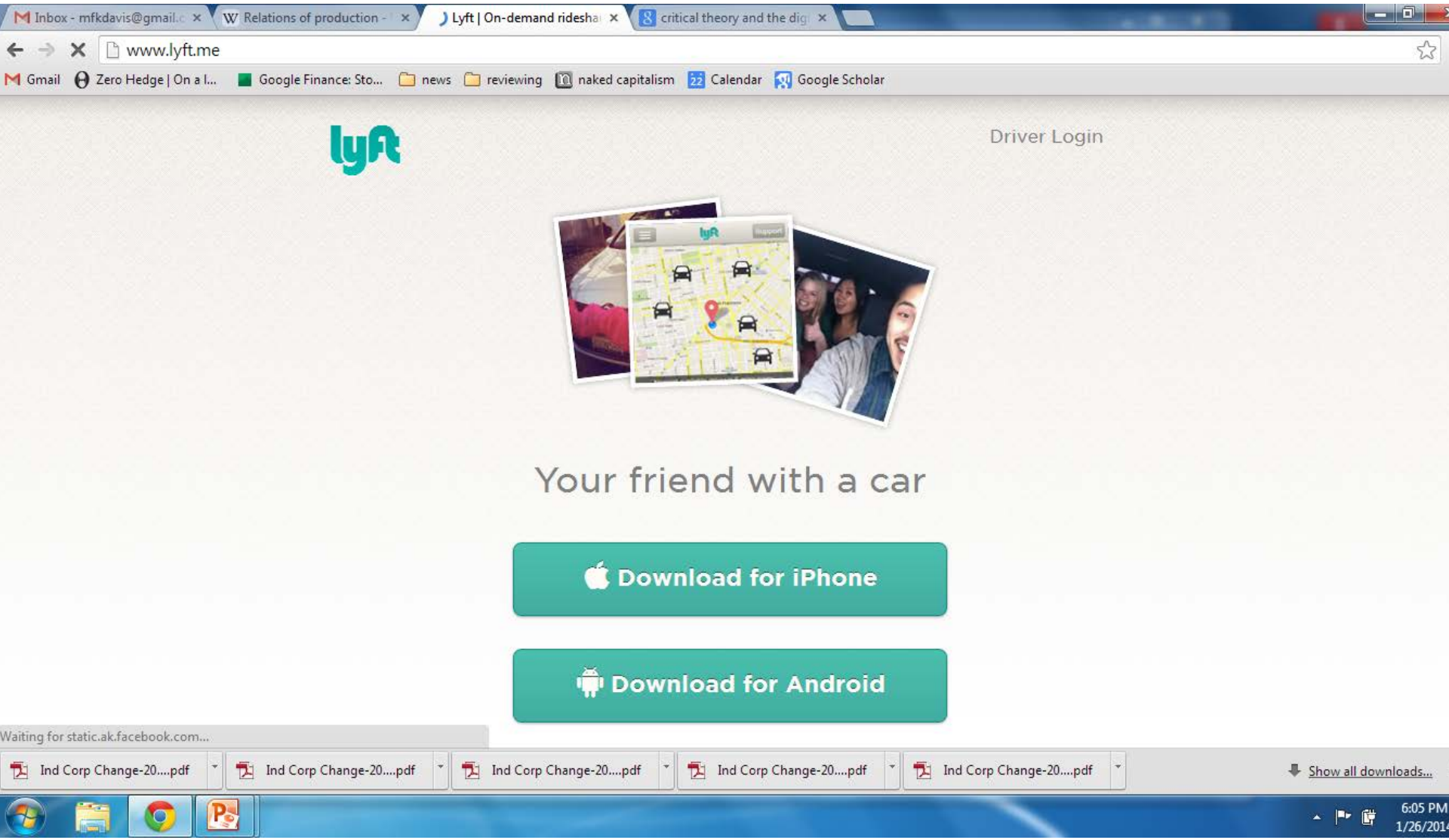
Airbnb Model



Monetize – Your Car and You As Driver



Monetize Your Car



Winners Take All Economies?

- Does entrepreneurial economy reinforce income inequality?
  - Do new firms create same number of highly-paid employment as earlier "new" firms?
    - Google vs. Intel, apps
  - Create ecosystems/platforms of relatively lowly paid or contingent workers?
    - Branded products, Apple, etc.

Winners Take All Economies?

- Monetization of :
  - Digital exhaust (Huberty)
  - Social interaction
  - Consumer durables
  - “Free time” through
    - Microlabor
    - Unregulated service performance
  - Open source production (Github)

What Does This Mean?

- The where, what and how of some portions of the global workforce is being transformed
- Should we be thinking about new classes or class fractions?
  - Creative class (Florida)
  - Cognitive-creative class (Alan Scott)
  - Symbolic analysts (Reich)
- How much of this is driven by financialization and not "real" changes
- Globalization and other forces?

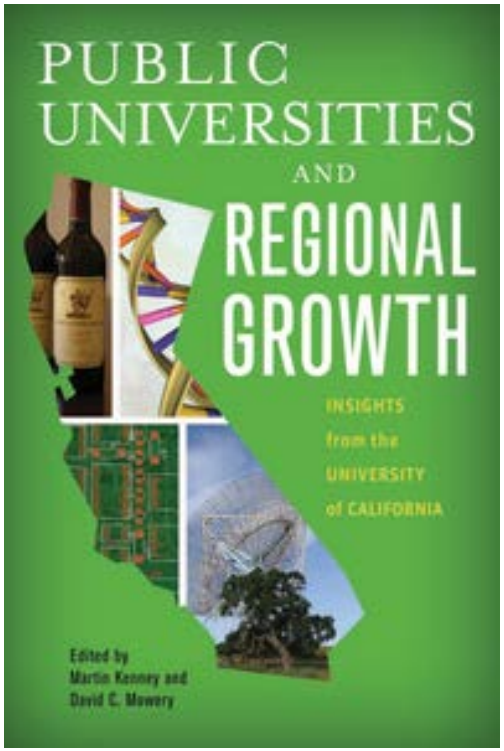
Labor Atomized Throughout Society

- Online human activity, both work and not work, creates value that is monetized online
- Much "long tail" work is not sufficiently valued to produce substantial income, but forms the corpus from which some work becomes valuable
  - Flappy birds and other successes
- Online world recognition monetized offline
- What is correct way to reward, winners or the milieu?

Value Created Outside of Wage (and Contract) Environment So Is Social Wage Good Economic Strategy?

- Encourage entrepreneurship
- Allow time for creation
- Reward the milieu rather than only the "lucky" individual
- Encourage disruptive competition
- Encourage consumption

Thank you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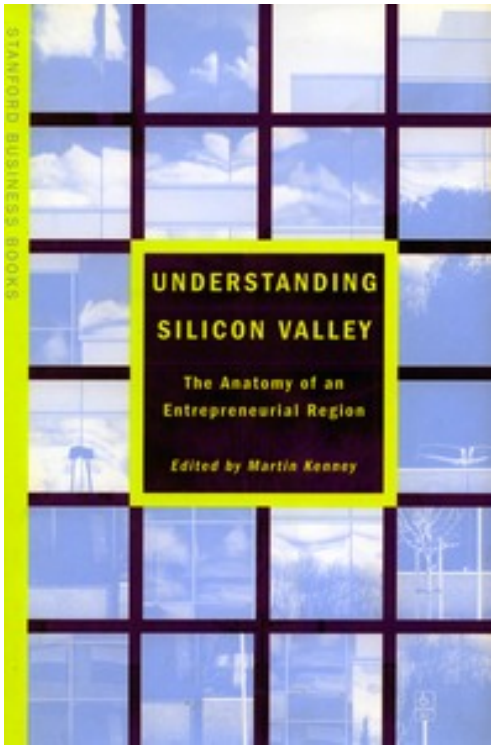
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