# DR. SARAH ABRAHAM CS349

# RESPONSIBILITY TO CONSUMERS



# WHO ARE A COMPANY'S CUSTOMERS?

# TECHNOLOGICAL REVOLUTIONS

- Major changes in technologies within a society
- Requires strong interconnectedness between technology and market
- Results in profound impact on economy and therefore society

# **NEOLITHIC REVOLUTION**

- Began around 10000 BC in the Fertile Crescent but a worldwide phenomenon
- Transition from hunter-gatherer to agrarian societies
- Domestication of plants allowed for larger human settlements
- Larger human settlements allowed for greater skill specialization, centralized authority, concepts of property ownership, development of written languages, and art, etc...

# INDUSTRIAL REVOLUTION

- Began in the late 1700s in Britain
- Transition from hand production to machine production led to specialized equipment, factories, and mass production
- Agrarian, rural societies in Europe and America transitioned to industrial, urban societies
- Rise of centralized banking, global trade, capitalism, and increase in literacy
- Major impacts to environment and the health of lower classes

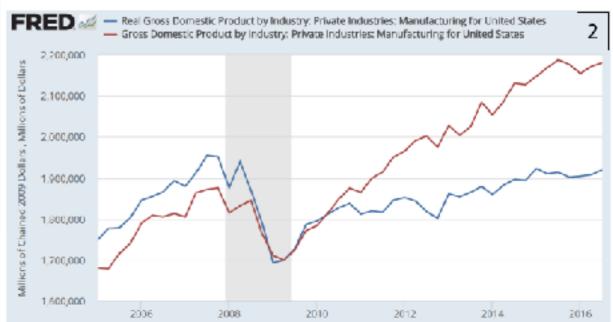
# **DIGITAL REVOLUTION**

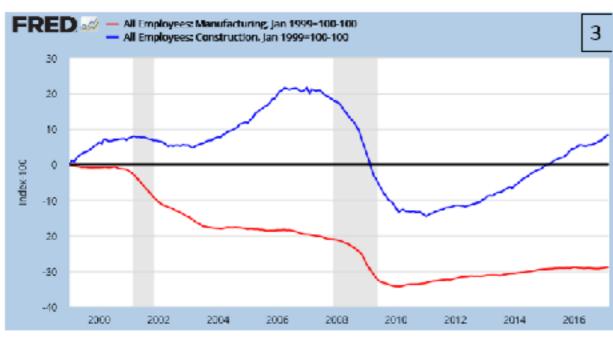
- Began in 1950s when the invention of the transistor and integrated circuit allowed for electronics to replace mechanical and analogue machines
- Devices become more portable, cheaper to mass produce and accessible worldwide
- Unprecedented access to information and compute power changes modes of manufacturing, economy, communication, and society

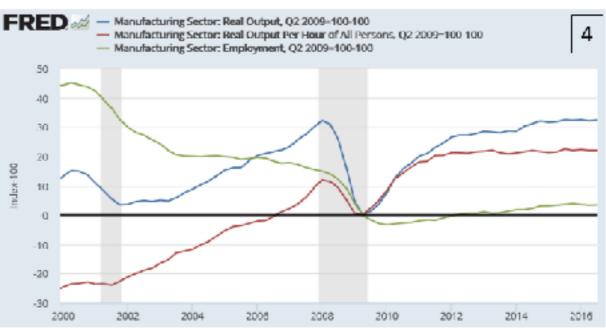
# THE OUTSOURCING OF MANUFACTURING

US manufacturing jobs are in decline but output is not









# WHERE DID THE JOBS GO?

- Automation
- Improved processes
- Streamlined supply line

#### RISE OF THE SERVICE ECONOMY

- Service economy built around services rather than products: finance, hospitality, retail, health services, information technology, and education
- In 1990 manufacturing was dominant sector of employment for 36 states
  - As of 2014, only dominant in 7 states
- In 2003, retail was largest source of employment in 21 states
  - During 2008 recession, 13 states transitioned from retail to health care-dominant
- Health-care and social assistance industries have doubled since 1990 and are largest sector employers in 34 states

# RISE OF INFORMATION

- Information theory is the study of coding information
- Norbert Wiener (originator of the concept of cybernetics) said "information is information not matter or energy"
  - Information is fundamental to the universe
- Information can be commoditized like matter or energy
  - Information is a service
- Machine learning has made information from big data accessible to analysis

#### **HUMAN ATTENTION AS A COMMODITY**

- Advertising is nothing new
  - Goal is to convert your attention into personal spending
- In an "attention economy" your attention is being sold to advertisers...so they can advertise to you
- https://www.youtube.com/watch?v=7gKmO0OqJaw

# WHO ARE A COMPANY'S CUSTOMERS? (REDUX)

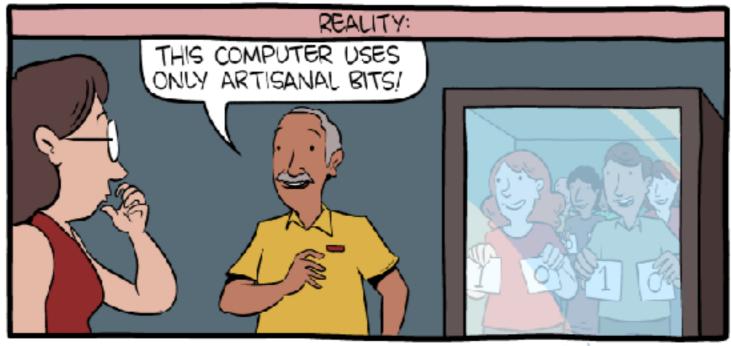
- Other companies
- Shareholders

# WHAT ABOUT NONPROFITS?

- Nonprofit status only means organization does not earn a profit
- Nonprofits can make a profit (selling goods or services) but profit must be put back in the organization
  - No profit-sharing or shareholders, etc
  - But often have salaried employees and management
- How much of the money goes to the cause versus operations can vary

# HOW CAN WE DIRECT THIS FOR THE BETTER?





#### REFERENCES

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