

NARROWCAST, TELEGRAPH, AND TELEPHONE

8/3/11

History of Information

Global Telephone Network

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Much of the globe's international telephone traffic flows through the United States, as shown by this rendering of 2005 international phone-call traffic from telecommunications research firm, Telegeography.

Illustration: Copyrighted Map Courtesy of Telegeography

Telegraph and Telephone

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□ Samuel Morse (1791-1872)

"If the presence of electricity can be made visible in any desired part of the circuit, I see no reason why intelligence may not be instantaneously transmitted by electricity to any distance."

Fischer's America Calling

4

- Intersection of technology, modernity, community
- Summarizes approaches to technology (Determinism, Symptomatic, SCOT)
- Tool vs. Structure

Major Claims about the Telephone

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- “Weakening” local ties
- De-localization: widely-held assumption about telephone as a tool to fight provincialism
- Individual, subjective, and psychological effects: “a general withdrawal into self-pursuit and privatism”

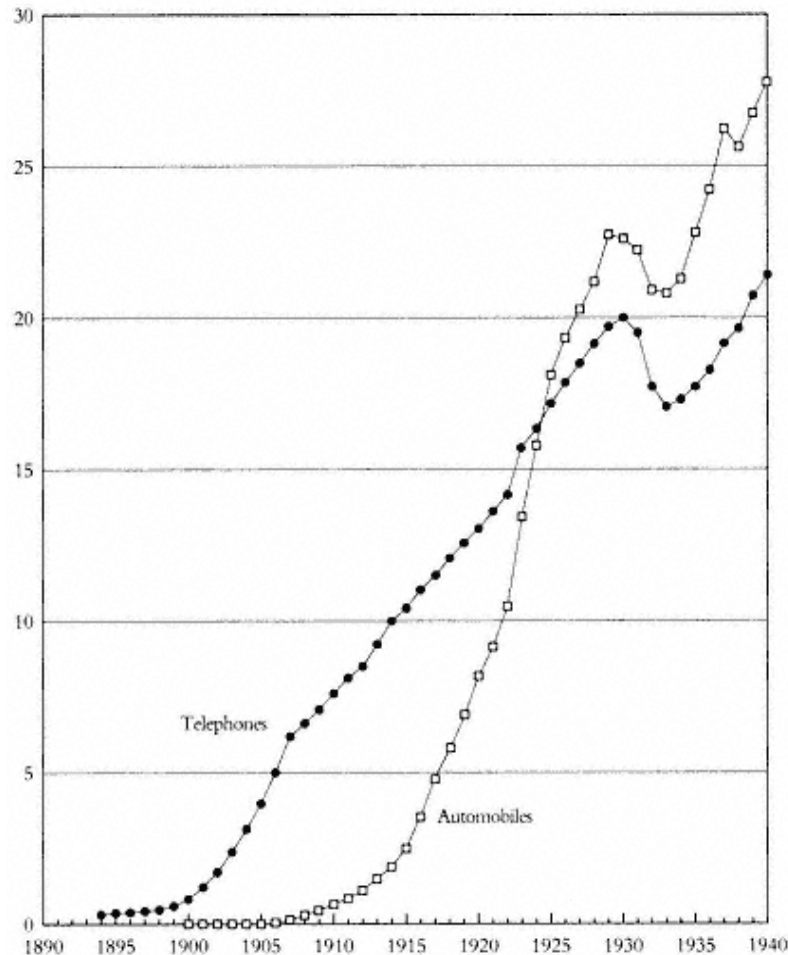
Marketing:

6

- Finding uses but also managing use for the telephone:
 - Appropriate conversations
 - Time limits
 - Ending a conversation

Historical Development of the Telegraph/Telephone

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MONOPOLY

8

- Infrastructure: Market Concentration necessary?
- First era of Monopoly: 1880-1893
- Era of Competition: 1894-WWI: Small providers band together against Bell.
- Subsequent consolidation: against growth?
- 1949: Case filed against Ma-bell: creation of baby bells, MFJ not a done deal until 1982

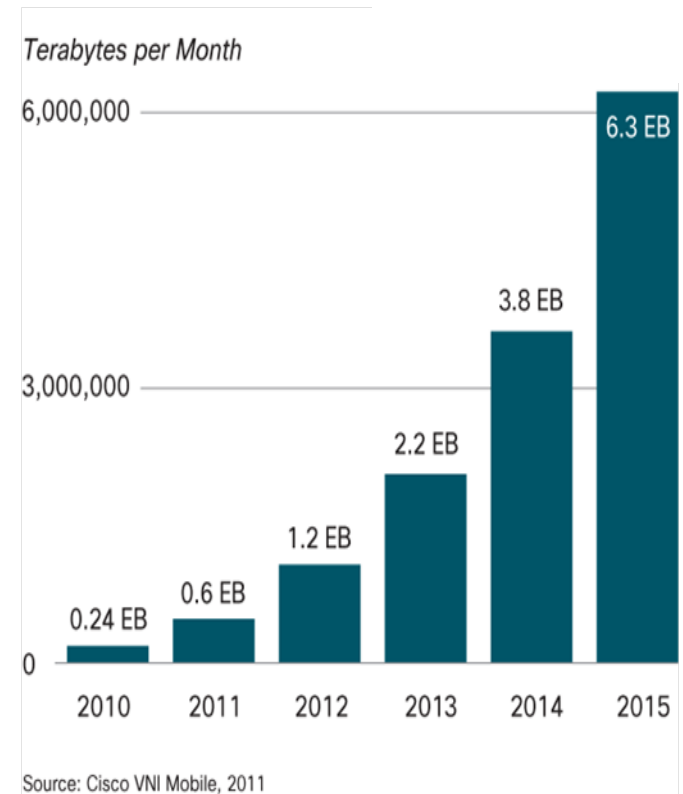
MOBILE

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- “Forget Ma Bell-Think Ma Cell”-CNN Money 2006
- March 2011 “The Return of Ma Bell?”-Fox News et. al

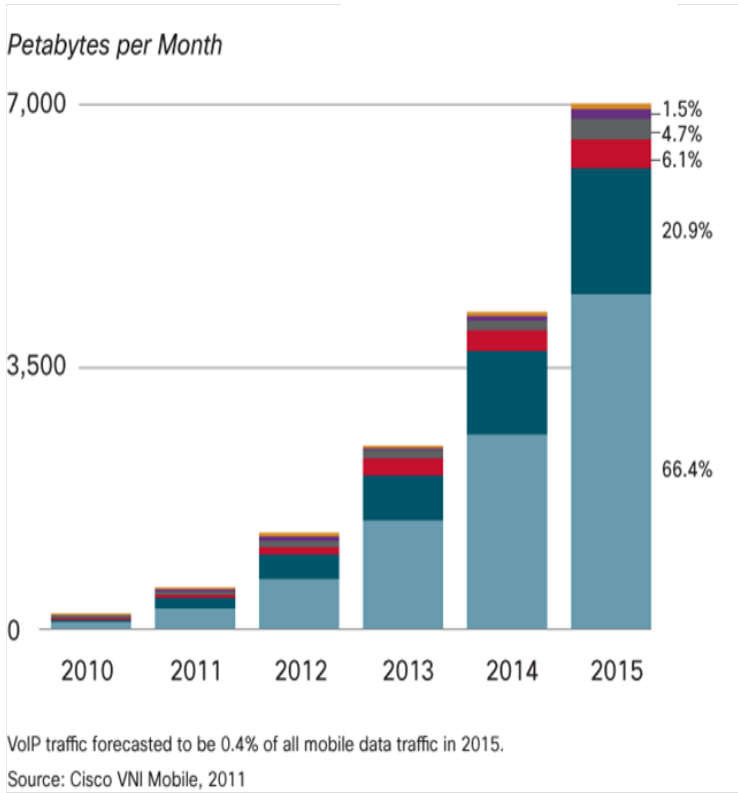


Cisco Forecast: 6.3 Exabytes/Month Mobile Data Traffic by 2015

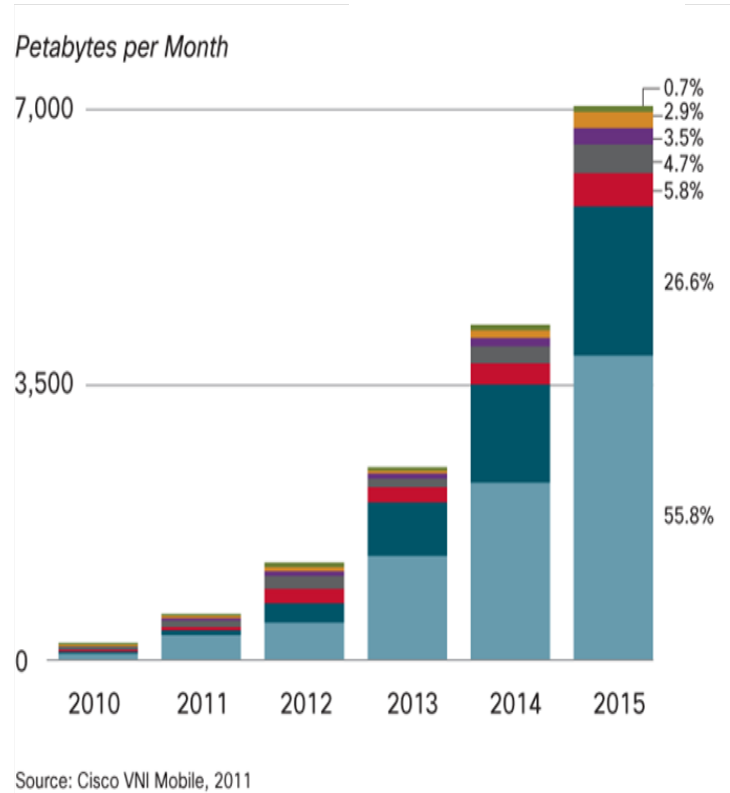


Cisco Analysis: Increase in Mobile Data Traffic

Cisco Forecasts 6.3 Exabytes per Month of Mobile Data Traffic by 2015



Laptops and Smartphones Lead Traffic Growth



- Mobile VoIP
- Mobile Gaming
- Mobile M2M
- Mobile P2P
- Mobile Web/Data
- Mobile Video

- Other Portable Devices
- Home Gateways
- M2M
- Nonsmartphones
- Smartphones
- Laptops and Netbooks
- Tablets

Public vs Private

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- Telephone wires vs. road maintenance

Friday 8/5

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- Optional review session
 - ▣ Please prepare questions
 - ▣ Discuss some midterm questions
- Midterm grades back by Friday
- Reading response #4 due on Monday (optional)
- Final exam
 - ▣ next week Friday 8/12
 - ▣ 10:10am, 90 mins