

Group 8 : Narrowcast: telegraph & telephone

YoonJoo , Jasmine, Pamela, Louis

Before the Telephone

- Before 1870's, voice and mail carrier/messengers were the only means of communication
- Early practical uses of telephony were underestimated by businessmen and their inventors

Founding the Telephone Industry

- First telephone March 1876, patent a month later by Alexander Graham Bell
- 3-way partnership of Bell, his father-in-law, and another friend founded the Bell Telephone Company
- Had a full vertical integration approach
- Western Union (telegraph giant) patent/infringement dispute with Bell, resulted in Bell dominance of telephony market, ceding the telegraph market to Western Union

The Era of Monopoly: 1880-1893

- Originally bulky
- Caller would call in to an operator, request who to be connected to, and then be patched through the switchboard and wires to the receiver
- Switchboard system of managing lines quickly became inefficient as urban size increased
- Business model focused on a high-cost, high-quality system marketed by businessmen and their mantra of efficiency
- Flat-rate, unlimited calls vs. message-rate, pay-per-call
- Most telephone entrepreneurs came from telegraph or telephone families
- Public had to be educated or enticed into then-novel uses for the telephone, which they didn't see

The Era of Competition:

1894 to World War I

- Bell's U.S. patent monopoly ended 1893 and 1894
- Independent competitions quickly rose locally in urban areas
- Main competitive threats were groups of independents who banded together against "Bell Octopus"
- Huge accompanying social issue of general phone etiquette which originally stemmed from party line etiquette
- 1913 Kingsbury Commitment – Bell released this statement to the federal government
- Increase in competition, and increased quality and connection distances due to R&D developments allowed for:

The Era of Competition: 1894 to World War I

- To sum it up: “In the roughly twenty years between the expiration of Bell's monopoly and World War I telephone service was transformed from a business tool and a luxury good to a common utility. Most North Americans still could not afford or would not invest in a home telephone, but middle-class urban households and millions of farm families did have service. The rest, largely the urban working class, were familiar with and occasionally used the telephone in a neighbor's home or at a local store,” (Fischer, 50).

World War I to World War II : Consolidation and Depression

- Federal government took over the telephone and telegraph industry for one year during WWI
- Willis-Graham Act of 1921 allowed AT&T and Bell to virtually eliminate their competition.
- The New Deal incentivized federal regulation and supervision.
 - The 1934 Federal Communications Act authorized the Federal Communications Commission (FCC)

World War I to World War II : Consolidation and Depression

- Post war labor shortages changed the telephone service
- The war and inflation made the telephone service fees raise.
- At the peak of the Depression, the telephone industry suffered a 20% loss.
- Industry recovered in 1939, there was a surplus of service demand.
- The demand, federal aid and affluence dramatically increased residential subscriptions in the states on the years to follow.

The Telephone Elsewhere

Canada:

- Similar history to the United States
- Canada's courts overruled Bell's patent monopoly earlier.
- Government subsidized telephone services
- Telephone rates were lower than in the States and residential connections where almost the same.

The Telephone Elsewhere

Europe:

- Government postal and telegraph administrations took over the telephone systems
- Focus was on using the telephone to meet the needs of the public
- Telephone distribution was larger in the USA than in Europe
- During the depression, European nations increased the use of telephone while in Canada and USA decreased.
 - Low-income household in the USA could not sustain the telephone service during the Depression while big-city subscription increased in Europe
 - Rival technologies in North America.
 - European government aid.
- By 1980s European government monopoly matched American private monopoly

Electrification and the Automobile

Electrification:

- Parallels the history of telephone and was also shaped by politics
- Electrical industry also welcomed regulation

Automobile:

- Local government regulated the usage of automobiles.
- Federal government started to impose taxes to maintain highways around WWI
- After WWI American families owned more cars than telephones
- Automobile industry also suffer a drawback during the Depression but as severe as the telephone.

Telephone vs. Automobile

- Similarities:
 - “Parent” technology
 - Started as expensive devices but quickly became popular devices.
- Differences:
 - Telephone started as a business tool while the automobile originated as a toy
 - Price competition increase the automobile diffusion while monopoly pricing stuck telephone diffusion
 - Government’s role in the telephone industry was not very significant while in the automobile industry it was

Publicity and sales techniques

- It was important to let people know how to use the telephone-Educating the public

education tactics

1. Free publicity
2. Explicit advertising
3. Sold subscriptions door-to-door

Finding uses

In 1906, advertising industry journal noted, “telephones are universal nowadays but the public is blind to many of their uses and needs to be reminded by special telephone arguments.”

- Telephone companies started offer sports results, train arrival times, wake-up calls, and night watchman call-ins.
- Telephone vendors targeted businessmen first and most often. They claimed that the telephone would increase efficiency, save time, and impress customers. Saying long-distance calls are effective for business.
- Other ads from this period suggested using the telephone to convey messages of moderate urgency ,to convey invitations.

Managing Use

- Task of finding uses but also that of managing customers' use of the telephone, showing them how to work it and how to use proper etiquette.
- Telephone companies undertook not only mechanical but also social education
- AT&T distributed card labeled “ the telephone pledge” to be attached to instruments and reading.,” I believe in the Golden Rule and will try to be as Courteous and Considerate over the Telephone as if Face to Face.”
- 1926 telephone magazine raised the issue who should end a conversation, the caller or receiver
- The companies also tried to teach customers to avoid occupying the line with long conversations.

Sustaining Goodwill

- AT&T began getting involved with public interests in the 19th century to divorce itself from its arrogant and dominant image as a monopoly
- Telephone companies used free publicity, mostly through advertisements and public demonstrations, to disseminate their image as supporters of democracy
- Methods of marketing:
 - forming alliances with newspapers, giving them service in exchange for advertisement
 - seeking influential leaders (politicians, clergymen, university professors) to participate in demonstrations of the product
- Specifically, Vail's campaign for AT&T:
 - AT&T interested in the goodwill of the public
 - Helping the public achieve modernity through telephone technology

Practicality vs Sociability

- Before the 1920's, telephones were being advertised for their practical uses
- Vendors were mainly focused on business men or using the telephone as a tool for home management
- Telephone was similar to the telegraph, providing services such as: business transactions, alarm, weather, emergencies, invitations, ordering things
- At the time “chit-chat” and conversations were considered frivolous
- Women were mostly excluded from the telephone because they had no business to take care of
- After 1920's, the theme of sociability emerged in the marketing of telephones
- Vendors focused on the product as a luxurious good
- At the time, there were competing technologies, such as the automobile, being advertised as a luxurious good
- The telephone was almost a substitute for proximity, and the idea of friendships and conversations was important
- Theme of sociability opened up the telephone to a wider range of users, because sociability is universal

Explaining Sociability

- Fischer gives some plausible explanations to why sociability may have developed after practicality in the telephone marketing industry
- He first explains that vendors may have pushed practical uses of the telephone because the telephone came from the same line as the telegraph. The telegraph had many practical/business-like functions.
- He says that sociability in general may have arisen in the 1920's, so the telephone industry began to link sociability to telephone services to meet the public trend. However, it's difficult to pin down the reasons why sociability in general may have arisen
- He says the conversion from the flat rates to the measured rates may have encouraged the vendors to sell sociability, because measured rates would rake in more money if there were longer phone conversations
- Advertising themes in the 1920 started gearing towards “softer themes,” attracting female consumers
- Fischer seems to portray that the rise of sociability is a phenomenon that can't be explained by one sole cause

Automobile Marketing vs. Telephone Marketing

- Designers for automobiles and telephones had to create uses for their products
- The automobile was initially advertised as a luxurious good for things like recreational uses and for social status, and later it was developed in a practical sense (improvement on models)
- The telephone was initially advertised as a practical business tool for household management, and later it was portrayed as a luxurious good for “convenience and comfort”

Conclusion

- Promoters of technology don't know and don't get to decide the final use of their products
- Consumers play a big role in determining the use of products, they even develop new uses

Discussion

- Government involvement on technological advances has been ubiquitous but the telephone is one of the few exceptions (to this involvement). Would then the telephone be considered an example technological determinism?
- Sociability expanded the telephone industry. Telephone advertisements started to focus less on the practical and more on the social. Since then, how much technology sacrifices practicality to satisfy sociability?