

## Tables

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# A History of Communication Technology

Tables from Chapter 2

Table 2.1

**Number of Newspaper Firms and Daily Newspaper Circulation, 1704-2014**

<i>Year</i>	<i>Firms</i>	<i>Circulation (millions)</i>	<i>Year</i>	<i>Firms</i>	<i>Circulation (millions)</i>
1704	1		1965	11,383	60.4
1710	1		1970	11,383	62.1
1720	3		1975	11,400	60.7
1730	7		1980	9,620	62.2
1740	12		1981	9,676	61.4
1750	14		1982	9,183	62.5
1760	18		1983	9,205	62.6
1770	30		1984	9,151	63.1
1780	39		1985	9,134	62.8
1790	92		1986	9,144	62.5
1800	235		1987	9,031	62.8
1810	371		1988	10,088	62.7
1820	512		1989	10,457	62.6
1830	715		1990	11,471	62.0
1840	1,404		1991	11,689	60.0
1850	2,302	0.8	1992	11,339	60.0
1860	3,725	1.5	1993	12,597	60.0
1870	5,091	2.6	1994	12,513	59.0
1880	9,810	3.6	1995	12,246	57.0
1890	12,652	8.4	1996	10,466	57.0
1900	15,904	15.1	1997	10,042	57.0
1904	16,459	19.6	1998	10,504	56.2
1909	17,023	24.2	1999	10,530	56.0
1914	16,944	28.8	2000	10,696	55.8
1919	15,697	33.0	2001	10,739	55.6
1921	9,419	33.7	2002	10,855	55.2
1923	9,248	35.5	2003	8,376	55.2
1925	9,569	37.4	2004	8,435	54.6
1927	9,693	41.4	2005	1,452	53.3
1929	10,176	42.0	2006	1,437	52.3
1931	9,299	41.3	2007	1,422	50.7
1933	6,884	37.6	2008	1,408	48.6
1935	8,266	40.9	2009	1,397	46.2
1937	8,826	43.3	2010		44.1
1939	9,173	43.0	2011	1,382	44.4
1947	10,282	53.3	2012	1,380	43.4
1950	12,115	53.8	2013	1,395	40.7
1960	11,315	58.9	2014	1,331	40.4

Note 1: Data showing newspaper firms and daily circulation

The data from 1704 through 1900 are from Lee (1973).

The data from 1904 through 1947 are from U.S. Bureau of the Census (1976).

The number data between 1947 and 1986 are from U.S. Bureau of the Census (1986).

The data from 1987 through 1988 are from U.S. Bureau of the Census (1995).

The data for 1988 and 1989 are from U.S. Bureau of the Census (1997).

Data from 1989 through 1997 are from U.S. Census (1999).

Data from 1997 through 2000 are from U.S. Bureau of the Census (2001).

Data from 2000 through 2002 are from U.S. Bureau of the Census (2003).

Data from 2002 through 2005 are from U.S. Bureau of the Census (2008).

Data from 2005 through 2008 are from U.S. Bureau of the Census (2010).

Data from 2009 are from U.S. Bureau of the Census (2012).

Data for 2010 are from Newspaper Association of America (2015).

Data for 2011 are from Newspaper Association of America (2015).

Data for 2012 are from Pew Research Center (2013).

Data for 2013 are from Newspaper Association of America (2015).

Data for 2014 are from Newspaper Association of America (2015).

Source: Dan Brown, Ph.D.

Table 2.2

**Published Periodical Titles, 1904-2002**

<i>Year</i>	<i>Titles</i>
1904	1,493
1909	1,194
1914	1,379
1919	4,796
1921	3,747
1923	3,829
1925	4,496
1927	4,659
1929	5,157
1931	4,887
1933	3,459
1935	4,019
1937	4,202
1939	4,985
1947	4,610
1954	3,427
1958	4,455
1960	8,422
1965	8,990
1970	9,573
1975	9,657
1980	10,236
1981	10,873
1982	10,688
1983	10,952
1984	10,809
1985	11,090
1986	11,328
1987	11,593
1988	11,229
1989	11,556
1990	11,092
1991	11,239
1992	11,143
1993	11,863
1994	12,136
1995	11,179
1996	9,843
1997	8,530
1998	12,448
1999	11,751
2000	13,019
2001	13,878
2002	13,846

Note: The data from 1904 through 1958 are from U.S. Bureau of the Census (1976).

The data from 1960 through 1985 are from U.S. Bureau of the Census (1986).

The data from 1987 through 1988 are from U.S. Bureau of the Census (1995).

The data for 1988 through 1991 are from U.S. Bureau of the Census (1997).

The data from 1991 through 1996 are from U.S. Bureau of the Census (1999).

The data from 1996 through 2000 are from U.S. Bureau of the Census (2001).

The data after 2000 are from U.S. Bureau of the Census (2003)

Source: Dan Brown, Ph.D.

Table 2.3

**Published New Book Titles, 1880-2012**

<i>Year</i>	<i>Total Titles</i>	<i>Year</i>	<i>Total Titles</i>	<i>Year</i>	<i>Total Titles</i>	<i>Year</i>	<i>Total Titles</i>
1880	2,076	1912	10,903	1944	6,970	1983	53,380
1881	2,991	1913	12,230	1945	6,548	1984	51,058
1882	3,472	1914	12,010	1946	7,735	1985	50,070
1883	3,481	1915	9,734	1947	9,182	1986	52,637
1884	4,088	1916	10,445	1948	9,897	1987	56,057
1885	4,030	1917	10,060	1949	10,892	1988	55,483
1886	4,676	1918	9,237	1950	11,022	1989	53,446
1887	4,437	1919	8,594	1951	11,255	1990	46,738
1888	4,631	1920	8,422	1952	11,840	1991	48,146
1889	4,014	1921	8,329	1953	12,050	1992	49,276
1890	4,559	1922	8,638	1954	11,901	1993	49,756
1891	4,665	1923	8,863	1955	12,589	1994	51,663
1892	4,862	1924	9,012	1956	12,538	1995	62,039
1893	5,134	1925	9,574	1957	13,142	1996	68,175
1894	4,484	1926	9,925	1958	13,462	1997	119,262
1895	5,469	1927	10,153	1959	14,876	1998	120,244
1896	5,703	1928	10,354	1960	15,012	1999	119,357
1897	4,928	1929	10,187	1961	18,060	2000	122,108
1898	4,886	1930	10,027	1962	21,904	2001	141,703
1899	5,321	1931	10,307	1963	25,784	2002	147,120
1900	6,356	1932	9,035	1964	28,451	2003	171,061
1901	8,141	1933	8,092	1965	28,595	2004	164,020
1902	7,833	1934	8,198	1966	30,050	2005	170,078
1903	7,865	1935	8,766	1967	28,762	2006	174,956
1904	8,291	1936	10,436	1968	30,387	2007	190,502
1905	8,112	1937	10,912	1969	29,579	2008	180,032
1906	7,139	1938	11,067	1970	36,071	2009	178,841
1907	9,620	1939	10,640	1975	39,372	2010	186,344
1908	9,254	1940	11,328	1979	45,182	2011	190,533
1909	10,901	1941	11,112	1980	42,377	2012	185,933
1910	13,470	1942	9,525	1981	48,793		
1911	11,123	1943	8,325	1982	46,935		

Source: Dan Brown, Ph.D.

Note: The data for 1880-1919 include pamphlets; 1920-1928, pamphlets included in total only; thereafter, pamphlets excluded entirely. Beginning 1959, the definition of "book" changed, rendering data on prior years not strictly comparable with subsequent years.

Beginning 1967, the counting methods were revised, rendering prior years not strictly comparable with subsequent years.

The data from 1904 through 1947 are from U.S. Bureau of the Census (1976).

The data from 1975 through 1983 are from U.S. Bureau of the Census (1984).

The data from 1984 are from U.S. Bureau of the Census (1985).

The data from 1985 and 1989 through 1992 are from U.S. Bureau of the Census (1995).

The data from 1986 and 1987 are from U.S. Bureau of the Census (1990).

The data from 1988 are from U.S. Bureau of the Census (1992).

The data from 1985 and 1989 are from U.S. Bureau of the Census (1995).

The data from 1989 through 1993 are from U.S. Bureau of the Census (1997).

The data from 1993 through 1996 are from U.S. Bureau of the Census (1999).

The data from 1997 through 1999 are from R. R. Bowker (2001).

Data from 2001 through 2003 are from Grabojs (2005).

Data from 2004 and 2005 are from Barr and Harbison (2009).

Data from 2006 through 2007 are from Barr and Harbison (2011).

Data from 2008 through 2012 are from Barr and Harbison (2013).

Note: The report for 2012 is likely to increase after the reporting process concludes.

Table 2.4

**Telephone Penetration & Wireless Telephone Systems & Subscribers, 1920-2015**

Year	Households With Wired Telephones (%)	Year	Households With Wired Telephones (%)	Subscribers (thousands)
1920	35.0	1965	84.6	
1921	35.3	1966	86.3	
1922	35.6	1967	87.1	
1923	37.3	1968	88.5	
1924	37.8	1969	89.8	
1925	38.7	1970	90.5	
1926	39.2	1975		
1927	39.7	1979		
1928	40.8	1980	93.0	
1929	41.6	1981		
1930	40.9	1982		
1931	39.2	1983		1
1932	33.5	1984	91.8	100
1933	31.3	1985	92.2	350
1934	31.4	1986	92.2	682
1935	31.8	1987	92.5	1,231
1936	33.1	1988	92.9	2,069
1937	34.3	1989	93.0	3,509
1938	34.6	1990	93.3	5,283
1939	35.6	1991	93.6	7,557
1940	36.9	1992	93.9	11,033
1941	39.3	1993	94.2	16,009
1942	42.2	1994	93.9	24,134
1943	45.0	1995	93.9	33,786
1944	45.1	1996	93.8	44,043
1945	46.2	1997	93.9	55,312
1946	51.4	1998	94.2	69,209
1947	54.9	1999	94.1	86,047
1948	58.2	2000	94.6	109,478
1949	60.2	2001	94.6	128,375
1950	61.8	2002	95.5	140,766
1951	64.0	2003	95.5	158,722
1952	66.0	2004	94.2	182,140
1953	68.0	2005	92.4	207,896
1954	69.6	2006	92.8	233,041
1955	71.5	2007	94.6	255,396
1956	73.8	2008	95	270,334
1957	73.8	2009	95.7	285,646
1958	73.8	2010	95.5	310,900
1959	78.0	2011	95.6	322,800
1960	78.3	2012	96.1	326,000
1961	78.9	2013	95.7	342,740
1962	80.2	2014	96.1	368,600
1963	81.4	2015	96.3	388,910
1964	82.8			

Source: Dan Brown, Ph.D.

Note: 1950-1982 data applies to principal earners filing reports with FCC; earlier data applies to Bell and independent companies.

Beginning in 1959, data includes figures from Alaska & Hawaii.

The data for 1986 and 1987 are estimates.

The data to 1970 are from U.S. Bureau of the Census (1976).

The data from 1970 through 1982 are from U.S. Bureau of the Census (1986).

The data after 1982 from U.S. Dept. of Commerce (1987).

The data from 1986 and 1987 are from U.S. Bureau of the Census (1992, 1993).

The data for 1987 through 1989 are from U.S. Bureau of the Census (1997).

The telephone households data from 1989 through 1998 are from U.S. Bureau of the Census (1999) except that households with telephones for 1998 are from FCC (2000).

Wireless telephone data from 1990 through 1994 from U.S. Bureau of the Census (1999).

Households with telephones for 1999 & wireless subscribers for 1994 through 1999 from U.S. Bureau of the Census (2001).

Households with telephones after 1998 are from FCC (2007).

Households with telephones from 1999 through 2009 from U.S. Bureau of the Census (2010).

Households with telephones for 2010 & 2011 are from FCC (2011).

Wireless systems from 1990 and 1994 through 2000 are from U.S. Bureau of the Census (2001).

Wireless systems and subscribers from 2000 through 2003 are from U.S. Bureau of the Census (2006).

Wireless subscribers after 2003 are from U.S. Bureau of the Census (2008).

Systems from 1991 and 1992 are from U.S. Bureau of the Census (1998).

Wireless subscribers for 2007-2008 are from U.S. Bureau of the Census (2010).

Wireless subscribers for 2009 are from FCC (2011).

Wireless data from 2010 through 2011 are from CTIA, 2011.

Data for 2012 are from Dezege (2013).

Households with telephones data from 2013 and 2015 are from FCC (2015).

Wireless subscribers from 2013 through 2015 are from Statista (2016)

Table 2.5

**Motion Picture Attendance and Box Office Receipts, 1922-2015**

Year	Average Weekly Attendance (millions)	Receipts (\$ million)	Year	Average Weekly Attendance (millions)	Receipts (\$ million)	Hours Per Person Per Year
1922	40		1971	14.0	1,214	
1923	43		1972	15.0	1,583	
1924	46	1.71	1973	16.0	1,524	
1925	46		1974	18.0	1,909	
1926	50		1975	20.0	2,115	
1927	57		1976	20.0	2,036	
1928	65		1977	20.0	2,372	
1929	80	720	1978	22.0	2,643	
1930	90	732	1979	22.0	2,821	
1931	75	719	1980	20.0	2,749	
1932	60	527	1981	21.0	2,966	
1933	60	482	1982	23.0	3,453	
1934	70	518	1983	23.0	3,766	
1935	80	556	1984	23.0	4,030	
1936	88	626	1985	20.3	3,749	
1937	88	676	1986	19.6	3,780	
1938	85	663	1987	20.9	4,250	
1939	85	659	1988	20.9	4,460	
1940	80	735	1989	21.8	5,030	
1941	85	809	1990	22.8	5,020	
1942	85	1,022	1991	21.9	4,800	
1943	85	1,275	1992	22.6	4,870	
1944	85	1,341	1993	23.9	5,200	11
1945	85	1,450	1994	24.8	5,400	12
1946	90	1,692	1995	24.3	5,500	12
1947	90	1,594	1996	26.3	5,900	12
1948	90	1,506	1997	26.7	6,366	12
1949	70	1,451	1998	28.5	6,949	12
1950	60	1,376	1999	28.2	7,448	13
1951	54	1,310	2000	27.3	7,670	13
1952	51	1,246	2001	28.7	8,410	12
1953	46	1,187	2002	31.3	9,520	13
1954	49	1,228	2003	30.2	9,490	14
1955	46	1,326	2004	29.4	9,530	13
1956	47	1,394	2005	26.9	8,990	13
1957	45	1,126	2006	27.9	9,480	12
1958	40	992	2007	26.9	9,629	12
1959	42.0	958	2008	25.8	9,634	12
1960	40.0	951	2009	27.2	10,600	12
1964	44.0	913	2010	25.8	10,580	12
1965	44.0	927	2011	24.7	10,200	
1966		964	2012	26.1	10,800	
1967		989	2013	25.7	10,900	
1968		1,045	2014	24.4	10,400	
1969		1,099	2015	25.4	11,120	
1970	18.0	1,162				

Note: The data to 1970 are from U.S. Bureau of the Census (1976).

The data from 1970, 1975, and 1979 through 1985 are from U.S. Bureau of the Census (1986).

The box office data from 1971 are from U.S. Bureau of the Census (1975).

The box office receipts data from 1972 through 1988 are from U.S. Department of Commerce (1988), and the data for 1988 through 1992 are from U.S. Department of Commerce (1994).

The 1991 attendance came from U.S. Bureau of the Census (1996).

The data for 1993 through 1996 are from U.S. Department of Commerce (1998).

The data for 1997 through 1999 are from U.S. Bureau of the Census (2001).

Data for hours per person per year through 1999 are from U.S. Department of Commerce (1999), and these data represent projections.

Hours per person per year from 1999 through 2002 are from U.S. Bureau of the Census (2007).

Hours per person per year from 2003 through 2009, with 2009 projected, are from U.S. Bureau of the Census (2012).

Attendance and receipts data for 2000-2006 are from National Association of Theater

Owners (2008a and 2008b respectively).

Attendance and receipts data for 2007 are from National Association of Theater Owners (2010a and 2010b respectively and include Canada with the U.S.).

Box office data from 2007 through 2012 are from National Association of Theater Owners (2012).

Average weekly attendance for 2011 are from National Association of Theater Owners (2011).

Average weekly attendance for 2012 are from National Association of Theater Owners (2012).

Average weekly attendance for 2013 and 2014 are from National Association of Theater Owners (2016a)

Box office data from 2013 through 2015 are from National Association of Theater Owners (2016b)

Source: Dan Brown, Ph.D.

Table 2.6 (note there's also a 2.6A)

**Recorded Music Unit Shipments (millions), 1973-2014**

Year	Vinyl Singles	LPs/EPs	Cassettes	Cassette Singles	8-tracks	CDs	CD Singles	DVD Music Video	DVD Audio	Other Music Video	Total
1973	228.0	280.0	15.0		91.0						614.0
1974	204.0	276.0	15.3		96.7						592.0
1975	164.0	257.0	16.2		94.6						531.8
1976	190.0	273.0	21.8		106.1						590.9
1977	190.0	344.0	36.9		127.3						698.2
1978	190.0	341.3	61.3		133.6						726.2
1979	195.5	318.3	82.8		104.7						701.3
1980	164.3	322.8	110.2		86.4						683.7
1981	154.7	295.2	137.0		48.5						635.4
1982	137.2	243.9	182.3		14.3						577.7
1983	125.0	210.0	237.0		6.0	1					579.0
1984	132.0	205.0	332.0		6.0	6					681.0
1985	121.0	167.0	339.0		4.0	23					654.0
1986	93.9	125.2	344.5			53					616.6
1987	82.0	107.0	410.0			102.1					701.1
1988	65.6	72.4	450.1			149.7					737.8
1989	36.6	34.6	446.2			207.2					724.6
1990	27.6	11.7	442.2	87.4		286.5	1.1			9.2	865.7
1991	22.0	4.8	360.1	69.0		333.3	5.7			6.1	801.0
1992	19.8	2.3	336.4	84.6		407.5	7.3			7.6	865.5
1993	15.1	1.2	339.5	85.6		495.4	7.8			11	955.6
1994	11.7	1.9	345.4	81.1		662.1	9.3			11.2	1122.7
1995	10.2	2.2	272.6	70.7		722.9	21.5			12.6	1112.7
1996	10.1	2.9	225.3	59.9		778.9	43.2			16.9	1137.2
1997	7.5	2.7	172.6	42.2		753.1	66.7			18.6	1063.4
1998	5.4	3.4	158.5	26.4		847.0	56.0	0.5		26.7	1123.9
1999	5.3	2.9	123.6	14.2		938.9	55.9	2.5		17.3	1160.6
2000	4.8	2.2	76.0	1.3		942.5	34.2	3.3		14.9	1079.2
2001	5.5	2.3	45.0	-1.5		881.9	17.3	7.9	0.3	9.8	968.5
2002	4.4	1.7	31.1	-0.5		803.3	4.5	10.7	0.4	4	859.7
2003	3.8	1.5	17.2			745.9	8.3	17.5	0.4	2.4	798.4
2004	3.5	1.3	5.2			766.9	3.1	29	0.35	3.7	958.0
2005		1	2.5			705.4		33.8			1301.8
2006		0.9	0.7			619.7		23.2			1588.5
2007	0.6	1.3	0.4			511.1	2.6	27.5			1774.3
2008	0.4	2.9	0.1			384.7	0.7	12.8			1852.5
2009	0.3	3.2				292.9	0.9	11.2			1851.8
2010	0.3	4				225.8	1.2	8.7			1726.3
2011	0.4	5.5				240.8	1.3	7.7	0		1824.9
2012	0.4	7.1				210.9	1.1	6.2	0		1816.5
2013	0.3	9.4				172.2	0.6	4.7	-0.1		1684.6
2014	0.5	13.2				144.1	1	4.1	0.1		1516.1

Source: Dan Brown, Ph.D.

Note: The data are from U.S. Bureau of the Census (1986, 1994, 1998, 1999, 2002, 2006, 2009, 2010). A minus sign reflects greater returns than shipments.

The Census Bureau reports were obtained from the Recording Industry Association of America at <http://www.riaa.com>, from which the data for vinyl singles and CD singles for 2007-08 were obtained.

The Census Bureau reports were obtained from the Recording Industry Association of America at <http://www.riaa.com>, from which the data for vinyl singles and CD singles for 2007-08 were obtained.

Data for 2009 - 2012 are from the Recording Industry Association of America at <http://www.riaa.com>.

Data for 2013 - 2014 are from the Recording Industry Association of America (2014)

Table 2.6A (also see Table 2.6)

**Recorded Music Unit Shipments (millions), 1996-2014**

Year	CDs	Music Video*	Other Albums**	Other Singles***	Total Physical Units	Digital Download Single	Digital Download Album	Digital Kiosk#	Music Video	Music Mobile##	Digital Subscription	Total Digital Units
1996	778.9	16.9	228.2	113.2	1137.2							
1997	753.1	18.6	175.3	116.4	1063.4							
1998	847.0	27.2	161.9	87.8	1123.9							
1999	938.9	19.8	126.5	75.4	1160.6							
2000	942.5	18.2	78.2	40.3	1079.2				18.2			
2001	881.9	17.7	47.6	21.3	968.5				17.7			
2002	803.3	14.7	33.3	8.4	859.7				14.7			
2003	746	19.9	20.5	12.1	798.4				19.9			
2004	767	32.8	7.7	6.6	814.1	139.4	4.6		32.8			176.8
2005	705.4	33.8	4.4	5.0	748.7	366.9	13.6	0.7	33.8	170	1.3	586.3
2006	619.7	23.2	1.7	2.9	642.6	586.4	27.6	1.4	23.2	315	1.3	954.9
2007	511.1	27.5			543.9	809.9	42.5	1.8	27.5	362	1.8	1245.5
2008	384.7	12.8			401.8	1033	56.9	1.6	12.8	338.4	1.6	1444.3
2009	292.9	11.2			309.2	1138.3	76.4	1.7	20.4	305.8	1.2	1236.8
2010	225.8	8.7			240.5	1162.4	83.1	1.7	18.1	220.5	1.5	1265.4
2011	240.8	7.7			255.7	1332.3	103.9	1.3	16.3	115.4	1.8	1569.2
2012	210.9	6.2			225.8	1392.2	116.7	2	10.5	69.3	3.4	1590.7
2013	172.2	4.7			187.2	1327.9	118	3.7	8.4	39.4	6.2	1497.4
2014	144.1	4.1			163	1200.4	117.6	1.6	6.8	26.7	7.7	1353.1

Source: Dan Brown, Ph.D.

All data before 2009 are from the U.S. Bureau of the Census (2001, 2010), which cited the Recording Industry Association of America at <http://www.riaa.com>.

Data for 2009 - 2012 are from the Recording Industry Association of America at <http://www.riaa.com>.

Data for 2013 - 2014 are from the Recording Industry Association of America (2014)

\*Includes DVD video and "other" video from Table 2.6

\*\*Includes Cassettes, LP/EP, DVD Audio, and SACD

\*\*\*Includes CD singles, cassette singles, and vinyl singles

# Includes singles and albums

## Includes Master Ringtones, Ringbacks,



Table 2.7

**Radio Households and Penetration, 1922-2008**

Year	Households with Sets (thousands)	Percent Penetration	Year	Households with Sets (thousands)	Percent Penetration	Year	Households with Sets (thousands)	Percent Penetration
1922	60		1951	41,900		1980	79,968	99.0
1923	400		1952	42,800		1981	81,600	99.0
1924	1,250		1953	44,800		1982	82,691	99.0
1925	2,750		1954	45,100		1983	83,078	99.0
1926	4,500		1955	45,900	95.9	1984	84,553	99.0
1927	6,750		1956	46,800	95.7	1985	85,921	99.0
1928	8,000		1957	47,600	95.8	1986		99.0
1929	10,250		1958	48,500	96.1	1987		99.0
1930	13,750	40.3	1959	49,450	96.1	1988	91,100	99.0
1931	16,700		1960	50,193	95.1	1989	92,800	99.0
1932	18,450		1961	50,695	94.7	1990	94,400	99.0
1933	19,250		1962	51,305	93.7	1991	95,500	99.0
1934	20,400		1963	52,300	94.6	1992	96,600	99.0
1935	21,456		1964	54,000	96.2	1993	97,300	99.0
1936	22,869		1965	55,200	96.1	1994	98,000	99.0
1937	24,500		1966	57,200	97.6	1995	98,000	99.0
1938	26,667		1967	57,500	97.1	1996	98,000	99.0
1939	27,500		1968	58,500	96.2	1997	98,000	99.0
1940	28,500	80.3	1969	60,600	97.4	1998	99,000	99.0
1941	29,300		1970	62,000	97.8	1999	99,000	99.0
1942	30,600		1971	65,400		2000	100,500	99.0
1943	30,800		1972	67,200		2001	101,900	99.0
1944	32,500		1973	69,400		2002	105,100	99.0
1945	33,100		1974	70,800		2003	106,700	99.0
1946	33,998		1975	72,600	98.6	2004	108,300	99.0
1947	35,900	91.8	1976	74,000		2005	109,900	99.0
1948	37,623		1977	75,800		2006	110,500	99.0
1949	39,300	93.4	1978	77,800		2007	110,500	99.0
1950	40,700		1979	79,300		2008	115,600	99.0

Source: Dan Brown, Ph.D.

Note: Authorization of new radio stations and production of radio sets for commercial use was stopped from April 1942 until October 1945. 1959 is the first year for which Alaska and Hawaii are included in the figures.

The data prior to 1970 are from U.S. Bureau of the Census (1976).

The households with sets data from 1970 - 1972 are from U.S. Bureau of the Census (1972).

The households with sets data from 1973 and 1974 are from U.S. Bureau of the Census (1975).

The households with sets data from 1975 through 1977 are from U.S. Bureau of the Census (1978).

The households with sets data from 1978 and 1979 are from U.S. Bureau of the Census (1981).

All data from 1988 through 1994 are from U.S. Bureau of the Census (1995).

Households for 1994 through 1999 are from U.S. Bureau of the Census (1999).

Penetration for 1998 is from U.S. Bureau of the Census (2001).

Penetration after 1999 is from U.S. Bureau of the Census (2010).

Households with sets 1998 are from U.S. Bureau of the Census (2007).

Households with sets from 1999 through 2007 are from U.S. Bureau of the Census (2010).

Data for 2008 are from U.S. Bureau of the Census (2012).

**Table 2.8**  
**Television Households and Penetration, 1946-2014**

<i>Year</i>	<i>Households with Sets (thousands)</i>	<i>Percent Penetration</i>	<i>Year</i>	<i>Households with Sets (thousands)</i>	<i>Percent Penetration</i>
1946	8		1981	79,900	98
1947	14		1982	81,500	98
1948	172		1983	83,300	98
1949	940		1984	83,800	98
1950	3,875	9	1985	84,900	98
1951	10,320		1986	85,900	98
1952	15,300		1987	87,400	98
1953	20,400		1988	89,000	98
1954	26,000		1989	90,000	98
1955	30,700		1990	92,000	98
1956	34.90		1991	93,000	98
1957	38,900		1992	92,000	98
1958	41,924		1993	93,000	98
1959	43,950		1994	94,000	98
1960	45,750	87	1995	95,000	98
1961	47,200		1996	96,000	98
1962	48,855		1997	97,000	98
1963	50,300		1998	98,000	98
1964	51,600		1999	101,000	98
1965	52,700		2000	101,000	98
1966	53,850		2001	102,000	98
1967	55,130		2002	106,000	98
1968	56,670		2003	107,000	98
1969	58,250		2004	109,000	98
1970	59,550	95	2005	110,000	98
1972			2006	110,000	98
1973			2007	111,000	98
1974			2008	112,800	98
1975	68,500	97	2009	114,500	99
1976	69,600		2010	114,900	99
1977	71,200		2011	115,900	99
1978	72,900		2012	114,700	97
1979	74,500		2013	114,200	96
1980	76,300	98	2014	115,800	96

Note: 1959 is the first year for which Alaska and Hawaii are included in the figures.

The data dealing with households with television to 1971 are from U.S. Bureau of the Census (1976).

The data dealing with households with television from 1980 through 1984 are from U.S. Bureau of the Census (1985).

The data about penetration for all other pre-1987 years and all data for 1985 and 1986 are from U.S. Bureau of the Census (1986) and data from 1987-1991 are from U.S. Bureau of the Census (1995).

The data from 1991 through 1996 are from FCC (2000).

The penetration data from 1996 through 1999 are from U.S. Bureau of the Census (2001).

The households with sets data from 1996 through 1998 (2001).

All data from 1999 through 2007 are from U.S. Bureau of the Census (2010).

Data for 2008 through 2010 are from Television Bureau of Advertising (2012).

Data for 2011 and 2012 are from FCC (2013).

Data for 2013 and 2014 are from FCC (2015b).

Source: Dan Brown, Ph.D.

Table 2.9

**Cable Television Systems, Subscribers, and Penetration, 1952-2014**

<i>Year</i>	<i>Systems</i>	<i>Subscribers (thousands)</i>	<i>Penetration (Percent)</i>
1952	70	14	
1955	400	150	
1960	640	650	
1965	1,325	1,275	
1967	1,770	2,100	
1968	2,000	2,800	
1969	2,260	3,600	
1970	2,490	4,500	6.7
1971	2,639	5,300	
1972	2,841	6,000	
1973	2,991	7,300	
1974	3,158	8,700	
1975	3,506	9,800	12.6
1976	3,681	10,800	
1977	3,832	11,900	
1978	3,875	13,000	
1979	4,150	14,100	
1980	4,225	17,500	19.9
1981	4,375	18,300	25.3
1982	4,825	25,250	29.8
1983	5,600	29,430	34.0
1984	6,200	32,800	39.3
1985	6,600	35,440	42.8
1986	7,600	38,170	45.6
1987	7,900	41,160	47.7
1988	8,500	44,160	49.4
1989	9,050	47,500	52.8
1990	9,575	50,520	56.4
1991	10,704	52,570	58.9
1992	11,075	54,300	60.2
1993	11,217	56,250	61.4
1994	11,214	58,373	62.4
1995	11,218	60,550	63.4
1996	11,119	62,300	65.3
1997	10,950	63,600	66.5
1998	10,845	64,650	67.2
1999	10,700	67,100	67.5
2000	10,400	68,600	68.0
2001	10,300	69,500	68.0
2002	9,900	73,200	70.3
2003	9,400	74,400	68.6
2004	8,875	73,800	67.5
2005	7,926	73,900	65.8
2006	7,090	65,600	64.1
2007	6,391	65,300	61.3
2008	6,101	66,218	61.6
2009	7,702	62,600	
2010	7,426	59,800	46.5
2011	5,312	58,000	44.4
2012	5,127	57,300	42.5
2013		54,400	41.1
2014	4,833		

Note: Cable penetration refers to the proportion of TV households with cable.

The systems data from 1952 through 1989 are from U.S. Bureau of the Census (1990), from 1990 through 1996 are from U.S.

Bureau of the Census (1998), and 1997 through 2003 are from U.S. Bureau of the Census (2006); 2004 from Television and cable factbook 2006 (2006); and 2005 from NCTA (2006).

Data regarding subscribers from 1952 through 1981 are from U.S. Bureau of the Census (1986); 1982 through 1989 are from U.S. Bureau of the Census (2003); 1990 through 2000 are from U.S. Bureau of the Census (2006); after 2000 are from FCC (2006).

Penetration data from 1970 through 1988 are from U.S. Bureau of the Census (1990); 1989 through 1994 are from U.S. Bureau of the Census (1996); 1995 through 1996 are from U.S.

Bureau of the Census (1998); 1997 through 1998 are from U.S. Bureau of the Census (2006);

Systems and subscribers data for 1999 through 2005 are from U.S. Bureau of the Census (2008) except that the number of cable systems for 2005 is from FCC (2006).

Systems and subscribers data for 2006 and 2007 are from Amobi and Kolb (2007), except that the number of cable systems in 2007 is from FCC (2008).

Systems and subscribers data for 2008 are from U.S. Bureau of the Census (2012).

Systems and subscriber data for 2009 are from Amobi and Kolb (2010).

Systems and subscriber data for 2010 are from Amobi (2011).

Penetration data for 2002 through 2008 are from U.S. Bureau of the Census (2012).

Systems and subscriber data for 2011 and 2012 and penetration data after 2008 are from FCC (2013).

Systems and subscriber data for 2012 and 2013 and penetration data after 2011 are from FCC (2015b).

Source: Dan Brown, Ph.D

Table 2.10

**Multichannel Video Program Distribution (thousands), 1980-2013**

Year	Home Satellite Dish Subscribers*	DBS Subscribers	MMDS Subscribers*	SMATV Subscribers*
1991	764		180	965
1992	1,023		323	984
1993	1,612	<70	397	1,004
1994	2,178	602	600	850
1995	2,341	1,675	800	950
1996	2,300	3,500	1,200	1,100
1997	2,184	5,047	1,100	1,163
1998	2,028	7,200	1,000	940
1999	1,783	10,078	821	1,450
2000	1,477	12,987	700	1,500
2001	1,000	16,070	700	1,500
2002	701	18,200	490	1,600
2003	502	20,400	200	1,200
2004	336	23,160	200	1,100
2005	206	26,120	100	1,000
2006	111	27,973	100	900
2007		30,000		
2008		31,300		
2009		32,600		
2010		33,400		
2011		33,900		
2012		34,000		
2013		34,200		

Source: Dan Brown, Ph.D.

Note: Home satellite dishes represent the four- to eight-foot dishes. DBS uses smaller dishes.

The data through 1995 are from FCC (1995).

Subscriber data for 1996 and 1997 are from FCC (1998).

Data from 1997 through 2001 are from FCC (2002).

Data from 2002 through 2005 are from FCC (2006).

Data for 2006 are from FCC (2009).

DBS subscribers for 2007 are from FCC (2008).

Data from 2007 and 2008 are from FCC (2012b).

Data from 2009 through 2012 are from FCC (2013).

Data for 2013 are from FCC (2015b).

\*Note: These services accounted for <1% of the video market in 2012 and are no longer included in FCC annual video market updates (FCC, 2013).

Table 2.11

**VCR AND DVR Penetration, 1980–2014**

<i>Year</i>	<i>VCR Penetration (Percent)</i>	<i>Digital Video Recorders Penetration (Percent)</i>
1980	1.1	
1981	1.8	
1982	3.1	
1983	5.5	
1984	10.6	
1985	20.8	
1986	36.0	
1987	48.7	
1988	58.0	
1989	64.6	
1990	68.6	
1991	71.9	
1992	75.0	
1993	77.1	
1994	79.0	
1995	81.0	
1996	82.2	
1997	84.2	
1998	84.6	
1999	84.6	
2000	85.1	
2001	86.2	
2002	91.2	
2003	91.5	
2004	90.8	
2005	90.2	4
2006	79.2	7
2007		20
2008	78.0	24
2009	74.0	31
2010	70.2	36
2011		39
2012		46
2013		42.2
2014		45.1

Note: VCR penetration refers to the proportion of TV households with VCRs.

The data from 1978 are from U.S. Bureau of the Census (1982). The data from 1979 through 1984 are from U.S. Bureau of the Census (1984).

The data from 1985 are from U.S. Bureau of Census (1986). The data from 1987 are from U.S. Bureau of the Census (1988).

The data from 1988 through 1992 are from U.S. Bureau of the Census (1995).

The data from 1993 through 1997 are from U.S. Bureau of the Census (1999).

The data from 1998 through 2000 are from U.S. Bureau of the Census (2001).

The data for 2000 through 2002 are from U.S. Bureau of the Census (2003).

The data from 2003 are from (U.S. Bureau of the Census (2006). VCR data for 2004 are estimated from FCC (2006).

DVR subscription data are from FCC (2004), FCC (2005), and FCC (2006).

The data for 2005 are from U.S. Bureau of the Census (2008).

The data for 2005 through 2006 are from FCC (2009).

The data for 2008 and 2010 is from Nielsen tech survey finds more HDTVs, VCRs (2010).

VCR penetration for 2009 is from Gruenwedel (2010).

DVR penetration for 2007 is from Amobi and Kolb (2007).

DVR penetration for 2008 through 2011 is from FCC (2012b).

Data for 2012 are from Amobi (2013).

DVR data from 2013 through 2014 are calculated from FCC (2015b).

Source: Dan Brown, Ph.D.

Table 2.12

**Personal Computer Shipments and Home Use, 1978-2015**

<i>Year</i>	<i>PCs Shipped (millions)</i>	<i>Homes with PCs (millions)</i>	<i>Percentage of Homes with PCs*</i>
1978	0.2		
1979	0.2		
1980	0.4		
1981	1.1	0.8	0.9%
1982	3.5	3.0	3.7%
1983	6.9	7.6	9.2%
1984	7.6	12.0	14.3%
1985	6.8	15.0	17.6%
1986	7.0	17.4	20.2%
1987	8.3	20.0	22.8%
1988	9.5	22.4	25.1%
1989	9.3		
1990	9.8		
1991	10.9	25.0	25.0%
1992	12.5	25.0	27.2%
1993	14.8	31.0	30.0%
1994	18.6	32.0	33.0%
1995	22.6		
1996	25.0		
1997	30.0	35.0	36.6%
1998	35.4	44.2	42.1%
1999	44.3		
2000	47.8	53.7	51.0%
2001	53.0	60.2	56.5%
2002	55.2	63.4	59.0%
2003	61.1	66.1	61.8%
2004	67.5		
2005	74.0		
2006	75.8		
2007		80.9	69.7%
2008	68.3	89.9	77.0%
2009	71.0	86.8	74.1%
2010	75.0	90.5	77.0%
2011	75.1	89.7	75.6%
2012	66.0	95.5	78.9%
2013	63.3	96.1	78.5%
2014	66.0		
2015	65.3		

Source: Dan Brown, Ph.D.

Note: Shipments from 1978 are from U.S. Bureau of the Census (1983); from 1979 and 1980 are from U.S. Bureau of the Census (1984).

The data from 1981 through 1988 are from U.S. Bureau of the Census (1992).

Shipments from 1989 and 1990 are from U.S. Bureau of the Census (1993), for 1991 through 1993 are from U.S. Bureau of the Census (1995), and for 1994 through 1995 are from U.S. Bureau of the Census (1997).

The computer shipments for 1996 are from U.S. Department of Commerce (1998), and Shipments for 1997 are from U.S. Department of Commerce / International Trade Association (1999).

Shipments for 1998 are from U.S. Department of Commerce / International Trade Association (2000).

The percentages of households with computers before 1988 are calculated by dividing the number of homes with computers by the number of homes with TV from Table 9.

Percentage of homes with PCs after 1996 are from U.S. Bureau of the Census (2006).

Homes with computers for 2000 is from National Telecommunications & Information Administration (2000).

Homes with computers for 2001 are from National Telecommunications & Information Administration (2002).

PC shipments for 1999-2002 are estimated from reports of the annual rates of growth in Graham-Hackett (2005).

Penetration after 2002 through 2004 is from Graham-Hackett (2005), and homes with PCs for 2002 through 2004 is estimated from the penetration rate.

Shipments in 2005 through 2006 are estimated from growth rates (Kessler, 2007b). 2008 penetration is from Kessler (2011).

Shipments for 2009 and 2010 are from Cathers (2011). Penetration for 2010 is from OECD (2013).

Penetration for 2007 through 2013 are from US Census Bureau via Statista, and homes with PCs for 2007 through 2013 are estimated from the penetration rate.

PC shipments for 2012 through 2015 are from IDC (2016).

**Table 2.13**  
**Internet Use by Persons 18 and Older, 1997-2013**

<i>Year</i>	<i>Home Access (%)</i>
1997	13.2
1998	26.2
1999	
2000	38.9
2001	50.3
2002	
2003	61.3
2004	62.0
2005	
2006	71.0
2007	71.0
2008	71.9
2009	74.0
2010	
2011	
2012	78.6
2013	76.2

*Source:* Dan Brown, Ph.D.

Note. All data through 2004 are from U. S. Bureau of the Census (1995, 1998, 1999, 2001, 2002, and 2006), using latest edition containing data.

Data from 2004 through 2005 are from Kessler (2007a).

Data for 2006 are from U.S. Bureau of the Census (2008).

Data for 2007 are from U.S. Bureau of the Census (2009).

Data for 2008 are from U.S. Bureau of the Census (2010). Data for 2009 are from Kessler (2011). Data from 2012 are from U.S. Bureau of the Census (2014a).

Data for 2013 are from U.S. Bureau of the Census (2014b).

Table 2.14

**High-speed (>200 kbps) Internet Connections 2005-2013 (thousands)**

Year	DSL+	Cable Modem	Other Wireline	FTTP#	Satellite	Powerline & Other**	Fixed Wireless	Mobile Wireless*	Total Fixed	Total
2005	19,884	26,558	373	298	427	5	209	380	47,803	50,930
2006	25,758	31,982	545	894	572	5	483	22,288	60,238	82,525
2007	29,742	36,507	605	1,849	791	5	707	51,016	70,206	121,222
2008	30,439	40,251	705	2,884	938	5	485	26,532*	75,707	132,814
2009	31,212	42,438	714	3,980	1,116	5	527	56,300	79,994	136,293
2010	31,637	45,334	788	4,993	1,176	6	587	97,544	84,521	182,065
2011	31,769	46,698	772	5,476	1,204	6	644	119,556	86,568	206,124
2012	31,142	51,649	822	6,728	1,454		771	169,165	92,566	261,731
2013	27,287	50,709	22	7,176	1,643		763	159,197	87,599	

Source: Dan Brown, Ph.D.

Note: Data from 2005 and 2006 are from FCC (2010). Data from 2007 through 2011 are from FCC (2012a).

Data for 2012 are from FCC (2013b)

Data for 2013 are from FCC (2014).

+DSL numbers include both asynchronous and synchronous DSL.

\*FCC instructions for reporting mobile wireless changed in 2008, accounting for the apparent inconsistency in that category.

\*\*FCC reporting requirements changed for 2013 report, Power Line and Other were summarized with Other Wireline to maintain firm confidentiality

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## Bibliography

- Amobi, T. N. (2011). Industry surveys: Broadcasting, cable, and satellite. In E. M. Bossong-Martines (Ed.), *Standard & Poor's industry surveys*, Vol. 1.
- Amobi, T. N. (2013). Industry surveys: Broadcasting, cable, & satellite. In E. M. Bossong-Martines (Ed.), *Standard & Poor's industry surveys*, Vol. 1.
- Amobi, T. N. & Kolb, E. (2007, December 13). Industry surveys: Broadcasting, cable & satellite. In E. M. Bossong-Martines (Ed.), *Standard & Poor's industry surveys*, 175 (50), Section 1.
- Amobi, T. N. & Kolb, E. (2010). Industry surveys: Broadcasting, cable & satellite. In E. M. Bossong-Martines (Ed.), *Standard & Poor's industry surveys*, Vol. 1.
- Barr, C., & Harbison, C. (2009). Book title output and average prices. In D. Bogart (Ed.), *Library and book trade almanac* (pp. 504-513). Medford, NJ: Information Today, Inc.
- Barr, C., & Harbison, C. (2011). Book title output and average prices. In D. Bogart (Ed.), *Library and book trade almanac* (pp. 491-504). Medford, NJ: Information Today, Inc.
- Barr, C., & Harbison, C. (2013). Book title output and average prices. In D. Bogart (Ed.), *Library and book trade almanac* (pp. 435-450). Medford, NJ: Information Today, Inc.
- Barr, C., & Harbison, C. (2015). Book title output and average prices. In D. Bogart (Ed.), *Library and book trade almanac* (pp. 453-467). Medford, NJ: Information Today, Inc.
- Bowker R. R.. (2001). *The Bowker annual library and book trade almanac*, 2001. Medford, NJ: Information Today, Inc.
- Cathers, D. (2011). Industry surveys: Computers. In E. M. Bossong-Martines (Ed.), *Standard & Poor's industry surveys*, Vol. 1.
- CTIA. (2011). 50 wireless quick facts. Retrieved from [http://www.ctia.org/consumer\\_info/index.cfm/AID/10378](http://www.ctia.org/consumer_info/index.cfm/AID/10378)
- Dezago, R. (2013, July). Industry surveys: Telecommunications: Wireline. In E. M. Bossong-Martines (Ed.), *Standard & Poor's industry surveys*, Vol 2.
- Federal Communications Commission. (1995, December 11). *Annual assessment of the status of competition in markets for the delivery of video programming*. CS Docket No. 95-61, Washington, DC: Author.
- Federal Communications Commission. (1998, January 13). *Annual assessment of the status of competition in markets for the delivery of video programming*. CS Docket No. 97-141, Washington, DC: Author.
- Federal Communications Commission. (2000, January 14). *Annual assessment of the status of competition in markets for the delivery of video programming*. CS Docket No. 99-230, Washington, DC: Author.
- Federal Communications Commission. (2002, January 14). *In the matter of annual assessment of the status of competition in the market for the delivery of video programming* (eighth annual report). CS Docket No. 01-129. Washington, DC 20554.
- Federal Communications Commission. (2004). *In the matter of annual assessment of the status of competition in the market for the delivery of video programming*, 10th annual report. CS Docket No. 03-172.
- Federal Communications Commission. (2005). *In the matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993: Annual report and analysis of competitive market conditions with respect to commercial mobile services* (10th report). WT Docket No. 05-71.
- Federal Communications Commission. (2006). *In the matter of annual assessment of the status of competition in the market for the delivery of video programming*, 12th annual report. CS Docket No. 05-255. Retrieved from <http://www.fcc.gov/mb/>.
- Federal Communications Commission. (2007). *Statistical trends in telephony*. Retrieved from <http://www.fcc.gov/wcb/iatd/trends.html>.
- Federal Communications Commission. (2008). *Fourth report and order and further notice of proposed rulemaking*. Retrieved from [http://hraunfoss.fcc.gov/edocs\\_public/Query.do?mode=advance&rpt=full](http://hraunfoss.fcc.gov/edocs_public/Query.do?mode=advance&rpt=full).
- Federal Communications Commission. (2009). What is broadband. Retrieved from [http://www.broadband.gov/about\\_broadband.html](http://www.broadband.gov/about_broadband.html).
- Federal Communications Commission. (2011a, October). Internet access services: Status as of December 31, 2010. Retrieved from <http://transition.fcc.gov/wcb/iatd/comp.html>.
- Federal Communications Commission. (2010, February). High-Speed Services for Internet Access: Status as of December 31, 2008. Washington, DC 20554.
- Federal Communications Commission. (2011, December). Telephone subscribership in the United States. Retrieved from <http://transition.fcc.gov/wcb/iatd/lec.html>.
- Federal Communications Commission. (2012a, June). Internet access services: Status as of June 30, 2011. Washington, DC 20554.
- Federal Communications Commission. (2012b, July 20). In the matter of annual assessment of the status of competition in the market for the delivery of video programming (fourteenth annual report). MB Docket No. 07-269. Washington, DC 20554.
- Federal Communications Commission. (2013a, July 22). In the matter of annual assessment of the status of competition in the market for the delivery of video programming (fifteenth annual report). MB Docket No. 12-203. Washington, DC 20554.
- Federal Communications Commission. (2013b, December). Internet access services: Status as of December 31, 2012. Retrieved from [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-324884A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-324884A1.pdf)
- Federal Communications Commission. (2014, October). In-

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- ternet access services: Status as of December 31, 2013. Retrieved from [https://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2014/db1016/DOC-329973A1.pdf](https://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db1016/DOC-329973A1.pdf)
- Federal Communications Commission. (2015a, December). Federal-State Joint Board Monitoring Reports. Retrieved from <https://www.fcc.gov/general/federal-state-joint-board-monitoring-reports>.
- Federal Communications Commission. (2015b, April 2). 16th Report to Congress on the status of competition in the market for the delivery of video programming. Retrieved from <https://www.fcc.gov/document/fcc-adopts-16th-video-competition-report>.
- Grabois, A. (2005). Book title output and average prices: 2003 final and 2004 preliminary figures. In D. Bogart (Ed.), *The Bowker annual library and trade book almanac* (50th edition, pp. 521-525). Medford, NJ: Information Today.
- Graham-Hackett, M. (2005, June 2). Global PC demand outlook losing steam. In E. M. Bossong-Martines (Ed.), *Standard & Poor's Industry Surveys*, 173 (22), Section 1.
- Gruenwedel, E. (2010). Report: Blu's household penetration reaches 17%. *Home Media Magazine*, 32, 40.
- International Data Corporation. (2016). *United States Quarterly PC Tracker*. Retrieved from [http://www.idc.com/tracker/showproductinfo.jsp?prod\\_id=141](http://www.idc.com/tracker/showproductinfo.jsp?prod_id=141)
- Kessler, S. H. (2007a, September 20). Industry surveys: Computers: Consumer services & the Internet. In E. M. Bossong-Martines (Ed.), *Standard & Poor's industry surveys*, 175 (38), Section 1.
- Kessler, S. H. (2007b, August 26). Industry surveys: Computers: Hardware. In E. M. Bossong-Martines (Ed.), *Standard & Poor's industry surveys*, 175 (17), Section 2.
- Kessler, S. H. (2011). Industry surveys: Computers: Consumer services and the Internet. In E. M. Bossong-Martines (Ed.), *Standard & Poor's industry surveys*, Vol. 1.
- Lee A. (1973). *The daily newspaper in America*. New York: Octagon Books.
- National Association of Theater Owners. (2008a). Total U.S. admissions. Retrieved from <http://www.natooline.org/statisticsadmissions.htm>.
- National Association of Theater Owners. (2008b). *Total U.S. box office grosses*. Retrieved from <http://www.natooline.org/statisticsboxoffice.htm>.
- National Association of Theater Owners. (2010a). *Total U.S. admissions*. Retrieved from <http://www.natooline.org/statisticsadmissions.htm>.
- National Association of Theater Owners. (2008b). *Total U.S. box office grosses*. Retrieved from <http://www.natooline.org/statisticsboxoffice.htm>.
- National Association of Theater Owners. (2011). *Theatrical market statistics 2011*. Retrieved from <http://www.mpaa.org/resources/5bec4ac9-a95e-443b-987b-bff6fb5455a9.pdf>
- National Association of Theater Owners. (2012). *Theatrical market statistics 2012*. Retrieved from <http://www.mpaa.org/Resources/3037b7a4-58a2-4109-8012-58fca3abdf1b.pdf>
- National Association of Theater Owners. (2016a). *Annual U.S./Canada Admissions*. Retrieved from <http://natooline.org/data/admissions/>
- National Association of Theater Owners. (2016b). *U.S. and Canada Box Office Grosses*. Retrieved from <http://natooline.org/data/boxoffice/>
- National Cable and Telecommunications Association. (2006). *Annual overview 2006*. Retrieved from <http://www.ncta.com>.
- National Telecommunications & Information Administration. (2000, October 16). *Falling through the net, toward digital inclusion*. Washington, DC: U.S. Department of Commerce. Retrieved February 22, 2002 from <http://www.ntia.doc.gov/ntiahome/digitaldivide/>.
- National Telecommunications & Information Administration. (2002, February). *A nation online: How Americans are expanding their use of the Internet*. Washington, DC: U.S. Department of Commerce. Retrieved February 28, 2004 from <http://www.ntia.doc.gov/ntiahome/dn/index.html>.
- Newspaper Association of America. (2015, March 30). Newspaper circulation volume. Retrieved from <http://www.naa.org/Trends-and-Numbers/Circulation-Volume/Newspaper-Circulation-Volume.aspx>
- OECD. (2013). Broadband and telecom. Retrieved from <http://www.oecd.org/internet/broadband/oecdbroadbandportal.htm>
- Nielsen tech survey finds more HDTVs, VCRs. (2010, October 4). *Multichannel News*, 28.
- Pew Research Center. (2013). The state of the news media 2013: An annual report on American journalism. Retrieved from <http://stateofthemediamedia.org/2013/newspapers-stabilizing-but-still-threatened/>
- Recording Association Industry of America. (2012). U. S. shipment numbers. Retrieved from [http://www.riaa.com/keystatistics.php?content\\_selector=2008-2009-U.S-Shipment-Numbers](http://www.riaa.com/keystatistics.php?content_selector=2008-2009-U.S-Shipment-Numbers).
- Recording Association Industry of America. (2014). News and Notes on 2014 RIAA Music Industry Shipment and Revenue Statistics. Retrieved from [https://www.riaa.com/wp-content/uploads/2015/09/2013-2014\\_RIAA\\_YearEndShipmentData.pdf](https://www.riaa.com/wp-content/uploads/2015/09/2013-2014_RIAA_YearEndShipmentData.pdf).
- Rochette, W. (2013, June). Industry surveys: Publishing and advertising. In E. M. Bossong-Martines (Ed.), *Standard & Poor's industry surveys*, Vol 2.
- Statista. (2016). Wireless carriers in the U.S. by the number of subscribers 2013-2015, by quarter (fee-based). Retrieved from <http://www.statista.com/statistics/283507/subscribers-to-top-wireless-carriers-in-the-us/>

- Television and cable factbook 2006* (Vol. 74). (2006). New York: Warner Communications News.
- Television Bureau of Advertising. (2012). TV basics. Retrieved from <http://www.tvb.org/trends/95487>.
- U.S. Bureau of the Census. (1972). *Statistical abstract of the United States: 1972* (93rd Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1975). *Statistical abstract of the United States: 1975* (96th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1976). *Statistical history of the United States: From colonial times to the present*. New York: Basic Books.
- U.S. Bureau of the Census. (1978). *Statistical abstract of the United States: 1978* (99th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1981). *Statistical abstract of the United States: 1981* (102nd Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1982). *Statistical abstract of the United States: 1982-1983* (103rd Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1983). *Statistical abstract of the United States: 1984* (104th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1984). *Statistical abstract of the United States: 1985* (105th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1985). *Statistical abstract of the United States: 1986* (106th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1986). *Statistical abstract of the United States: 1987* (107th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1988). *Statistical abstract of the United States: 1989* (109th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1989). *Statistical abstract of the United States: 1989* (110th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1990). *Statistical abstract of the United States: 1991* (111th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1992). *Statistical abstract of the United States: 1993* (113th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1993). *Statistical abstract of the United States: 1994* (114th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1994). *Statistical abstract of the United States: 1995* (115th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1995). *Statistical abstract of the United States: 1996* (116th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1996). *Statistical abstract of the United States: 1997* (117th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1997). *Statistical abstract of the United States: 1998* (118th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1998). *Statistical abstract of the United States: 1999* (119th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1999). *Statistical abstract of the United States: 1999* (119th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (2001). *Statistical abstract of the United States: 2001* (121st Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (2002). *Statistical abstract of the United States: 2002* (122nd Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (2003). *Statistical abstract of the United States: 2003* (123rd Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (2006). *Statistical abstract of the United States: 2007* (125th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (2007). *Statistical abstract of the United States: 2007* (126th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (2008). *Statistical abstract of the United States: 2008* (127th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (2009). *Statistical abstract of the United States: 2009* (128th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (2010). *Statistical abstract of the United States: 2008* (129th Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (2012). *Statistical abstract of the United States: 2012* (133rd Ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (2014a, January). Computer and internet access in the United States: 2012. Retrieved from <http://www.census.gov/hhes/computer/publications/2012.html>
- U.S. Bureau of the Census. (2014b, November). Computer and internet access in the United States: 2013. Retrieved from <http://www.census.gov/content/dam/Census/library/publications/2014/acs/acs-28.pdf>
- U.S. Department of Commerce. (1987). *U.S. industrial outlook 1987*. Washington, DC: U.S. Department of Commerce, U.S. Bureau of Economic Analysis and U.S. Bureau of Labor Statistics.
- U.S. Department of Commerce. (1988). *U.S. industrial outlook 1988*. Washington, DC: U.S. Department of Commerce,

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- U.S. Bureau of Economic Analysis and U.S. Bureau of Labor Statistics.
- U.S. Department of Commerce. (1994). *U.S. industrial outlook 1994*. Washington, DC: U.S. Department of Commerce, U.S. Bureau of Economic Analysis and U.S. Bureau of Labor Statistics.
- U.S. Department of Commerce. (1998). *U.S. industry and trade outlook 1998*. New York: McGraw-Hill.
- U.S. Department of Commerce. (1999). *U.S. industrial outlook 1999*. Washington, DC: U.S. Department of Commerce, U.S. Bureau of Economic Analysis and U.S. Bureau of Labor Statistics.
- U.S. Department of Commerce/International Trade Association. (1999). *U.S. industry and trade outlook 1999*. New York: McGraw-Hill.
- U.S. Department of Commerce/International Trade Association. (2000). *U.S. industry and trade outlook 2000*. New York: McGraw-Hill.