NOTES

INTRO

- Susannah Fox and Lee Rainie, "The Web at 25 in the U.S.: Part 1—How the Internet Has Woven Itself into American Life," last modified February 27, 2014, http://www.pewinternet.org/2014/02/27/part-1-how-the-internet-has-woven-itself-into-american-life/.
- 2 Google Answers, "Q: Personal Computer Penetration in US," posted July 28, 2004, http://answers.google.com/answers/threadview?id=380304.
- Google Groups, posted August 6, 1991, https://groups.google.com/forum/#!msg/alt.hypertext/eCTkkOoWTAY/bJGhZyooXzkJ.

1. THE BIG BANG: THE MOSAIC WEB BROWSER AND NETSCAPE

- Molly Baker, "Technology Investors Fall Head over Heels for Their New Love," *Wall Street Journal*, August 10, 1995.
- William Stewart, "NSFNET—National Science Foundation Network," Living Internet, accessed August 18, 2016, http://www.livinginternet.com/i/ii_nsfnet.htm.
- 3 Internet History Podcast, *Episode 8: Aleks Totic*, of Mosaic and Netscape, March 16, 2014.
- 4 Internet History Podcast, *Episode 9: Jon Mittelhauser*, *Founding Engineer*, *Mosaic and Netscape*, March 27, 2014.
- Patricia Sellers, "Don't Call Me SLACKER! Meet America's Top Talents Under 30. They Are Unorthodox, Rebellious, and a Challenge to Manage," *Fortune*, December 12, 1994.
- Internet History Podcast, *Episode 10: Rob McCool*, *Founding Engineer*, *Mosaic and Netscape*, April 2, 2014.
- 7 Ibid.
- B John Naughton, A Brief History of the Future: From Radio Days to Internet Years in a Lifetime (Woodstock, NY: Overlook, 2000), 239.
- "Html & Emacs," e-mail message, November 16, 1992, accessed August 18, 2016, from the Internet Archive Wayback Machine, http://web.archive.org/web/20021225141741/http://ksi.cpsc.ucalgary.ca/archives/WWW-TALK/www-talk-1992.messages/292.html.
- 10 George Gilder, "The Coming Software Shift," Forbes ASAP, August 28, 1995.
- 11 Internet History Podcast, *Episode 8: Aleks Totic*, of Mosaic and Netscape.
- James Gillies and Robert Cailliau, *How the Web Was Born: The Story of the World Wide Web* (Oxford: Oxford University Press, 2000), 241.
- 13 Matthew Gray, "Web Growth Summary," Internet Statistics, Massachusetts Institute of Technology,

- accessed August 18, 2016, http://www.mit.edu/~mkgray/net/web-growth-summary.html.
- 14 Gillies and Cailliau, How the Web Was Born, 242.
- 15 Tom Steinert-Threlkeld, "Can You Work in Netscape Time?" Fast Company, October 31, 1995.
- Robert Reid, *Architects of the Web: 1,000 Days That Built the Future of Business* (New York: John Wiley & Sons, 1997), 12.
- 17 Walter Isaacson, *The Innovators: How a Group of Hackers, Geniuses, and Geeks Created the Digital Revolution* (New York: Simon & Schuster, 2014), 418.
- 18 Gillies and Cailliau, How the Web Was Born, 242.
- 19 Gilder, "The Coming Software Shift."
- Woods Wilton, "1994 Products of the Year," Fortune, December 12, 1994.
- 21 Reid, *Architects of the Web*, 17.
- 22 Internet History Podcast, *Episode 6: Mosaic and Internet Explorer Engineer*, *Chris Wilson*, March 10, 2014.
- 23 Gilder, "The Coming Software Shift."
- John Markoff, "Business Technology; A Free and Simple Computer Link," *New York Times*, December 8, 1993, D5.
- 25 Internet History Podcast, *Episode 8: Aleks Totic*, of Mosaic and Netscape.
- Jonathan Weber, "Computer Sales Suffered a Rare Drop Last Year," *Los Angeles Times*, January 21, 1992.
- *Tim Ferriss Show*, "163: Marc Andreessen—Lessons, Predictions, and Recommendations from an Icon," https://tim.blog/2016/05/29/marc-andreessen/.
- David A. Kaplan, *The Silicon Boys and Their Valley of Dreams* (New York: HarperCollins, 2000), 231.
- 29 Jim Clark and Owen Edwards, *Netscape Time: The Making of the Billion-Dollar Start-up That Took on Microsoft* (New York: St. Martin's, 1999), 32.
- Adam Lashinsky, "Remembering Netscape: The Birth of the Web—July 25, 2005," *Fortune*, July 25, 2005, http://archive.fortune.com/magazines/fortune/fortune_archive/2005/07/25/8266639/index.htm.
- 31 Internet History Podcast, Episode 9: Jon Mittelhauser, Founding Engineer, Mosaic and Netscape.
- 32 Internet History Podcast, *Episode 8: Aleks Totic*, of Mosaic and Netscape.
- 33 Internet History Podcast, *Episode 10: Rob McCool*, *Founding Engineer*, *Mosaic and Netscape*.
- 34 Clark and Edwards, *Netscape Time*, 58.
- 35 Internet History Podcast, *Episode 8: Aleks Totic*, of Mosaic and Netscape.
- Jon Mittelhauser, "[IAmA] Coauthor of the First Widely Used Web Browser, an Early Owner/Evangelist/Investor for Tesla Motors, and the Guy Who Ran the Launch of OnLive (a Reddit Trifecta?) AMAA," Reddit, posted July 8, 2011, accessed August 19, 2016, https://www.reddit.com/r/IAmA/comments/ik5mk/iama_coauthor_of_the_first_widely_used_web/.
- 37 Clark and Edwards, *Netscape Time*, 63.
- 38 Ibid.
- 39 Jamie Zawinski, "The Netscape Dorm," accessed August 19, 2016, from the Internet Archive

- Wayback Machine capture on February 8, 2010, https://web.archive.org/web/20100208023804/http://www.jwz.org/gruntle/nscpdorm.html.
- 40 Internet History Podcast, *Episode 8: Aleks Totic*, of Mosaic and Netscape.
- 41 Internet History Podcast, *Episode 5: Netscape and Mosaic Founding Engineer*, *Lou Montulli*, March 6, 2014.
- 42 Reid, Architects of the Web, 27.
- 43 Internet History Podcast, Episode 10: Rob McCool, Founding Engineer, Mosaic and Netscape.
- 44 Joshua Quittner and Michelle Slatalla, *Speeding the Net: The Inside Story of Netscape and How It Challenged Microsoft* (New York: Atlantic Monthly Press, 1998), 121.
- 45 Ibid.
- 46 "The 25 Most Intriguing People in '94," *People*, December 26, 1994–January 2, 1995.
- 47 Internet History Podcast, *Episode 10: Rob McCool*, *Founding Engineer*, *Mosaic and Netscape*.
- 48 Internet History Podcast, *Episode 5: Netscape and Mosaic Founding Engineer*, *Lou Montulli*.
- 49 Reid, Architects of the Web, 31.
- 50 Internet History Podcast, *Episode 9: Jon Mittelhauser*, *Founding Engineer*, *Mosaic and Netscape*.
- 51 Internet History Podcast, *Episode 8: Aleks Totic*, of Mosaic and Netscape.
- Robert D. Hof, "From the Man Who Brought You Silicon Graphics . . ." *BusinessWeek*, October 24, 1994.
- 53 Quittner and Slatalla, *Speeding the Net*,174.
- 54 "Layout Engine Usage Share," Wikipedia, accessed August 19, 2016, https://en.wikipedia.org/wiki/File:Layout_engine_usage_share-2009-01-07.svg.
- 55 Steinert-Threlkeld, "Can You Work in Netscape Time?"
- 56 Lashinsky, "Remembering Netscape."
- 57 Naughton, A Brief History of the Future: From Radio Days to Internet Years in a Lifetime, 251.
- 58 Quittner and Slatalla, *Speeding the Net*, 203.
- 59 Internet History Podcast, *Episode 9: Jon Mittelhauser*, *Founding Engineer*, *Mosaic and Netscape*.
- 60 U.S. Department of Justice, *U.S. v. Microsoft: Proposed Findings of Facts*, https://www.justice.gov/sites/default/files/atr/legacy/2006/04/10/iii-b.pdf.
- 61 Lashinsky, "Remembering Netscape."
- 62 Ibid.
- 63 Internet History Podcast, Episode 9: Jon Mittelhauser, Founding Engineer, Mosaic and Netscape.
- 64 James Collins, "High Stakes Winners," *Time*, February 19, 1996.
- 65 Michael Lewis, The New New Thing: A Silicon Valley Story (New York: W. W. Norton, 2000), 74.
- Michael A. Cusumano and David B. Yoffie, *Competing on Internet Time: Lessons from Netscape and Its Battle with Microsoft* (New York: Free Press, 1998), 10.
- Jeff Pelline, "Netscape Playing Catch-up to Yahoo," CNET, March 30, 1998, accessed August 19, 2016, http://www.cnet.com/news/Netscape-playing-catch-up-to-yahoo/.

- 68 Cusumano and Yoffie, Competing on Internet Time, 31.
- 69 Bob Metcalfe, "Without Case of Vapors, Netscape's Tools Will Give Blackbird Reason to Squawk," *InfoWorld*, September 18, 1995.

2. BILL GATES "GETS" THE INTERNET: MICROSOFT AND INTERNET EXPLORER

- 1 Brent Schlender, "What Bill Gates Really Wants," Fortune, January 16, 1995.
- 2 Ibid.
- 3 Laurent Belsie and Scott Armstrong, "High Hopes and Hype Blaze Path for Information Superhighway," *Christian Science Monitor*, January 13, 1994.
- 4 Alan Stone, *How America Got On-line: Politics, Markets, and the Revolution in Telecommunications* (Armonk, NY: M. E. Sharpe, 1997), 196.
- 5 David Kline, "Align and Conquer," *Wired*, February 1, 1995.
- 6 Edmund L. Andrews, "Time Warner's 'Time Machine' for Future Video," *New York Times*, December 11, 1994.
- 7 L. J. Davis, *The Billionaire Shell Game: How Cable Baron John Malone and Assorted Corporate Titans Invented a Future Nobody Wanted* (New York: Doubleday, 1998), 221.
- 8 Ibid., 179.
- 9 Internet History Podcast, *Episode 88: How Microsoft Went Online*, with *Brad Silverberg*, November 2, 2015.
- 10 "Time 25," *Time*, June 17, 1996.
- Paul Andrews, How the Web Was Won: Microsoft from Windows to the Web; The Inside Story of How Bill Gates and His Band of Internet Idealists Transformed a Software Empire (New York: Broadway, 1999), 63.
- 12 Ibid., 54.
- J. Allard, "Windows: The Next Killer Application on the Internet," e-mail to Paul Maritz et al., January 25, 1994, di killerapp internetmemo.rtf.
- 14 Andrews, How the Web Was Won, 109.
- James Wallace, *Overdrive: Bill Gates and the Race to Control Cyberspace* (New York: John Wiley, 1997), 183.
- 16 Andrews, *How the Web Was Won*, 116.
- Joshua Quittner and Michelle Slatalla, *Speeding the Net: The Inside Story of Netscape and How It Challenged Microsoft* (New York: Atlantic Monthly Press, 1998), 192.
- 18 Kathy Rebello, "Inside Microsoft: The Untold Story of How the Internet Forced Bill Gates to Reverse Course," *BusinessWeek*, July 15, 1996.
- 19 Tom Steinert-Threlkeld, "Can You Work in Netscape Time?" Fast Company, October 31, 1995.
- 20 Internet History Podcast, Episode 88, How Microsoft Went Online.
- 21 Joshua Cooper Ramo, "Winner Take All: Microsoft v. Netscape," *Time*, September 16, 1996.
- 22 Internet History Podcast, *Episode 88*, *How Microsoft Went Online*.
- 23 Rebello, "Inside Microsoft."

- 24 Wallace, Overdrive, 9.
- 25 Charles Cooper, "Of Silicon Valley and Sominex," *PC Week*, June 5, 1996.
- 26 Rebello, "Inside Microsoft."
- 27 Gary Wolf, "Steve Jobs: The Next Insanely Great Thing," Wired, February 1, 1996.

3. AMERICA, ONLINE: AOL AND THE EARLY ONLINE SERVICES

- 1 Michael A. Banks, *On the Way to the Web: The Secret History of the Internet and Its Founders* (Berkeley, CA: Apress, 2008), 93.
- 2 Ibid., 144.
- Robert D. Shapiro, "This Is Not Your Father's Prodigy," Wired.com, January 6, 1993.
- 4 Glenn Rifkin, "At Age 9, Prodigy On-Line Reboots," New York Times, November 7, 1993.
- Paul M. Eng, "Prodigy Is in That Awkward Stage," *BusinessWeek*, February 13, 1995; available at https://www.bloomberg.com/news/articles/1995-02-12/prodigy-is-in-that-awkward-stage.
- 6 Mark Nollinger, "America, Online!" Wired.com, September 1, 1995.
- 7 Kara Swisher, *AOL.com: How Steve Case Beat Bill Gates*, *Nailed the Netheads*, *and Made Millions in the War for the Web* (New York: Times Business/Random House, 1998), 94.
- 8 Nollinger, "America, Online!"
- 9 Jeff Goodell, "The Fevered Rise of America Online," *Rolling Stone*, October 3, 1996.
- America Online, Inc., "America Online, Inc. Passes 200,000 Household Mark," PR Newswire, October 27, 1992.
- Harry McCracken, "A History of AOL, as Told in Its Own Old Press Releases," Technologizer, posted May 24, 2010.
- 12 Ibid.
- 13 Kara Swisher, *There Must Be a Pony in Here Somewhere: The AOL Time Warner Debacle and the Quest for a Digital Future* (New York: Crown, 2003), 39.
- 14 Swisher, AOL.com, 82.
- 15 Internet History Podcast, *Episode 27: She Gave the World a Billion AOL CDs—An Interview With Marketing Legend Jan Brandt*, August 11, 2014.
- 16 "What Was the Conversion Rate of AOL CDs in the 1990s?" Quora, answered December 28, 2010, https://www.quora.com/What-was-the-conversion-rate-of-AOL-CDs-in-the-1990s/answer/Jan-Brandt.
- 17 Internet History Podcast, *Episode 27: She Gave the World a Billion AOL CDs.*
- 18 "How Much Did It Cost AOL to Distribute All Those CDs Back in the 1990s?" Quora, answered December 27, 2010, https://www.quora.com/How-much-did-it-cost-AOL-to-distribute-all-those-CDs-back-in-the-1990s/answer/Jan-Brandt.
- 19 Internet History Podcast, Episode 27: She Gave the World a Billion AOL CDs.
- 20 Swisher, AOL.com, 102.
- 21 Ibid., 103.
- 22 Nollinger, "America, Online!"

- 23 Swisher, AOL.com, 124.
- 24 Nollinger, "America, Online!"
- 25 Swisher, *AOL.com*, 128.
- 26 Gene Koprowski, "AOL CEO Steve Case," Forbes ASAP, October 7, 1996.
- 27 Ibid.
- 28 Nollinger, "America, Online!"
- 29 David Carlson, "The Online Timeline, 1990–94," accessed January 31, 2018, http://iml.jou.ufl.edu/carlson/1990s.shtml.
- 30 Nollinger, "America, Online!"
- 31 Ibid.
- Frank Rose, "Keyword: Context," Wired, December 1, 1996.
- Amy Cortese and Amy Barrett, "The Online World of Steve Case," *BusinessWeek*, April 15, 1996; available online at https://www.bloomberg.com/news/articles/1996-04-14/the-online-world-of-steve-case.
- Peter Coy, "Has the Net Finally Reached the Wall? America Online's Crash May Portend Constant Crises Unless the Internet Is Revamped," *BusinessWeek*, August 26, 1996.
- 35 Rose, "Keyword: Context."
- 36 Internet History Podcast, *Episode 27: She Gave the World a Billion AOL CDs.*
- 37 Swisher, AOL.com, 206.
- 38 Rose, "Keyword: Context."
- 39 Swisher, AOL.com, 206.
- 40 Ibid., 208.
- 41 Internet History Podcast, *Episode 27: She Gave the World a Billion AOL CDs.*
- 42 Swisher, AOL.com, 275.

4. BIG MEDIA'S BIG WEB ADVENTURE: PATHFINDER, HOTWIRED AND ADS

- 1 Chris Dixon, "The Next Big Thing Will Start Out Looking Like a Toy," *cdixon blog*, January 3, 2010, accessed February 9, 2018, http://cdixon.org/2010/01/03/thenext-big-thing-will-start-out-looking-like-a-toy/.
- 2 "The Web Back in 1996–1997," posted September 16, 2008, http://royal.pingdom.com/2008/09/16/the-web-in-1996-1997/.
- 3 Ibid.
- Tim O'Reilly, "SLAC Symposium on the Early Web," posted November 26, 2001, https://web.archive.org/web/20141216174754/http://archive.oreilly.com/lpt/wlg/907.
- William Glaberson, "In San Jose, Knight-Ridder Tests a Newspaper Frontier," *New York Times*, February 7, 1994.
- 6 Michael Shapiro, "The Newspaper That Almost Seized the Future," *Columbia Journalism Review*, November 2011; available online at

- https://archives.cjr.org/feature/the_newspaper_that_almost_seized_the_future.php.
- 7 Ken Auletta, *The Highwaymen: Warriors of the Information Superhighway* (New York: Random House, 1997), 315.
- 8 Jane Hodges, "Pathfinder Readies for Year Two," *Ad Age*, October 23, 1995.
- 9 Ibid.
- 10 Alec Klein, *Stealing Time: Steve Case, Jerry Levin, and the Collapse of AOL Time Warner* (New York: Simon & Schuster, 2003), loc. 1262, Kindle.
- 11 James Ledbetter, "The End of the Path?" *Industry Standard*, October 26, 1998.
- 12 Kara Swisher, *There Must Be a Pony in Here Somewhere: The AOL Time Warner Debacle and the Quest for a Digital Future* (New York: Crown, 2003), 91.
- 13 Ledbetter, "The End of the Path?"
- 14 Internet History Podcast, Episode 33: HotWired CEO Andrew Anker, September 22, 2014.
- 15 Ibid.
- 16 Rick Tetzeli, "The Internet and Your Business," *Fortune*, March 7, 1994.
- 17 Internet History Podcast, *Episode 35: Joe McCambley Discusses Advertising and the First Banner Ads*, October 6, 2014.
- 18 Internet History Podcast, *Episode 38: An Oral History of the Web's First Banner Ads*, October 27, 2014.
- 19 Internet History Podcast, *Episode 13: Co-Designer of the First Banner Ad*, *Co-Founder of Razorfish*, *Craig Kanarick*, April 17, 2014.
- 20 Ibid.
- 21 Ibid.
- 22 Internet History Podcast, *Episode 35*, *Joe McCambley Discusses Advertising and the First Banner Ads.*
- 23 Internet History Podcast, Episode 33: HotWired CEO Andrew Anker.
- Lou Montulli, "The Reasoning behind Web Cookies," *The Irregular Musings of Lou Montulli*, May 14, 2013, from the Internet Archive Wayback Machine capture on December 27, 2013, https://web.archive.org/web/20131227064455/http://www.montulli-blog.com/2013/05/the-reasoning-behind-web-cookies.html.
- 25 "Interactive Ad Firms Grow on the Web," *Upside*, September 1996, 50.
- 26 Constance Loizos, "Feeling the Burn," *Red Herring*, April 1998.
- George Slefo, "Digital Ad Spending Surges to Record High as Mobile and Social Grow More Than 50%," *Ad Age*, April 21, 2016.

5. HELLO, WORLD: THE EARLY SEARCH ENGINES AND YAHOO

- 1 Matthew Gray, "Web Growth Summary," 1996, accessed January 31, 2018, http://stuff.mit.edu/people/mkgray/net/web-growth-summary.html.
- 2 Cybertelecom, "History of DNS," accessed January 31, 2018, http://www.cybertelecom.org/dns/history.htm.
- 3 Jerry Yang and David Filo, Yahoo! Unplugged: Your Discovery Guide to the Web (New York: John

- Wiley, 1995), 198 and 240.
- 4 Randall E. Stross, "How Yahoo! Won the Search Wars," Fortune, March 2, 1998.
- 5 Ibid.
- 6 Ibid.
- 7 Ibid.
- 8 Brent Schlender, "How a Virtuoso Plays the Web," Fortune, March 6, 2000.
- 9 Internet History Podcast, Episode 21: Yahoo Employee #3, Tim Brady, June 16, 2014.
- 10 Robert Reid, *Architects of the Web: 1,000 Days That Built the Future of Business* (New York: John Wiley, 1997), 254.
- 11 Karen Angel, Inside Yahoo!: Reinvention and the Road Ahead (New York: John Wiley, 2002), 18.
- 12 Ibid.
- David A. Kaplan, *The Silicon Boys and Their Valley of Dreams* (New York: HarperCollins, 2000), 310.
- 14 Ibid., 312.
- 15 Angel, Inside Yahoo!, 25.
- 16 Reid, Architects of the Web, 267.
- 17 Kaplan, The Silicon Boys and Their Valley of Dreams, 305.
- 18 Internet History Podcast, *Episode 78: Yahoo's Master Brand Builder, Karen Edwards*, August 24, 2015.
- 19 Linda Himelstein, Heather Green, Richard Siklos, and Catherine Yang, "Yahoo! The Company, the Strategy, the Stock," *BusinessWeek*, August 27, 1998.
- 20 Bernhard Warner, "Your Ad Here," Industry Standard, September 27, 1999.
- 21 Janice Maloney, "Yahoo: Still Searching for Profits on the Internet," Fortune, May 1996.
- 22 Reid, Architects of the Web, 265.
- 23 Ibid., 262.
- 24 Angel, Inside Yahoo!, 57.
- 25 Reid, Architects of the Web, 264.
- 26 Stross, "How Yahoo! Won the Search Wars."
- 27 Angel, Inside Yahoo!, 57.
- 28 Stross, "How Yahoo! Won the Search Wars."
- 29 Jeff Pelline, "Netscape Revenue Up 114%," CNET, April 23, 1997.
- 30 Securities and Exchange Commission, Yahoo! Inc. Form 10-Q, accessed January 31, 2018, http://www.sec.gov/Archives/edgar/data/1011006/0000912057-96-017646.txt.
- 31 Angel, Inside Yahoo!, 45.
- 32 Kim Cleland, "A Gaggle of Web Guides Vies for Ads; Yahoo Directory Opens to Sponsorship Deals as Competition Grows," *Ad Age*, April 17, 1995.
- 33 Internet History Podcast, *Episode 21: Yahoo Employee #3*, *Tim Brady*.

- 34 Reid, Architects of the Web, 262.
- 35 Angel, Inside Yahoo!, 73.
- 36 Ibid., 81.
- 37 Ibid., 87.
- 38 Ibid., 98.

6. GET BIG FAST: AMAZON.COM AND THE BIRTH OF ECOMMERCE

- Brad Stone, *The Everything Store: Jeff Bezos and the Age of Amazon* (New York: Little, Brown, 2014), 25–26.
- 2 Robert Spector, Amazon.com: Get Big Fast (New York: HarperBusiness, 2000), 25.
- 3 Stone, *The Everything Store*, 26.
- 4 Ibid., 25.
- 5 Jeff Bezos, interview by Academy of Achievement, May 4, 2001, http://www.achievement.org/achiever/jeffrey-p-bezos/#interview.
- Jeff Bezos, "A Bookstore by Any Other Name" (lecture, Commonwealth Club of California, July 27, 1998).
- Michael Dunlop, "10 World Famous Companies That Started in Garages," Retire@21, accessed January 31, 2018, http://www.retireat21.com/blog/10-companies-started-garages.
- 8 Internet History Podcast, *Episode 50: Amazon's Technical Co-Founder and Employee #1*, *Shel Kaphan*, February 1, 2015.
- 9 Stone, *The Everything Store*, 35.
- 10 Spector, *Amazon.com: Get Big Fast*, 52.
- 11 Stone, *The Everything Store*, 38.
- 12 David Sheff, "The Playboy Interview: Jeff Bezos," *Playboy*, February 1, 2000.
- 13 Internet History Podcast, *Episode 50: Amazon's Technical Co-Founder and Employee #1*, *Shel Kaphan*.
- 14 Ibid.
- 15 Spector, *Amazon.com: Get Big Fast*, 73.
- 16 Ibid., 85; Sheff, "The Playboy Interview: Jeff Bezos."
- 17 Stone, *The Everything Store*, 41.
- 18 Spector, *Amazon.com: Get Big Fast*, 93.
- 19 G. Bruce Knecht, "Wall Street Whiz Finds Niche Selling Books on the Internet," *Wall Street Journal*, May 16, 1996.
- 20 Stone, *The Everything Store*, 48.
- 21 Ibid.
- James Romenesko, "The Height of Online Success: Tiny Amazon.com Squares Off Against Industry Giant Barnes & Noble," St. Paul Pioneer Press, July 21, 1997, 6E.
- 23 Spector, Amazon.com: Get Big Fast, 114.

- 24 Ibid., 124.
- 25 Robert Spector, "Yesterday's Goliath, Today's David," Wall Street Journal, June 25, 2011.
- 26 Randall E. Stross, "Why Barnes & Noble May Crush Amazon," Fortune, September 29, 1997.
- 27 Spector, Amazon.com: Get Big Fast, 168.
- 28 Romenesko, "The Height of Online Success."
- 29 Sheff, "The Playboy Interview: Jeff Bezos."
- 30 Stone, *The Everything Store*, 59.
- William C. Taylor, "Who's Writing the Book on Web Business?" *Fast Company*, October–November 1996.
- 32 Stone, *The Everything Store*, 54.
- Pankaj Ghemawat, *Leadership Online (B): Barnes & Noble vs. Amazon.com in 2005*, Harvard Business School Case Study 9-705-492 (Boston: Harvard Business School, 2006).
- Morris Rosenthal, "Book Sales Statistics," Foner Books, accessed January 31, 2018, http://www.fonerbooks.com/booksale.htm.
- "Amazon History and Timeline," accessed January 31, 2018, http://phx.corporate-ir.net/phoenix.zhtml?p=irol-corporateTimeline_pf&c=176060.
- 36 Stone, *The Everything Store*, 67.
- 37 Spector, Amazon.com: Get Big Fast, 161.

7. TRUSTING STRANGERS: EBAY, COMMUNITY SITES AND PORTALS

- 1 Adam Cohen, *The Perfect Store: Inside eBay* (New York: Little, Brown, 2002), 20.
- 2 Ibid., 22.
- 3 Google Groups, posted September 12, 1995, https://groups.google.com/forum/#!msg/misc.forsale.non-computer/DxxiU7FQp8Q/8ncYwB2DDEAJ.
- 4 Cohen, The Perfect Store, 25.
- 5 Ibid., 29.
- 6 Ibid., 44.
- 7 Ibid., 55.
- 8 Ibid., 59.
- 9 Ibid., 48.
- 10 Ibid., 46.
- Joshua Cooper Ramo, "The Fast-Moving Internet Economy Has a Jungle of Competitors . . . and Here's the King," *Time*, December 27, 1999.
- 12 Cohen, The Perfect Store, 83.
- 13 Ibid., 57.
- 14 Ibid., 64.
- 15 Ibid., 79.

- 16 Ibid., 110.
- 17 Casey Hait and Stephen Weiss, *Digital Hustlers: Living Large and Falling Hard in Silicon Alley* (New York: HarperCollins, 2001), 47.
- 18 Ibid., 46.
- 19 Silicon Alley Reporter, no. 16 (Summer 1998), 38.
- 20 Hait and Weiss, Digital Hustlers, 115.
- 21 Internet History Podcast, *Episode 91: Co-Founder of Feed Magazine*, *Stefanie Syman*, December 7, 2015.
- 22 Internet History Podcast, *Episode 107: Founder of Marketwatch*, *Larry Kramer @lkramer*, May 22, 2016.
- David Plotz, "A Slate Timeline," *Slate*, June 19, 2006; accessed January 31, 2018, http://www.slate.com/articles/news_and_politics/slates_10th_anniversary/2006/06/a_slate_timeline.htm
- 24 Stephen P. Bradley and Erin E. Sullivan, *AOL Time Warner*, *Inc.*, Harvard Business School Case Study 9-702-421, June 23, 2005.
- 25 Internet History Podcast, Episode 62: iVillage Co-Founder Nancy Evans, April 27, 2015.
- 26 Ibid.
- 27 Internet History Podcast, *Episode 64: GeoCities Founder David Bohnett*, May 11, 2015.
- 28 Eric Ransdell, "Broadcast.com Boosts Its Signal," Fast Company, August 1998.
- 29 Mike Sager, "The Billionaire," Esquire, April 1, 2000.
- 30 Ransdell, "Broadcast.com Boosts Its Signal."
- Po Bronson, *The Nudist on the Late Shift: And Other True Tales of Silicon Valley* (New York: Broadway, 2000), 78.
- 32 Po Bronson, "Hotmale," Wired, December 1, 1998.
- 33 Karen Angel, Inside Yahoo!: Reinvention and the Road Ahead (New York: John Wiley, 2002), 86.
- 34 Ibid., 89.
- PR Newswire, "April Internet Ratings from Nielsen//NetRatings," May 11, 1999, https://www.thefreelibrary.com/April+Internet+Ratings+From+Nielsen%2F%2FNetRatings.-a054609261.
- 36 Gordon Gould, "Search and Destroy," Silicon Alley Reporter, no. 16 (Summer 1998).
- 37 Jim Evans, "Portals in a Storm," *Industry Standard*, December 28, 1998–January 4, 1999.
- 38 Angel, Inside Yahoo!, 93.
- 39 Ibid., 131.
- 40 Ibid., 80.
- 41 Michael Krantz, "Start Your Engines: Excite and Yahoo, the Two Leading Web-Search Sites, Race to Remake Themselves into Portals," *Time*, April 20, 1998.
- Linda Himelstein, Heather Green, Richard Siklos, and Catherine Yang, "Yahoo! The Company, the Strategy, the Stock," *BusinessWeek*, August 27, 1998.

O DI AMINIC DIIDDI EC. THE DAT CAM EDA

O. DLUWING DUDDLES: I TE DUI-CUM EKA

- John Cassidy, *Dot.Con: How America Lost Its Mind and Money in the Internet Era* (New York: HarperCollins, 2002), 28.
- John Kenneth Galbraith, *A Short History of Financial Euphoria* (New York: Whittle Books in association with Viking, 1993), 87.
- 3 Internet History Podcast, *Episode 67: Journalist Maggie Mahar Discusses the Dot-com Bubble*, June 1, 2015.
- 4 Roger Lowenstein, *Origins of the Crash: The Great Bubble and Its Undoing* (New York: Penguin Press, 2004), 103.
- 5 Cassidy, Dot.Con, 107.
- 6 Charles Fishman, "The Revolution Will Be Televised (on CNBC)," Fast Company, June 2000.
- 7 Internet History Podcast, *Episode 67: Journalist Maggie Mahar Discusses the Dot-com Bubble*.
- 8 Andy Serwar, "A Nation of Traders," *Fortune*, October 11, 1999.
- 9 Maggie Mahar, *Bull! A History of the Boom and Bust*, 1982–2004 (New York: HarperBusiness, 2003), 257.
- 10 Cassidy, Dot.Con, 200.
- 11 Ibid., 200.
- 12 Ibid., 201.
- 13 Mahar, Bull!, 292.
- 14 Ibid., xviii.
- Joseph Nocera and Tyler Maroney, "Do You Believe? How Yahoo! Became a Blue Chip," *Fortune*, June 7, 1999.
- **16** Cassidy, *Dot.Con*, 162.
- 17 Jim Rohwer, "The Numbers Game," Fortune, November 22, 1999.
- 18 Mahar, *Bull!*, 263.
- 19 Federal Reserve Board, "Remarks by Chairman Alan Greenspan," December 5, 1996, https://www.federalreserve.gov/boarddocs/speeches/1996/19961205.htm.
- 20 Sebastian Mallaby, *The Man Who Knew: The Life and Times of Alan Greenspan* (New York: Penguin, 2016), 741.
- 21 Justin Martin, Greenspan: The Man Behind the Money (Cambridge, MA: Perseus, 2000), 226.
- 22 Mahar, *Bull!*, 6.
- 23 Ibid., 170.
- 24 Amy Kover, "Dot-com Time Bomb on Madison Avenue," Fortune, December 6, 1999.
- 25 Bethany McLean, "More Than Just Dotcoms," *Fortune*, December 6, 1999; Anthony B. Perkins and Michael C. Perkins, *The Internet Bubble: Inside the Overvalued World of High-Tech Stocks—And What You Need to Know to Avoid the Coming Shakeout* (New York: HarperBusiness, 1999), 6.
- Brent Goldfarb, Michael Pfarrer, and David Kirsch, "Searching for Ghosts: Business Survival, Unmeasured Entrepreneurial Activity and Private Equity Investment in the Dot-com Era" (working

- paper RHS-06-027, Social Science Research Network, Rochester, SSRN-id929845, 2005, accessed March 26, 2017; downloadable at http://papers.ssrn.com/abstract=825687).
- 27 John Cassidy, "Striking It Rich: The Rise and Fall of Popular Capitalism," *New Yorker*, January 14, 2002.
- Mark Gimein, "Around the Globe, Net Stock Mania," *Industry Standard*, December 28, 1998–January 4, 1999.

9. IRRATIONAL EXUBERANCE: THE DOT-COM BUBBLE

- Peter Elkind, "The Hype Is Big, Really Big, at Priceline," *Fortune*, September 6, 1999.
- 2 David Noonan, "Price Is Right," *Industry Standard*, December 28, 1998–January 4, 1999.
- 3 Ibid.
- 4 Ibid.
- 5 Elkind, "The Hype Is Big, Really Big, at Priceline."
- 6 Ibid.
- 7 Todd Woody, "Idea Man," *Industry Standard*, June 28, 1999.
- 8 Randall E. Stross, *eBoys: The First Inside Account of Venture Capitalists at Work* (New York: Ballantine, 2001), 120; Woody, "Idea Man."
- 9 Woody, "Idea Man."
- 10 Elkind, "The Hype Is Big, Really Big, at Priceline."
- 11 Ibid.
- 12 Dyan Machan, "An Edison for a New Age," Forbes, May 17, 1999.
- 13 Theta Pavis, "Toys 'R' Online," *Digital Coast Reporter*, no. 3 (October 1998).
- 14 Miguel Helft, "Uncle of the Board," *Industry Standard*, December 27, 1999–January 3, 2000.
- 15 Jacob Ward, "EToys 'R' Us?" Industry Standard, May 31–June 7, 1999.
- Omar Merlo, *Pets.com Inc.: Rise and Decline of a Pet Supply Retailer*, Harvard Business Review Case Study 909A21, September 15, 2009.
- 17 Tim Clark, "Amazon Invests in Online Pet Store," *CNET News*, March 29, 1999, http://news.cnet.com/Amazon-invests-in-online-pet-store/2100-1017_3-223621.html.
- 18 Philip J. Kaplan, *F'd Companies: Spectacular Dot-com Flameouts* (New York: Simon & Schuster, 2002), 16.
- 19 Ibid., 21.
- Securities and Exchange Commission, Webvan Group, Inc., Form 424B1, Prospectus filed with SEC, accessed February 9, 2018, https://www.sec.gov/Archives/edgar/data/1092657/000089161899004914/000089161899-004914.txt; Stross, *eBoys*, 36; Randall Stross, "Only a Bold Gamble Can Save Webvan Now," *Wall Street Journal*, February 2, 2001; and Scott Simon, "Profile: Online Shopping with Webvan," *Weekend Edition*

- (National Public Radio), October 9, 1999.
- Linda Himelstein, "Louis H. Borders," *BusinessWeek*, September 27, 1999; and Himelstein, "Can You Sell Groceries Like Books?" *BusinessWeek*, August 26, 1999.
- 22 Andrew McAfee and Mona Ashiya, *Webvan*, Harvard Business Review Case Study 9-602-037, February 14, 2002.
- 23 Ibid.
- 24 Himelstein, "Can You Sell Groceries Like Books?"
- 25 Carolyn Said, "Online Beats In Line / Buying Groceries on the Web Takes the Hassle out of Shopping," *San Francisco Chronicle*, July 22, 1999.
- 26 Stross, "Only a Bold Gamble Can Save Webvan Now."
- 27 Rusty Weston, "Return of the Milkman," *Upside*, April 1, 2000.
- 28 McAfee and Ashiya, Webvan.
- Securities and Exchange Commission, Webvan Group, Inc., Form 10-Q, accessed February 9, 2018, https://www.sec.gov/Archives/edgar/data/1092657/000089161800002826/000089161800-002826.txt; and Kara Swisher, "Webvan Needs Fresh Ideas to Help Bring Home Bacon," *Wall Street Journal*, October 2, 2000.
- 30 Saul Hansell, "Some Hard Lessons for Online Grocer," New York Times, February 19, 2001.
- 31 Arlene Weintraub and Robert D. Hof, "For Online Pet Stores, It's Dog-Eat-Dog," *BusinessWeek*, March 6, 2000.
- 32 Laurie Freeman, "Pets.com Socks It to Competitors," *Ad Age*, November 29, 1999, via Factiva, accessed November 17, 2008.
- 33 "Death of a Spokespup," *Adweek*, New England edition, December 2000.
- 34 Weintraub and Hof, "For Online Pet Stores, It's Dog-Eat-Dog."
- 35 Mike Tarsala, "Pets.com Killed by Sock Puppet," MarketWatch.com, November 8, 2000, https://www.marketwatch.com/story/sock-puppet-kills-petscom.
- 36 Freeman, "Pets.com Socks It to Competitors"; Tarsala, "Pets.com Killed by Sock Puppet."
- Thomas Eisenmann, "Petstore.com," HBS No. 801-044 (Boston: Harvard Business School Publishing, 2000), p. 9.
- 38 Stross, *eBoys*, 116
- 39 Julia Flynn, "Gap Exists Between Entrepreneurship in Europe, North America, Study Shows," *Wall Street Journal*, July 2, 1999.
- 40 Stross, *eBoys*, 63.
- 41 Anthony B. Perkins and Michael C. Perkins, *The Internet Bubble: Inside the Overvalued World of High-Tech Stocks—And What You Need to Know to Avoid the Coming Shakeout* (New York: HarperBusiness, 1999), 38.
- 42 John Cassidy, *Dot.Con: How America Lost Its Mind and Money in the Internet Era* (New York: HarperCollins, 2002), 237.
- 43 Stross, *eBoys*, xvii.
- 44 Roger Lowenstein, *Origins of the Crash: The Great Bubble and Its Undoing* (New York: Penguin Press, 2004), 101, 112.

- 45 "Financial Spotlight: Net IPOs Lose Their Luster," *Industry Standard*, June 28, 1999.
- 46 Lowenstein, *Origins of the Crash*, 125.
- 47 "Yahoo! Buys GeoCities," CNNMoney, January 28, 1999. http://money.cnn.com/1999/01/28/technology/yahoo_a/.
- 48 Stephan Paternot, A Very Public Offering: A Rebel's Story of Business Excess, Success, and Reckoning (New York: J Wiley, 2001), 172.
- 49 Perkins and Perkins, *The Internet Bubble* (New York: HarperBusiness, 1999), 21.
- 50 "Excite@Home Buys Online Greeting Card Site for \$780 Million," CNET, January 2, 2002, https://www.cnet.com/news/excitehome-buys-online-greeting-card-site-for-780-million/.
- 51 "Excite@Home to Acquire Bluemountain," *New York Times*, October 26, 1999, http://www.nytimes.com/1999/10/26/business/excitehome-to-acquire-bluemountain.html.
- 52 "Will K-Tel's Stock Fizzle?" CNET, June 10, 1998, https://www.cnet.com/news/will-k-tels-stock-fizzle/.
- Ernst Malmsten, *Boo Hoo: A Dot.com Story from Concept to Catastrophe* (London: Random House Business Books, 2001), 111.
- 54 Kaplan, F'd Companies, 24.
- 55 Ibid., 34.
- 56 Ibid., 38.
- 57 "Pixelon.com Announces iBash '99," InterActive Agency, Inc., October 27, 1999, http://www.alanwallace.com/iagency/public_relations/archives/1999/pixelon.10.27.99.html.
- David Kirkpatrick, "Suddenly Pseudo," *New York*, December 20, 1999, accessed February 1, 2018, at http://nymag.com/nymetro/news/media/internet/1703/.
- 59 Casey Hait and Stephen Weiss, *Digital Hustlers: Living Large and Falling Hard in Silicon Alley* (New York: HarperCollins, 2001), 267.
- 60 Wired Staff, "Steaming Video," Wired, November 1, 2000.
- 61 Hait and Weiss, *Digital Hustlers*, 240.
- 62 Corrie Driebusch, "Drkoop.com Epitomized Hype of Tech Boom and Bust," *Wall Street Journal*, April 26, 2015.
- 63 James Ledbetter, "The Final Frontier for Lou Dobbs?" Industry Standard, June 21, 1999.
- 64 Kirin Kalia, "A Giant Leap for Web-Kind," Silicon Alley Reporter, no. 28 (1999).
- 65 Gail Shister, "Sam Donaldson Enjoys Internet Interview Show," Chicago Tribune, January 1, 2000.
- Joshua Cooper Ramo, "The Fast-Moving Internet Economy Has a Jungle of Competitors . . . and Here's the King," *Time*, December 27, 1999.
- James Kelly, "That Man in the Cardboard Box," *Time*, December 27, 1999.
- 68 Joshua Quittner, "An Eye on the Future," *Time*, December 27, 1999.
- 69 David Kirkpatrick, "Is Net Investing a Sucker's Game?" Fortune, October 11, 1999.
- 70 Justin Fox, "Net Stock Rules: Masters of a Parallel Universe," Fortune, June 7, 1999.
- 71 Jacqueline Doherty, "Amazon.bomb," *Barron*'s, May 31, 1999.

- 72 Brad Stone, *The Everything Store: Jeff Bezos and the Age of Amazon* (New York: Little, Brown, 2014), 100.
- 73 Ibid., 101.

10. POP!: NETSCAPE VS. MICROSOFT, AOL + TIME WARNER AND THE NUCLEAR WINTER

- David B. Yoffie and Mary Kwak, "The Browser Wars, 1994–1998," Harvard Business School Case 798-094 (June 1998), 9.
- 2 Kara Swisher, "After a Life at Warp Speed, Netscape Quickly Logs Off," Wall Street Journal, November 25, 1998.
- David Yoffie and Michael A. Cusumano, *Competing on Internet Time: Lessons from Netscape and Its Battle with Microsoft* (New York: Free Press, 1998), 9.
- 4 Ibid., 9.
- 5 Ibid., 33.
- 6 Ibid., 38.
- 7 Yoffie and Kwak, "The Browser Wars," 9; Eric Nee, "Up for Grabs?" *Fortune*, February 23, 1998.
- 8 Yoffie and Kwak, "The Browser Wars," 14.
- 9 Kenneth S. Corts and Deborah Freier, "A Brief History of the Browser Wars," Harvard Business School Case 9-703-517 (2003), 6.
- 10 "Netscape Breaks Free," *Economist*, March 28, 1998.
- 11 Nee, "Up for Grabs?"
- 12 John Heilemann, *Pride Before the Fall: The Trials of Bill Gates and the End of the Microsoft Era* (New York: HarperCollins, 2001), 199.
- 13 Ken Auletta, World War 3.0: Microsoft and Its Enemies (New York: Random House, 2001), 362.
- 14 Charles Arthur, *Digital Wars: Apple, Google, Microsoft and the Battle for the Internet* (Philadelphia: Kogan, 2012), 22.
- "List of Public Corporations by Market Capitalization," Wikipedia, last modified January 23, 2018, https://en.wikipedia.org/wiki/List_of_public_corporations_by_market_capitalization.
- Joe Steinbring, "How Many Personal Computers Are Sold per Year?" accessed February 1, 2018, https://steinbring.net/2011/how-many-personal-computers-are-sold-per-year/.
- 17 U.S. Census Bureau, "Computer and Internet Use in the United States: Population Characteristics," issued May 2013, http://www.census.gov/prod/2013pubs/p20-569.pdf.
- 18 Internet History Podcast, *Episode 8: Aleks Totic*, of Mosaic and Netscape.
- 19 Auletta, World War 3.0, 197.
- Jared Sandberg, "WorldCom Agrees to Acquire CompuServe for \$1.2 Billion," *Wall Street Journal*, September 8, 1997.
- 21 Nina Munk, Fools Rush In: Steve Case, Jerry Levin, and the Unmaking of AOL Time Warner (New York: HarperCollins, 2004), 118.
- 22 Marc Gunther, "AOL: The Future King of Advertising?" *Fortune*, October 11, 1999.

- 23 Munk, Fools Rush In, 118.
- 24 Marc Gunther, Liz Smith, and Wilton Woods, "The Internet Is Mr. Case's Neighborhood," Fortune, March 30, 1998, accessed February 1, 2018, http://archive.fortune.com/magazines/fortune/fortune_archive/1998/03/30/240097/index.htm.
- 25 Gunther, "AOL: The Future King of Advertising?"
- 26 "AOL, Drkoop.com Partner," CNNMoney, July 6, 1999, accessed February 1, 2018, http://money.cnn.com/1999/07/06/technology/aol/.
- 27 Kara Swisher, *There Must Be a Pony in Here Somewhere: The AOL Time Warner Debacle and the Quest for a Digital Future* (New York: Crown, 2003), 62.
- 28 Ibid., 109, 117.
- 29 Munk, Fools Rush In, 106.
- 30 Gary Rivlin, "AOL's Rough Riders," *Industry Standard*, October 30, 2000.
- 31 Munk, Fools Rush In, 153.
- 32 Justin Fox, "Net Stock Rules: Masters of a Parallel Universe," *Fortune*, June 7, 1999; Swisher, *There Must Be a Pony in Here Somewhere*, 119.
- 33 Munk, Fools Rush In, 118, 123.
- 34 Swisher, There Must Be a Pony in Here Somewhere, 128.
- 35 Munk, Fools Rush In, 125.
- 36 Swisher, There Must Be a Pony in Here Somewhere, 141.
- 37 Ibid., 154.
- 38 Ibid., 141.
- 39 Munk, Fools Rush In, 118.
- Daniel Okrent, Maryanne Murray Buechner, Adam Cohen, Emily Mitchell, Michael Krantz, and Chris Taylor, "Happily Ever After?" *Time*, January 24, 2000.
- **41** Ibid.
- 42 Swisher, *There Must Be a Pony in Here Somewhere*, 155.
- 43 John Cassidy, *Dot.Con: How America Lost Its Mind and Money in the Internet Era* (New York: HarperCollins, 2002), 283.
- 44 "The Greatest Defunct Web Sites and Dotcom Disasters," CNET, June 5, 2008, http://web.archive.org/web/20080607211840/http://crave.cnet.co.uk/0,39029477,49296926-6,00.htm.
- 45 Jim Edwards, "One of the Kings of the '90s Dot-com Bubble Now Faces 20 Years in Prison," *Business Insider*, December 6, 2016, http://www.businessinsider.com/where-are-the-kings-of-the-1990s-dot-com-bubble-bust-2016-12/#petscoms-greg-mclemore-raised-121-million-from-investors-but-lost-money-on-every-sale-7.
- 46 Cassidy, Dot.Con, 273.
- 47 Ibid., 306.
- 48 Ibid., 292.
- 49 David Kleinbard, "The \$1.7 Trillion Dot.com Lesson," CNNMoney, November 9, 2000, http://cnnfn.cnn.com/2000/11/09/technology/overview/.

- 50 Zhu Wang, "Technological Innovation and Market Turbulence: The Dot-com Experience," *Review of Economic Dynamics* 10, no. 1 (2007): 78, 79.
- 51 Don Clark, "PayPal Files for an IPO, Testing a Frosty Market," Wall Street Journal, October 1, 2001.
- 52 Saul Hansell, "Some Hard Lessons for Online Grocer," *New York Times*, February 19, 2001.
- 53 Karen Angel, *Inside Yahoo!: Reinvention and the Road Ahead* (New York: John Wiley, 2002), 222.
- 54 Stephan Paternot, *A Very Public Offering: A Rebel's Story of Business Excess, Success, and Reckoning* (New York: John Wiley, 2001), 67.
- 55 "Silicon Alley 100," Silicon Alley Reporter, March 1999.
- 56 Paternot, A Very Public Offering, 111.
- 57 Cassidy, *Dot.Con*, 197.
- 58 Paternot, A Very Public Offering, 118.
- 59 Ibid., 201.
- 60 Lessley Anderson, "The Selling of TheGlobe.com," *Industry Standard*, July 5–12, 1999.
- 61 Securities and Exchange Commission, Form 10-Q, quarterly report for TheGlobe.com, accessed February 1, 2018, https://www.sec.gov/Archives/edgar/data/1066684/000089534500000280/000089534500-000280.txt.
- 62 Alan Abelson, "Up & Down Wall Street," Barron's, August 14, 2000.
- David Henry, "More Insiders Sell Big Blocks of Stock: Surge May Foretell Market Weakness in 3 to 12 Months," *USA Today*, September 18, 2000, 1B.
- James Altucher, "How I Helped Mark Cuban Make a Billion Dollars and 5 Things I Learned from Him," posted 2017, http://www.jamesaltucher.com/2011/04/why-im-jealous-of-mark-cuban-and-5-things-i-learned-from-him/.
- 65 Maggie Mahar, *Bull! A History of the Boom and Bust*, 1982–2004 (New York: HarperBusiness, 2003), 319.
- 66 Casey Hait and Stephen Weiss, *Digital Hustlers: Living Large and Falling Hard in Silicon Alley* (New York: HarperCollins, 2001), 292.
- 67 Mahar, Bull!, 325.
- 68 Ibid., 333.
- 69 Chet Currier, "The Bear Market Is Dead—Long Live the New Bull," Bloomberg News, June 13, 2003.
- "Participants Report Card for 2002: The Impact of the Bear Market on Retirement Savings Plans," Vanguard Group Retirement Research, February 2003.
- 71 John Markoff, "Why Google Is Peering Out, at Microsoft," *New York Times*, May 3, 2004.
- 72 *Tim Ferriss Show*, "163: Marc Andreessen—Lessons, Predictions, and Recommendations from an Icon," https://tim.blog/2016/05/29/marc-andreessen/.
- Keith Collins and David Ingold, "Through Years of Tumult, AOL Sticks Around," Bloomberg, posted May 12, 2015, https://www.bloomberg.com/graphics/2015-verizon-aol-deal/.
- 74 Jim Hu, "AOL Time Warner Drops AOL from Name," CNET, September 18, 2003, https://www.cnet.com/news/aol-time-warner-drops-aol-from-name/.
- 75 Swisher, *There Must Be a Pony in Here Somewhere*, 220, 260.

- 76 Christian Wolmar, *Fire and Steam: A New History of the Railways in Britain* (London: Atlantic Books, 2007), locs. 1628, 1971–72, Kindle.
- 77 Ibid., loc. 1934–35.
- 78 Ibid., loc. 1941–44.
- 79 Ibid., loc. 1637–38.
- 80 Om Malik, Broadbandits: Inside the \$750 Billion Telecom Heist (Hoboken, NJ: John Wiley, 2003), x.
- 81 Roger Lowenstein, *Origins of the Crash: The Great Bubble and Its Undoing* (New York: Penguin, 2004), 150.
- 82 Malik, *Broadbandits*, xi; Shawn Young, "Why the Glut in Fiber Lines Remains Huge," *Wall Street Journal*, May 12, 2005.
- Wired Staff, "Bandwidth Glut Lives On," Wired, September 30, 2004, http://archive.wired.com/techbiz/media/news/2004/09/65121?currentPage=all.
- 84 Young, "Why the Glut in Fiber Lines Remains Huge."
- 85 "Internet Users in the World," Internet Live Stats, http://www.internetlivestats.com/internet-users/.
- 86 "Total Number of Websites," Internet Live Stats, http://www.internetlivestats.com/total-number-of-websites/.
- 87 Angel, Inside Yahoo!, 173.
- 88 Erick Schonfeld, "Facebook Overthrows Yahoo to Become the World's Third Largest Website," TechCrunch, December 24, 2010, https://techcrunch.com/2010/12/24/facebook-yahoo-third-largest-website/.
- 89 "Zuckerberg, Facebook Move to Mimic Amazon and Google's 'Go Anywhere' Strategy," *Peridot Capitalist*, April 17, 2014, https://www.peridotcapitalist.com/2014/04/.

11. I'M FEELING LUCKY: GOOGLE, NAPSTER AND THE REBIRTH

- John Battelle, "The Birth of Google," *Wired*, August 1, 2005.
- 2 Steven Levy, *In the Plex: How Google Thinks, Works, and Shapes Our Lives* (New York: Simon & Schuster, 2011), 121–22.
- 3 David A. Vise, *The Google Story: For Google's 10th Birthday* (New York: Delta, 2006), 20.
- 4 Ibid., 37.
- 5 Levy, *In the Plex*, 17.
- 6 Ibid., 21.
- 7 Vise, *The Google Story*, 38.
- 8 Ibid., 33.
- 9 Levy, *In the Plex*, 29.
- John Battelle, *The Search: How Google and Its Rivals Rewrote the Rules of Business and Transformed Our Culture* (New York: Portfolio, 2005), 84.
- 11 Internet History Podcast, Episode 41: Excite.com CEO George Bell, November 17, 2014.
- 12 Battelle, *The Search*, 85.

- 13 Levy, *In the Plex*, 31.
- 14 Vise, *The Google Story*, 79.
- 15 Battelle, *The Search*, 89.
- 16 Vise, *The Google Story*, 85.
- 17 Michael Specter, "Search and Deploy," *New Yorker*, May 29, 2000.
- 18 Vise, *The Google Story*, 96.
- 19 David Kirkpatrick, "What's a Google? A Great Search Engine, That's What," *Fortune*, November 8, 1999.
- 20 Levy, In the Plex, 72.
- 21 Ibid., 36.
- 22 Ibid., 67.
- 23 Steve O'Hear, "Inside the Billion-Dollar Hacker Club," TechCrunch, March 2, 2014, https://techcrunch.com/2014/03/02/w00w00/.
- 24 Internet History Podcast, *Episode 73*: "Father" of the MP3, Karlheinz Brandenburg, July 14, 2015.
- 25 Ibid.
- 26 "A History of Storage Cost," mkomo.com, September 8, 2009, http://www.mkomo.com/cost-pergigabyte.
- 27 David Essex, "More Big Honkin' Hard Drives in 1999," CNN.com, January 21, 1999, http://www.cnn.com/TECH/computing/9901/21/honkin.idg/.
- Paul Boutin, "Nullsoft, 1997–2004: AOL Kills Off the Last Maverick Tech Company," *Slate*, November 12, 2004, http://www.slate.com/articles/technology/webhead/2004/11/nullsoft 19972004.html.
- 29 *Downloaded*, documentary directed by Alex Winter, 2013.
- 30 Joseph Menn, *All the Rave: The Rise and Fall of Shawn Fanning's Napster* (New York: Crown Business, 2003), 191.
- 31 Ibid., 247, 260.
- 32 Ibid., 223.
- 33 Ibid., 134.
- 34 Richard Nieva, "Ashes to Ashes, Peer to Peer: An Oral History of Napster," *Fortune*, September 5, 2013.
- 35 Menn, All the Rave, 205.
- 36 Nieva, "Ashes to Ashes, Peer to Peer."
- 37 Internet History Podcast, Episode 139: The Napster Story with Jordan Ritter, April 16, 2017.
- 38 Greg Kot, Ripped: How the Wired Generation Revolutionized Music (New York: Scribner, 2010), 31.
- 39 Steve Knopper, *Appetite for Self-Destruction: The Spectacular Crash of the Record Industry in the Digital Age* (New York: Free Press, 2009),135.
- 40 Menn, All the Rave, 144.
- 41 Ibid., 230.

- 42 Ibid., 244.
- 43 Knopper, Appetite for Self-Destruction, 148.
- 44 Downloaded.
- 45 Menn, All the Rave, 102.
- 46 Knopper, Appetite for Self-Destruction, 143.
- 47 Kot, *Ripped*, 45.
- 48 Downloaded.
- 49 Stephen W. Webb, "*RIAA v. Diamond Multimedia Systems:* The Recording Industry Attempts to Slow the MP3 Revolution, Taking Aim at the Jogger Friendly Diamond Rio," *Richmond Journal of Law and Technology* 7, no. 1 (Fall 2000), at https://scholarship.richmond.edu/cgi/viewcontent.cgi? article=1102&context=jolt.
- 50 Stephen Witt, *How Music Got Free: The End of an Industry, the Turn of the Century, and the Patient Zero of Piracy* (New York: Viking, 2015), 126.

12. RIP. MIX. BURN.: THE IPOD, ITUNES AND NETFLIX

- Joe Wilcox, "Apple: Looking for a Few Good Converts," CNET, March 26, 2002.
- Alyson Raletz, "Man Who Came Up with iMac Name Tells What the 'i' Stands For," *Kansas City Business Journal*, June 7, 2012.
- 3 Brent Schlender and Rick Tetzeli, *Becoming Steve Jobs: The Evolution of a Reckless Upstart into a Visionary Leader* (New York: Crown Business, 2016), p. 263, Kindle.
- 4 Walter Isaacson, Steve Jobs (New York: Simon & Schuster, 2011), 384, Kindle.
- 5 Steve Knopper, *Appetite for Self-Destruction: The Spectacular Crash of the Record Industry in the Digital Age* (New York: Free Press, 2009), 166.
- 6 Isaacson, Steve Jobs, 388, Kindle.
- 7 Ibid.
- 8 Steven Levy, *The Perfect Thing: How the iPod Shuffles Commerce, Culture, and Coolness* (New York: Simon & Schuster, 2006), 134–35, Kindle.
- 9 Leander Kahney, *Jony Ive: The Genius Behind Apple's Greatest Products* (New York: Portfolio, 2013), 183.
- 10 Isaacson, Steve Jobs, 390.
- "Steve Jobs Introduces Original iPod—Apple Special Event (2001)," posted January 4, 2014, https://www.youtube.com/watch?v=SYMTy6fchiQ.
- 12 Schlender and Tetzeli, *Becoming Steve Jobs*, 272.
- 13 Kot, *Ripped*, 35.
- 14 Ibid., 43.
- 15 Ibid., 42.
- 16 Isaacson, Steve Jobs, 396.
- 17 Ibid.

- 18 Ibid., 403.
- 19 Levy, The Perfect Thing, 143.
- 20 Isaacson, Steve Jobs, 405.
- 21 Ibid.
- 22 Levy, *The Perfect Thing*, 105.
- 23 Ibid., 109.
- 24 Ibid., 58.
- 25 Knopper, *Appetite for Self-Destruction*, 232.
- "Global Recorded Music Revenue from 2002 to 2016 (in Billion U.S. Dollars)," https://www.statista.com/statistics/272305/global-revenue-of-the-music-industry/.
- 27 Tweet from @Mark_J_Perry, sourced from the RIAA, April 18, 2017, https://twitter.com/mark_j_perry/status/854407708870660097.
- 28 Knopper, Appetite for Self-Destruction, 181.
- 29 Gina Keating, Netflixed: The Epic Battle for America's Eyeballs (New York: Portfolio, 2012), 27.
- 30 Stephen P. Kaufman and Willy Shih, *Netflix in 2011*, Harvard Business Review Case Study 615-007 (August 2014).
- 31 Keating, *Netflixed*, 67.
- 32 Ibid., 27.
- 33 Ibid., 59.
- 34 Ibid.
- 35 Peter J. Coughlan and Jennifer L. Illes, *Blockbuster Inc. & Technological Substitution (A): Achieving Dominance in the Video Rental Industry*, Harvard Business Review Case Study 9-704-404 (December 18, 2003).
- 36 Sunil Chopra and Murali Veeraiyan, *Movie Rental Business: Blockbuster*, *Netflix*, *and Redbox*, Harvard Business Review Case Study KEL616 (October 12, 2010).
- 37 Daniel Kadlec, "How Blockbuster Changed the Rules," *Time*, August 3, 1998.
- 38 Kaufman and Shih, Netflix in 2011.
- 39 Keating, *Netflixed*, 185.
- 40 Kaufman and Shih, Netflix in 2011; Chopra and Veeraiyan, Movie Rental Business.
- 41 Kaufman and Shih, Netflix in 2011.
- 42 Jeremy O'Brien, "The Netflix Effect," *Wired*, December 1, 2012, https://www.wired.com/2002/12/netflix-6/.
- 43 Ibid.
- 44 Larry Downes and Paul Nunes, "Blockbuster Becomes a Casualty of Big Bang Disruption," *Harvard Business Review*, November 3, 2013.
- 45 Coughlan and Illes, *Blockbuster Inc.* & *Technological Substitution (A)*.
- 46 Maria Halkias, "Blockbuster Is Trying to Turn It Around," *Dallas Morning News*, May 2010, https://www.dallasnews.com/business/business/2010/05/08/Blockbuster-is-trying-to-turn-it-3330.

- 47 Chopra and Veeraiyan, *Movie Rental Business*.
- 48 Coughlan and Illes, *Blockbuster Inc.* & *Technological Substitution (A)*.
- 49 Conor Knighton, "Be Kind, Rewind: Blockbuster Stores Kept Open in Alaska," *CBS Sunday Morning*, April 23, 2017, https://www.cbsnews.com/news/be-kind-rewind-blockbuster-stores-kept-open-in-alaska/?ftag=CNM-00-10aab8c&linkId=36799161.
- 50 O'Brien, "The Netflix Effect."
- 51 Matthew Boyle, "Questions for . . . Reed Hastings," *Fortune*, May 23, 2007.

13. A THOUSAND FLOWERS, BLOOMING: PAYPAL, ADWORDS, GOOGLE'S IPO AND BLOGS

- Fara Warner, "These Guys Will Make You Pay," *Fast Company*, November 2001.
- 2 Ibid.
- 3 Eric M. Jackson, *The PayPal Wars: Battles with eBay, the Media, the Mafia, and the Rest of Planet Earth* (Washington, DC: WND Books, 2012), 34, 40.
- 4 Ibid., 180–81.
- 5 Matt Richtel, "Internet Offering Soars, Just Like Old Times," *New York Times*, February 16, 2002.
- John Battelle, *The Search: How Google and Its Rivals Rewrote the Rules of Business and Transformed Our Culture* (New York: Portfolio, 2005), 126.
- 7 David A. Vise, *The Google Story: For Google's 10th Birthday* (New York: Delta, 2006), 98.
- 8 Battelle, *The Search*, 123.
- 9 Ibid., 93.
- 10 Kevin J. Delaney, "After Google's IPO, Can Ads Keep Fueling Company's Engine?" *Wall Street Journal*, April 29, 2004.
- Ben Elgin, Linda Himelstein, Ronald Grover, and Heather Green, "Inside Yahoo!," *BusinessWeek*, May 21, 2001.
- Sergey Brin and Lawrence Page, "The Anatomy of a Large-Scale Hypertextual Web Search Engine," accessed February 1, 2018, http://infolab.stanford.edu/~backrub/google.html.
- 13 Jim Hu, "Yahoo Reports Profit on Higher Revenue," CNET, October 9, 2002.
- 14 Battelle, The Search, 141.
- 15 Steven Levy, *In the Plex: How Google Thinks, Works, and Shapes Our Lives* (New York: Simon & Schuster, 2011), 94.
- 16 Vise, The Google Story, 119.
- 17 Battelle, *The Search*, 148; Levy, *In the Plex*, 70.
- "Google's Ad Revenue from 2001 to 2016," 2018, https://www.statista.com/statistics/266249/advertising-revenue-of-google/; John Huey, Martin Nisenholtz, and Paul Sagan, *Riptide* (Cambridge, MA: Harvard University/Shorenstein Center on Media, Politics and Public Policy, 2013), vol. 1, chap. 12, https://www.digitalriptide.org/chapter-12-google-the-second-coming/.
- 19 Kevin J. Delaney and Robin Sidel, "Google IPO Aims to Change the Rules," Wall Street Journal,

- April 30, 2004.
- **20** Levy, *In the Plex*, 150.
- 21 Battelle, The Search, 220
- 22 Delaney, "After Google's IPO."
- 23 Ibid.
- 24 Matt Richtel, "Analysts Doubt Public Offering of Google Is a Bellwether," *New York Times*, May 1, 2004.
- 25 "Letter from the Founders," *Wall Street Journal*, updated April 29, 2004, https://www.wsj.com/articles/SB108326432110097510.
- 26 "Excerpts from Google's Filing," *Wall Street Journal*, updated April 29, 2004, https://www.wsj.com/articles/SB108326291882697484.
- 27 Levy, *In the Plex*, 149.
- 28 Ibid., 151.
- 29 Ibid., 149.
- 30 Gregory Zuckerman, "Google Shares Prove Big Winners—for a Day," *Wall Street Journal*, August 20, 2004.
- 31 Ian Ayres and Barry Nalebuff, "Going, Going, Google," Wall Street Journal, August 20, 2004.
- 32 Battelle, The Search, 227.
- Laurie J. Flynn, "The Google I.P.O.: The Founders; 2 Wild and Crazy Guys (Soon to Be Billionaires), and Hoping to Keep It That Way," *New York Times*, April 30, 2004.
- 34 John Markoff, "Why Google Is Peering Out, at Microsoft," *New York Times*, May 3, 2004.
- 35 Levy, *In the Plex*, 101, 102.
- 36 Scott Rosenberg, *Say Everything: How Blogging Began, What It's Becoming, and Why It Matters* (New York: Crown, 2009), 120, 125.
- 37 Ibid., 101.
- 38 Ibid., 102.
- 39 Ibid., 18.
- 40 Ibid., 53.
- *Newsweek* Staff, "Whispers on the Web," *Newsweek*, August 17, 1997, http://www.newsweek.com/whispers-web-172450.
- 42 Matt Drudge, "Anyone with a Modem Can Report on the World," address before the National Press Club, June 2, 1998, http://www.bigeye.com/drudge.htm.
- 43 Ibid.
- 44 Philip Weiss, "Watching Matt Drudge," New York, August 24, 2007.
- 45 Brian Abrams, *Gawker: An Oral History* (Kindle Single, 2015), loc. 138.
- 46 Ibid., loc. 229–30.
- 47 Ibid., loc. 248.

- Julie Bosman, "First with the Scoop, If Not the Truth," *New York Times*, April 18, 2004, http://www.nytimes.com/2004/04/18/style/first-with-the-scoop-if-not-the-truth.html?_r=0.
- 49 Vanessa Grigoriadis, "Everybody Sucks," New York, October 14, 2007.

14. WEB 2.0: WIKIPEDIA, YOUTUBE AND THE WISDOM OF CROWDS

- 1 Nick Denton, "Second Sight," *Guardian*, September 20, 2001.
- 2 Scott Rosenberg, *Say Everything: How Blogging Began, What It's Becoming, and Why It Matters* (New York: Crown, 2009), 38.
- 3 Sarah Lacy, *Once You're Lucky*, *Twice You're Good: The Rebirth of Silicon Valley and the Rise of Web 2.0* (New York: Gotham, 2008), 6.
- 4 "Jurisimprudence," *Schott's Vocab*, May 31, 2010, https://schott.blogs.nytimes.com/2010/05/31/jurisimprudence/.
- Andrew Lih, *The Wikipedia Revolution: How a Bunch of Nobodies Created the World's Greatest Encyclopedia* (New York: Hyperion, 2009), xv.
- 6 Ibid., 64–65.
- 7 "User: Ben Kovitz," Wikipedia, last modified December 20, 2017, https://en.wikipedia.org/wiki/User:BenKovitz#The_conversation_at_the_taco_stand.
- 8 "Wikipedia Statistics: English," December 18, 2017, https://stats.wikimedia.org/EN/TablesWikipediaEN.htm.
- 9 "Web 2.0," November 2005, http://www.paulgraham.com/web20.html.
- 10 Fred Vogelstein, "TechCrunch Blogger Michael Arrington Can Generate Buzz . . . and Cash," *Wired*, June 22, 2007.
- Julia Angwin, *Stealing MySpace: The Battle to Control the Most Popular Website in America* (New York: Random House, 2009), 59.
- 12 Ibid., 238.
- 13 National Venture Capital Association, *Yearbook 2015*, http://nvca.org/?ddownload=1868.
- 14 Associated Press, "Venture Investment Hits a 6-Year High," *Los Angeles Times*, January 19, 2008, http://articles.latimes.com/2008/jan/19/business/fi-venture19.
- 15 Lacy, Once You're Lucky, Twice You're Good, 100.
- 16 Sarah Lacy and Jessi Hempel, "Valley Boys," BusinessWeek, August 14, 2006.
- 17 Michael Arrington, "Digg Is (Almost) as Big as Slashdot," TechCrunch.com, November 9, 2005, https://techcrunch.com/2005/11/09/digg-is-almost-as-big-as-slashdot/.
- 18 Lacy and Hempel, "Valley Boys."
- 19 Lacy, Once You're Lucky, Twice You're Good, 76.
- John Cloud, "The YouTube Gurus," *Time*, December 25, 2006.
- 21 Steven Levy, *In the Plex: How Google Thinks, Works, and Shapes Our Lives* (New York: Simon & Schuster, 2011), 245.
- Wired Staff, "Now Starring on the Web: YouTube," Wired, April 9, 2006, http://archive.wired.com/techbiz/media/news/2006/04/70627.

- 23 Randall Stross, *Planet Google: One Company's Audacious Plan to Organize Everything We Know* (New York: Free Press, 2008), 193.
- Jason Abbruzzese, "The Rise and Fall of AIM, the Breakthrough AOL Never Wanted," Mashable, April 15, 2014, http://mashable.com/2014/04/15/aim-history/#IJvEwv67sPq3.
- 25 Angwin, Stealing MySpace, 52.
- 26 "The Father of Social Networking," Mixergy, December 3, 2014, https://mixergy.com/interviews/andrew-weinreich-sixdegrees/.
- 27 David Kirkpatrick, *The Facebook Effect: The Inside Story of the Company That Is Connecting the World* (New York: Simon & Schuster, 2010), 69.
- 28 Angwin, Stealing MySpace, 53.
- 29 Gary Rivlin, "Wallflower at the Web Party," *New York Times*, October 15, 2006.
- 30 Internet History Podcast, *Episode 117: Founder of Friendster and Nuzzel*, *Jonathan Abrams*, September 18, 2016.
- 31 Angwin, Stealing MySpace, 64.
- 32 Lev Grossman, "Tila Tequila," *Time*, December 16, 2006.
- 33 Angwin, Stealing MySpace, 84, 103.
- 34 Ibid., 140.
- 35 Ibid., 104.
- 36 John Cassidy, "Me Media: How Hanging Out on the Internet Became Big Business," *New Yorker*, May 15, 2006.
- 37 Angwin, Stealing MySpace, 175, 179.
- 38 Ibid., 262.

15. THE SOCIAL NETWORK: FACEBOOK

- 1 S. F. Brickman, "Not-So-Artificial Intelligence," *Crimson*, October 23, 2003.
- 2 David Kirkpatrick, *The Facebook Effect: The Inside Story of the Company That Is Connecting the World* (New York: Simon & Schuster, 2010), 25.
- 3 Ben Mezrich, *The Accidental Billionaires: The Founding of Facebook* (New York: Anchor Books, 2010), 49.
- 4 Kirkpatrick, *The Facebook Effect*, 26.
- 5 Crimson Staff, "Put Online a Happy Face," Crimson, December 11, 2003.
- 6 Luke O'Brien, "Poking Facebook," 02138, November–December 2007, 66.
- 7 Mezrich, *The Accidental Billionaires*, 95.
- 8 Sam Altman, "Mark Zuckerberg on How to Build the Future," *Y Combinator* (blog), August 16, 2016, http://blog.ycombinator.com/mark-zuckerberg-future-interview/.
- 9 Kirkpatrick, *The Facebook Effect*, 34.
- 10 Ibid., 38.

- "CS50 Lecture by Mark Zuckerberg," December 7, 2005; posted April 4, 2014, https://www.youtube.com/watch?v=xFFs9UgOAlE.
- 12 Kirkpatrick, The Facebook Effect, 38.
- 13 Ibid., 47.
- 14 Katherine Losse, *The Boy Kings: A Journey into the Heart of the Social Network* (New York: Free Press, 2012), xvii.
- 15 O'Brien, "Poking Facebook."
- 16 Kirkpatrick, *The Facebook Effect*, 43.
- 17 Ibid., 42.
- 18 Cassidy, "Me Media."
- 19 Kirkpatrick, The Facebook Effect, 64.
- 20 Kevin J. Feeney, "Business, Casual," *Crimson*, February 24, 2005.
- 21 Ibid.
- 22 Sarah Lacy, *Once You're Lucky, Twice You're Good: The Rebirth of Silicon Valley and the Rise of Web 2.0* (New York: Gotham, 2008), 150.
- 23 Ibid.
- 24 Kirkpatrick, The Facebook Effect, 63.
- 25 Ibid. 48.
- 26 Ibid., 89.
- 27 Altman, "Mark Zuckerberg on How to Build the Future."
- 28 Kirkpatrick, *The Facebook Effect*, 86.
- 29 Ibid., 95.
- 30 Ibid., 103.
- 31 Ibid., 98.
- 32 "What's the Story Behind Mark Zuckerberg's Fabled 'I'm CEO . . . Bitch!' Business Card?" updated February 1, 2011, https://www.quora.com/Facebook-company/Whats-the-story-behind-Mark-Zuckerbergs-fabled-Im-CEO%E2%80%A6bitch-business-card/answer/Andrew-Boz-Bosworth.
- 33 Melia Robinson, "How Sean Parker Bounced Back from Being Fired to Change Facebook's History," *Business Insider*, February 9, 2015, http://www.businessinsider.com/how-plaxo-and-sean-parker-changed-facebook-2015-2.
- 34 Kirkpatrick, *The Facebook Effect*, 100.
- 35 Ibid.
- 36 Julia Angwin, *Stealing MySpace: The Battle to Control the Most Popular Website in America* (New York: Random House, 2009), 177.
- 37 "James W. Breyer and Mark E. Zuckerberg Interview, Oct. 26, 2005, Stanford University," posted July 14, 2012, https://www.youtube.com/watch?v=WA_ma359Meg&feature=youtu.be.
- 38 Kirkpatrick, *The Facebook Effect*, 149.
- 39 Ibid., 111.

- 40 "CS50 Lecture by Mark Zuckerberg."
- 41 Kirkpatrick, The Facebook Effect, 113.
- 42 Ibid., 126.
- 43 Ibid., 130.
- 44 Ibid., 148.
- 45 Ibid., 145.
- 46 Ibid., 131.
- 47 Ibid., 150.
- 48 Ibid., 152.
- 49 Ibid., 154.
- 50 "CS50 Lecture by Mark Zuckerberg."
- 51 Kirkpatrick, *The Facebook Effect*, 156.
- 52 Ibid., 157.
- 53 Ibid.
- 54 Ibid., 170.
- 55 Ibid., 168.
- Allison Fass, "Peter Thiel Talks About the Day Mark Zuckerberg Turned Down Yahoo's \$1 Billion," Inc.com, March 12, 2013, https://www.inc.com/allison-fass/peter-thiel-mark-zuckerberg-luck-day-facebook-turned-down-billion-dollars.html.
- David Kushner, "The Baby Billionaires of Silicon Valley," Rolling Stone, November 16, 2006.
- 58 Kirkpatrick, The Facebook Effect, 161.
- 59 Ibid., 168.
- 60 Lacy, Once You're Lucky, Twice You're Good, 169.
- 61 Kirkpatrick, The Facebook Effect, 180.
- 62 Ibid., 181.
- 63 Ibid., 189.
- 64 Ibid., 190.
- 65 Ibid.
- 66 Ibid., 192.
- 67 Ibid., 191.
- 68 Ibid., 192.
- 69 Ibid., 173.
- 70 Ibid., 185.
- 71 Ibid., 197.
- 72 Ibid., 227.
- 73 Ellen McGirt, "Hacker. Dropout. CEO.," Fast Company, May 2007.

- 74 Kirkpatrick, *The Facebook Effect*, 235.
- 75 Ibid., 275.

16. THE RISE OF MOBILE: PALM, BLACKBERRY AND SMARTPHONES

- Tom Hormby, "The Story Behind Apple's Newton," *Gizmodo*, January 19, 2010, https://gizmodo.com/5452193/the-story-behind-apples-newton.
- 2 Markos Kounalakis, *Defying Gravity: The Making of Newton* (Hillsboro, OR: Beyond Words, 1993), 01:56.
- Andrea Butter and David Pogue, *Piloting Palm: The Inside Story of Palm, Handspring, and the Birth of the Billion-Dollar Handheld Industry* (New York: Wiley, 2002), 23.
- 4 "Newton Message Pad," apple-history, last modified July 15, 2015, http://apple-history.com/nmp.
- 5 Kounalakis, *Defying Gravity*, 00:36.
- 6 Jim Louderback, "Newton's Capabilities Just Don't Measure Up," PC Week, September 13, 1993.
- Peter H. Lewis, "So Far, the Newton Experience Is Less Than Fulfilling," *New York Times*, September 26, 1993.
- Harry McCracken, "Newton, Reconsidered," *Time*, June 1, 2002; John Markoff, "Apple's Newton Reborn: Will It Still the Critics?" *New York Times*, March 4, 1994.
- 9 David S. Evans, *Invisible Engines: How Software Platforms Drive Innovation and Transform Industries* (Cambridge, MA: MIT Press, 2006), 159.
- 10 Butter and Pogue, *Piloting Palm*, 197.
- 11 Evans, *Invisible Engines*, 155; Butter and Pogue, *Piloting Palm*, 166.
- 12 Rod McQueen, *BlackBerry: The Inside Story of Research in Motion* (Toronto, ON: Key Porter, 2010), 154.
- Alastair Sweeny, *BlackBerry Planet: The Story of Research in Motion and the Little Device That Took the World by Storm* (Mississauga, ON: John Wiley, 2009), 47.
- 14 McQueen, BlackBerry, 93.
- 15 Ibid., 174.
- 16 Ibid., 185.
- 17 Sweeny, BlackBerry Planet, 4.
- Jacquie McNish and Sean Silcoff, Losing the Signal: The Untold Story Behind the Extraordinary Rise and Spectacular Fall of BlackBerry (New York: Flatiron Books, 2015), 112.
- 19 Kevin Maney, "BlackBerry: The Heroin of Mobile Computing," USA Today, May 7, 2001.
- 20 McQueen, BlackBerry, 194.
- 21 Ibid., 80.
- 22 Brian Merchant, *The One Device: The Secret History of the iPhone* (New York: Little, Brown, 2017), 30.
- 23 Ibid., 34.
- 24 Ibid., 195.

- 25 Mary Meeker, Scott Devitt, and Liang Wu, *Internet Trends: June 7, 2010, CM Summit—New York City* (Morgan Stanley, 2010), www.kpcb.com/file/june-2010-internet-trends.
- 26 McQueen, BlackBerry, 11.
- 27 "Steve Jobs on Apple's Resurgence: 'Not a One-Man Show,' "BusinessWeek Online, May 12, 1998, available from the Internet Archive Wayback Machine, https://web.archive.org/web/20111209185106/http://www.businessweek.com/bwdaily/dnflash/may1998

17. ONE MORE THING: THE IPHONE

- 1 How the iPhone Was Born: Inside Stories of Missteps and Triumphs, video documentary, Wall Street Journal Video, June 25, 2017, http://www.wsj.com/video/how-the-iphone-was-born-inside-stories-of-missteps-and-triumphs/302CFE23-392D-4020-B1BD-B4B9CEF7D9A8.html.
- 2 Brian Merchant, *The One Device: The Secret History of the iPhone* (New York: Little, Brown, 2017), 200.
- 3 "Steve Jobs at D2 2004 All Things Digital Conference," March 25, 2013, https://www.youtube.com/watch?v=mCBu50CozH0.
- 4 "Steve Jobs in 2005 at D3," June 1, 2012, https://www.youtube.com/watch?v=IzH54FpWAP0.
- 5 How the iPhone Was Born.
- Fred Vogelstein, *Dogfight: How Apple and Google Went to War and Started a Revolution* (New York: Sarah Crichton Books / Farrar, Straus and Giroux, 2013), p. 25, Kindle.
- 7 "Motorola Razr," note 3, Wikipedia, last modified December 26, 2017, https://en.wikipedia.org/wiki/Motorola_Razr#cite_note-3.
- 8 Charles Arthur, *Digital Wars: Apple, Google, Microsoft and the Battle for the Internet* (Philadelphia: Kogan, 2012), loc. 153, Kindle.
- 9 Frank Rose, "Battle for the Soul of the MP3 Phone," *Wired*, November 1, 2005.
- 10 Merchant, The One Device, 217.
- 11 Vogelstein, *Dogfight*, 28.
- 12 Ibid.
- 13 Ibid., 29.
- 14 Merchant, The One Device, 217.
- Walter Isaacson, Steve Jobs (New York: Simon & Schuster, 2011), p. 466, Kindle.
- 16 Merchant, *The One Device*, 205.
- 17 Ibid., 20.
- 18 Ibid., 21.
- 19 Isaacson, Steve Jobs, 468.
- 20 Brent Schlender and Rick Tetzeli, *Becoming Steve Jobs: The Evolution of a Reckless Upstart into a Visionary Leader* (New York: Crown Business, 2016), p. 310, Kindle.
- 21 Merchant, The One Device, 94.

- "CHM Live: Original iPhone Software Team Leader Scott Forstall (Part Two), June 28," 2017, https://www.youtube.com/watch?v=IiuVggWNqSA.
- 23 Merchant, The One Device, 105.
- 24 Vogelstein, *Dogfight*, 38.
- 25 Matthew Panzarino, "Apple v. Samsung Day 2: Schiller, Forstall Testify on Creation, Sales and Hardships of iPhone Project," *Next Web*, August 3, 2012, https://thenextweb.com/apple/2012/08/03/apple-v-samsung-day-2-schiller-forstall-testify-on-creation-sales-and-hardships-of-iphone-project/.
- 26 Merchant, The One Device, 209.
- 27 "On the Verge—Tony Fadell and Chris Grant—On the Verge, Episode 005," April 30, 2012, https://www.youtube.com/watch?v=qf9XcNWRvSU&t=1901s.
- 28 Isaacson, Steve Jobs, 469.
- 29 Ibid., 67.
- 30 Ibid., 35–36.
- 31 Merchant, *The One Device*, 365.
- 32 Vogelstein, *Dogfight*, 17.
- 33 Schlender and Tetzeli, *Becoming Steve Jobs*, 360.
- 34 "Steve Jobs Talks iPhone—All Things D5 (2007)," posted December 22, 2013, https://www.youtube.com/watch?v=fkPN_U0D3CM&t=1570s.
- John Markoff, "Phone Shows Apple's Impact on Consumer Products," *New York Times*, January 11, 2007.
- 36 Schlender and Tetzeli, *Becoming Steve Jobs*, 363.
- 37 Ibid.
- 38 Ibid., 362.
- Prince McLean, "Apple iPhone 3G Sales Surpass RIM's BlackBerry," AppleInsider, October 21, 2008, http://appleinsider.com/articles/08/10/21/apple_iphone_3g_sales_surpass_rims_blackberry.html.
- 40 Adam Lella, "U.S. Smartphone Penetration Surpassed 80 Percent in 2016," comScore, February 3, 2017, https://www.comscore.com/Insights/Blog/US-Smartphone-Penetration-Surpassed-80-Percent-in-2016.
- 41 "Steve Jobs Talks iPhone—All Things D5 (2007)."