

```
abuse of dominance, 62, 82-83, 145-146, 150
                                                      Amazon Web Services (AWS), 77-78
  to bottleneck, 148, 154
                                                      anticompetitive cross-subsidization, 69
                                                      antitrust. See also Sherman Act
  to data, 41, 47-48, 153
                                                         cases, 60, 63
  denial of, 151
  to horizontal search engines, 70-74
                                                         concerns, 61, 108-112
                                                         enforcement, 8, 155
  nondiscriminatory, 40, 62, 63, 65, 73-74, 129-130
  remedies, 70, 73-74, 129-130, 151, 161, 163
                                                         intervention, 76-77, 86
                                                         investigations, 62-63, 71, 81-83
  terms, 129-130
ad-based results, 73-74
                                                         issues, 84-85
                                                         laws, 2, 16, 110, 111
administrative hierarchy, 19
AdSense, 54
                                                         liability, 71-72
advertisers, 1, 26-27, 53-54, 64, 66
                                                         litigation, 29
                                                         neo-Brandeis movement, 86
  price regulation of, 74
  search engines, advertising-based model for, 48-51
                                                         policy, 93, 162
                                                         proceedings, 54
  welfare loss for, 67
advertising
                                                         provisions, 146-147
  non-search, 53
                                                         remedies, 65
                                                      Apple, 77-78, 81-82
  space, 151-152
                                                      Argenton, Cédric, 153
  targeting, 51-53
algorithmic matching, 124, 134
                                                      Armstrong, Mark, 24-25
algorithmic predictions, 20-23, 45, 57-58
                                                      Arrow, Kenneth, 12
Alibaba, 88
                                                      Article 102 TFEU, 145, 150
allocative efficiency, 38, 128-129
                                                      artificial intelligence, 14
allocative inefficiency, 119-120
                                                      Aspen Highlands Skiing Corp. v. Aspen Skiing Co.,
Alphabet, 104. See also Google
                                                              148-149
alternative business models, 47-48, 51-55, 60
                                                      Associated Press v. United States, 147-148
Amazon, 5–6, 49–50, 76–77, 92–93, 98, 107,
                                                      auction-based advertised results, 50-51
       108-109, 143
                                                      auctioning markets, 121-122, 132-134
  Basics, 92
                                                      Authors United, 85
                                                      automated cars, 100, 103-104, 116
  dominance of, 96
                                                      automation, 14
  evolution of, 77-81
  market power of, 81-87
                                                      availability, 114-115
  Marketplace, 79-81, 86, 87, 89, 91, 96
                                                      average costs, 37, 38, 118-119
  Prime, 78-79, 80-81, 83-84, 90
                                                      AWS. See Amazon Web Services
  revenue and net income 2011-2015, 81
  Studio, 77-78
                                                      balancing frameworks, 31, 32, 35
  Walmart and, 91
                                                      Barnes & Noble, 77-78
```



```
barriers to entry, 3-4, 12-13, 15-17, 92-93,
                                                          dynamic, 132, 145–146, 165–166
                                                          efficient concentration and, 98-99
       109-110, 146
behavioral economics, 59-60, 64-65
                                                          innovation and, 12
Bell System, 130
                                                          inter-platform, 68-69, 108-112, 145-146
                                                            lack of, 119
big data, 2-3, 14, 146
  importance of, 45
                                                            promoting, 122-124
  reliance on, 19-20
                                                          intra-platform, 63, 68-69, 92, 108-112,
Bing, 49-50
                                                              145-146
Bork, Robert, 71-72
                                                         law, 92
bottleneck, 129-130, 139, 146-147, 148, 150-151, 154
                                                          market failures and, 123
                                                          modern laws on, 11
Bower, Joseph, 13
Brazil, 144–145
                                                          policy, 3, 7–8, 29–31, 44, 47–48, 73–74, 81, 87
breaking-up
                                                            enforcement of, 145
  Bell System, 130
                                                            priorities, 122
  horizontal, 157, 161
                                                            range of, 117
  policies, 161, 164-165
                                                            regulation and, 154-155
  search engines, 128-129
                                                            reliance on, 136
  Standard Oil, 130
                                                            stronger, 91-95
  vertical, 161
                                                            valid concerns over, 111
burden of proof, 32
                                                          policy enforcement, 75
business models, 18, 27-29, 66, 77, 79, 80, 82, 86,
                                                         potential, 163
                                                         predation and, 84
       97-98, 99, 108, 111
                                                         price, 107, 127-128
  alternative, 47-48, 51-55, 60
  multisided, 1, 100, 128
                                                         product market, 12-13
buyers, 1, 88-89
                                                         promoting, 136-139
                                                         protecting, 94, 139-144
Caillaud, Bernard, 24-25
                                                         weakness of, 59-60
Canada, 11, 55, 136–137, 149–150
                                                         winner-takes-all, 13
capitalism, 10-12, 17
                                                       Competition Act (Canada), 136-137, 149-150
Carlton, Dennis W., 142
                                                       Competition Bureau of Canada, 146
centralization, 98
                                                       complementarity, 38
centralized algorithmic routing, 115-116
                                                       concentration, 12-13, 17, 74, 93-94, 102-103, 158
centralized pricing, 112
                                                         competition and, 98-99, 108
Chandler, Alfred D., 11–12
                                                          degrees of, 154
Chicago School, 92-94, 142
                                                         determinants of, 114
chicken-and-egg problems, 26, 101, 103, 114
                                                         drivers of, 10-17, 41
Chile, 144–145
                                                         efficient, 42, 67, 87, 89, 98, 110, 120–121, 134,
China, 136-137, 144-145
                                                              139, 157
Christensen, Clayton, 13
                                                         employment-based models and, 104
Coase, R. H., 18
                                                          excessive, 137–138
coexisting platforms, 42
                                                         horizontal search engines and, 55-57
                                                         intermediation and, 100-101
collusion, 110-112
                                                         natural, 4-6, 41, 43, 45, 165
commission, 128
communication technologies, 18
                                                          reducing, 157
                                                          ride-hailing platforms and, 117
competition, 3-4, 10-11, 24-25, 58-59. See also
                                                         technological change and, 19-20
       Schumpeterian competition
                                                       congestion, 42, 89, 90
  agency, 155
                                                       consumer welfare, 93-94, 95, 136-137, 138
  antitrust concerns and, 108-112
  authorities, 155
                                                       contestability, 45, 119-120, 153, 163
  balancing effects, 32-35
                                                         degrees of, 160-161
                                                         framework of, 152-153
  benefits of, 112
  concentration and, 108
                                                         high levels of, 144
  differentiated, 42
                                                         low, 138-139, 145, 163
  in digital economy, 95
                                                         market, 67
```



contractors, 132–133	mandated nondiscriminatory access, 129–130
independent, 105, 106	price, 84
private, 118–119	by vertical integration, 145–152
contractual arrangements, 101	discriminatory behavior, 65, 70, 71, 93, 129,
contractual conditions, 105–106	145–146, 154, 161
coordination failure, 101–102	discriminatory conduct, 81, 139, 145-146, 151
cost structure, 57–58	dispatch and matching system, 97
Court of Appeal for the Second Circuit,	displacement, 7, 8, 119–120, 144
US, 81–82	delaying, 8
Craigslist, 88	dynamic, 7
eredit cards, 18, 32, 33–34, 35	prevention of, 165
eritical network mass, 97–98	promoting, 136–139
cross-market externalities, 102–103	technological, 132
,	disruption, 43
lata, 5, 20–23. See also big data	District Court for the Southern District of Florida
access to, 41, 47–48, 153	US, 32
analysis of, 97–98	division of labor, 126–127
centralized algorithmic routing and,	division of power, 69
115–116	DOJ. See Department of Justice
collection of, 92, 97–98, 99–100	DoubleClick, 69
combining, 53–54	drivers, 97, 99–100, 116–117, 120
economies of scope and, 70	antitrust laws and, 110
horizontal search engines and, 57–59	automated cars and, 103–104
matching and, 160	commission to, 128
misuse of, 144–145	exclusivity and, 108
* 11 12	•
on passengers, 97	as independent contractors, 105, 106
personal, 53	passenger destination and, 123–124
points of minimum efficient scale associated	professional, 103–104
with, 45	pure marketplace and, 101–103 transaction fees and, 102
value of, 74	
decentralization, 98, 102	dynamic competition, 132, 145–146, 165–166
lefault, 24, 54, 60, 69, 73, 89, 102–103, 130	1 - 1 - 0 - 0 - 0
lelivery, 90–91, 96	e-books, 79, 80, 81–82
lemand	Echo, 77–78
efficient aggregation of, 36	e-commerce online marketplaces, 1, 5–6, 46,
elasticities, 29–30	95–96, 158, 159. <i>See also</i> specific online
side users, 102–103	retailers
demand heterogeneity, 42, 86, 89, 159	alternative structures for, 80
demand-side economies of scale, 97–98, 109	dominance in, 84–87
demand-side network externalities, 4–5, 109, 160	product differentiation in, 89
Demsetz, Harold, 133	winner-takes-all tendencies in, 81, 87
Department of Justice (DOJ), US, 141	economic activity, 11
leregulation, 67	economic dislocations, 11
desirable legal changes, 161–163	economic efficiency, 137–138
lesirable policy changes, 29–35	economic welfare, 138
digital economy, 1, 14, 95	economics, of platforms, 161–163
ligital infrastructure, 135–136	Economics for the Common Good (Tirole), 165–160
ligital matching, 20–23	economies of scale, 3–6, 97
ligital platforms, 35–36, 126	average costs and, 37
ligitalization, 6, 14, 21, 40, 70	benefits of, 90
liminishing marginal returns, 59	demand-side, 97–98, 109
lirect network externalities, 26	internal, 37
liscrimination, 146–147	large, 41
institutional problems related to, 154	marginal costs of creating, 5



186 Index

general search, 72 economies of scale (cont.) multiproduct, 38 global platforms, 131 supply side, 40 Gmail, 63, 69 Google, 2, 5, 22, 47-48, 62-63, 66, 107, 143 taxi services and, 116 economies of scope, 70 Android, 62 Economist (magazine), 16, 21-22 antitrust liability of, 71-72 business strategy of, 57 Ecosia, 60 efficiency, 36, 45. See also concentration, efficient development of, 50-51 allocative, 38, 128-129 downstream segments of, 72 economic, 137-138 Finance, 51 Flights, 49-50, 51 matching and, 123-124 founders of, 48-49 productive, 38 FTC and, 61-62 efficient pricing, 29-30, 31 electricity distribution, 3-4 Hotels, 51 employment, 14, 103-104 interfaces on, 50 employment-based models, 104 Maps, 51, 143 market power of, 66-67 enforcement, 36, 93, 152-154, 155-156 enforcement influence, 137 market shares of, 55-57 News, 51 entry restrictions, 39-40, 132, 160-161, 165 essential facilities doctrine, 146, 150 number of searches performed on, 58 essential input, 67-68, 72, 74, 129-130, 139 organic rankings on, 68-69 essentiality, 151 PageRank algorithm and, 48 EU. See European Union paid advertisements on, 68-69 Places, 51 European Commission, 61, 82 European Court of Justice, 150 proprietary results on, 60-61 European Union (EU), 33-34 revenue of, 55-57 Evans, David, 24-25 Reviews, 49-50 Shopping, 51, 61–62, 69, 88 exclusion, 137 anticompetitive, 152-153 specialized results of, 72-73 Schumpeterian competition and, 138 Hachette Book Group, 85 exclusivity, 98-99, 122 de facto, 106-107 Hagiu, Andrei, 28 drivers and, 108 hardwired links, 65 explicit forms of, 122-123 Hecht (case), 148 ride-hailing platforms and, 109-110 Hipster Antitrust, 76–77, 87, 94, 95, 164–165 Expedia, 49-50 horizontal conspiracy, 110-111 exploitative abuses, 144-145 horizontal search engines, 5, 45, 47-48, 62, 74, ex post enforcement, 152–154, 155–156 88-89, 158, 159 extra-supply, 103 access to, 73-74 concentration and, 55-57 Facebook, 2, 53, 135-136, 143, 161 data and, 57–59 fairness, 137–138 input in, 72–73 Federal Trade Commission (FTC), 61-62, 140-141 structure of, 52 FedEx, 91 hub-and-spoke agreement, 110-111 Filistrucchi, Lapo, 27, 28, 34 human capital, 121-122 fixed costs, 57 hybridity, 79-80, 86, 100 foreclosure, 107, 139–140 discrimination by vertically integrated platfragmentation, 98-99, 134 forms, 145-152 franchise bidding, 44, 121-122, 132-134 ride-hailing platforms and, 105-107 FTC. See Federal Trade Commission iBookstore, 81-82 Gallick, Edward C., 120 imperfect markets, 43-44 Gamco (case), 148 independent car owners, 100

General Motors, 104

independent contractors, 105, 106



India, 144–145 indirect network externalities, 26–27, 28, 36, 41, 53,	close to zero, 4, 40, 42, 47–48, 57 curve, 38
109, 122–123	demand elasticities and, 29–30
induced fragmentation, 63	negligible, 4–5, 17
industrial organization, 162	variable, 45
industrial revolution, 11	market contestability, 67
industry restructuring policies, 44	market definition, 29-30, 33, 34-35
industry-specific regulators, 7, 38-39, 126-127, 145,	market failure, 17, 97, 106, 118–119, 123
152, 155	market fragmentation, 7, 95
information asymmetries, 102, 112, 113, 114,	market imperfections, 102
118–119, 131	market intermediation, 27-29
information technologies, 18	market power, 3–4, 7, 54, 155–156, 157, 163
infrastructure, 36–37, 45, 86, 90–91	addressing, 157
digital, 135–136	of Amazon, 81–87
investments in, 98	economic incentives to exploit, 129
logistics, 87	exercise of, 66, 67, 128, 144
innovation, 7, 11, 21	exploitative exercises of, 138–139
competition and, 12	extending, 55
discouraging, 12–13	of Google, 66–67
disruptive, 13	incentive to leverage, 69
Innovator's Dilemma, The (Christensen), 13	issues of, 8
Instagram, 143, 161	leverage, 107, 121, 129–131
institutional costs, 154–155	regulation of, 62–65, 66
institutional specialization, 126-127	Schumpeter and, 12
intermediation, 4, 18–20, 23, 27–29, 45, 100–101, 162	sources of, 53–54
iPad, 77–78, 81–82	market regulation, 133
Israel, 144–145	market shares, 55-57
/ 11 12	market thickness, 107
Japan, 136–137	Marx, Karl, 10–11
Jullien, Bruno, 24–25	mass production, 11
, , , , , , , , , , , , , , , , , , , ,	MasterCard Inc. v. Comm'n, 33-34
Kayak, 49–50	matching, 45, 97
Khan, Lina M., 91–92, 93	algorithmic, 124, 134
Kijiji, 88	data and, 160
Kindle, 77–78, 81	digital, 20–23
Krugman, Paul, 76–77	efficient, 123-124
	network externalities and, 114–115
labor markets, 14	ride-hailing platforms and, 114
laissez-faire arguments, 8, 136, 157, 165	symmetric, 28–29
Lao, Marina, 71–73	matchmaking platforms, 17, 20, 124–125
lawmaking, 14	MCI Communications v. American Tel & Tel Co.,
LinkedIn, 143	148–149
Liu Quihong, 91–92	medallion systems, 98, 120–121
logistics, 87, 90–91, 96	mergers
Lorain Journal Co. v. United States, 143	blocking, 143–144
Lyft, 97, 123	enforcement, 85–86
drivers and, 105	preemptive, 140
multihoming and, 109–110	problematic, 164–165
Power Driver Bonus program, 106–107	vertical, 92–93
price algorithms and, 106	MFN. See most favored nation clauses
Terms of Service of, 105–106	Microsoft, 22, 73, 140–141, 142–143
, ,	Microsoft v. Commission, 150–151
marginal costs, 5, 21, 36–37, 38, 114	minimum efficient scale, 124
average costs and, 20	monopsony, 15, 76–77, 85



188 Index

most favored nation clauses (MFN), 81-83, 111, on-demand transportation services, 6, 97-99, 139-140 111-112, 113-114, 117, 134. See also Lyft; Uber Move Fast and Break Things (Taplin), 164-165 availability and, 114-115 multihoming, 103-104, 109-110 geographic locations, tied to, 121 multisided platform markets, 1, 20, 100 paradigmatic shift in, 104 centrality of, 23-24 ratings and, 114-115 economic literature on, 24-29 sharing economy and, 105 underutilized assets and, 99-100 multisidedness, 27, 28, 29, 31, 34-35 economic consequences of, 162 waiting times and, 114–115 implications of, 31 OneBox, 50-51, 61-62, 65, 72-73 Myth of Capitalism, The (Tepper), 164-165 one-sided models, 103-104 online search engines, 1. See also horizontal search National Bancard Corp. (NaBanco) v. Visa USA, engines alternative structures for, 52 Inc., 32-33 nationalization, 135-136 developments of, 51 natural monopolies. See specific topics evolution of, 48-51 negative externalities, 113-114, 128 online shopping marketplaces, 5-6, 88, 90, 95-96. neo-Brandeis antitrust movement, 86 See also Amazon; e-commerce online Netscape, 140-141, 142-143 marketplaces organic results, 49-50, 55, 73-74 network coordination, 107 original market, 140-143 network duplication, 128-129 network effects, 2-3, 25 Otter Tail Power Co. v. United States, 148 benefits of, 87 ownership structure, 135 between buyers and sellers, 88-89 PageRank algorithm, 48 network externalities, 40-41, 57-60, 142 paid advertisements, 68-69 aggregation of, 42, 103 bidirectional, 102-103 Parker, Geoffrey G., 24-25 demand-side, 4-5, 109, 160 passengers, 97, 99-100, 102, 112, 116-117 direct, 26 destination of, 123-124 indirect, 26-27, 28, 36, 41, 53, 109, 122-123 overcharging, 118 matching and, 114-115 price charged to, 128 online shopping marketplaces and, 88 pure marketplace and, 101-103 points of minimum efficient scale associated path-dependence, 132 with, 45 payment cards, 1 positive, 117 peer-to-peer exchanges, 20-21 positive effect of, 95-96, 124 physical platforms, 151-152 role of, 117 platform intermediaries, 19 strength of, 160-161 platform intermediation, 4, 18-20, 23, 45, 162 two-sided, 100-101 platforms. See specific platforms network industry, 32, 67-68, 69 policy prescriptions, 23-24 network utilities, 6, 43, 44, political economy, 132, 164 132, 160–161 political influences, 131-132 portability, 7-8, 43, 98-99, 155 networks. See specific network types newspapers, 1 portability rules, 123, 124-125, 153 nondiscriminatory access, 40, 62, 63, 65, 73-74, positive feedback loop effect, 102-103 120-130 Posner, Eric, 123 nondiscriminatory rules, 73-74 potential competitors, 16, 68-69, 85-86, 92-93, 138, non-neutrality of price structures, 27 139-144, 152-153, 161 non-platform users, 128 predation, 31, 80-81, 93 Nook, 77-78 competition and, 84 ride-hailing platforms and, 108–109 no-surcharge rules, 139-140 predatory pricing, 83-84, 85-86, 108 Ohio v. American Express Co. (AmEx), 32-33 prediction technology, 5, 23 price algorithms, 106, 111 oligopolies, 92-93, 140



Index 189

limits of standard approaches to, 131-132 price competition, 107, 127-128 market, 133 price discrimination, 84 price fixing, 32, 110-111 of market power, 62-65, 66 antitrust laws and, 111 of price, 66, 67, 74, 118–120, 127–129, 153–154, 155 Uber and, 111-112 public agencies for, 126 price regulation, 66, 67, 74, 118–120, 127–129, public utility, 76-77, 126 of ride-hailing platforms, 118-121, 124-125 153–154, 155 scope of, 44 price skimming, 39, 123-124 price structures, 27, 28, 29-30, 31, 128 of search ads, 66-67 primary-market entry, 142 sector-specific, 126-127 principal-agent models, 135 of taxi services, 113-114, 118 privacy, 1–2, 21–22, 54–55, 60, 144–145, 164 traditional economic, 44 relevance of search results, 71 private contracting, 118-119 privately owned firms, 135 relevant markets, 16-17, 32-34 privatization, 134-135 remedies, 8, 40, 60-61, 64, 92, 93, 165-166 product differentiation, 5-6, 42, 50, 55, 60, 88, 89, access, 70, 73-74, 129-130, 151, 161, 163 behavioral, 70, 74 95-96, 107, 159 case-by-case, 73-74 productive efficiency, 38 productive inefficiency, 128-129 effectiveness of, 153 profitability, 80, 118 structural, 47-48, 62, 65, 67-70, 130 profit maximization, 29–30, 31, 83–84, 134–135 targeted, 155 retailers, 76-78, 79, 81-82, 85, 86, 92, 151-152 prophylactic bans, 69, 86, 130, 152-153 Prüfer, Jens, 153 return on investments, 127-128 public choice theory, 131-132, 135 revenue share, 15, 16-17 public ownership, 134–135 ride-hailing platforms, 97–99, 113–114, 128, 158, 160. public policy, 1-2 See also Lyft; Uber public regulatory agencies, 126 algorithmic matching and, 124 alternative structures in, 101 public utility, 40, 76-77, 126 pure marketplace, 101-103, 119 concentration and, 117 exclusivity and, 109-110 pure platform models, 25, 103 hybridity and, 105-107 quality, 22, 40, 48, 50, 53-54, 59, 70 matching and, 114 externalities, 141 passenger destination and, 123-124 metrics, 54, 60 predation and, 108-109 reduction of, 64-65, 66, 67-68, 144-145 regulation of, 118-121, 124-125 in small urban areas, 114 Quidsi, 85-86, 143 supply-side scale economies and, 116-117 race to the bottom, 164 robber barons, 16 Radio Telefis Eireann (RTE) and Independent Rochet, Jean-Charles, 24-25, 27, 28 rule of reason, 31, 32 Television Publications Ltd (ITP) "rules of the game," 94 v. Commission of the European Rysman, Marc, 24-25 Communities, 150-151 Ramsey pricing, 39 rates of entry, 15 Salop, Steven C., 92-93 ratings, 114-115 scarcity, 42, 47-48, 55, 60, 64, 65, 70, 90 refusal to deal, 62, 92, 139, 146-147, 148, 149, artificial, 72, 151 150, 163 reducing, 129-130 shareability and, 74 regulation, 7-8 of Amazon Marketplace, 91 Schmalensee, Richard, 24-25 competition policy and, 154-155 Schumpeter, Joseph A., 7, 8, 10–11, 12 desirability of, 91 Schumpeterian competition, 136, 139, 165-166 exclusion and, 138 entry, 127–129 of entry, 120-121 institutional refinements for, 163-164 imperfect, 43-44 virtues of, 152



190 Index

search bias, 49, 60-61, 62, 64-65, 68-69, 71-72, structural remedies, 67-70 subadditivity, 37, 38, 43, 57, 74, 87, 158 – 159, 160 – 16186, 161 search engines, 5, 23, 151-152. See also horizontal sunk costs, 38 search engines; online search engines superstar digital platforms, 15-16 access to, 73-74 supply chain, 90 algorithm predictions, 5, 59 supply-side scale economies, 4-5, 40-41, 116-117, breaking-up, 128-129 as direct provider of content, 70 points of minimum efficient scale associated relevance of results of, 71 universal search, 64 ride-hailing platforms and, 116–117 upstream and downstream segments of, 68 supra-competitive prices, 127-128 vertical search, 50, 51, 55, 60-61, 62, 63, 64, Supreme Court, US, 32-33, 148-149. See also specific 68-69, 72, 74 cases search neutrality, 71 switching costs, 2-3, 43, 89, 102-103, 109-110, 122, search ads, 66-67 125, 133-134 sector-specific regulation, 126-127 symmetric matching, 28-29 sector-specific regulators, 132, 145 Taplin, Jonathan, 164-165 self-driving vehicles, 115-116 self-preferential search results, 51 target advertising, 51-53 sellers, 1, 88-89 taxi services, 112 Shapiro, Carl, 3, 92-93 competition and, 98 shareability, 72-73, 74 economies of scale and, 116 shareability constraints, 70 independent car owners, 100 sharing economy, 99, 112 regulation of, 113-114, 118 control of prices and, 106 traditional, 108 technological change, 4, 6, 42, 120 on-demand transportation services and, 105 concentration and, 19-20 platforms, 105 profitability of, 118 economic activity and, 11 structure of, 99-107 forms of, 13 technological change and, 20-21 nature of, 36-37 technological features of, 113-114 pace of, 43 Sherman Act (US), 11, 15, 111, 147 sharing economy and, 20-21 Section 1 of, 32 technological displacement, 132 Section 2 of, 61-62 Tepper, Jonathan, 164-165 Tesla Network, 104 shipping costs, 79–80 Sidak, Gregory, 71-72 theory of the firm, 18-20 single-firm dominance, 137–138 thick networks, 101-103, 108, 114 single-homing, 109 Tirole, Jean, 3, 24-25, 27, 28, 136, 165-166 Sisk, David E., 120 total welfare, 136-137 Sky scanner, 49-50 transaction costs, 53, 64, 101-102 Skype, 143 transaction fees, 102 small businesses, 11, 16, 136, 137, 139, 164–165 transportation platforms, 99-107 travel services, 49-50 small but significant and non-transitory increase in price (SSNIP), 29-30 Tribune Company v. United States, 147-148 small urban areas, 114 Trip Advisor, 49-50 social networks, 1 Trivago, 49-50 South Africa, 144-145 two-sided intermediaries, 19 SSNIP. See small but significant and two-sided models, 51-53, 54-55, 100-101 non-transitory increase in price pure, 102-103, 105, 106 standard monopolists, 39 tying, defensive, 140-143 Standard Oil, 76-77, 130 standard price, 7-8 Uber, 97, 99, 104, 108, 123 status quo bias, 54, 59-60, 64-65, 89, 102-103 antitrust laws and, 110 storage, 90-91, 96 contractual conditions of, 105-106



Index 191

drivers and, 105 hybrid models of, 51 multihoming and, 109-110 market power leverage and, 129-131 nationalization of, 135-136 partial, 107 price algorithms and, 106, 111 vertical mergers, 92-93 price fixing and, 111-112 vertical restraints, 32 vertical search, 50, 51, 55, 60-61, 62, 63, 64, 68-69, transaction costs and, 101-102 weekly and hourly guarantee programs from, vertical separation, 65, 69, 130, 161 UberEATS, 121 vertically integrated industrial enterprises, 17 UberPOOL, 116 virtual stores, 90, 95-96 UberRUSH, 121 Visa, 32 under-utilized assets, 99-100 visual prominence, 50, 51, 60-61, 64-65, 68-69, 73 United States (US), 11, 14, 15-16, 55. See also Supreme Court, US; specific departments waiting times, 114-115 Waldman, Michael, 142 Sherman Act, 11, 15, 32, 61-62, 111, 147 Walmart, 88, 91 United States v. Apple, Inc., 110-111 United States v. Associated Press 326 US 1, 147-148 Waze, 69, 143 Weyl, Glen, 135-136, 137, 143-144 United States v. Philadelphia Nat'l Bank, 32-33 United States v. Terminal Railroad Assn of WhatsApp, 143 Whinston, Michael, 142 St. Louis, 147-148 White, Alexander, 137, 143-144 universal search, 64, 70 UPS, 91 Wholefoods, 85-86 US. See United States Williamson, Oliver E., 133, 142 users' profiles, 153 Windows operating system, 141 winner-takes-all tendencies, 81, 84-85, 87, 108-109 value chain, 17, 22 Wright, Julian, 28 Wu, Tim, 94, 95, 130 van Alstyne, Marshall W., 24-25 Verizon Communications Inc v. Law Offices of Curtis V. Trinko, LLP, 148-149 Yahoo, 22, 49-50 vertical agreements, 110-111 Yelp, 49-50 vertical breakups, 65 YouTube, 63, 69, 143 vertical integration, 40, 55, 67-68, 70, 84-87, 104

Zhu, Feng, 91-92

discrimination by, 145-152