INDEX

A

Aakash (low-cost tablet), 113–114
Accenture, 16
Adafruit.com, 205
Adopt (Harford), 99
Adaptation strategies: acting with speed and agility, 92–95; experimenting in order to reach goal, 91–92; Haier’s innovative, 94–95; improvising instead of planning, 89–91; survival through, 87–95; thinking the unthinkable, 88–89. See also Flexible thinking
Adversity: how 3M’s jugaad spirit overcame the recession, 51–53; how General Electric successfully innovates in, 187–188; how resilience is nurtured by, 31–33; how Tulsi Tanti created success out of, 29–31; learning to capitalize on, 42–51; major sources facing Western companies, 38–42; reframing half-empty glass as half full, 33–37; research on how people react to crisis and, 32. See also Capitalizing on adversity; Seek opportunity in adversity principle
Age of Now, 171
Age of Scarcity, 74
Aging population: of Chinese consumer sector, 142; increasingly larger consumer sector in Western economies due to, 142–143
Ahuja, Simone, 17
Akerson, Dan, 125
All India Institute of Medical Sciences (New Delhi), 223
Allianz Global Investors (Germany), 172–173
Aloft (Starwood Group), 76
Amazon, 41, 98, 103, 149
Amazon’s Kindle Fire, 114
American dream, 145
Analytical Engine, 204
Ancona, Xavier Lopez, 137
Andressen-Horowitz, 149
Andressen, Marc, 149
Anthem, 191
Apple: customer-pleasing approach of, 54; following your heart principle as practiced by, 177–179; iPad cost, 114; iPad created without market surveys by, 101; low-cost competition to, 71; radical innovation practiced by, 173; “user-centric design” approach used at, 121. See also Jobs, Steve
Apple iPad, 16, 24, 65, 101, 114, 121, 177
Apple iPod, 17, 121, 177, 190, 221
Aquino, Barn, 64, 65, 163, 166, 167
Aquino, Corazon, 64
Aronowitz, Kate, 129
Ashoka’s AshokaHub, 222
Asset-light business model, 58, 62–63
Assis, Heloísa Helena (Zica), 137–138
Austerity factors: competition from low-cost rivals, 70–71; dwindling natural resources, 70; government regulations, 70; increasingly frugal customers, 70; rivalry from agile Western startups, 71
Auto-entrepreneur program (France), 215
Auto industry: doing more with less, 75–76; KPT’s Revo kits, 65–66; low-cost competition from India and China, 70–71; Renault’s entry into low-cost brands, 150–151; Tata Motors’ frugal and flexible innovation in the, 21–22, 76, 90, 148. See also U.S. auto industry
B

Babbage, Charles, 204
Baby boomers: Generations X and Z joining workforce with, 15; preference for simplicity by, 117
Bara, Mary, 125–127
Base of the pyramid (BOP) consumers, 64, 65, 97, 150–151
Basu, Radha, 219
Bay Area Financial Capability Innovators Development Lab, 225
Beach, David, 217
Beacon Community program, 191
Beijing Aerospace, 61
Beleza Natural (Brazil), 138
Benioff, Marc, 44–46
Bernoff, Josh, 169
Bernstein, Leonard, 186
Berwick, Donald, 207–208
Best Buy, 103, 104–105, 199
Better Under Pressure (Menkes), 42
Bhatt, O. P., 33, 34, 35
Big Bazaar, 23–24, 162, 167
Biju, Rama, 137
Bill Float, 208
Binary logic, 97
Biodesign program (Stanford-India), 223, 227
Biyani, Kishore, 23–24, 159–160, 162, 167
Blink (Gladwell), 168
Bloomberg Businessweek, 79–80
Bloomberg, Michael, 223
Blue Cross and Blue Shield, 152–153
Boeing, 10, 152
Booz & Company, 9, 55, 177
Borders.com, 41
Brabeck-Letmathe, Peter, 39
Brands: for eco-aware consumers, 78; for low-cost products, 76
Brazil: Beleza Natural salons in, 138; generic drug makers of, 70; how scarcity is mother of invention in, 59–60; large number of consumers in, 60; polycentric structure empowering markets in, 47. See also BRICs (Brazil, Russia, India, China) nations
Breakneck globalization, 16–17
Browenham, Terri, 188
BRICs (Brazil, Russia, India, China) nations: examining drivers of innovation in, 18; extreme economic conditions prevalent in, 182–183; large base of consumers in, 60; new approach to innovation emerging in, 17–19. See also Brazil; China; India
British government’s jugaad initiatives, 214–215
Bross, Matt, 170
Brown, Tim, 170
Bruck, Armin, 122, 123
Buckley, George, 11, 53, 55
Burton, Denise, 176
Business models: asset-light, 58; 62–63; conversion franchising, 64–65; experiment with multiple, 103; how IBM’s growth mindset changed its, 49–50; “innovator’s dilemma” of failing to adapt, 98; “more for less,” 74–79; “more for more,” 71; reinventing to take advantage of shifting conditions, 40; salesforce.com’s innovative, 44–46; securing C-level buy-in to drive systemic changes in, 153; tapping networks as part of, 50–51, 63–65
BusinessWeek, 121, 130

G
C-level leaders: growth mindset of innovative, 48–50; how they can drive adoption of jugaad, 195–200; securing buy-in to drive changes, 153. See also Jugaad principles
Cameron, David, 214
Capitalizing on adversity: approach challenges with growth mindset, 48–50; build psychological capital to boost resilience, 46–48; how 3M successfully approached, 51–53; realize extreme conditions are fertile soil for innovation, 44–46; recognizing that the glass is always half-full, 42–44; tap networks to tackle market threats, 50–51. See also Adversity
CARD MRI (Philippines), 64
Carmichael, Philip, 94
Cascade tool (New York Times Company), 106
Celsius (Mexico), 33–36
Center for Financial Services Innovation (CFSI), 147, 148, 153, 195, 225
Center for Information Technology Leadership, 133
Centers for Disease Control and Prevention, 221
Centers for Medicare and Medicaid Services, 207
Centers of Passion (frog), 24
Centre for India & Global Business, 18
CEO. See C-level leaders
Ceres, 39
Change: how innovation impacted by velocity of, 15–16; securing C-level buy-in to drive systemic, 153
Charles Schwab Bank, 225
Chen, Jane, 67, 69, 84, 217, 218
Chengalpattu Government Medical College (India), 109–110
Chhatpar, Ravi, 163–164
Children’s Healthcare of Atlanta, 208
China: fast-growing economy of, 18; how scarcity is mother of invention in, 59–60; large number of consumers in, 60; people with diabetes in, 85; polycentric structure empowering multinationals’ subsidiaries in, 47; rapidly aging consumer sector in, 142. See also BRICs (Brazil, Russia, India, China) nations
Chipchase, Jan, 163–164
Christensen, Clayton, 98
Chrysler, 9–10
Church & Dwight, 157
Cisco, 86, 152–153
Clay fridge innovation, 1–3
Clinton, Hillary, 224
Code for America, 225
“Common sense retailing,” 160
Competition: low-cost companies from emerging markets increasing, 70–71; Western start-ups, 71
Complemancy, 95–97
Complexity: factors driving, 13–17; simplicity movement as backlash against, 116–117
Complexity factors: breakneck globalization, 16–17; diverse workforce, 14–15; interconnectivity, 15; scarcity of resources, 13–14; velocity of change, 15–16

Comstock, Beth, 192

Consumers: aging population of, 142–143; base of the pyramid (BOP), 64, 65, 97, 150–151; creating separate brands for low-income and high-income, 76; engaging eco-aware, 78; “fat tail” (dominant), 146, 147; getting more value for less cost, 65–69; Hispanic, 15, 143–144; including the margin (marginalized), 22–23, 131–158; large base in BRICs, 60; Maslow’s hierarchy of needs and, 136–138; Nokia’s ethnographic approach to filling needs of, 112–113. See also Customers

The Container Store, 176

Continuum, 173

Conversion franchising model, 64–65

Cook, Tim, 179

Cor Brasil (Brazil), 138

Core values: IBM’s, 101; improvisation by breaking rules and shifting, 100–101

Corporate social responsibility (CSR), 97, 146, 150

Coulsdon, Stuart, 217

Cox, Christopher, 129

“Creative capitalism,” 133

Credit Appraisal Toolkit (CAT) [YES BANK], 132

Crowdsourcing, 200

Cuervo, Soleio, 105

Customer-centric design, 121, 173

Customer-minded innovation, 178

Customer value: Haier’s “value for money” strategy, 93; how simplicity adds to, 111; include the margin approach for cocreating, 134–142; provided to customers for less cost, 65–69; R&D that rewards cleverness instead of, 119

Customers: clamoring for simplicity, 116; design simple products around basic needs of, 121; engaging in heart-to-heart communication, 174–175; helping them get more value for less cost, 65–69; how R&D is disconnected from real-world, 170; increasingly frugal, 70; looking for authentic relationships, 169; marketing executives who are emotionally disconnected from, 171; risk of letting innovation agenda be dictated by inflexible, 101; service innovation to better serve, 114–115; serving the marginalized sector of, 22–23, 131–138. See also Consumers

D

Daily Duo vacuum cleaner (Philips), 121

Danone (France), 46–48

Das, Kanak, 20, 34–35

DataWind (UK-based), 114

Davis, Miles, 186

DDX (Digital Direct X-ray), 61

“Defeaturing” practice, 113

Deshpande Foundation, 213–214

Deshpande, Gururaj “Desh,” 214

Design: Apple’s “user-centric,” 121; “defeaturing” practice, 113; embracing customer-centric, 121, 173; embracing inclusive design principles, 154–156; from the ground up, 113–114, 121–124; getting engineers and industrial designers working together, 124–125; simple products around basic needs of customers, 121; Steve Jobs’s passion for, 179; universal design philosophy, 124. See also Products; R&D (research & development)

Design for America (DFA), 220–222

Designing Our Tomorrow (DOT) [University of Cambridge], 220

“Detached engagement,” 166–167

Dharma (personal obligations), 166

Diabetes SMS-based control (Tulane University), 202

Diabetes Specialties Centre (Chennai, India), 85–86

Diaz, Illac, 112

DimensionU, 207

“Direct seeding” rice planting technique, 82

Disengaged employees, 98–99

Diverse consumer base: increasingly, 134; from marginal to becoming the majority, 142–146; Western firms not designed to meet needs of, 146–147. See also Marginalized consumers

Diverse workforce: increasing population of, 14–15; providing inclusive work culture for, 151–152. See also Employees

DIY (do-it-yourself) generation, 203–205, 211

Do more with less principle: General Electric’s approach of, 188–189; Gustavo Grobocopatel’s approach of, 21, 57–58; helping customers get more value by, 65–69; how Western firms are learning to, 69–79; PepsiCo’s approach to, 79–83. See also Frugal business strategies; “More for less” business model; Resource scarcity

Drucker, Peter, 181

DuPont, 102

DuPage, Carol, 48–50, 95

E

E Health Points (EHPs), 218–219

ECG (electrocardiogram) devices, 77–78, 188–189, 191

Eco-aware consumers, 78

Economies: bringing prosperity through the jugaad movement, 227–228; conditions when jugaad works best, 182–183; diversity of many emerging, 134; dramatic shift in U.S., 144–145; fast-growing BRIC, 18; how companies can profit from the grassroots jugaad movement, 224–227; “plutonomy” unsustainability in current U.S., 145; supporting grassroots jugaad innovators to revitalize local, 224–225

Econova LED TV (Philips), 121

Einstein, Albert, 85, 115

Element (Starwood Group), 76

Eli Lilly, 152

Embrace, 67–69, 217
Index

“Empathy development bootcamps,” 172–173

Flexible thinking barriers: binary logic as, 97; complacency as, 95–97; disengaged employees as, 98–99; rigid and time-consuming R&D, 99–100; risk aversion as, 98

Employees: allowing them time to experiment, 101–102; disengaged, 98–99; encouraging them to trust their gut, 176–177; 15-percent program for experimenting by, 51, 101–102; Gallup survey on disengaged, 99, 172; looking for meaning in their work, 168, 169; outdated human resource management of, 171–172; persuading them to adopt jugaad, 196–197; problem of limited availability of skilled, 111; providing inclusive work culture for, 151–152; unique characteristics of Gen Y and Z, 144. See also Diverse workforce

Endeavor, 104, 223

Energizer Holdings, 157

Engineering Design Centre (University of Cambridge), 143

Entrepreneurial Design for Extreme Affordability Program (Stanford University), 27, 67, 216–218, 226

Fabre, Fernando, 104

Fabre, Fernando, 104

Facebook: content created by users of, 12; cross-functional teams used at, 125; easy interface of, 96, 128–130; encouraging their employees to trust their gut, 176; explosive growth of, 39, 128; flexible thinking applied to, 93; how teams work together at, 105; how the groundswell jugaad movement is facilitated by, 225–226; information networks through, 16, 169; as low-tech revolution leader, 128–130; New York Times Company (NYTC) predictions for success of, 106; simplicity approach adopted by, 117. See also Social media

The Facebook Effect (Kirkpatrick), 225

Failure: practicing “detached engagement” to overcome fear of, 166–167; leading into success through, 103–105

Fast Company Most Influential Women in Technology, 205

“Fat tail” (dominant) consumers, 146, 147

FDG (fluorodeoxyglucose) delivery, 187–188

FDIC, 147

Financial inclusion services, 208–209

Flexible thinking: barriers to Western firms, 95–100; breaking down organizational silos, 103–106; Dr. V. Mohan’s mobile telemedicine clinic as, 83–86; General Electric’s success with, 189–190; how the jugaad approach increases, 185; jugaad principle of, 20–21; learning to improvise and have, 100–103; New York Times Company (NYTC) approach to, 106–107; survival through adaptation and, 87–95. See also Adaptation strategies

Ford, 10, 40, 225–226

Ford, Henry, 101

Ford’s “Fiesta Movement,” 226

Foreign Policy magazine, 113

Forrester Research, 17, 169

Fortune magazine, 79

Franklin, Benjamin, 7, 202

French government’s jugaad initiatives, 215

Fried, Limor “Ladyada,” 203–205

frog: Centers of Passion initiative of, 24; crowdsourcing practiced by, 200; engaging the passion of their employees, 176; specialized consultation services of, 173; working with emerging market innovators, 163–164

From the ground up design: benefits of, 113–114; simplify your organization by instituting, 121–124

Frugal business strategies: finding abundance in scarcity through, 74–79; General Electric’s approach to doing more with less, 188–189; leverage existing networks for distribution, 63–65; PepsiCo’s approach to doing more with less, 79–83; remaining asset-light, 62–63; Renault’s, 150–151; reuse and recombine, 61–62. See also Do more with less principle; Resource scarcity

Frugal customers, 70

“Frugal engineering,” 76, 151, 197

Frugal Innovation Labs (Santa Clara University), 218–219

Frigidaire

Frugal lifestyles, 210, 211

Fry, Art, 11, 51

The Future of Management (Hamel), 40

Gallup surveys on disengaged employees, 99, 172

Gaming industry, 210–211

Gambiarra, as Brazilian form of jugaad, 5

Gandhi, Mahatma, 166

Gap, 175

Gate, Bill, 131, 133, 138

GE Healthcare, 140, 187

GE Healthcare India, 188

General Electric (GE): adoption of Embrace’s low-cost incubators by, 69; do more with less
principle used by, 188–189; Healthymagination program of, 153, 191; Six Sigma approach used by, 10, 192–193; successful integration of Six Sigma and jugaad by, 186–193

General Motors (GM), 9–10, 22, 40, 111, 125–127, 194

Generation Y (Millennials): diverse workforce due to, 14–15; DIY (do-it-yourself) generation using jugaad, 203–205, 211; how Ford is using social media to connect with, 226; looking for meaning and passion in their work, 168, 169, 194; preference for simplicity by, 117; reinventing products for, 96–97; reshaping entire industries, 205–211; scarce resources and consumer base of, 14; unique workforce characteristics of, 144

Generation Z: diverse workforce of the, 15; preference for simplicity by, 117; reinventing products for, 96–97; scarce resources and consumer base of, 14; unique workforce characteristics of, 144

Geng, Diane, 24, 162–163

Ghosn, Carlos, 151, 197

Gilbert, Ryan, 208

Gladwell, Malcolm, 11, 168

Global Nutrition Group (GNG) [PepsiCo], 81

Globalization: harnessing ingenuity across borders, 226–227; how innovation is impacted by breakneck, 16–17

GlobalLogic, 96–97

Goldman Sachs, 18

Google: “closed Swiss Army knife” metaphor for products of, 127; Code for America funding by, 225; cross-functional teams used at, 125; encouraging their employees to trust their gut, 176; failure celebrated at, 104; 15-percent program of, 51, 101–102; flexible network of small teams used at, 100; flexible thinking applied at, 93; simplicity approach adopted by, 117, 127

Google Android, 114

Google Health, 104

Google Mail, 102

Google Maps, 102

Google PowerMeter, 104

Government regulations: as business barrier in India, 31–32; as increasing issue in Western economies, 70

Grobrocopathel, Gustavo: asset-light strategy used by, 58, 62; examining the more with less approach of, 21, 83; innovative subcontracting business model used by, 57–58

Groundswell (Bernoff and Li), 169

Growth mindset, 48–50

H

Hanke, John, 102

Hapinoy Community Stores (Philippines), 64

Hapinoy Program (Philippines), 64, 165–166, 167

Harford, Tim, 99–100

Harvard Business Review jugaad blog, 26, 214

Health care delivery: Centers for Medicare and Medicaid Services approach to, 207–208; Dr. Jeganathan’s minimalist incubator, 109–110; Dr. V. Mohan’s telemedicine solution for diabetes patients, 83–86; E Health Points (EHPs) medical clinics, 218–219; Embrace’s portable infant warmers, 67–69, 217; infusion pumps made from recyclable parts, 217; Siemens’s Fetal Heart Monitor, 124; SMS for diabetes-control, 202; Stanford-India Biodesign program for development of affordable, 223; telemedicine programs for, 152–153; Text4Baby free service for, 154

Health Cloud, 141–142

Healthpoint Services India, 218–219

Healthymagination program (GE), 153, 191

Hewlett-Packard (HP), 113

Hispanic population: increasing consumer sector of, 143–144; workforce percentage of, 15

Hocking, Clint, 211

Holmes, Oliver Wendell, 109

Hosking, Ian, 143, 219–220

Hospital-acquired infection (HAI), 221

HTC (China), 39, 71, 100, 148

Huawei, 71, 100, 170

Human resource management, 171–172

“Humanizing technology,” 118

Hurricane Katrina, 202

IBN magazine, 178

Including the margin principle: cocreating value strategies for, 134–142; enabling financial inclusion, 208–209; General Electric’s success with, 191; how Procter & Gamble approaches, 128–131; how Tata Motors’ success with, 101; IBM: Airlit’s IT infrastructure managed by, 62–63; CEO survey (2010) by, 13, 17; flexible thinkers of, 103; growth mindset of, 49–50; Smart Planet initiative of, 101; “ValuesJam” online brainstorming at, 101, 199–200

IDEO, 170, 173, 200

Immelt, Jeffrey, 57, 153, 186–187, 192

Improvisation: as alternative to structured approach, 24–25; for experimenting with multiple ways to reach goal, 91–92; jugaad innovators’ effective use of, 89–90; learning to use, 100–105; Tata Motors’ successful, 90–91

Improvisation skills: allow employees time and space to improvise, 101–102; break rules and shift values as needed, 100–101; don’t let others dictate your innovation agenda, 101; experiment with multiple business models, 103; getting outside your comfort zone, 102; partner with flexible thinkers, 102–103; willingness to fail, 103–105

Inc. magazine, 178
Index

Including the margin principle: (continued)
156–157; increasing profits by, 150–156; as jugaad principle, 22–23; as moral imperative that makes business sense, 133–134; YES BANK’s approach of, 131–133. See also Marginalized consumers

Inclusive work culture, 131–152
India: barriers to starting a business in, 31–32; examining the grassroots entrepreneurship in, 18–19; how scarcity is mother of invention in, 50–60; jugaad (“innovative fix”) practice in, 3–5; large number of consumers in, 60; MitiCool’s innovation in, 2–3; people with diabetes in, 85. See also BRICs (Brazil, Russia, India, China) nations
Indian Institute of Management (IIM) [Ahmedabad, India], 1, 35
Indian Institute of Technology (IIT), 223
Indian Space Research Organization (ISRO), 86, 92
Indique: Big Ideas from Emerging India (PBS documentary series), 26
Industrial Revolution: historic practitioners of jugaad during, 5–8; McCormick’s reaper innovation during, 6; Yankee ingenuity driving the, 5
Infant mortality: Dr. Jegannathan’s minimalist incubator to reduce, 109–110; Embrace’s portable infant warmers to reduce, 67–69, 217; Siemens’s Fetal Heart Monitor to reduce, 124; Text4baby free service helping to reduce, 154
Infusion pumps (Bangladesh hospitals), 217
Innovation: customer-minded, 178; how jugaad

‘Innovator’s dilemma,” 98–99

(International Finance Corporation (World Bank), 36
International Monetary Fund (IMF), 38
“Intrapreneurship,” 98–99
Intuition: as The Container Store’s foundation principle, 176; “gut intelligence” form of, 168; Kishore Bhatny’s “common sense retailing” using, 159–160; why firms shun, 170–171. See also Follow your heart principle
INXS Technologies (India), 161
Isaacson, Walter, 177
Isang Litrong Liwanag (A Liter of Light), 112
Ive, Jonathan, 178
J
Jackson, Phyllis, 157
Jain, Anil, 164–165
Jain Irrigation Systems Ltd. (India), 164–165
Jana, Reena, 130
Jeganathan, Sathy, 109–110
Jobs, Steve: able to zero in on customer needs, 121; famous for heeding his intuition, 24, 173, 177–179; on following your heart, 159. See also Apple
Johnson & Johnson, 154, 156, 191
Jua kali, as Kenya’s equivalent of jugaad, 5
Jugaad adoption agenda: apply jugaad to formulate robust strategies, 199; avoid implementing jugaad in top-down fashion, 196; celebrate your existing jugaad innovators, 196; cross-pollinate and synergize jugaad ideas, 198–199; monetize jugaad inventions, 197–198; persuade skeptical employees, 196–197; use Web 2.0 tools to harness customer and partner creativity, 199–200
Jugaad community: campus recruiting of new members for the, 226; emergence of global, 222–224; training future jugaad innovators of the, 216–222; Western governments partnering with the, 211–216
Jugaad (“innovative fix”): as complement to structured innovation, 24–25; examining the growing movement in the West, 26–27; history of Western, 5–8; how CEOs can drive adoption of, 195–200; how the West lost its, 8–13; improvising ingenious solutions through, 3–5; international applications of, 5; introducing six principles of, 19–24; MitiCool as, 2–3; strategies for getting started with, 193–195; training future innovators in, 216–222; zichu chuangxin, as Chinese form of, 164. See also Innovation
Jugaad integration strategies: mixing jugaad with structured innovation, 183–186; understanding when jugaad works best, 182–183
Jugaad movement: bringing a more prosperous world through, 227–228; how companies can profit from the, 224–227; how Generation Y innovators are reshaping entire industries, 203–211; ingenuity economy as part of the, 202–203; rapid growth and institutional support of, 201; Western governments joining the, 211–216
Jugaad principles: do more with less, 21, 57–84; jugaad principle, 22–23; as moral imperative that makes business sense, 133–134; YES BANK’s approach of, 131–133. See also Marginalized consumers
Jugaad training: Design for America (DFA) approach to, 220–222; Santa Clara University’s Frugal Innovation Labs, 218–219; Stanford University’s Entrepreneurial Design for Extreme Affordability course, 27, 67, 216–218, 226; University of Cambridge’s inclusive design program, 219–220
Junco, Enrique Gómez: adaptability of, 35–36; how adversity was reframed by, 20; innovation by reframing, 37
Kiapa, Prasad, 33–34, 95–96, 166
Kant, Ravi, 90–91
Kapoor, Rana, 131–133, 134
Kauffman Foundation, 215

Keep it simple principle: as backlash against complexity, 116–117; example of the art of, 112–116; General Electric’s approach of, 190–191; growing evidence of need for, 118–119; how the Facebook approach is to, 128–130; as jugaad principle, 22; Dr. Jeganathan’s minimalist incubator example of, 109–110; practical benefits of, 111. See also Low-tech revolution; Simplicity strategies
Kellogg, 44
Kennedy, John F., 199
Khan Academy, 206–207
Khan, Mehmood, 80–81
Kickstarter.com, 216
KidZania, 137
Kinect (Microsoft), 204
Kirkpatrick, David, 225
Kodak, 98
Koh’s, 76
KPIs (key performance indicators), 74–75
KPIT Cummins Infosystems (India), 65–66
Kshatriya, Tejas, 66

Lada (low-cost car), 75
ladyada.net, 205
Lafler, A. G., 78–79
Lam, Sara, 24, 162–163
Lapenna, Lily, 203
The Laws of Simplicity (Maeda), 118
Leaders: growth mindset of innovative, 48–50; how CEOs can drive adoption of jugaad, 193–200; securing buy-in to drive changes, 153
Leberecht, Tim, 185
Levy, Rob, 147, 148–149
Li, Charlene, 169
Liang, Linus, 67, 217
Lifestyle downshifting, 117
“the Limping Middle Class” (Reich), 145
LinkedIn, 15
Lorenzo, Doreen, 97
Los Grobo (Argentina), 21, 58, 83
Lowther, Peter, 122
Love, Lucy, 204, 205
Lorenz (Roberts), 164
Low-cost brands, 76
Low-tech revolution: factors driving the, 116–117; global examples of successful, 112–116; how Facebook is leading the, 128–130; practical benefits of the, 111; R&D (research & development) impact by, 110–111; why Western firms reject the, 118–119. See also Keep it simple principle
Lucile Packard Children’s Hospital (Stanford University), 69
Luhuamen Athletica, 173
LUNAR, 173
Luthans, Fred, 46

M
M-PESA service, 61–62
MAC 400 (portable ECG) [GE], 189, 191, 192
MAC 1, 77–78
MacArthur Research Network on Transitions to Adulthood, 14
MacGyver (TV series), 5, 203
Maeda, John, 72, 118
Malina, Yuri, 221
ManpowerGroup survey, 59–60
Marginalized consumers: base of the pyramid (BOP), 64, 65, 97, 150–151; enabling financial inclusion of, 208–209; General Electric’s inclusion of, 191; how Procter & Gamble serves, 156–157; how to increase profits by including the, 150–156; increasing competition facing Western firms for, 147–149; transitioning into the majority, 142–146; why Western firms ignore the, 146–147. See also Diverse consumer base; Including the margin principle
Marino, Mario, 213
Marketers: disconnected from their customers, 171; innovating radically instead of following traditional, 173
Markets: adopting best practices from emerging, 154; approaching marginal groups as whole new, 133–136; creating separate brands to increase coverage of, 76; diversity of global, 134; grassroots networks used for cover distribution to, 50–51, 63–65; multinational firms’ polycentric structure empowering units in BRIC, 47; resource scarcity as barrier to emerging, 32; start-ups entering the marginal, 149; Western firms facing increased competition in core, 147–149
MarketSimplified platform (INXS Technologies), 161
Marzaro, Stefanó, 120
Maslow, Abraham, 136–138
Maslow’s hierarchy of needs, 136
MasterCard, 44, 149
Mathematics low-cost education, 206–207
Mayer, Marissa, 127
Mayo Clinic, 80
McCartney, Liz, 202
McCormick, Cyrus, 5–6, 7, 202
McCormick’s reaper, 6
McDonald, Robert, 12, 105–106, 157
McNerney, Jim, 52, 33
Medical care. See Health care delivery
Mendiola Sanchez, Ramon, 74–75, 150
Menkes, Justin, 42
Merrimack Valley (Massachusetts), 213
Merrimack Valley Sandbox, 213–214
Index

Microloans of microfinance institutions (MFIs), 131–132, 136
Microsoft, 113, 131, 177, 204, 225
MicroVentures (Philippines), 64
Millennials. See Generation Y (Millennials)
MintyMP3, 205
MIT, 113, 214
Mittal, Sunil, 21, 62, 83
Mitticool fridge innovation, 2–3
Mobile SMS (text messaging), 115–116
Mohan, V., 85–86, 88, 92, 98
Monty, Scott, 226
"More for less" business model, 74–79. See also Do more with less principle
"More for more" business model, 71
Motorola, 10, 100
Muller, Thomas, 32
Murphy’s Law, 90
Murty, Naganand, 67, 217
Muslim population, 144
MyBnk (UK), 203
N
Naha, Abhi, 23, 135–136
Nano (low-cost auto) [Tata Motors], 76, 90, 148
Narayana Hrudayalaya (India), 166–167
National Electronic Fund Transfer (NEFT) system [YES BANK], 139
National Innovation Foundation, 35
Neutle, 39
Netcape, 149
Networks: benefits of Hapinoy Program, 64–65, 163–166, 167; Colgate Palmolive use of, 63; Design for America (DFA), 220–222; forming "passion," 167; harnessing ingenuity across borders with global innovation, 226–227; market distribution through, 50–51, 63–65; MicroVentures use of, 64; partnering for low-cost products, 78–79. See also Partnering strategy
Neusoft (China), 23, 141–142, 198
New Economy Initiative for Southeast Michigan (NEI), 215–216
New York Times Company (NYTC), 22, 106–107
Next Idea competition (New York City), 223–224
Nike, 173
Nokia: Chinese companies successfully competing against, 39, 71, 100; 1100 cellphone sold by, 76, 113, 173; ethnographers employed by, 112–113
Non-governmental organizations (NGOs): corporate social responsibility (CSR) of, 150; corporations partnering with, 153; Deshpande Foundation’s Merrimack Valley Sandbox, 213–214; mobile SMS (text messaging) used during relief efforts by, 115–116; New Economy Initiative for Southeast Michigan (NEI), 215–216; Operation Hope, 146; relevance of jugaad practices for, 209; Rural China Education Foundation (RCEF), 24, 163; Sightavers, 139; Venture for America (VFA), 215–216; Venture Philanthropy Partners (VPP), 213. See also Organizations

O
Obama administration: push for stringent federal fuel economic standards by, 38; several initiatives to stimulate community-led innovation by, 212–213. See also United States
Obama, Barack, 27, 212
100 Global Leaders for Tomorrow, 337
Open source hardware (OSHW) movement, 204
Operation Hope, 146
Optima Energía (Mexico), 20, 36–37
Oracle, 44, 46, 117
Organizational silos: description of, 105; flexible thinking to break down, 105–106
Organization: CEO agenda driving jugaad adoption by, 195–200; creating “centers of passion” across your, 173–176; integrating jugaad into your, 181–200; start-up, 71, 149, 216; strategies for simplifying your, 119–128. See also Non-government organizations (NGOs); Western firms
Out of Poverty (Polak), 217
Outliers (Gladwell), 11
OXO, 124
P
Palensky, Fred J., 198–199
Palmisano, Sam, 49–50, 101
Panelsit, Ravi, 66, 84
Pankaj, Rahul, 67, 217
Parivaranthan training program (SBI), 34
Partnering strategy: corporations with non-profit organizations, 153; for creating low-cost products, 78–79; General Electric’s public-private partnerships (PPPs), 190; partnering with flexible thinkers, 102–103; Social Innovation Fund for promoting community programs, 212–213. See also Networks
Passage (game), 211
Passion: engaging employee, 176; forming network, 167; Generation Y (Millennials) search for meaning and, 168, 169, 194; of Steve Jobs, 178–179. See also Follow your heart principle
Patel, Kal, 104
Patek, James, 217–218
Pattanaik, Devdutt, 167
PayNearMe, 149
Pfizer, 50
PCM pouch (Embrace), 68
PepsiCo: doing more with less approach of, 79–83; Global Value Innovation Center (India) set up by, 81; reinventing its business model, 21
PepsiCo Frito-Lay, 83
PepsiCo India, 81–83
Peyret, Patrice, 209
Pizer, 50
Index

Radjou, Navi, 17–18
Raminakrishna Nagar (India), 1
Ramon Magsaysay Award, 89
Rangan, Venkat, 161, 162
Read, Ian, 50
“Realistic optimism,” 42–44
Reframing adversity, 33–37
Reich, Robert, 145
Renault-Nissan, 75–76, 150–151, 155, 197
Resilience: building psychological capital to boost, 46–48; how adversity nurtures, 31–33
Resilience Advocacy Project (New York City), 202
Resource scarcity: accelerating problem of, 39; austerity factors shaping Western firms’ responses to, 69–79; as contributor to complexity of emerging markets, 32; as barrier to innovation, 13–14; dwindling natural resources and, 70; how it inspires invention, 59–60; how jugaad works with, 182; how simplicity helps solve problem of, 111; PepsiCo’s approach to managing, 79–83; strategies dealing with environment of, 60–65; strategies for getting more value out of, 65–69. See also Do more with less principle; Frugal business strategies
Reuters Market Light (RML), 63–66
Rhode Island School of Design, 72, 118
Riboud, Franck, 46–48
Richardson, Adam, 41
Richie, Brooke, 202
Risk: Western firms’ aversion to, 98; willingness to fail and take, 103–105
Roberts, Kevin, 164, 171, 174
Rohrer, Jason, 210–211
Roosevelt, Theodore, 69
Rosenburg, Zach, 202
Ross, Alec, 224
Ruetenberg, Linda, 223
Rural China Education Foundation (RCEF), 24, 163
Saatchi & Saatchi, 164, 174
Safaricom (Kenya), 61–62
Salar, Jean-Philippe, 197
salesforce.com, 44–46
Samant, Shashank, 96
The Sandbox (Merrimack Valley Sandbox), 213–214
Santa Clara University, 155, 218–219
SAP, 44, 117
Schmidt, Eric, 99, 100
Schultz, Howard, 174
Schweitzer, Louis, 75–76
Scripps Health, 191
Sears, 44
Seek opportunity in adversity principle, 20–21, 187–188. See also Adversity
Self-directed compassion, 178
Self-empathy, 178

Pharmaceutical industry: low-cost competition to, 70; R&D expenditures of the, 9; scrambling to serve the base of the pyramid (BOP) consumers, 97
Philips, 22, 61, 120–121, 194
Philips Design, 209
Pink, Daniel, 13, 168
Plastyc, 208–209
Polak, Paul, 217
Polycentric organization, 47
Porcini, Mauro, 53–55
Portable infant warmers, 67–69
Post-it Notes, 11, 51
The Power of Pull: How Small Moves, Smartly Made, Can Set Big Things in Motion (Hagel, Brown, and Davison), 172
Prabhu, Jaideep, 18
Prajapati, Mansukh, 1–4, 26
Prasad, Venkatash, 226
Procter & Gamble (P&G): Beacon Community program partnership of, 191; CEO on innovation approach of, 12; Connect & Develop mechanism at, 105–106; marginalized consumers served by, 156–157; R&D partnering by, 78–79; shifting to serve the marginalized customers, 23; social media tools embraced by, 43; Tremor software service of, 44; Vocalpoint tool used by, 43–44; YourEncore.com launched by partners of, 152
Products: creating separate low-cost brands for, 76; designed from the ground up, 113–114, 121–124; designing affordable solution, 77–78; eco-aware, 78; how simplicity increases universal appeal of, 111; incentive systems for selling affordable, 76–77; make it simple and not simplistic, 127–128; partnering to create low-cost, 78–79; reinventing for Generation Y and Z users, 96–97; Siemens’s SMART strategy used for creating simple, 122–124, 194; simplify architectures and reuse platforms, 123–127; universal design philosophy to boost usability of, 124; Western firm’s “defeaturing” practice of designing, 113. See also Design models; R&D (research & development)
Public Policy, 14
Public-private partnerships (PPPs), 190

R&D (research & development): Apple’s relatively low expenditures on, 177; challenged to do more with less, 75–76; designing affordable solutions through, 77–78; as disconnected from real-world customers, 170; expense of pharmaceutical, 9; expense of the auto sector, 9–10; falling budgets of, 117, 118; flexible thinking derailed by rigid and time-consuming, 99–100; low-tech revolution of, 110–111; partnering for, 78–79; rewarding cleverness instead of customer value, 119; scaling back on, 71–73; Siemens’s SMART strategy used for, 122–124; structured innovation approach to, 8–13; Western companies reducing investment in, 117. See also Design models; Products; Technology
Radjou, Navi, 17–18
Ramakrishna Nagar (India), 1
Ramon Magsaysay Award, 89
Rangan, Venkat, 161, 162
Read, Ian, 50
“Realistic optimism,” 42–44
Reframing adversity, 33–37
Reich, Robert, 145
Renault-Nissan, 73–76, 150–151, 155, 197
Resilience: building psychological capital to boost, 46–48; how adversity nurtures, 31–33
Resilience Advocacy Project (New York City), 202
Resource scarcity: accelerating problem of, 39; austerity factors shaping Western firms’ responses to, 69–79; as contributor to complexity of emerging markets, 32; as barrier to innovation, 13–14; dwindling natural resources and, 70; how it inspires invention, 59–60; how jugaad works with, 182; how simplicity helps solve problem of, 111; PepsiCo’s approach to managing, 79–83; strategies dealing with environment of, 60–65; strategies for getting more value out of, 65–69. See also Do more with less principle; Frugal business strategies
Reuters Market Light (RML), 63–66
Rhode Island School of Design, 72, 118
Riboud, Franck, 46–48
Richardson, Adam, 41
Richie, Brooke, 202
Risk: Western firms’ aversion to, 98; willingness to fail and take, 103–105
Roberts, Kevin, 164, 171, 174
Rohrer, Jason, 210–211
Roosevelt, Theodore, 69
Rosenburg, Zach, 202
Ross, Alec, 224
Ruetenberg, Linda, 223
Rural China Education Foundation (RCEF), 24, 163

S
Saatchi & Saatchi, 164, 174
Safaricom (Kenya), 61–62
Salar, Jean-Philippe, 197
salesforce.com, 44–46
Samant, Shashank, 96
The Sandbox (Merrimack Valley Sandbox), 213–214
Santa Clara University, 155, 218–219
SAP, 44, 117
Schmidt, Eric, 99, 100
Schultz, Howard, 174
Schweitzer, Louis, 75–76
Scripps Health, 191
Sears, 44
Seek opportunity in adversity principle, 20–21, 187–188. See also Adversity
Self-directed compassion, 178
Self-empathy, 178
Service innovation, 114–115
Shah, Sonal, 213
Shetty, Devi, 166–167
Sibal, Kapil, 113
SICP (White House Office of Social Innovation and Civic Participation), 27, 212–213, 225
Siebel, 44, 46
Siemens AG: description and expansion of, 122; Fetal Heart Monitor developed by, 124; SMART product strategy of, 22, 122–124, 194
Sightsavers, 139
Silva, Rohan, 214
Simplicity strategies: design simple offerings from the ground up, 121–124; designing simple products around basic customer needs, 121; embrace universal design philosophy to boost usability, 124; get engineers and industrial designers to work together, 124–125; make it simple and not simplistic, 127–128; redesign entire organization around simplicity, 119–121; simplify product architectures and reuse platforms, 125–127. See also Keep it simple principle
Singham, Roy, 151–152
Sivakumar, Mr., 34
Six Sigma: General Electric’s successful integration of jugaad and, 186–193; organizational culture of, 99; as structured innovation process, 10–11, 21; used and rolled back by 3M, 52–53, 55
Skoll Foundation’s Social Edge, 222
Slingbox technology, 103
Social computing revolution, 39
Social Innovation Fund partnership, 212–213
Social media: how the jugaad movement is facilitated by, 225–226; innovation through realistic optimism about, 43–44; worry over growth of, 43. See also Facebook; Twitter
Social media: “humanizing technology,” 118; used to lower the cost of inclusion, 152–153; scaling up personalized solutions with, 140–142. See also R&D (research & development)
Telemedicine programs, 85–86, 152–153
Teresa, Mother, 166
Texas Instruments, 39
Think and act flexibly principle. See Flexible thinking
Thomson Reuters (India), 140
ThinkWorks, 151–152
Tata Group, flexible innovation practiced at, 21–22, 90
Tata Motors: improvisation by, 90–91, 148; Nano (low-cost) auto by, 76, 90, 148; new strategies to cope with adversity used by, 22
Tata, Ratan, 21–22, 26, 90, 197
Technology: “humanizing technology,” 118; used to lower the cost of inclusion, 152–153; scaling up personalized solutions with, 140–142. See also R&D (research & development)
Sohionic Systems, 270
Tendulkar, Sachin, 3
Testing: 3M Post-it Notes innovation of, 51; Six Sigma used and then rolled back by, 52–53, 55, 198–199; turning adversity into opportunity, 51–55
Tinder, 176
Todays Motor Car (TMC), 29
Tolkien, J.R.R., 281
TomTom, 156
Total Quality Management (TQM), 283
Tremor software service (Procter & Gamble), 44
Tulane University, 202
Twitter, 16, 39, 43, 169, 225. See also Social media
Ubisoft, 211
UbiComp (Ubiquitous Computing), 18
U.S. government, 372
United Kingdom, 112, 275
United States: dramatic economic shift in the, 144–145; government support of jugaad approaches in the, 211–214; increasing age of population in the, 142–143; increasing Hispanic population in the, 15, 143–144. See also Obama administration
UnitedHealth Group, 152–153
UnitedHealthcare, 191
University of Cambridge, 1, 18, 143, 155, 219–220
University of Massachusetts at Lowell, 213
University of Nebraska-Lincoln, 46
Upington prepaid Visa cards, 209
University of Nebraska-Lincoln, 46
Upington prepaid Visa cards, 209
Index

U.S. auto industry: failures of the, 9–10, 40; simplifying General Motor’s R&D approach, 125–127. See also Auto industry
U.S. public debt, 13–14
U.S. State Department, 224
Ushahidi (Kenyat), 22, 115–116
Ushahidi Platform, 22

V
Vadafone (UK), 61
Value. See Core values; Customer value
Van Leeuwen, 76
Vats, Taamaya, 81
Velocity of change, 15–16
Venture for America (VFA), 215–216
Venture Philanthropy Partners (VPP), 213
VidaNET (Mexico), 154
Vista, 149
Visa (prepaid cards), 208–209
Vocalpoint (Procter & Gamble), 43–44
Voluntary simplicity movement, 117
Vscan ultrasound device (GE), 190–191, 192

W
Walmart Express Centers, 148–149
Wal-mart, Inc., 148, 156, 195
Wall Street Journal, 211
Walmart Money Centers, 148
Wang, Vera, 76
Warby Parker, 71
Washington Post, 116
Welch, Jack, 52, 168, 186
The West: examining the groundswell jugaad movement in, 26–27; historic practitioners of jugaad in, 5–8; how complex factors impact innovation in, 15–17; how jugaad principles can benefit, 19–24; jugaad as a solution for economic realities facing the, 227–228; how jugaad was lost in, 8–13; restoring prosperity through jugaad to the, 227–228
Western firms: barriers to flexible thinking by, 95–100; “defeaturing” practice of, 113; how they can learn to follow their hearts, 172–177; how they can profit from the groundswell jugaad movement, 224–227; increased competition in core markets facing, 147–149; major adversity facing contemporary, 38–42; rejection of low-tech revolution by, 118–119; responses to austerity factors by, 69–79; why they don’t follow their heart, 169–172; why they view marginal groups as unprofitable, 146–147. See also Organizations
Wharton Infosys Business Transformation, 37
Whirlpool, 39, 92, 93
White House Office of Social Innovation and Civic Participation (SICP), 27, 212–213, 225
White Mountain Apache Tribe project (Eastern Arizona), 217–218
A Whole New Mind (Pink), 168
Wikileaks, 16
Wilson, Woodrow, 201
Winning in the Indian Market (Bijapurkar), 137
Wired magazine, 205
World Bank’s International Finance Corporation, 36
World Economic Forum, 37
World Economic Forum’s Social Entrepreneur Award, 89
World Health Organization, 154
Wright brothers, 7

Y
Yankee ingenuity, 3
YES BANK, 131–133, 136, 139
YES MONEY service, 139
YourEncore.com, 152
youthCONNECT initiative, 213

Z
Zhang, Ruimin, 22, 92–93
Zhongxing Medical (China), 61
Zica (Heloisa Helena Assis), 137–138
Zimbalist, Michael, 106, 107
Zhongxing Medical (innovation), 5, 164
Zone V, 23, 135–136, 139–140
Zuckerberg, Mark, 105
Zynga, 210