INDEX

Abernathy, W., 225
Accenture, 183
Agile, 233–251, 263
  benefits, 241
  brief history, 235–237
  fifty shades, 238–240
  Hella, 249–251
  implementation, 247–249
  LSU, 237–238
  tools, 242–247
  See also Lean start-up (LSU)
AGLAIA, 44
Aglaia, 68
  See also Hella Aglaia
AirBnB, 66, 70, 213
Allen, Tom, 7
Ambidexterity, 214
Appert, Nicolas, 136
Apple, 47, 75
Aravind Clinic, 168–169
Artificial intelligence, 259
ASICS (application-specific integrated circuits), 82, 89

Backbone technologies, 182
Bain and Co., 236
BCM. *See* Body control modules (BCM)
Behrend, Jürgen, 35, 36, 37, 40–41, 43, 45, 46, 68, 76, 97, 163–164, 227
Behr group, 43
Behr Hella Service, 44
Behr-Hella Thermocontrol (BHTC), 89
BHTC. *See* Behr-Hella Thermocontrol (BHTC)
Blank, Steve, 238
BMW, 42
Body control modules (BCM), 188–189, 190
Boeing, 737, 184
Boseki, Kanebuchi, 150
Bottom-up innovation, 176, 178
Brake lights, 42
Breidenbach, Rolf, 12, 40
Bright, James, 211
British Navy, 135
Build-measure-learn, 243
Business, platform thinking, 191
Business architecture pivot, 245
Business model, 66–69

CAD. *See* Computer aided design (CAD)
Capability, 6, 74, 253, 262–266
  dynamic, 12–13
  extending, 118–121
  reflective, building, 121–122
Carnegie-Mellon University, 259
Caterpillar, 67
CCM. *See* Comfort Control Module (CCM)
Champion, 7
Channel pivot, 245
Chaplin, Charlie, 162
Clark, K., 186, 237
Climate control, 87–90
Co-creating with users, 185
Comfort Control Module (CCM), 190
Competence, 5–6, 74–76, 253, 258–262

Computer aided design (CAD), 81–82
Connect & Develop model (P&G), 202
Consultative marketing, 59
Continuity, 6, 254, 266–268
Continuous improvement (CI), 246, 255
  behavioural patterns, 158–161
  challenge of, 149–165
  concept of, 152–153
  Hella and, 45–46, 162–165
  high involvement innovation, 153–154
  learning, 156–162
  reasons being important, 162
  stages in evolution of, 154–157
  Total Quality Management, 163–164
Conversations, 122, 268–270
Creative destruction, 213
Crick, Frances, 2
Customer need pivot, 245
Customer segment pivot, 245
Cusumano, Michael, 185

Deep Mind (Google), 259
DfX approaches, 237
Diagnostic equipments, 64
Die Anderung, 84–87
Discontinuity, 209–230
  disruption and, 213–214
  See also Venturing
Disruption, 211–213
  discontinuity and, 213–214
DNA, 2–3
Dominant design, 211
Douglas DC3, 184
Driving E-novation, 19, 103, 143–145
Dynamic capability, 12–13
Dyson, James, 4

Eastman, George, 213
Easyjet, 184
EBay, 182
Economist Magazine, 167
Eco-system venturing, 224
Edison, Thomas, 75, 210, 225
Eindhoven, 90
Electronics, 77–84
  accelerating innovation in, 102–104
Engine of growth pivot, 245
Entrepreneurial capacity, building, 218–224
  See also Venturing
Entrepreneurial responsibility, 13, 37–39
Entrepreneurs, 6–8, 74–75
  external, 127
  innovation, 75–76
Environmental complexity, dealing with, 13–19
EUREKA programme, 90
European Union, 90
Export markets, Hella, 31–32
External entrepreneurs, 127

Financial crisis of, 2008, 40
Finding, 199–200
Five whys, 247
Fluid phase, 196–197
Ford, 31
Ford, Henry, 17, 53
Forming, 200–202
4P's framework', 52–53
  examples, 55–57
Frangos, Jean-Marc, 201
Frankfurt Stock Exchange, 41
Free innovation (von Hippel), 186
Freemium model, 184
French Army, 136
Frugal innovation, 167–178, 264–265
  core principles, 173–174
  Hella and, 174–178
  as a mindset, 172–173
  multinational players, 170–171

platform-plus option, 177
reason being relevant, 171–172
underlying ideas of, 168

Gatekeeper, 7
Gautem, Naveen, 178
Gawer, Annabelle, 185
Global Innovation Mall, 123–124
Goodrich Corporation, 42
Google, 47
Deep Mind, 259

Harrison, John, 135
Harvard Business Review, 236
Harvest venturing, 219, 224
Hella, 8–9, 253–270
after-market operation, 39
agile for, 249–251
business segments, 10
climate control, 87–90
crisis/shocks at, 28–30, 35–37, 40, 44
Driving E-novation, 19, 103, 143–145
economic miracle, 32–34
electronics, 77–84
entrepreneurial responsibility, 37–39
future developments, 99–102
innovation DNA, 20
innovation history, 23–47, 51–52
internationalization, 34–35
joint venture/strategic partnerships, 43–44
journey, 19–21
Lichtkanal, 73–74
managing innovation, 107–124
networks and, 203–205
overview, 9–11
proactive approach, 19
product development, 36
production system, 44–46
R&D, 100–102, 177
reorganization, 39
strategic shifts and changes, 79–84
survival, 28–30
technological investments and development, 42
21st Century, 39–41
values, 11
war and, 31–32
xenon headlamps, 42
Hella Aerospace GmbH, 42
Hella Aglaia, 68–69
Hella Focus Areas (HFA), 102–104
Hella Gutmann, 64
Hella Production System (HPS), 93–99
Hella Service Partner system, 44
Hella Ventures, 227–230
Henderson, Rebecca, 186
HFA. *See* Hella Focus Areas (HFA)
High involvement innovation (HII), 153–154
HII. *See* High involvement innovation (HII)
HPS. *See* Hella Production System (HPS)
Hueck, Arnold, 34, 35
Hueck, Oskar Eduard, 29–30, 34
Hueck company, 34, 37

IBM, 109–110
I-Circle meeting, 122, 227, 228
Idea/ideation, 131–132
failure, 132–133
platforms supporting, 137–138
Idea management, 140
Immelt, Jacques, 177
Innovation
challenge to, 168
DNA of, 2–3
entrepreneurs. *See* Entrepreneurs

frugal. *See* Frugal innovation
at Hella. *See* Hella
history, 8–9
key elements, 5–6
managing, 107–124
milestones of, 76–78
mobilizing, 127–145
networks, 195–205
old challenges, 1–2
one-hundred club, 4–5
platform thinking. *See* Platform thinking
Innovation accounting, 244
Innovation venturing, 224
Intel, 65
Internal entrepreneurship, 76
dealing with challenges in, 138–141
enabling high engagement, 130–138
innovation engagement, 129–130
reasons for unfulfilled potential of, 127–129
Internet, 136
Internet of things (IoT), 182
Intrapreneurship, 134
Ive, Jonathan, 75

Jaeger, Michael, 102, 250
Japan, 150–151, 236
Jobs, Steve, 75, 213
Joint ventures, 43–44
Jugaad innovation, 168
Juran, Joseph, 149

Kaizen, 130
KAM. *See* Key account management (KAM)
Kanban, 246–247
Key account management (KAM), 86
Knowledge base, 260–261
Knowledge extension, 184
Knowledge recombination, 184
Kodak, 260–261
Kraft durch Freude (KDF) car, 31
Krücken, Karl-Heinz, 78, 86, 88
Kwid SUV, 171

Leadership, 4
Lean start-up (LSU), 237–238
build-measure-learn, 243
continuous improvement, 246
five whys, 247
innovation accounting, 244
kanban, 246–247
line stop/andon cord, 246
MVP, 243, 244–245
pivoting, 244–245
single unit flow, 246
validated learning, 243–244
LED. *See* Light emitting diode (LED)
Lego, 183
Lehmann Brothers, 40
Leoni Bordnetz-Systeme, 43
Libratus, 259–260
Lichtkanal, Hella, 73–74
Light emitting diode (LED), 93
Lighting industry, 211
Lincoln Electric Company, 150
Linde, Herr, 210
Line stop/andon cord, 246
Linux, 186
Lockheed, 237
Longitude Act, 135
Lopez, Ignacio, 45, 89, 95–96
Lopez era, 45
LSU. *See* Lean start-up (LSU)

Machine learning, 259, 260
Managing innovation, 107–124
building reflective capability, 121–122
challenges in, 122–124
discussion, 122
extending capability, 118–121
Hella, 110–111, 112–118

Manufacturing businesses, 150–151
McDonalds, 53
McKinsey, 86–87
Mège-Mouriès, Hippolyte, 136
Mendel, Gregor, 2–3
Methodology, platform thinking, 192
Microprocessor, 79
Minimum viable product (MVP), 238, 243, 244–245
Mobilizing innovation, 127–145
  See also Internal entrepreneurship
Model T, 17, 225
Mother Teresa, 169
MVP. *See* Minimum viable product (MVP)

Nano car from Tata, 171, 178
Napoleon, Louis, 136
National Cash Register, 150
National Socialist government, 31
Networks, 195–205
  finding, 199–200
  forming, 200–202
  Hella and, 203–205
  partnerships, 203
  performing, 202–203
  reason being important, 196–198
  times and, 196
Neusoft, 169
New markets, moving to, 63–66
Nonaka, I., 236

Open communities, 185
Open innovation, 67–69
Ordnance Survey of UK, 182
Organization
  challenge, 219
  innovation, types of, 218
  See also Venturing

Paradigm innovation, 66–69
Pasteur, Louis, 51
People, 190–191
Performing, 202–203
Philips, 90
Philips, Fredrik, 210
Philips, Gerard, 210
Philips Metaalgloeilampfabriek N.V., 210
Picos, 96
Pivot/pivoting, 244–245
  versions, 245
Pixar, 75
Platform pivot, 245
Platform-plus option, 177
Platform thinking, 181–192, 263
  business, 191
  journey to, 189–192
  methodology, 192
  offering routes to reusing knowledge, 183–185
  people, 190–191
  technology, 191
Position innovation, 63–66
PostIt Notes, 134
Prahalad, C. K., 168
Process innovation, 53, 58–59, 60–62
Procter and Gamble, 67–68, 202
Product Management (PM), 86
Promotors, 7
Punctuated equilibrium, 211

Radical innovation, 211
Reflective capability, 121–122
Renault-Nissan, 171, 225, 226
Resource allocation, 128, 140
Ries, Eric, 238, 243, 244, 245
Robinson, D., 152
Robust design, 184
Röpke, Reinhard, 34, 35, 36
Röpke, Wilhelm, 30, 34, 35
Rothwell, Roy, 7, 184

Sailing ship effect, 198–199
Schlage, Fabian, 123
Schroeder, A., 152

Schumpeter, Joseph, 213
Schwaber, Ken, 236
Scrum approach, 236
Shetty, Devi, 169
Silicon Valley, 195
Single unit flow, 246
Skunk works, 237
Sofica Thermal, 87
Software development, agile and, 235–237
Solid-state electronics (SSE), 34
Stanley Electric, 43
Start-ups, 237–238
  See also Lean start-up (LSU)
Strategic partnerships, 43–44
Sutherland, Jeff, 236
Swann, Joseph, 210

Takeuchi, H., 236
Tata, 171, 225
Tata, Ratan, 171
TDK, 92–93
Technology
  platform thinking, 191
Technology pivot, 245
Tesla, 184
Theory of mind, 260
3M, 134–135, 140, 150
Tokugawa, Yoshimune, 150
Tools, agile, 242–247
Total Quality Management, 163–164
Toyota, 237, 246
Trowitsch, Christian, 78

Uber, 66, 70, 213, 225–226
Users, co-creating with, 185
Utterback, J., 225

Validated learning, 243–244
Value capture pivot, 245
Value engineering, 176
Value network, 215
Vanity metrics, 243
VEDILIS project, 90
Venkataswamy, Govindappa, 168
Venture capital venturing, 224
Venturing, 219–224
  eco-system, 224
  harvest, 219, 224
  innovation, 224
  strengths and weaknesses, 220–223
  venture capital, 224
Virtual hospital, 169
Volkswagen (VW), 31, 32, 88–89
Von Hippel, Eric, 186

Waldeyer, Friedrich, 78, 88
War, Hella and, 31–32
Watson, James, 2
Westfälische Metall-Industrie Aktien-Gesellschaft (WMI), 26–30, 31, 34–35, 38
Westphalia, Germany, 23, 26, 27, 28, 39, 41, 46
Wheelwright, S., 237
White paper, 227
Wilkins, Maurice, 2
Windmuller, Sally, 19, 23, 51–52, 209–210
Wirtschaftswunder, 32–34
Witte, Eberhard, 7
WMI. *See* Westfälische Metall-Industrie Aktien-Gesellschaft (WMI)

Xenon lights, 42, 90–93

YouTube, 244

ZE. *See* Zukunftsentwicklung (ZE)
Zoom-in pivot, 245
Zoom-out pivot, 245
Zukunftsentwicklung (ZE), 101–102