

Index

A

- Agile manufacturing 17, 19–21, 26, 41, 112
- Agility 2, 6, 11, 15–23, 27, 28, 35, 38, 39, 41, 42, 44, 47–49, 78–80, 82, 91, 97, 102, 104, 111, 115, 116, 121, 122, 130, 132, 144, 146, 147, 153–155, 161, 172, 186, 189, 191–193, 218, 219, 221, 227, 228, 230, 231
- Automatic data capture systems 34, 203
- Automotive industry 3, 6, 17, 20, 34, 45, 49, 67–71, 73, 74, 76–78, 84, 93, 163, 172, 191, 221, 227

B

- BTO (Build-to-Order) 23, 26, 28, 37, 99, 100, 110, 111, 124, 132, 143, 152, 153, 156, 167, 173, 182, 183, 229
- Business alignment 190

C

- Chinese automotive industry development 72
- Collaboration and coordination 29
- Common data definition 33, 122, 164
- Communication 12, 32–37, 41, 44–46, 48, 70, 77, 79, 95, 98, 100, 104, 108, 111, 115, 118, 120, 121, 124, 132, 133, 140–142, 144, 147, 150, 152, 153, 155–158, 160, 162, 164, 167, 170, 173, 180, 183, 187,

- 188, 191, 192, 200, 203, 218, 219, 221, 228, 231
- Conceptual model 11, 49, 84, 181, 192
- Cooperating to enhance competitiveness 17
- Cost reduction 49, 146, 151, 155
- Critical factors 6, 84, 91, 96, 109, 118, 122, 123, 142, 150, 158, 164, 179, 180, 198, 199, 202, 203, 221
- Cross functional SCM application system integration 34, 39
- Customer Sensitivity 23, 42, 43, 48, 81, 84, 91, 98, 100, 110, 111, 119, 120, 124, 125, 132, 143, 144, 151–153, 159, 160, 165–167, 173, 181–183, 191, 206, 207, 217–219, 228, 229

- D
- Data accuracy 96, 97, 109, 122, 132, 159, 165, 180, 181, 192, 193, 203, 227
- Data consistency 4, 30, 33, 34, 50, 96, 97, 109, 118, 122, 132, 142, 150, 151, 158, 159, 164, 179–181, 191, 193, 200, 201, 203–205, 220, 221, 227, 228
- Definition of supply chain agility 11, 21, 28, 206

- E
- Effectiveness 20, 28, 38, 98, 100, 208
- Efficient agile supply chains 172, 220, 229
- Emerging markets 68, 69, 72, 73
- Enhancing the customers 22
- ERP (Enterprise Resource Planning) 5, 25, 32, 34–38, 45, 50, 93, 105–107, 109, 115, 126, 127, 133, 140, 148, 167, 170, 173, 180, 182, 184, 185, 189, 200, 203, 217
- Execution applications 36, 37

- F
- Face-to-face communication 144
- First tier suppliers 6, 37, 45, 71, 79, 91, 92, 103, 104, 124, 133, 139, 141, 146, 167, 168, 170, 173, 182–184, 187, 188, 231
- Flexibility 2, 3, 12, 16, 21, 23, 25–28, 30, 31, 39, 40, 44, 46–48, 78, 101, 102, 112, 113, 120, 126, 145, 146, 151, 154, 185, 191, 193, 208, 217, 220, 221, 227

- G
- Government regulation 70

- I
- Imbalanced power 188
- Industry 4.0 1, 2, 11, 13, 14, 31, 37
- Information sharing 4, 25, 31, 32, 38, 39, 77, 79, 96, 97, 105, 122, 123, 131, 144, 147, 152, 156, 181, 183, 188, 192, 193, 203, 227
- Integrated planning applications 36, 37

Interviews 38, 80, 81, 84, 104,
130–133, 144, 151, 160, 180,
200, 203, 205, 206, 209, 220

IS applications 41, 67, 80, 91, 93,
109, 117, 120, 121, 133, 140,
148, 155, 157, 173, 184, 190,
200, 204

IS integration 2, 4–6, 11–13, 30,
31, 33, 34, 38–49, 67, 78–82,
84, 91–93, 96–102, 104–106,
109–118, 120–124, 126, 127,
130–133, 139, 140, 142–148,
150–161, 163–165, 168,
170–173, 179–193, 197–206,
208–210, 216–221, 227–231

IS integration contributes to supply
chain agility 5

J

Just in time 18, 20

L

Leanness 16, 18–20

Leveraging the impact of people and
information 17

Leveraging the knowledge of people
190

Local content rate 74, 76, 151

M

Manufacturing flexibility 26

Mastering changes and uncertainty
102

Measurement scales 200, 209

MRP (Material Resource Planning)
77, 94, 117, 126, 189

N

Network Integration 24, 44, 48,
81, 84, 91, 102, 104, 105,
114, 115, 121, 127, 128, 133,
146, 154, 155, 161, 162, 165,
168–170, 173, 181, 186–188,
191, 206, 217–219, 228, 231

New business landscapes 12

O

OEM (Original Equipment
Manufacturers) 6, 67–69,
71–74, 78, 79, 91, 92, 95, 96,
103–108, 110, 116, 118–121,
123, 124, 127, 130, 131, 133,
139–144, 146–149, 151–154,
156, 159, 160, 168, 170,
182–184, 187, 188, 229, 231

P

Pattern of demand for new cars 69

PLS (Partial Least Square) 197, 202,
204

Preparation and coordination 186,
192

Process Integration 24, 43, 44, 48,
81, 84, 91, 101, 102, 112–
114, 120, 121, 126, 133, 144,
145, 153, 154, 160, 161, 167,
168, 173, 181, 184–186, 191,
206, 217–219, 228

Proposed model 230

Pull system 27

R

Rapid technological advancement 12

Reliability 30, 46, 150, 151, 164,
173, 198, 200–202, 209

Responsiveness 2, 3, 16, 19–21,
26–28, 32, 35, 39, 43, 44, 47,
48, 78, 101–103, 105, 110,
124, 126, 133, 144, 152, 153,
155, 173, 183, 191, 208, 217,
220–222, 228–230

RFID (Radio Frequency
Identification Technology) 34,
153

S

Shanghai automotive industry devel-
opment 74

Small batches 27, 28

Supply chain agility 2–6, 11, 12,
16, 21–23, 27–31, 39, 41,
46–50, 67, 68, 74, 78, 80–82,
84, 91, 92, 96, 97, 102, 106,
109, 111, 116, 119–122, 124,
131, 132, 139, 142, 145, 151,
156, 159, 160, 164, 165, 172,
179, 181, 182, 188, 190–193,
197, 198, 206–210, 216–222,
227–231

Supply chain integration 5, 15, 21,
30, 49, 130, 188

Survey 6, 38, 40, 69, 80–82, 164,
193, 197–200, 206, 210,
219–221, 228–231

T

Times based competition for individ-
ualized products 12

V

Validity 81, 82, 198, 200, 201, 209,
212

Virtual Integration 25, 39, 46, 48,
81, 84, 91, 105, 115, 116,
121, 122, 127, 129, 130, 133,
147, 156, 162–164, 170,
171, 173, 181, 189–191, 206,
217–219, 228

W

Waste control 19, 112, 126, 185