Index

Acquired customer management, 92	Articulated robot, 36
Adapting services, 59	Artificial intelligence (AI), 5, 31–32,
Additive manufacturing, 35, 39	72, 103, 120, 143–144, 148,
solutions, 36, 42	175
technologies, 36-37, 41	digital and, 103
Additive technologies, 40	at firm's core, 149–150
Advertisers, 87	Assessment in digital transformation
Agent of change, 132–133	processes, 45–47
Agile organisation, 2	Aster, 144
Agility, 72	Audit, 45–46
Agility for digital transformation, 167	Augmented reality, 37, 39, 42–43
change management approach,	technologies, 43
175–177	Authentication, 34
digital mind-set, 184–186	Avio Aero, 135–137
digital world, 172–175	
framework for digital	Bandersnatch, 68–70
transformation, 177–184	Banner advertising, 77, 82
need for, 170–171	'Barilla Goes Digital', 18–19
past intuitions and present pitfalls	Big data, 30–31, 33, 74, 139
in VUCA world, 167–170	analytics, 72, 141, 146–150
Airbnb, 7, 52	architecture, 143
Alibaba, 157	exploiting big data for mass
Amazon, 7, 154, 157, 163	personalisation, 77–79
Amazon Prime Video, 55	processing tools, 143
Amazon Web Service (AWS), 58	Big Data, Analytics and Decisions
Analytical skills, 33	framework (B-DAD
Analytics, 31, 147	framework), 141
App Store, 62	Binge-racing, 67–68
Apple, 52, 157, 159–160	Binge-watching, 67–68
Apple Arcade, 62	Blockbuster, 63–70
Apple digital servitised business	Born-digital companies, 51
model, 61–62	Boston Consulting Group (BCG),
Apple Music, 62	21–22, 36
Apple Pay, 62	Broadcasting, 80–81
Apple TV, 55	Business
Apple TV+, 62	analytics, 10–11
AppleStore, 52	ecosystems, 154–156
AppleTV, 52	exploiting key assets for business
Arm robots, 36	management, 139–141

leader, 130–132	Corporations, new figures in, 125–130
network redesign, 21	Cost per acquisition (CPA), 79
scope redefinition, 21	Cost per click (CPC), 77, 82
Business model (s), 52–53 (see also	Cost per lead, 77
Digital business models)	Cost per mille (CPM), 77
digital-driven servitisation, 58–60	Cost per sale, 77
digitalisation of traditional	Coupon/loyalty advertising (CLA), 83
companies, 51, 53	Cross-selling, 93
Disney, 55–56	Curiosity, 104
Domino's Pizza, 56–58	Customer acquisition, 163
of platforms, 159–163	Customer experience (CX), 172
transformation, 21	transformation, 21
Business process	Customer reactivation campaigns, 92
choice phase, 145	Customer-driven strategic business
in data management, 141	transformation, 71
design phase, 143–145	Customer-initiated contacts (CICs),
implementation phase, 146	84–85
intelligence phase, 142–143	CXO, 128–129
redesign, 20	Cyber security, 34
redesign, 20	Cyberspace, 34
Cartesian robots, 36	Cyberspace, 5 i
Centre of excellence (COE), 176	Data and technology, 73
Change management approach,	Data management, 139
175–177	big data analytics and knowledge
Chief digital officers (CDOs),	management, 146–150
125–126	business processes in, 141–146
Chief innovation officer	exploiting key assets for business
agent of change, 132-133	management, 139–141
business leader, 130–132	Data management platform (DMP),
five traits of, 130–135	78, 150–151
revolutionary culture, 134	Data mining methods, 144
talent scout, 133–134	Data protection officer (DPO), 127
tech instructor, 134–135	Data transfer system, 38
Churn management, 91–93	Deep learning, 31
Classification, 31, 147	Descriptive analytics, 144
Click-through-rate (CTR), 78, 82, 87	Dicing, 144
Cloud computing, 33, 39–40	Digital adapting services, 60
Cloud technology, 40	Digital business models, 51
Clustering, 148	architecture and relevance, 52–53
Co-robots, 36	Blockbuster vs. Netflix, 63–70
Competitive ecosystems, impact of	business model digitalisation of
technologies 4.0 on, 38-44	traditional companies,
Competitive effects of advertising, 90	53–60
Consumer packaged goods (CPG), 11	Digital competitive position, 21–22
Content channel advertising, 82	Digital culture, 99–103
Content-integrated CICs, 85	Digital dynamic capabilities, 12–15

Digital ecosystems, 153	Digitisation, 6, 71
business models of platforms,	Dimensionality reduction, 148
159–163	Direct network effects, 162
ecosystems, business ecosystems,	Disney, 55–56
and, 154–156	Disney Plus, 55–56
platforms as, 156–159	Display advertising,
Digital governance, 106	77–78
Digital HR, 122–123	DisplayAdv, 91
Digital innovation, 102–103	Domino's Pizza, 56–58
Digital knowledge-based view, 10–11	Drill-down, 144
Digital leader(ship), 97–98, 103–109,	Drill-through, 144
173	Dynamic capabilities, 12–13
Digital mind-set, 184–186	J
Digital resource-based view, 9–10	E-commerce, 38
Digital skills, 106	Ecosystems, 154–156 (see also Digital
Digital smoothing services, 60	ecosystems)
Digital substituting services, 60	assessment methodology, 46
Digital technologies, 5–6	Email advertising/marketing, 78
exploitation and integration, 5	Email service provider (ESP), 78
Digital transformation, 1, 6, 29, 71	Encryption, 34
assessment in digital	Engaged collaborators, 106
transformation processes,	Evaluation models, 45
45–47	Evaration models, 13
core HR process at times of,	Factory-integrated adapting
120–125	services, 60
decisions, 23–24	Factory-integrated smoothing
distinctive characteristics of people	services, 60
mindset and skills for, 119	Factory-integrated substituting
extents, 19–21	services, 60
framework for, 177–184	Film rental, 65–66
impact, 1–2	Firm-initiated contacts (FICs), 84
process, 118	Firms, 5, 10
strategic challenges, 22–24	1 111113, 5, 10
strategic management theories and	Gentry robots (see Cortosian robots)
digitalisation, 9–15	Gantry robots (see Cartesian robots) Generation, 31
as strategic process, 15–22	Good Old Fashion of AI, 147
strategy and digitalisation, 5–9	
structure, 15–18	Google, 7, 82, 154, 157
Digital world, 172–175	Greenplum, 144
Digital-driven servitisation, 58–60	IIANIA 144
Digitalisation, 1, 71	HANA, 144 HBO Now, 55
potential benefits, 5–6	High-tech companies, 61
strategic management theories and,	
9–15	Human resources (HR), 117 Avio Aero, 135–137
strategy and, 5–9	*
tools for, 1	core HR process at times of digital
10018 101, 1	transformation, 120–125

five traits of chief innovation	Leadership, 103–104
officer, 130–135	new culture, 112–113
management, 117	rules for, 109–113
new figures in corporations,	signature, 109–110
125–130	Learning culture, 100–102
Hyper-connected augmented	LinkedIn, 121, 128
consumer, 74	LinkedIn, 159
,	Localised exploitation, 20
IBM Watson Platform, 182	Loyalty programs, 93
iCloud, 62	
Idealised influence, 107	Machine learning (ML), 31, 143,
Indirect network effects, 162	147–148
Individualised consideration, 106	MADlib, 144
Industry 4.0, 118	Mahout, 144
Information and communication	Man-machine interfaces, 41
technology (ICT), 99	Manual adapting services, 60
Information technologies (IT), 7	Manual smoothing services, 60
Infrastructure as a Service (Iaas),	Manual substituting services, 60
34, 58	Marketers, 75, 80
Innovation, 172	Marketing, 72
analytical technologies, 30	automation, 74–75
platforms, 158	managers, 79
Inspirational motivation, 106	solutions, 159
Intellectual stimulation, 106	Mass personalisation
Internal integration, 20	display advertising, 77–78
Internet advertising, 77	email advertising/marketing, 78
Internet of things (IoT), 29–30, 33,	exploiting big data for, 77
72, 143, 153	search engine marketing, 78–79
in companies, 39–40	search engine optimisation,
paradigm, 30	78–79
technologies, 30	Microsoft, 159–160
Interrogation algorithms, 144	Microsoft's AI transformation,
Investments in digital technologies, 1	46–47
iPhone, 162	Minimum Viable Product (MVP), 181
iTunes, 52, 62	Modern marketing, 71
	as data-driven and predictive,
K-Nearest Neighbours (K-NN),	73–76
147	effectiveness, 79–91
Key Performance Indicators (KPIs),	exploiting big data for mass
144	personalisation,
Knowledge management (KM),	77–79
146–150	retention strategies and churn
practices, 11	management, 91–93
Knowledge portals, 11	road to, 71–73
Knowledge-based view (KBV), 9	MolecoLeader®, 112
Kognitio, 144	MyMagic+ wristband, 55

Narrowcasting, 80–81 RepRap project, 35 Netflix, 55–56, 63–70, 157 Resource allocation, 24 Network effects, 157, 159, 161-162 Resource-based view (RBV), 9 Retargeting, 88-89 Retention strategies, 91–93 On-Line Analytical Processing Revolution R Enterprise, 144 (OLAP), 144 Revolutionary culture, 134 Online advertising, 38, 88, 91 Online display advertising, 91 Risk management processes, 34 Organic search, 79 Roll up, 144 Organisational design and culture, 72 Rule-based system, 147 Paid search, 79 Search channel advertising, 82 advertising, 91 Search engine marketing (SEM), Pentaho, 144 78–79, 83 Search Engine Optimisation (SEO), Personalisation, 77 78-79 Pivoting, 144 Pizza Tracker, 57 Search engine results pages (SERP), Platform as a Service (PaaS), 34 Search Engines (SE), 78 **Platforms** SearchAdv, 91 business models of, 159–163 Segmentation, 74 as digital ecosystems, 156–159 Pop-unders, 77 Seizing, 13 Selective Compliance Assembly Pop-ups, 77 Post-purchase recommendations, 92 Robot Arm (SCARA), 36 Pre-evaluation, 45 Sense-making, 110 Prediction, 31 Sensing, 13, 16 Servitisation, 58–60 Predictive analytics, 144–145 Simulation, 37, 39 Predictive marketing, 73 Premium Subscriptions, 159 models, 41 Price Comparison Advertising (PCA), 83 Skills Management, 112 Proactive churn management Slicing, 144 Smart networks, 38 programs, 92 Product-service systems (PSS), 58 Smart objects, 38 Programmatic advertising, 77 Smart services, 38 Smart Working, 123–125 Smoothing services, 59 Radio Frequency Identification Software as a Service (SaaS), 34 (RFId), 30 Radoop, 144 Spotify, 52 RapidMiner, 144 'Spray-and-pray' mentality, 83 Strategic management theories Reactance, 89 digital dynamic capabilities, theory, 86 12 - 15Reciprocity appeal approach, 86 digital knowledge-based view, Regression, 148 10 - 11Reinforcement learning, 31 digital resource-based view, 9–10 Replenishment campaigns and repeat purchase programs, 93 and digitalisation, 9-15

Index

Uber, 52 Unilever, 11–12 Unsupervised learning, 148 Up-selling, 93 User experience (UX), 128
Valuable, rare, inimitable, and non-substitutable (VRIN), 9–10 Value capture, 53 Value configuration, 53 Value creation, 53 Video ads, 77 Video on demand (VOD), 67 Viral advertising videos, 81 Viral marketing, 81 Virtual prototyping simulation, 39 Virtual reality, 37 Vision of digital change, 106 Volatility, uncertainty, complexity, and ambiguity (VUCA), 3 past intuitions and present pitfalls in VUCA world, 167–170 Volume, velocity, variety, veracity,
value and visibility (6Vs), 140–141
Windows Phone, 158 Word of Mouth marketing (WOM marketing), 80–81 X-teams, 110 YouTube boom, 64 'Zero Clicks' app, 58