# Index

## Symbols

3G 90  
(B2C) environment 17  

### A

acceptable-and-a-half 63  
ad-hoc 95  
ad-hoc analysis 263  
adoption index 98, 100, 106  
Affiliated Values Model (AV) 141  
agent systems 431, 432  
American Institute of Certified Public Accountants (AICPA) 242  
analysis of moment structures (AMOS). 53  
atomic stored data 432  
attitude toward the site (ATS) 352  
average variance extracted (AVE) 54  
AV model 142  

### B

B2B customer 260  
B2B development 259, 263, 272  
B2B e-commerce 259, 260, 261, 262, 263,  
264, 265, 267, 268, 270, 276  
B2B workflow control 418  
B2C e-commerce 15, 25, 37  
B2C e commerce vendors 15  
BBBOnLine 240, 243  
brick-and-mortar 277, 278, 284  
brick-and-mortar store 344, 345  
business-consumer interaction 198, 200  
business performance 303, 304, 306, 307,  
308, 309, 310, 311, 312, 313, 314,  
315, 316, 319  
Business Process Modeling Notation 401, 403  
business strategy 303, 305, 306, 308, 314,  
315, 316, 317  
business-to-business (B2B) 57, 139  
business-to-consumer (B2C) 13, 15, 57, 139,  
288, 322  
business-to-consumer (B2C) auctions 139  

### C

Canadian Institute of Chartered Accountants  
(CICA) 242  
CART algorithm 145  
CART analysis 140, 149, 151, 152, 153, 154  
CART (Classification and Regression Trees) 145  
CART decision-tree induction process 145  
CHAID (Chi-squared Automatic Interaction  
Detector) 145  
Chief Executive Officer (CEO) 329  
CIM-OSA framework 409  
Classification and Regression Trees (CART) 139  
click-and-brick business models 277  
Common Object Request Broker Architecture  
(CORBA) 441  
Common Values Model (CV) 141  
communication strategy 24  
comparative fit index (CFI) 291  
complex context 17  
ConcurTaskTrees (CTT) 402  
ConcurTaskTrees (CTT) notation 402  
Confirmatory factor analysis (C.F.A.) 351  
conjunctive strategy 75  
constraint-based intermediaries 194, 202, 203
Constraint-based intermediaries 195, 199, 201, 202
constraint-based intermediary 195, 196, 199, 201
consumer-to-consumer (C2C) 139
context-specific information 95
Continuous Double Auction (CDA) 165
conventional commerce 13
cross-service study 101
cultural interpersonal cues 15
cultural level 25
cultural tools 35
customer loyalty 44, 45, 46, 47, 48, 49, 51, 55, 56, 57, 59, 60, 61
customer relationship management (CRM) 129, 408
customer relationship management (CRM) software 408
customer relationship management (CRM) system 129
cyberspace 239, 258

data-based intermediaries 193, 194, 198, 200, 201, 202
data heterogeneity 432, 433
data model XML 199
decision making 242, 248, 249, 250, 251, 255, 256
decision-making 326
decision-making model 239, 241, 244, 255, 256
decision-making process 239, 244, 246, 256
decision support tools 73, 83, 84
disjunctive strategy 75
dynamic business environment 314

e-Commerce technologies 278, 279, 281, 284, 285, 286, 287, 288, 292, 294
e-commerce website 19, 22, 25, 28, 34, 36, 37, 38
e-commerce websites 72, 73, 78, 81, 83, 84
economic agents 191, 193
economic transactions 191
economic value 118
e-consumer behaviour 1, 2, 10
e-consumer shopping 4
e-CRM 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 274, 276
EDI diffusion 261
Electronic Data Interchange (EDI) 322, 323
electronic markets 191, 192, 193, 194, 197
electronic network 199
elimination-by-aspects strategy (EBA) 75
e-markets 239, 240, 241, 242, 243, 245, 246, 247, 249, 252, 253, 254, 255, 256
end-use customers 407
Enterprise Resource Planning (ERP) 408
Enterprise Resource Planning (ERP) systems 408
Enterprise Service Bus (ESB) 415
enterprise software applications 407
environment conducive 261
ERP system 408
EtaiIQ 344, 345, 350, 351, 352, 355, 361
e-vendor 239, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 253, 254, 255, 256
Expedia 225

F
face-to-face communication 20, 22
face-to-face interaction 13, 21
face-to-face interpersonal 13
face-to-face study 17
financial services industry (FSI) 322
**Index**

**G**
- geographical information system (GIS) 129
- global business activities 326
- global communication 15, 23
- global customers 15
- global information technology 13
- global perspectives 47
- goodness-of-fit index (GFI) 291
- GPRS network 128, 129, 131
- GPRS wireless network 125, 126, 127, 131
- growth in revenue (GINR) 282
- GSM 90

**H**
- handset-based service studies 96
- hardware 122, 124, 130, 132
- hedonic values 95
- HH-type e-vendors 243, 244, 245, 246, 249, 250, 251, 252, 253, 254
- high-context culture 35
- human computer interaction (HCI) 14, 16
- human computer interaction (HCI) research 14
- human computer interaction (HCI) trust research 16, 17
- hybrid approach 431, 434, 442
- hyper-competition 201

**I**
- IC (Interval Classifier) 145
- Independent Private Values Model (IPV) 141
- information and communication technology (ICT) 322, 367
- information and communication technology (ICT) activity 367
- information-based activities 191, 193
- information-intensive activity 191
- information-intensive industries 191
- information strategy 314
- information system (IS) 321
- information systems management 328
- information technology (IT) 118, 259, 278, 408
- infrastructural/contextual factors 242
- infrastructure 407, 410, 411, 415
- innovation adoption 118, 119, 120, 121, 122, 123, 132, 133, 134, 136, 137, 138
- instant messaging (IM) 90
- intention index 97, 99, 106
- inter alia 7
- inter-attribute correlations 77
- internal structure 391
- Internet applications 1
- Internet-enabled IT 279
- Internet service providers (ISPs) 44, 364, 365
- Internet transaction 14
- inter-organizational 407, 415, 416, 417, 418, 420, 429
- inter-organizational architecture 191, 203
- inter-organizational structures 192, 193
- Inter-Organizational System Availability (IOrSA) 291
- inter-organizational systems 281, 284, 285, 286, 287, 293
- Inter-organizational systems availability (IOrSA) 279, 285, 286, 287
- inter-platform communication 441
- IP-based service delivery 89
- IS human resources 327
- ISP business 47
- ISP market 45, 57
- ISP users 50, 56, 57
- IT alignment to organizational strategies (ITOrS) 277, 284, 285, 286, 293
- IT applications 280, 299
- IT-driven 128
- IT firms 263
- IT innovation 119, 120, 121, 123, 136
- IT investment 281, 283, 285, 296
- IT planning 280, 283, 284, 285, 286, 292, 294
- IT planning success 280, 285, 292
- IT-related innovations 120, 121, 122
- IT-related literature 283
- IT sophistication 285
- IT strategy 280, 285, 286, 291, 292
- IT system 279
K
Kingdom of Saudi Arabia (KSA) 26
knowledge-based constraint maintenance systems 191, 203
knowledge-based decision support systems 199
knowledge-based intermediaries 193, 194, 195, 200, 201, 203, 204
knowledge market 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219
knowledge transactions 206

L
Least and Unique Price (LUP) 161
Levenshtein’s distance (LD) 435
longitudinal data 279

M
machine learning technique 434
mainstream knowledge consumers 211, 213
market context 95
media cue 15, 22, 27, 30, 33, 34, 35, 36, 37
media cues 15, 19, 21, 22, 26, 27, 30, 31, 33, 34, 35, 36, 37
mental image 46
micro-enterprises 368
middleware 194
MMS (multimedia messaging service) 90
mobile business 90
mobile commerce 118, 119, 120, 121, 123, 131, 133, 134, 135
mobile commerce technologies 118, 119, 120, 123, 133, 134
mobile data services 93
mobile data solution 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134
mobile data solutions 118, 119, 123, 131, 133, 134
mobile Internet 89, 90, 93, 94, 107, 109, 110
mobile services 89, 90, 92, 93, 94, 95, 96, 98, 99, 100, 106, 107, 108, 112
mobile technology 118, 124, 126, 128, 130, 131, 132, 133, 134, 138
Multi-agent based system (MAS) 431, 443
Multi-agent based system (MAS) prototype 431
multi-attribute based compensatory 72
multicultural community 15, 23
multi media cues 15
multimedia playback 96, 97, 99, 103, 104
multimedia streaming 90, 94
multiple discriminant analysis (MDA) 145

N
National Consumers League (NCL) 240
NetQual 344, 345, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 360, 362
New York Stock Exchange (NYSE) 165
non-compensatory based strategies 84
non-compensatory strategies 72, 73, 74, 75, 78, 79, 80, 84
non-compensatory WebDSS 72, 73, 74, 75, 76, 77, 78, 84
non cultural social 15
non-face to face communication 23
non-verbal cues 19, 21
number of all bids 170

O
offline environments 345
online access 261
online auction 161, 162, 163, 166, 172, 173
Online auctions 162, 163
online business 227
online customer 5
online knowledge market 206, 207, 208, 209, 211, 216
online retailer 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 233, 234, 235, 236, 237
online shoppers 239, 240, 241, 243, 244, 246, 247, 249, 252, 255, 256, 257
online stores 220, 221, 222
online system efficiency (OnSE) 284, 285, 293
online transactions 5
OnSQE 277, 278, 279, 282, 284, 286, 288, 289, 290, 291, 292, 293, 301
Index

OnSQE (Online systems quality and effectiveness) 278
ontological structures 433
opportunities 1
Orbitz 225
organizational context 122, 131
organizational readiness 118, 133
organization market 207
output quality 46

P
Path analysis 100
peer-to-peer management 195
price premium (PP) 149
process-oriented technologies 414
productivity paradox 281, 287, 293, 295, 296, 299
protocol analysis 349
proxy-bidding mechanism 141
psychological 46, 48, 49
psychology 18, 20, 39

Q
QUEST (Quick, Unbiased and Efficient Statistical Tree) 145

R
radio networks 90
real-world risk 29
recommendation agents (RA) 73
Remote Method Invocation (RMI) 441
research and development (R&D) 326
resource-based perspective 283
return on equity (ROE) 282
return on investment (ROI) 282
return on sales (ROS) 282
RFID reader 10
Role-Based Access Control (RBAC) 417, 420
Role-Based Access Control (RBAC) model 417, 420
rule-based triggers 191, 203

S
sales to total assets (STA) 283
semantic data heterogeneity 432, 433
semantic processing 432
Semantic Relatedness Score (SRS) 436, 440
semantic web 191, 197, 203
Semantic Web Services (SWS) 431, 444
semi-structured interviews 28
Service Oriented Architecture (SOA) 407, 430, 442
service quality 44, 45, 46, 47, 48, 49, 50, 51, 55, 56, 58, 59, 60, 61
SERVQUAL instrument 46, 48
shopping orientation 2
SLIQ (Supervised Learning In Quest) 145
Small Business Administration (SBA) 368
smartphones 89, 90, 96, 102, 104, 107
social neighborhood 103
social network 89, 107
social presence 15, 19, 20, 21, 22, 26, 33, 34, 40, 41, 43
Social Responses to Computer Technology (SRCT) 20
Social Responses to Computer Technology (SRCT) research paradigm 20
social setting 91, 107
social welfare 239, 241, 252, 253, 254, 255, 256
socio-cultural beliefs 261
socio-economic background 2
socio-economic, motivational 356
sociology 18, 20, 39
software 122, 124, 128, 131, 132, 137
spin-off information consumers 211
state-of-art technologies 213
strategic orientation of business enterprises (STROBE) 307
strategic role 305
structural equation modeling (SEM) 44, 92, 265
structural heterogeneity 432
structural model 265, 267
supply chain 118, 119, 120, 121, 123, 126, 127, 131, 133, 134, 137, 138
supply chain management (SCM) 118, 408
supply chain management (SCM) systems 408

T
TAM articles 92
TAM model 92, 94, 101, 104
<table>
<thead>
<tr>
<th>Term</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>technologically-oriented firms</td>
<td>269</td>
</tr>
<tr>
<td>technology acceptance model</td>
<td>92</td>
</tr>
<tr>
<td>technology acceptance model (TAM)</td>
<td>265</td>
</tr>
<tr>
<td>technology infrastructure</td>
<td>327</td>
</tr>
<tr>
<td>technology-organizational-environment frame (TOE)</td>
<td>322</td>
</tr>
<tr>
<td>technology-organization-environment</td>
<td>118, 120, 136</td>
</tr>
<tr>
<td>Technology-Organization-Environment (TOE)</td>
<td>321</td>
</tr>
<tr>
<td>Technology-Organization-Environment (TOE) model</td>
<td>321</td>
</tr>
<tr>
<td>telecommunication-devices control</td>
<td>387</td>
</tr>
<tr>
<td>telecommunicaitons</td>
<td>122, 128</td>
</tr>
<tr>
<td>theory of planned behavior</td>
<td>92, 94, 108</td>
</tr>
<tr>
<td>theory of reasoned action</td>
<td>92</td>
</tr>
<tr>
<td>theory of reasoned action (TRA)</td>
<td>16</td>
</tr>
<tr>
<td>third-party organization (TPO)</td>
<td>243</td>
</tr>
<tr>
<td>TOE framework</td>
<td>324, 338</td>
</tr>
<tr>
<td>transaction security</td>
<td>329</td>
</tr>
<tr>
<td>transaction-specific</td>
<td>47</td>
</tr>
<tr>
<td>tree-based method</td>
<td>140</td>
</tr>
<tr>
<td>trigger-based intermediaries</td>
<td>194, 195, 196, 198, 199, 202</td>
</tr>
<tr>
<td>Trigger-based intermediaries</td>
<td>194, 198, 201, 202</td>
</tr>
<tr>
<td>trigger-based intermediary</td>
<td>195, 198</td>
</tr>
<tr>
<td>trust-related behaviors</td>
<td>16, 29</td>
</tr>
<tr>
<td>U</td>
<td></td>
</tr>
<tr>
<td>ubiquitous computing</td>
<td>8</td>
</tr>
<tr>
<td>Ubiquitous Web Applications (UWA)</td>
<td>400</td>
</tr>
<tr>
<td>up-to-date developments</td>
<td>382</td>
</tr>
<tr>
<td>usage index</td>
<td>97, 106</td>
</tr>
<tr>
<td>utilitarian</td>
<td>92, 94, 95, 102, 103, 107, 112</td>
</tr>
<tr>
<td>V</td>
<td></td>
</tr>
<tr>
<td>varimax rotation</td>
<td>265</td>
</tr>
<tr>
<td>verbal content</td>
<td>22</td>
</tr>
<tr>
<td>virtual organizations</td>
<td>23</td>
</tr>
<tr>
<td>virtual way</td>
<td>407</td>
</tr>
<tr>
<td>visual design elements</td>
<td>14</td>
</tr>
<tr>
<td>vital assets</td>
<td>329</td>
</tr>
<tr>
<td>W</td>
<td></td>
</tr>
<tr>
<td>WAP (wireless application protocol)</td>
<td>90</td>
</tr>
<tr>
<td>Web application design methodologies</td>
<td>402</td>
</tr>
<tr>
<td>Web-based decision support</td>
<td>72, 73</td>
</tr>
<tr>
<td>web-based decision support systems</td>
<td>73</td>
</tr>
<tr>
<td>web-based decision support tool</td>
<td>84</td>
</tr>
<tr>
<td>web design</td>
<td>25, 26, 36, 39, 43</td>
</tr>
<tr>
<td>WebDSS</td>
<td>72, 73, 74, 75, 76, 77, 78, 81, 82, 83, 84, 85</td>
</tr>
<tr>
<td>Web info</td>
<td>315</td>
</tr>
<tr>
<td>Web-product</td>
<td>221, 222, 223, 224, 226, 227, 228, 229, 230</td>
</tr>
<tr>
<td>Web-product compatibility</td>
<td>221, 222, 223, 224, 226, 227, 228, 229, 230</td>
</tr>
<tr>
<td>web service description languages</td>
<td>199</td>
</tr>
<tr>
<td>web service directories</td>
<td>199</td>
</tr>
<tr>
<td>Web services</td>
<td>385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 405, 417, 420, 421, 422</td>
</tr>
<tr>
<td>Web services-based information systems</td>
<td>386</td>
</tr>
<tr>
<td>Web Services Policy Language (WSPL)</td>
<td>392</td>
</tr>
<tr>
<td>website design</td>
<td>14, 20, 22, 24, 25, 35, 36</td>
</tr>
<tr>
<td>Web Site Design Method (WSDM)</td>
<td>402</td>
</tr>
<tr>
<td>Web transaction</td>
<td>402</td>
</tr>
<tr>
<td>WEB/WAP browsing</td>
<td>97</td>
</tr>
<tr>
<td>Western media cue format</td>
<td>35</td>
</tr>
<tr>
<td>WiFi</td>
<td>90</td>
</tr>
<tr>
<td>wireless-capable mobile phone</td>
<td>129</td>
</tr>
<tr>
<td>wire services</td>
<td>201</td>
</tr>
<tr>
<td>word of mouth</td>
<td>213</td>
</tr>
<tr>
<td>Workflow Management Systems (WfMSs)</td>
<td>408</td>
</tr>
<tr>
<td>World Wide Web Consortium (W3C)</td>
<td>386</td>
</tr>
<tr>
<td>World Wide Web (WWW)</td>
<td>282</td>
</tr>
<tr>
<td>X</td>
<td></td>
</tr>
<tr>
<td>XML data</td>
<td>435</td>
</tr>
</tbody>
</table>