

# *Table of Contents*

---

	<b>Preface.....</b>	<b>xiii</b>
	<b>Business Engineering .....</b>	<b>xiii</b>
	<b>Structure of the Book .....</b>	<b>xv</b>
	<b>Conventions Used in Book .....</b>	<b>xvi</b>
<b>Chapter 1:</b>	<b>Introduction.....</b>	<b>17</b>
	<b>Business Basics.....</b>	<b>17</b>
	<i>Business Strategy.....</i>	<i>18</i>
	<i>Value Concept.....</i>	<i>19</i>
	<i>Business Environment.....</i>	<i>20</i>
	<i>Mental Models.....</i>	<i>21</i>
	<i>Learning Organization .....</i>	<i>22</i>
	<b>Enterprise Modeling.....</b>	<b>25</b>
	<i>Notations .....</i>	<i>25</i>
	<i>Entities.....</i>	<i>28</i>
	<i>Actions .....</i>	<i>33</i>
	<i>Plans.....</i>	<i>37</i>
	<i>Rules.....</i>	<i>39</i>
	<i>Organizations .....</i>	<i>40</i>

Table of Contents

---

	<b>Summary .....</b>	<b>46</b>
<b>Chapter 2:</b>	<b>Purpose.....</b>	<b>49</b>
	<b>Introduction to Purpose .....</b>	<b>49</b>
	<i>Measures of Purpose .....</i>	<i>54</i>
	<i>Decisions and Information .....</i>	<i>54</i>
	<i>Information Hierarchy.....</i>	<i>55</i>
	<i>Examples in Practice.....</i>	<i>59</i>
	<b>Purpose Components.....</b>	<b>61</b>
	<i>Financial Ledger.....</i>	<i>62</i>
	<i>Data Warehouse.....</i>	<i>66</i>
	<i>Work Breakdown Structure .....</i>	<i>68</i>
	<i>Purpose and Planning.....</i>	<i>71</i>
	<i>Purpose and Policy.....</i>	<i>74</i>
	<i>Purpose and Contract .....</i>	<i>76</i>
	<b>Summary .....</b>	<b>79</b>
<b>Chapter 3:</b>	<b>Processes .....</b>	<b>81</b>
	<b>What is a Business Process?.....</b>	<b>81</b>
	<i>Process Steps .....</i>	<i>83</i>
	<i>Compound Processes.....</i>	<i>84</i>
	<i>Process Definition .....</i>	<i>86</i>
	<i>Workflow Loop.....</i>	<i>87</i>
	<i>Process Monitoring .....</i>	<i>91</i>
	<b>Process Design with UML .....</b>	<b>93</b>
	<i>Business Use Case.....</i>	<i>93</i>
	<i>Process States.....</i>	<i>96</i>
	<i>Activity Diagram .....</i>	<i>99</i>
	<i>Role Activity Diagram.....</i>	<i>101</i>
	<i>Managing Process Complexity.....</i>	<i>103</i>

## Table of Contents

---

<i>Process Sequence Diagram</i> .....	109
<b>Process Components</b> .....	<b>111</b>
<i>Basic Process Class</i> .....	114
<i>Cash Sale Process</i> .....	115
<i>Multiple-Item Process</i> .....	117
<i>Process Value Added</i> .....	119
<i>Work in Process</i> .....	120
<i>Process Folders</i> .....	127
<b>Summary</b> .....	<b>127</b>

## Chapter 4: **Entities**..... **129**

<b>Entity Models</b> .....	<b>129</b>
<i>Entity Properties</i> .....	130
<i>Alternative Models</i> .....	135
<i>Entity Roles and Values</i> .....	137
<i>Names and Identity of an Entity</i> .....	142
<b>Entity Roles</b> .....	<b>144</b>
<i>Party</i> .....	145
<i>Customer</i> .....	146
<i>Employee</i> .....	147
<i>Actor</i> .....	148
<i>Artifact</i> .....	150
<i>Asset</i> .....	151
<i>Finance</i> .....	151
<i>Human Resource</i> .....	152
<i>Machine Resource</i> .....	153
<i>Product</i> .....	154
<i>Space, Place, and Location</i> .....	156
<b>Entity Values</b> .....	<b>157</b>
<i>Account</i> .....	157
<i>Address</i> .....	162
<i>Aspect</i> .....	165

## Table of Contents

---

<i>Capacity</i> .....	167
<i>Description</i> .....	172
<i>Inventory</i> .....	174
<i>Price</i> .....	178
<b>Summary</b> .....	<b>181</b>

## **Chapter 5: Organization ..... 183**

<b>Organizations, Systems, and Complexity</b> .....	<b>183</b>
<i>Organization History</i> .....	184
<i>Organizations of the Future</i> .....	185
<i>Organization Units</i> .....	187
<i>Organization Roles</i> .....	189
<b>Organization Structure</b> .....	<b>192</b>
<i>Hierarchical Organization</i> .....	192
<i>Network Organization</i> .....	195
<i>Autonomous Organizations</i> .....	199
<i>Coordination of Organizations</i> .....	203
<i>Organization and Communication</i> .....	204
<i>Value Networks</i> .....	206
<b>Organization Components</b> .....	<b>210</b>
<i>Organization Unit</i> .....	211
<i>Organization Role</i> .....	211
<i>Contract Components</i> .....	212
<i>Contract Manager</i> .....	216
<i>Process Manager</i> .....	219
<i>Message Manager</i> .....	222
<i>Entity Manager</i> .....	226
<b>Summary</b> .....	<b>227</b>

## **Appendix ..... 229**

## Table of Contents

---

<b>Simple System</b> .....	<b>229</b>
<b>Entity Components</b> .....	<b>230</b>
<i>Customer Role</i> .....	230
<i>Employee Role</i> .....	231
<i>Human Resource</i> .....	232
<i>Machine Resource</i> .....	233
<i>Material Role</i> .....	234
<i>Money Role</i> .....	235
<i>Product Role</i> .....	236
<i>Supplier Role</i> .....	237
<b>Process Components</b> .....	<b>238</b>
<i>Finance Process</i> .....	238
<i>Payment Process</i> .....	240
<i>Payroll Process</i> .....	242
<i>Production Process</i> .....	244
<i>Purchase Process</i> .....	246
<i>Sales Process</i> .....	248
<b>Purpose Components</b> .....	<b>250</b>
<i>Production Schedule</i> .....	250
<i>Financial Ledger</i> .....	252
<i>Ledger Period</i> .....	252
<i>Posting Account</i> .....	252
<i>Summary Account</i> .....	252
<i>Other Measures</i> .....	254
<b>Summary</b> .....	<b>254</b>
.....	256
<b>Bibliography</b> .....	<b>257</b>
<b>Glossary</b> .....	<b>265</b>