e-Business. Organizational and Technical Foundations

Description: Two significant factors combine to drive the phenomenon of e-Business. Competition constantly motivates companies in their marketplaces, while rapidly developing information technologies offer new opportunities and challenges.

For Mike Papazoglou and Piet Ribbers, both business and technology are integral to e-Business. They demonstrate here how a solid understanding of business, organization, management and technology is crucial to an understanding of what e-Business is today and how it is going to be shaped in the future.

e-Business: Organisational and Technical Foundations focuses on the development of e-Business between and within enterprises. In particular it addresses how enterprises collaborate, what coordination mechanism are necessary and how this is reflected at the technical infrastructure level.

It includes:

- Abundant real-world examples to encourage readers to understand and appreciate real-life e-Business
- An analytical and critical approach to understanding business issues, decision-making and technology use and development
- Extensive end of chapter discussion questions and assignments for students
- A companion website at company website with additional exercises for students and PowerPoint slides and solutions for lecturers

Contents:

About the Authors xv

Foreword xvii

Preface xix

1. The World of e-Business 1

1.1 What is e-Business? 2

1.1.1 e-Business vs. e-Commerce 2

1.1.2 Some critical factors 3

1.2 Characteristics of e-Business 4

1.3 Elements of an e-Business solution 5

1.4 e-Business roles and their challenges 8

1.5 e-Business requirements 10

1.6 Impacts of e-Business 12

1.7 Inhibitors of e-Business 14

1.7.1 Management/strategy issues 14

1.7.2 Cost/financing issues 15

1.7.3 Security and trust issues 15
4. e-Business Relationships 75

4.1 Modeling interdependent business activities: the value chain 77

4.1.1 The business unit value chain 77

4.1.2 Value chain analysis 80

4.1.3 Value stream analysis 82

4.1.4 Unbundling the business unit value chain 83

4.1.5 The industry value chain 83

4.2 Business processes and their management 85

4.2.1 Business process management 87

4.2.2 Characteristics of business processes 88

4.2.3 Types of business processes 90

4.2.4 Role of IT in business processes 92

4.3 Types and characteristics of e-Business relationships 94

4.3.1 Types of e-Business relationships 95

4.3.2 Types of business relationships and information exchange 97

4.3.3 Characteristics of e-Business relationships 98

4.4 Electronic links and the value chain 100

4.5 Chapter summary 102

5. Governance Structures 107

5.1 Markets versus hierarchies: theoretical contributions 108

5.1.1 The transaction cost perspective 109

5.1.2 Transaction aspects: asset specificity, product complexity and frequency 110

5.1.3 Behavioural assumptions: bounded rationality and opportunism 111

5.1.4 The resource-based perspective 112

5.2 Networks 113

5.3 A supply chain perspective: value-adding partnerships 115

5.4 The effects of information technology on governance 116

5.4.1 The electronic market hypothesis 116

5.4.2 The move-to-the-middle hypothesis 118

5.4.3 A supply chain perspective 120

5.5 Chapter summary 121
8.1.4 Market-making mechanisms 207
8.1.5 Biased or unbiased markets 207
8.2 The functions of electronic markets 208
8.3 How do electronic markets differ from traditional markets? 209
  8.3.1 Personalization and customization 209
  8.3.2 Information goods 210
  8.3.3 Search 211
  8.3.4 Transaction mechanisms 211
  8.3.5 Price discovery 212
  8.3.6 Facilitation 212
  8.3.7 Electronic invoicing and payment 212
8.4 What are the effects of electronic markets? 214
  8.4.1 The impact of the emergence of electronic markets 214
  8.4.2 Stakeholders: buyers, suppliers, investors and service suppliers 215
8.5 Electronic market success factors 216
  8.5.1 Context-related success factors 217
  8.5.2 Process-related success factors 219
8.6 e-Market technology solutions 221
8.7 Chapter summary 223
9. e-Procurement 227
9.1 Introduction 228
9.2 The purchasing process 230
  9.2.1 Modeling the purchasing process 231
  9.2.2 Purchasing as part of supply chain management 233
9.3 Developments in purchasing 234
9.4 IT and purchasing 235
9.5 e-Procurement 235
  9.5.1 e-Procurement models 239
  9.5.2 The components of e-Procurement systems 241
  9.5.3 Internet-based e-Catalog systems 242
  9.5.4 Catalog aggregation 245
11.4 Chapter summary 301
12. e-Business Modeling 305
12.1 Business modeling 307
12.2 Business processes and collaborations 309
12.3 Business modeling with UML 310
12.3.1 Class diagrams 311
12.3.2 Activity diagrams 313
12.3.3 Use case diagrams 313
12.3.4 Sequence diagrams 316
12.3.5 Deployment diagram 316
12.3.6 Business process modeling with UML 2.0 316
12.4 Business process modeling methodologies 320
12.4.1 The Unified Software Development Process 322
12.4.2 The Rational Unified Process (RUP) 323
12.4.3 The UN/CEFACT Modeling Methodology 325
12.5 The Supply-Chain Operations Reference (SCOR) model 331
12.6 Business Process Modeling Notation 335
12.7 Comparing BPMN with UML 339
12.8 The Model Driven Architecture (MDA) 340
12.9 Chapter summary 344
13. Security and Reliability for e-Business 349
13.1 Reliability and quality considerations 351
13.2 Quality requirements 353
13.3 Trust 357
13.4 e-Business risks 359
13.5 e-Business security 361
13.5.1 Application security requirements 362
13.5.2 Security mechanisms for e-Business 364
13.6 Realizing a secure e-Business infrastructure 367
13.6.1 Infrastructure availability 367
13.6.2 Network level security 368
13.6.3 Secure communications 372
13.6.4 Digital certification and trusted third parties 376
13.6.5 Trust services overview 378
13.7 Chapter summary 387

14. Approaches to Middleware 391
14.1 What is middleware? 392
14.2 Messaging 393
14.3 Remote Procedure Calls (RPCs) 396
14.4 Remote Method Invocation (RMI) 398
14.5 Message-Oriented Middleware (MOM) 400
14.5.1 Integration brokers 402
14.5.2 The Java Message Service 405
14.6 Data-access middleware 406
14.7 Transaction-oriented middleware 407
14.7.1 Transaction-processing (TP) monitors 408
14.7.2 Application servers 409
14.8 Distributed-object middleware 411
14.8.1 Object Request Brokers (ORBs) 412
14.8.2 The Enterprise Java Beans (EJB) component model 416
14.9 Newer generation frameworks 418
14.9.1 .NET 418
14.9.2 J2EE 420
14.10 Chapter summary 428

15. Component-based Development 431
15.1 What are components? 433
15.1.1 Component characteristics 436
15.2 Interfaces and contracts 438
15.3 Business components and entities 441
15.3.1 Business entities 442
15.3.2 Business components 442
15.4 Component models and compositions 444
15.4.1 Component models 444
Fax Order Form
To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353-1-481-1716 (from Rest of World). If you have any questions please visit http://www.researchandmarkets.com/contact/

Order Information
Please verify that the product information is correct.

Product Name: e-Business. Organizational and Technical Foundations
Web Address: http://www.researchandmarkets.com/reports/2243165/
Office Code: SCD4CY1W

Product Format
Please select the product format and quantity you require:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Hard Copy (Paper back): USD 72 + USD 28 Shipping/Handling</th>
</tr>
</thead>
</table>

* Shipping/Handling is only charged once per order.

Contact Information
Please enter all the information below in BLOCK CAPITALS

Title: Mr ☐ Mrs ☐ Dr ☐ Miss ☐ Ms ☐ Prof ☐
First Name: ___________________________ Last Name: ___________________________
Email Address: * ___________________________
Job Title: ___________________________
Organisation: ___________________________
Address: ___________________________
City: ___________________________
Postal / Zip Code: ___________________________
Country: ___________________________
Phone Number: ___________________________
Fax Number: ___________________________

* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)
Payment Information

Please indicate the payment method you would like to use by selecting the appropriate box.

☐ Pay by credit card: You will receive an email with a link to a secure webpage to enter your credit card details.

☐ Pay by check: Please post the check, accompanied by this form, to:
Research and Markets,
Guinness Center,
Taylors Lane,
Dublin 8,
Ireland.

☐ Pay by wire transfer: Please transfer funds to:
Account number 833 130 83
Sort code 98-53-30
Swift code ULSBIE2D
IBAN number IE78ULSB98533083313083
Bank Address Ulster Bank,
27-35 Main Street,
Blackrock,
Co. Dublin,
Ireland.

If you have a Marketing Code please enter it below:

Marketing Code: ____________________________________________

Please note that by ordering from Research and Markets you are agreeing to our Terms and Conditions at http://www.researchandmarkets.com/info/terms.asp

Please fax this form to:
(646) 607-1907 or (646) 964-6609 - From USA
+353-1-481-1716 or +353-1-653-1571 - From Rest of World