E-business
Lecture 1
Introduction to e-business and e-commerce
E-business lecture 1 - Outline

- Practicalities
- Chapter 1 (Introduction and overview)
E-business practicalities

• Lecturer:
  – Peter de Waal

• Lectures:
  – Monday (11:00-12:45h) and Wednesday (09:00h-10:45h)

• Workshops (Werkcollege):
  – Wednesday (11:00h-12:45h)
Course literature


Exam Material:
- All slides
- All indicated book chapters
- Werkcollege materials
- Additionally provided papers
Houserules

• Lectures:
  • No laptops, smartphones, tablets
  • Be on time and don’t be a nuisance

• Guest lectures:
  • Mandatory
Structure of the course

• Theoretical part:
  • 2 Lectures per week
  • 3 Guest lectures
  • 2 Exams (mid-term and end-of-term)

• Practical part:
  • 7 werkcolleges on E-business topics
  • Werkcolleges are not mandatory, but:
    • The material taught is part of the exam material!
    • Werkcollege sessions are for checking your solutions:
      • If you come unprepared, you are not admitted.
      • If you come prepared, the assistant can check your solution.
    • Online solutions will not be provided.
E-business course: outline

- Intro
- Fundamentals of E-commerce
- E-business infrastructure
- E-environment
- E-business strategy
- E-procurement
- Supply Chain Management & Logistics
- Security & Payment systems
- E-marketing & CRM
- Change management
E-business – Lecture 1

Introduction and Overview of E-business and E-commerce
Lecture 1: Outline

• What is e-Business / e-Commerce?
• E-business infrastructure
• E-environment
• E-business strategies
• E-procurement
• Supply Chain Management & Logistics
• Security & Payment systems
• E-Marketing
Figure 1.1  Google circa 1998
Impact of electronic communication

• Since Google was launched in 1998 which e-business startups have transformed the way we work, live and play?

• Which new technologies or applications have emerged with an impact on business?

• Which new technologies do you foresee, that may change electronic business?
E-business opportunities

• Reach
  • Over 1+ billion users globally
  • Connect to millions of products

• Richness
  • Variety of available information/products/services.
  • Blogs, videos, feeds…
  • Personalized messages for users

• Affiliation
  • Ease of co-operation
E-business fundamentals

What is e-commerce and e-business?

• You are attending a role in the e-business team of a global bank
• You anticipate you may be asked the distinction between e-commerce and e-business.
• Write down a definition for each
• E-commerce:
  
• E-business:
E-commerce: Definition

- E-commerce:
  “All electronically mediated information exchanges between an organization and its external stakeholders”
  - Buy side E-commerce
  - Sell side E-commerce

- E-business:
  The transformation of key business processes through the use of Internet technologies (IBM, 1997)
  “Full integration of ICT process with all business and operations processes.”
The distinction between buy-side and sell-side e-commerce

2: E-business fundamentals

Models of E-Commerce transactions

• Traditional:
  – B2C: Business to consumer
  – B2B: Business to business

• New:
  – C2C: Consumer to consumer
  – C2B: Consumer to business

– Also:
  – G2C: Government to consumer
  – G2B: Government to business
  – G2G: Government to government
Summary and examples of transaction alternatives between businesses, consumers and governmental organizations

<table>
<thead>
<tr>
<th>Consumer or citizen</th>
<th>From: Supplier of content/service</th>
<th>Government</th>
</tr>
</thead>
</table>
| Consumer-to-Consumer (C2C) | • eBay  
• Peer-to-Peer (Skype)  
• Blogs and communities  
• Product recommendations  
• Social networks: MySpace, Bebo | Government-to-Consumer (G2C)  
• National government transactional: Tax – inland revenue  
• National government information  
• Local government services |
| Consumer-to-Business (C2B) | • Priceline  
• Consumer-feedback, communities or campaigns | Government-to-Business (G2B)  
• Government services and transactions: tax  
• Legal regulations |
| Consumer-to-Government (C2G) | • Feedback to government through pressure group or individual sites | Government-to-Government (G2G)  
• Inter-government services  
• Exchange of information |
| Business-to-Consumer (B2C) | • Transactional: Amazon  
• Relationship-building: BP  
• Brand-building: Unilever  
• Media owner – News Corp  
• Comparison intermediary: Kelkoo, Pricerunner | |
| Business-to-Business (B2B) | • Transactional: Eurooffice  
• Relationship-building: BP  
• Media Owned: Emap business publications  
• B2B marketplaces: EC21 | |
Betfair peer-to-peer gambling exchange
3: E-business infrastructure

4: E-environment

- Social
- Legal
- Economic
- Political
- Technological
5: E-business strategy

• Strategy:
  • How advanced is a company in its use of ICT to support different processes.
  • Identification of stages in this development
    • Analysis
    • Objectives
    • Definition
    • Implementation
A simple stage model for buy-side and sell-side e-commerce
Sell-side E-Commerce

• More than just selling books and stuff…

• Using Internet technology with range of techniques

• Types of sell-side E-commerce:
  – Transactional E-Commerce sites
  – Services-oriented relationship building sites
  – Brand-building sites
  – Portal, publisher or media sites
  – Social networks
Online Value Proposition

Question: Drivers of consumer adoption?

• Content
• Customization
• Community
• Convenience
• Choice
• Cost reduction
Online Value Proposition

Barriers to consumer adoption

- No perceived benefit
- Lack of trust
- Security problems
- Lack of skills
- Cost
6: E-procurement

- Procure = obtain or purchase
- Procurement methods and procedures
- Marketplaces
- Auctions
7: Supply Chain Management

• Supply chain management:
  – The coordination of all supply activities of an organization from its suppliers and delivery of products to its customers.

• Value chain:
  – The value-adding activities that connect supply side with demand side.

• Value network:
  – Network of value chains.
  – Vertical / virtual integration
8: Security and Payment systems

Security issues:
- Secrecy
- Integrity
- Availability
- Key management
- Nonrepudiation
- Authentication
Security and Payment systems

Encryption methods

<table>
<thead>
<tr>
<th>Consumer</th>
<th>Merchant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original order</td>
<td>Original order</td>
</tr>
<tr>
<td>Public key</td>
<td>Private key</td>
</tr>
<tr>
<td>key management</td>
<td>management</td>
</tr>
<tr>
<td>Encrypted order</td>
<td>Encrypted order</td>
</tr>
</tbody>
</table>

Internet
9: E-marketing & CRM

• E-marketing:
  – Marketing using electronic media
  – In conjunction with data about customers
  – Typically multi-channel
  – Customer-centric: customer insight

• CRM: Customer relationship management

• Typical new technologies:
  • Web 2.0: Blogs, feeds, podcasts, social networks, virals
  • Apps!
  • Big Data
First Direct Interactive (www.firstdirect.com)

Blendtec viral campaign micro-site (www.willitblend.com)

More viral advertising
Superviral van 'zoenende onbekenden' blijkt kledingadvertentie

Het filmpje waarin onbekenden elkaar zoeken, blijkt een advertentie voor kledingmerk Wren.
There’s an App for this!
There’s an App for that!
And a podcast.....
Evolution of web technologies

Source: Adapted from Spivack (2007)
What’s next?

• Next Lecture: E-business fundamentals
• Next Wednesday: Workshop 1: