Content

- Overview on development for the Internet
- How to approach assignment 1

Different views on Web development:

- No new methods required (for example Chen et al., 1999; Murugesan & Deshpande, 2001)
- Need a different set of methods (for example Braa et al., 2000; Greenbaum & Stuedahl, 2000; Baskerville & Pries-Heje, 2001; Carstensen & Vogelsang, 2001)
- In between view new methods for front end and old methods for back end (Pressman 1998, Erikson 2000)

What is internet development (Web Information systems):

- Initially just a means of providing information
- Trial and error development of web systems through authoring tools (Avison & Fitzgerald, 2003)
- Has evolved to include integration with back-end databases (Oinas-Kukkonen et al, 2001)

Difference between traditional development and development for the Internet:

- Who develop these systems:
  - No necessarily formal development teams (Howcroft, Carroll, 2000)
  - A variety of developers not from traditional IT departments (Howcroft, Carroll, 2000)
- What do they use for development:
  - No formal methods or modelling techniques (Howcroft, Carroll, 2000; Rossi & Siau, 2001)
  - Existing methods for modelling not suited to web development (interactive, dynamic, hypertext and multimedia) (Rossi, Siau, 2001; Howcroft, Carroll, 2000)

Vidgen’s (2002) list of differences between Web development and Traditional IS development:

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Strategic dimension</th>
<th>Relates to business goals</th>
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<tbody>
<tr>
<td></td>
<td>abstract</td>
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<tr>
<td></td>
<td>Indirectly</td>
<td>Directly</td>
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<tr>
<td>User</td>
<td>Employee</td>
<td>Customer</td>
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<td></td>
<td>Use often mandatory</td>
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<td></td>
<td>training and consultation</td>
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<td>Work studies make user needs clear</td>
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<td></td>
<td>User needs understood through marketing and sales methods</td>
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<td>Job satisfaction key</td>
<td>Customer satisfaction key</td>
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<tr>
<td>Design</td>
<td>Internal design (eg database)</td>
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<td></td>
<td>Basic usability enough</td>
<td>Graphics design imperative</td>
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</table>
Characteristics of web development (Rossi, Siau, 2001):

- User interface – main face of the organisation to customers
- Security – taken into consideration from the beginning; security an inhibitor of use
- Maintenance – continuous changes to the interface
- Components (Reuse)
- Enterprise Integration

Evolutionary process (Bauer & Scharl, 2000):

- Evolutionary process
- Redesign
- Analysis
- Usage
- Implementation

This view is supported by other authors such as Rossi and Siau (2001) and Howcroft, Carrol (2000).

Looking at the practical situation (Baskerville & Pries-Heje, 2001):

- Time pressure
- Vague requirements
- Prototyping
- Release orientation
- Fixed architecture
- Coding your way out
- Quality is negotiable
- Dependence on good people
- Need for structure

Model for internet development (Vidgen, 2002)

- Organisational analysis
- Information analysis
- Work design
- Technical design

User satisfaction (Barnes & Vidgen, 2003)

Some modelling methods adapted for web development:

- Relationship Management Methodology (RMM) (Isakowitz et al, 1995)
- Object oriented Hypermedia Design Method (OOHDM) (Schwabe et al, 1996)
- Intranet Design Method (IDM) (Lee 1998)
- See Howcroft and Carroll (2000) for more examples and their own methodology
Comparing traditional modelling techniques for Web development (Oinas-Kukkonen et al. 2001)

<table>
<thead>
<tr>
<th>Basic hypermedia functionality</th>
<th>Structured</th>
<th>O-O</th>
<th>RMM</th>
<th>OOHDM</th>
<th>IDM</th>
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</thead>
<tbody>
<tr>
<td>Orientation</td>
<td>P</td>
<td>P</td>
<td>G</td>
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<tr>
<td>Local coherence</td>
<td>P</td>
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<tr>
<td>Global coherence</td>
<td>P</td>
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<tr>
<td>Navigation facilitation</td>
<td>N</td>
<td>P</td>
<td>G</td>
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<td>Multimedia support</td>
<td>P</td>
<td>P</td>
<td>P</td>
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</table>

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<tr>
<th>Advanced Hypermedia Functionality</th>
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<tr>
<td>Link attributes</td>
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<tr>
<td>Semantically typed nodes</td>
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<tr>
<td>Transclusion</td>
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<tr>
<td>Annotation capability</td>
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Approach assignment 1

- Read the Assignment question
  - What does it ask?
- Read the list of given references
  - What did you get from that?
- Decide what is interesting to you
- Use the reference list in the list of references and follow up other papers
- Use Proquest to get more papers

Something that attracted my attention (I):
- Avison and Fitzgerald (2003, p. 445) says that:
  ‘Many approaches to Web Development have focused on the user interface and in particular the look and feel of a Web site, but have failed to address the wider aspects of Web-Based information systems. At the same time, traditional IS methodologies – from the waterfall lifecycle to rapid application development (RAD) – have struggled to accommodate web-specific aspects into their methods and work practices’
- What does that mean for development and modelling for the Internet?

Something that attracted my attention (II):
- See similarities between the early history of systems development and the evolution of web development methods (use Oinas-Kukkonen et al, 2001, Vidgen, 2002 and others to support this claim)
- What does that mean for Web development?