# Investing in Information: The Information Management Body of Knowledge

## Contents

### Part One: Taking stock

**Chapter 1: Introduction**

- The context .......................................................... 2
- Four short stories ......................................................
  - A global courier company can’t find the address ............ 4
  - The legal profession battles with huge numbers of documents 6
  - Information management in education ....................... 8
  - Big problems in big Government ............................. 9
- Success is difficult to find ....................................... 11
- A brief history ....................................................... 12
  - The early days .................................................... 12
  - The maturing years .............................................. 13
  - The beginnings of an idea ...................................... 14
  - Attention shifts .................................................. 15
  - A meeting of minds .............................................. 17
- The situation today ................................................. 18
  - IT is “commoditised” .......................................... 18
  - A journey with no map? ....................................... 19
- The management perspective .................................... 20
  - Management 101 in a nutshell ................................ 20
  - New management competencies are needed .................. 22

**Chapter 2: The Information Management Body of Knowledge**

- A simple example .................................................. 23
- The IMBOK Framework step by step .............................
  - The knowledge areas ............................................ 26
  - The information management processes ..................... 27
- Summary .................................................................. 29

### Part Two: Exploring information management

**Chapter 3: Exploring information technology**

- What is Information Technology? .............................. 34
  - Nature of technology ........................................... 34
  - Context for use ................................................... 34
  - Strategic issues ................................................... 35
  - Recognising technology potential ............................ 36
  - Acquisition of technology .................................... 37
- Summary .................................................................. 38
  - Managerial issues concerning Information Technology ... 38
  - Information technology management competencies .... 41
  - Research side-note: Chasing the hottest IT ............... 42
  - Research side-note: Yes, technology is cool, but don’t forget the people 42

Published by Springer – available from amazon.com
### Chapter 4: Exploring information systems

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is an Information System?</td>
<td>43</td>
</tr>
<tr>
<td>Nature of Information Systems</td>
<td>43</td>
</tr>
<tr>
<td>Information systems maturity</td>
<td>46</td>
</tr>
<tr>
<td>The applications portfolio</td>
<td>51</td>
</tr>
<tr>
<td>Turnaround information systems</td>
<td>55</td>
</tr>
<tr>
<td>Strategic information systems</td>
<td>55</td>
</tr>
<tr>
<td>Key operational information systems</td>
<td>57</td>
</tr>
<tr>
<td>Support information systems</td>
<td>58</td>
</tr>
<tr>
<td>Classifying applications</td>
<td>59</td>
</tr>
<tr>
<td>The need for discussion</td>
<td>60</td>
</tr>
<tr>
<td>Issues in managing the applications portfolio</td>
<td>62</td>
</tr>
<tr>
<td>Migration around the portfolio</td>
<td>62</td>
</tr>
<tr>
<td>Portfolio management in complex businesses</td>
<td>62</td>
</tr>
<tr>
<td>Shifting attitudes</td>
<td>65</td>
</tr>
<tr>
<td>Benefits vary around the applications portfolio</td>
<td>65</td>
</tr>
<tr>
<td>Information systems project management</td>
<td>66</td>
</tr>
<tr>
<td>Communicating information systems ideas</td>
<td>67</td>
</tr>
<tr>
<td>Managing systems development</td>
<td>69</td>
</tr>
<tr>
<td>Needs analysis and acceptance testing – the key to success?</td>
<td>71</td>
</tr>
<tr>
<td>Methods, techniques and tools</td>
<td>73</td>
</tr>
<tr>
<td>Business and systems analysis</td>
<td>74</td>
</tr>
<tr>
<td>Relating business analysis to the portfolio</td>
<td>83</td>
</tr>
<tr>
<td>Horses for courses</td>
<td>84</td>
</tr>
<tr>
<td>Summary</td>
<td>89</td>
</tr>
<tr>
<td>Managerial issues in Information Systems</td>
<td>89</td>
</tr>
<tr>
<td>Information systems management competencies</td>
<td>91</td>
</tr>
<tr>
<td>Research side-note: Understanding organisational agility</td>
<td>92</td>
</tr>
<tr>
<td>Research side-note: The consequences of “enterprise systems” on organisational agility</td>
<td>93</td>
</tr>
<tr>
<td>Summary</td>
<td>93</td>
</tr>
</tbody>
</table>

### Chapter 5: Exploring business processes

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is a Business Process?</td>
<td>94</td>
</tr>
<tr>
<td>Nature of business processes</td>
<td>95</td>
</tr>
<tr>
<td>Processes and the organisation chart</td>
<td>95</td>
</tr>
<tr>
<td>Identifying business processes</td>
<td>96</td>
</tr>
<tr>
<td>The value chain as an early indicator of process thinking</td>
<td>97</td>
</tr>
<tr>
<td>Business process redesign</td>
<td>98</td>
</tr>
<tr>
<td>Radical process redesign</td>
<td>99</td>
</tr>
<tr>
<td>The depth and scope of change</td>
<td>99</td>
</tr>
<tr>
<td>Depth of change</td>
<td>102</td>
</tr>
<tr>
<td>Scope of change</td>
<td>103</td>
</tr>
<tr>
<td>Principles of BPR</td>
<td>104</td>
</tr>
<tr>
<td>Development of business processes</td>
<td>105</td>
</tr>
<tr>
<td>Approaches to business modelling</td>
<td>105</td>
</tr>
<tr>
<td>The general approach</td>
<td>106</td>
</tr>
<tr>
<td>An analysis method</td>
<td>108</td>
</tr>
<tr>
<td>Managing business processes</td>
<td>123</td>
</tr>
<tr>
<td>The process triangle</td>
<td>123</td>
</tr>
<tr>
<td>Concluding comment</td>
<td>125</td>
</tr>
<tr>
<td>Summary</td>
<td>125</td>
</tr>
<tr>
<td>Managerial issues in process management</td>
<td>125</td>
</tr>
</tbody>
</table>
Business process management competencies 127
Research side-note: Outsourcing business processes 127
Research side-note: Seeing change happening, from the bottom up 128

Chapter 6: Exploring business information 130
What is business information? 130
The nature of information 130
Current issues 132
Understanding information: a portfolio model 132
Organising information: a generic model 139
Summary 151
Managerial issues concerning business information 151
Business information management competencies 152
Research side-note: Getting a grip on a flood of information 153
Research side-note: Does information management contribute to performance? 153
Research side-note: You can smile but you can’t hide! 154

Chapter 7: Exploring business benefits 155
What is benefits management? 155
Nature of business benefits 156
Benefits and the applications portfolio 158
A survey into benefits management 159
Managing benefits in the modern context 160
Two stages in achieving benefits 160
Relationship with process management and project management 162
Planning the delivery of benefits 163
A simple example 164
The benefits dependency network – a business example 166
The benefits management cycle 170
Stage 1: Identify and structure benefits 171
Stage 2: Plan benefits realisation 174
Stage 3: Execute benefits delivery plan 175
Stage 4: Review, evaluate and exploit 177
Summary 178
Managerial issues in benefits management 178
Benefits management competencies 179
Research side-note: IT capability no longer guarantees business performance? 180
Research side-note: A more optimistic worked example 180

Chapter 8: Exploring business strategy 181
What is strategy? 181
Nature of business and information systems strategy 181
Strategic contribution of IT 182
Consequences of a lack of strategy 182
Differences between information systems and information technology strategies 183
Different kinds of organisation 184
Development of information systems strategies 184
Systems strategy in context 184
The external business environment 185
The internal business environment 186
The internal IS/IT environment 187
The external IS/IT environment 187
Summary of strategic inputs 188
The strategy process
   Current situation appraisal: ‘where we are now?’ 189
   Opportunity spotting: ‘where we could be?’ 189
   Decision time: ‘where we want to be?’ 189
   Summary 190
   Summary of approaches to strategic analysis 192
Implementation of strategy 192
   Establishing the IS/IT strategic planning process 192
   Common problems 193
   Getting started 194
   The longer term 194
   Setting priorities 195
Prioritising within the portfolio segments 196
   Support systems 196
   Key operational systems 197
   Strategic systems 197
   Turnaround systems 198
   The question of infrastructure 199
   Summary 199
Strategic analysis tools 200
   SWOT (Strategic drivers: Where are we now? Where could we be?) 201
   Porter’s five forces 204
   Critical Success Factor analysis (CSFs) 208
   Value chain analysis 210
   Business modelling 221
   Boston Box 227
   Summary 230
   Managerial issues in strategic management 230
   Strategy management competencies 231
   Research side-note: Strategic beginnings 233
   Research side-note: Have we grown up yet? 233
   Research side-note: What managers should do 233

Part Three: Operationalising information management 235

Chapter 9: Assessing information management capability 237
   The survey instruments 237
      The micro level 238
      The macro level 238
   Four cases assessed 238
   The reference sample 239
      Chief Information Officers 240
   Real estate agent 241
   Financial services company 242
   Summary 243

Chapter 10: Researching information management 245
   Epistemology 245
   Positivist and interpretive research 245
   Critical research 246
   Pragmatic research 249
   Final thoughts 250

Published by Springer – available from amazon.com
Chapter 11: Some models and frameworks reviewed

Selected models
  Zachman reveals complexity (1987) 252
  ITIL (1989) 253
  Capability Maturity Model (CMM) (1992) 254
  Henderson and Venkatraman seek simplicity (1993) 255
  Jacobs' ladder (1995) 256
  COBIT (1996) 258
  The Benefits Dependency Network (2005) 259

Consolidation 259

References 263

Bibliography 266

Index 267
Figures

Copies of these figures are available for legitimate educational purposes on request.
Contact us for more information: info@imbok.info

Figure 1: A stakeholder context for Information Management 4
Figure 2: The critical area where information needs to be managed 15
Figure 3: “Think, Plan, Act, Check”: Managing information systems investments 21
Figure 4: The Information Management Body of Knowledge framework (simplified) 24
Figure 5: Five management domains, four intersections of necessary alignment 27
Figure 6: Scope and benefit of information systems 47
Figure 7: Introducing the Boston Box 52
Figure 8: The Applications Portfolio 54
Figure 9: Business units in context 63
Figure 10: Summarising management around the Applications Portfolio 67
Figure 11: The “V” Model for systems development 70
Figure 12: A data flow (process or activity) model 77
Figure 13: A simple information model 79
Figure 14: The simple information model expanded 80
Figure 15: Many-to-many relationship 80
Figure 16: More about what is in an entity model 81
Figure 17: The beginnings of the Zoo entity model 83
Figure 18: Business processes and the organisation chart 95
Figure 19: The internal value chain 97
Figure 20: Using the Value Chain to indicate the scope of change 103
Figure 21: The process of business process analysis 109
Figure 22: The business object lifecycle 117
Figure 23: Business performance at the Zoo – “Entertain visitors” 122
Figure 24: Different categories of processes 124
Figure 25: Data becomes information 130
Figure 26: The DIKAR model 131
Figure 27: The information portfolio 135
Figure 28: Researching information technology in education: a sample ontology 137
Figure 29: The manufacturing business, as seen by the management (simplified) 143
Figure 30: A generic information model for business 145
Figure 31: An example of a corporate information model: Retailing 148
Figure 32: Discounted cash flow analysis 156
Figure 33: The nature of benefits seen through the applications portfolio 158
Figure 34: First and second stage achievement of benefits 161
Figure 35: Programme and project management 163
Figure 36: An example of benefits dependency 164
Figure 37: Benefits dependencies in education, seen through the IMBOK 166
Figure 38: A simple business example 167
Figure 39: Benefits dependency networks: a simplified example 169
Figure 40: Building the benefits dependency network 171
Figure 41: The Benefits Plan 175
Figure 42: An example stakeholder analysis 176
Figure 43: The benefits review 177
Figure 44: The strategic analysis process 185
Figure 45: Michael Porter’s five forces 205
Figure 46: The simple, original form of the value chain 211
Figure 47: The value chain interpreted for a DIY retailing business 215
Figure 48: A simple representation of a supply chain 216
Figure 49: Information in the supply chain – form and just a hint of function 217
Figure 50: A model for a retail business, in the form of a value chain 222
Figure 51: A sample retailing information model (before loyalty cards) 224
Figure 52: The Boston Box 228
Figure 53: "Education" and "Government" capability compared 240
Figure 54: Results for Chief Information Officers 241
Figure 55: Results from a real estate business 241
Figure 56: Analysis of macro data from a financial services business 243
Figure 57: A summary of research approaches, loosely based on Myers 248
Figure 58: The Zachman Framework (extended version) 252
Figure 59: The Henderson and Venkatraman alignment model (1993) 255
Figure 60: “Jacob's ladder”, as used in BP Chemicals 257
Figure 61: Consolidation of the frameworks 261