E-Commerce in Regional Small to Medium Enterprises

Table of Contents

Foreword ................................................................................................................................. ix
Preface ..................................................................................................................................... xii
Acknowledgments .................................................................................................................. xviii

Chapter 1
SMEs and Electronic Commerce:
An Overview of Our Current Knowledge........................................................................ 1
The Nature of SMEs ............................................................................................................. 2
SMEs in Regional Areas ......................................................................................................... 7
Pre E-Commerce Acquisition of IT by SMEs ...................................................................... 8
IT Adoption Criteria .............................................................................................................. 11
The Diversity of the SME Sector ........................................................................................ 12
Electronic Commerce ......................................................................................................... 13
E-Commerce and SMEs ....................................................................................................... 14
Conclusion ............................................................................................................................ 17
References ............................................................................................................................ 18
Chapter II
General Research Methodology and Procedures:
An Overview of How the Study was Undertaken ............................................25
  Overall Goals of the Study ........................................................................25
  Choice of Location for Data Gathering .....................................................27
  Mode of Data Collection ........................................................................31
  Development of the Survey Instrument ..................................................31
  E-Commerce Criteria, Barriers, Benefits, and Disadvantages .................35
  Pilot Study ...............................................................................................37
  Statistical Analysis ................................................................................37
  Conclusion ..............................................................................................39
  References ..............................................................................................40

Chapter III
Profile of SMEs in Sweden, Australia, and the USA:
Associations Between Various Business Characteristics ............................42
  Survey Instrument ..................................................................................43
  Response Rates .....................................................................................45
  Profile of Respondents in Sweden ..........................................................46
  Associations Between Business Characteristics in Sweden .....................51
  Associations Between Business Characteristics and
  E-Commerce Adoption in Sweden .........................................................63
  Summary of Swedish Findings ...............................................................67
  Profile of Respondents in Australia .........................................................68
  Associations Between Business Characteristics in Australia ..................71
  Associations Between Business Characteristics and
  E-Commerce Adoption in Australia .......................................................73
  Summary of Australian Findings .............................................................73
  Profile of Respondents in the USA ..........................................................74
  Associations Between Business Characteristics in the USA ....................78
  Associations Between Business Characteristics and
  E-Commerce Adoption in the USA ........................................................79
  Summary of USA Findings ......................................................................80
  A Comparison of Sweden, Australia, and the USA ...................................81
  Conclusion .............................................................................................83
  References ..............................................................................................83

Chapter IV
Criteria for the Adoption of E-Commerce:
Why Do SMEs Decide to Implement E-Commerce? ......................................86
  Background ............................................................................................87
  E-Commerce Adoption Criteria and Business Characteristics ...............90
  Research Questions .................................................................................92
  Methodology ..........................................................................................93
  Business Characteristics and E-Commerce Adoption
  Criteria in Swedish SMEs .......................................................................94
  Groupings of E-Commerce Adoption Criteria in Sweden .......................98
<table>
<thead>
<tr>
<th>Summary: E-Commerce Adoption Criteria in Swedish SMEs</th>
<th>110</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Characteristics and E-Commerce Adoption Criteria in Australia</td>
<td>111</td>
</tr>
<tr>
<td>Groupings of E-Commerce Adoption Criteria in Australia</td>
<td>112</td>
</tr>
<tr>
<td>Summary: E-Commerce Adoption Criteria in Australian SMEs</td>
<td>115</td>
</tr>
<tr>
<td>Business Characteristics and E-Commerce Adoption Criteria in the USA</td>
<td>115</td>
</tr>
<tr>
<td>Groupings of E-Commerce Adoption Criteria in the USA</td>
<td>117</td>
</tr>
<tr>
<td>Summary: E-Commerce Adoption Criteria in USA SMEs</td>
<td>118</td>
</tr>
<tr>
<td>Comparison of Results: A Discussion</td>
<td>118</td>
</tr>
<tr>
<td>E-Commerce Adoption Criteria: Implications</td>
<td>122</td>
</tr>
<tr>
<td>E-Commerce Adoption Criteria: Key Findings</td>
<td>124</td>
</tr>
<tr>
<td>References</td>
<td>125</td>
</tr>
</tbody>
</table>

Chapter V  
Barriers to E-Commerce Adoption:  
Why are SMEs Staying Away from E-Commerce? ............................................. 129  

<table>
<thead>
<tr>
<th>Background</th>
<th>130</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Questions</td>
<td>133</td>
</tr>
<tr>
<td>Methodology</td>
<td>134</td>
</tr>
<tr>
<td>Business Characteristics and E-Commerce Adoption Barriers in Sweden</td>
<td>135</td>
</tr>
<tr>
<td>Groupings of E-Commerce Adoption Barriers in Sweden</td>
<td>135</td>
</tr>
<tr>
<td>Summary: Adoption Barriers in Swedish SMEs</td>
<td>140</td>
</tr>
<tr>
<td>Business Characteristics and E-Commerce Adoption Barriers in Australia</td>
<td>141</td>
</tr>
<tr>
<td>Groupings of E-Commerce Adoption Barriers in Australia</td>
<td>145</td>
</tr>
<tr>
<td>Summary: Adoption Barriers in Australian SMEs</td>
<td>147</td>
</tr>
<tr>
<td>Business Characteristics and E-Commerce Adoption Barriers in the USA</td>
<td>147</td>
</tr>
<tr>
<td>Groupings of E-Commerce Adoption Barriers in the USA</td>
<td>149</td>
</tr>
<tr>
<td>Summary: E-Commerce Adoption Barriers in USA SMEs</td>
<td>150</td>
</tr>
<tr>
<td>Comparison of Results: A Discussion</td>
<td>151</td>
</tr>
<tr>
<td>E-Commerce Adoption Barriers: Implications</td>
<td>155</td>
</tr>
<tr>
<td>E-Commerce Adoption Barriers: Key Findings</td>
<td>155</td>
</tr>
<tr>
<td>References</td>
<td>156</td>
</tr>
</tbody>
</table>

Chapter VI  
Benefits of E-Commerce Adoption:  
What Can SMEs Expect to Gain from E-Commerce Adoption? ......................... 160  

<table>
<thead>
<tr>
<th>Background</th>
<th>161</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Questions</td>
<td>163</td>
</tr>
<tr>
<td>Methodology</td>
<td>163</td>
</tr>
<tr>
<td>Business Characteristics and E-Commerce Benefits in Sweden</td>
<td>165</td>
</tr>
<tr>
<td>Groupings of E-Commerce Benefits in Sweden</td>
<td>165</td>
</tr>
<tr>
<td>Summary: E-Commerce Adoption Benefits in Swedish SMEs</td>
<td>172</td>
</tr>
<tr>
<td>Business Characteristics and E-Commerce Benefits in Australia</td>
<td>172</td>
</tr>
<tr>
<td>Groupings of E-Commerce Adoption Benefits in Australia</td>
<td>174</td>
</tr>
<tr>
<td>Summary: E-Commerce Benefits in Australian SMEs</td>
<td>175</td>
</tr>
<tr>
<td>Comparison of Results: A Discussion</td>
<td>175</td>
</tr>
<tr>
<td>E-Commerce Benefits: Implications</td>
<td>177</td>
</tr>
<tr>
<td>E-Commerce Adoption Benefits: Key Findings</td>
<td>177</td>
</tr>
<tr>
<td>References</td>
<td>178</td>
</tr>
</tbody>
</table>
Chapter VII
Disadvantages of E-Commerce Adoption:
What Types of Problems do SMEs Face from E-Commerce? .......................... 180
  Background ................................................................................. 181
  Research Questions ..................................................................... 182
  Methodology ............................................................................... 183
  Business Characteristics and E-Commerce Disadvantages in Sweden ...... 184
  Groupings of E-Commerce Disadvantages in Sweden .................... 186
  Summary: E-Commerce Disadvantages in Swedish SMEs ............... 192
  Business Characteristics and E-Commerce Disadvantages in Australia... 193
  Groupings of E-Commerce Disadvantages in Australia .................. 194
  Summary: E-Commerce Disadvantages in Australian SMEs .......... 195
  Comparison of Results: A Discussion ........................................... 196
  E-Commerce Disadvantages: Implications .................................... 197
  E-Commerce Adoption Disadvantages: Key Findings .................... 197
  References .................................................................................. 198

Chapter VIII
Strategic Alliances and E-Commerce Adoption:
Does Partnering with Other SMEs Affect E-Commerce Adoption? ............. 200
  Background ............................................................................... 200
  The Role of Strategic Alliances ................................................... 201
  The Role of Alliances E-Commerce Adoption ............................... 205
  Research Questions ..................................................................... 206
  Methodology ............................................................................... 206
  Business Characteristics and Strategic Alliance Membership .......... 207
  Strategic Alliances and E-Commerce Adoption ............................. 211
  Comparison of Differences Between the Three Locations: A Discussion... 221
  Groupings of E-Commerce Criteria, Barriers, Benefits, and Disadvantages and Alliance Membership ........................................... 222
  Comparison of Results: A Discussion ........................................... 243
  E-Commerce and Strategic Alliances: Implications ......................... 247
  E-Commerce and Strategic Alliances: Key Findings ....................... 249
  References .................................................................................. 252

Chapter IX
The Role of Gender in E-Commerce Adoption:
Does Having a Male or Female CEO Affect E-Commerce Use? .................. 256
  Background ............................................................................... 257
  Research Questions ..................................................................... 260
  Methodology ............................................................................... 260
  Gender and E-Commerce Adoption ............................................... 261
  Comparison of Differences Between the Three Locations: A Discussion...... 266
  Groupings of E-Commerce Criteria, Barriers, Benefits, and Disadvantages and CEO Gender .................................................. 267
  Comparison of Results: A Discussion ........................................... 279
  E-Commerce and Gender: Implications ........................................ 284
  E-Commerce and Gender: Key Findings ....................................... 285
  References .................................................................................. 287
Chapter X
The Role of Education in E-Commerce Adoption:
Does the CEO’s Level of Education Affect E-Commerce Adoption? ..........291
  Background ...........................................................................................................291
  Research Questions ..............................................................................................292
  Methodology ..........................................................................................................293
  Education and E-Commerce Adoption ...................................................................294
  Groupings of E-Commerce Criteria, Barriers, Benefits, Disadvantages,
  and CEO Education ............................................................................................298
  Comparison of Results: A Discussion ..................................................................318
  E-Commerce and CEO Education: Implications ..................................................319
  E-Commerce and CEO Education: Key Findings ..................................................319
  References .............................................................................................................326

Chapter XI
Interaction of Adoption Factors:
Do SMEs Achieve the Desired Benefits from E-Commerce Adoption? .............328
  E-Commerce Criteria and Benefits in Sweden .......................................................329
  Summary of Criteria and Benefits in Sweden ......................................................334
  E-Commerce Criteria and Disadvantages in Sweden .............................................336
  Summary of Criteria and Disadvantages in Sweden .............................................337
  E-Commerce Criteria and Benefits in Australia ....................................................338
  Summary of Criteria and Benefits in Australia .....................................................340
  E-Commerce Criteria and Benefits/Disadvantages Associations
  and Strategic Alliance Membership ......................................................................341
  E-Commerce Criteria and Benefits/Disadvantages Associations
  and Business Size .................................................................................................344
  E-Commerce Criteria and Benefits/Disadvantages Associations
  and Business Sector ............................................................................................346
  E-Commerce Criteria and Benefits/Disadvantages Associations
  and Market Focus .................................................................................................348
  E-Commerce Criteria and Benefits/Disadvantages Associations
  and Type of E-Commerce .....................................................................................349
  Comparison of the Two Locations and Implications ............................................350
  E-Commerce Criteria and Resulting Benefits/Disadvantages:
    Key Findings ..................................................................................................352
  References .............................................................................................................354

Chapter XII
Current Barriers and Future Drivers:
Why SMEs Don’t Use E-Commerce Today and What Potential Benefits May
Lead Them to Use E-Commerce in the Future .....................................................355
  E-Commerce Barriers and Potential Drivers in Sweden .........................................356
  Summary of Barriers and Potential Drivers in Sweden ........................................363
  E-Commerce Barriers and Potential Drivers in Australia ......................................365
  Summary of Barriers and Potential Drivers in Australia ........................................367
  E-Commerce Barriers and Potential Drivers in the USA .......................................368
  Summary of Barriers and Potential Drivers in the USA ........................................373
Comparison of the Three Locations and Implications ........................................... 374
E-Commerce Barriers and Potential Drivers: Key Findings .................................. 378
References ............................................................................................................... 379

Chapter XIII
E-Commerce Adoption in Sweden, Australia, and the USA:
A Comparison ............................................................................................................ 381
  A Comparison of E-Commerce Criteria ................................................................. 382
  A Comparison of E-Commerce Barriers ................................................................. 386
  A Comparison of E-Commerce Benefits ................................................................. 389
  A Comparison of E-Commerce Disadvantages .................................................... 390
  Comparison of Three Locations: Implications .................................................... 391
  Comparison of Three Locations: Key Findings .................................................. 391
  References ............................................................................................................. 393

Chapter XIV
Implications for E-Commerce Adoption by SMEs:
How Can These Results Help with E-Commerce Adoption by SMEs? ............ 395
  E-Commerce in Sweden ....................................................................................... 396
  E-Commerce in Australia ..................................................................................... 398
  E-Commerce in the USA ...................................................................................... 399
  Final Remarks ....................................................................................................... 401
  References ............................................................................................................. 402

About the Authors .................................................................................................... 404

Index ......................................................................................................................... 405