Social enterprise business models:

identifying the trading concepts that inform them

Eva Balan-Vnuk

Submitted in requirement for the degree of Doctor of Philosophy

at The University of Adelaide.

Entrepreneurship, Commercialisation and Innovation Centre (ECIC)

Faculty of the Professions

The University of Adelaide

July 2013
# Table of Contents

Table of Contents .................................................................................................................. 2
Table of Figures and Tables ................................................................................................. 7
Abstract ................................................................................................................................. 12
Statement ............................................................................................................................... 14
Acknowledgements ............................................................................................................... 15
Definitions of key terms ...................................................................................................... 17

**CHAPTER 1: INTRODUCTION** ......................................................................................... 20
1.1 The research problem ...................................................................................................... 20
  1.1.1 Research goal ........................................................................................................... 21
  1.1.2 Research questions ................................................................................................. 22
  1.1.3 Research contribution ............................................................................................. 22
1.2 Research methods used .................................................................................................. 22
  1.2.1 Data for the “business model” definition map ......................................................... 25
  1.2.2 Data to identify social enterprise trading concepts ............................................... 25
  1.2.3 Data to identify the most financially advantageous business model ................. 25
  1.2.4 Alternative business models .................................................................................. 26
1.3 Findings and their implications ..................................................................................... 26
  1.3.1 Interpreting the term “business model” .................................................................. 26
  1.3.2 Identifying five trading concepts ............................................................................ 27
  1.3.3 Identifying the most financially advantageous business model ............................ 28
  1.3.4 Identifying alternative business models ................................................................. 29
1.4 Flow of this thesis ......................................................................................................... 30

**CHAPTER 2: SOCIAL ENTERPRISE LITERATURE REVIEW** ........................................... 34
2.1 Social entrepreneurship ................................................................................................. 35
2.2 What is a social enterprise? ........................................................................................ 39
2.3 Distinctions between social enterprises and traditional nonprofit organisations (NPOs) ... 41
2.4 The “third sector” and social enterprises ................................................................... 44
2.5 Social service organisations as social enterprises ...................................................... 47
2.6 Social enterprises: a growing global phenomenon .................................................... 48
2.7 Social enterprises create social value .......................................................................... 49
2.8 Social enterprise organisational forms ....................................................................... 51
2.9 Social enterprise legitimacy ....................................................................................... 53
2.10 Social enterprise governance .................................................................................... 55
2.11 Sustainability and social enterprises ........................................................................ 56
2.12 Socially responsible corporations ............................................................................. 57
2.13 Comparative overview of social enterprise conceptualisations ............................... 58
2.14 Conclusion ................................................................................................................ 64

**CHAPTER 3: BUSINESS MODELS LITERATURE REVIEW** ........................................... 67
3.1 Different perspectives in the literature ....................................................................... 68
3.2 Business models for e-commerce .............................................................................. 75
3.3 Business models for innovation and technology management ................................... 77
3.4 Business models and strategy .................................................................................... 78
CHAPTER 4: TRADING CONCEPTS LITERATURE REVIEW

4.1 Business models as mental models ........................................................................... 91
4.2 Cognitive frames and framing ................................................................................. 92
4.3 Pragmatic thinking ................................................................................................. 94
4.4 Concepts .................................................................................................................. 96
4.5 Concepts as “ideal types” ....................................................................................... 99
4.6 Cognitive linguistics and semiotics ....................................................................... 100
4.7 Concepts as purpose or intent ............................................................................... 102
4.8 Alternative approaches to concepts ....................................................................... 104
  4.8.1 Sensemaking ..................................................................................................... 104
  4.8.2 Mindsets and dominant logic .......................................................................... 105
  4.8.3 Metaphors ........................................................................................................ 105
  4.8.4 Personal constructs ......................................................................................... 106
  4.8.5 Values .............................................................................................................. 107
  4.8.6 Assumptions ................................................................................................... 107
  4.8.7 Negotiated belief structures .......................................................................... 108
4.9 Concept identification through concept mapping ............................................. 109
4.10 Conclusion ............................................................................................................. 110

CHAPTER 5: RESEARCH METHODOLOGY AND METHOD

5.1 Research methodology ............................................................................................. 113
  5.1.1 Comparison: an essential part of research ..................................................... 113
  5.1.2 Concept mapping as a research method ....................................................... 117
    5.2.2.1 Alternatives to concept mapping .............................................................. 118
    5.1.2.2 Community structure analysis ................................................................. 120
    5.1.2.3 Key advantages of concept mapping ......................................................... 121
  5.1.3 Qualitative Comparative Analysis (QCA) ..................................................... 123
    5.1.3.1 QCA as a research approach .................................................................. 123
    5.1.3.2 QCA as a data analysis technique ........................................................... 124
    5.1.3.3 Crisp set QCA (csQCA) .......................................................................... 127
  5.1.4 Interviews as a data source ............................................................................. 129
  5.1.5 Documents as a data source .......................................................................... 132
  5.1.6 Identifying generalizations ............................................................................. 133
5.2 Research method ..................................................................................................... 136
  5.2.1 Decide on the selection criteria for social enterprises .................................... 137
    5.2.1.1 Review of mapping exercises conducted in the United Kingdom .......... 138
    5.2.1.2 Presence of trading income ................................................................. 139
    5.2.1.3 Determining social aims is difficult ....................................................... 140
    5.2.1.4 Five key sources to develop selection criteria .................................... 141
    5.2.1.5 Selection criteria .................................................................................... 142
      5.2.1.5.1 The organisation has a social objective or mission ......................... 142
5.2.2 Select the sampling frame and method ......................................................... 144
5.2.2.1 Selecting a database .................................................................................. 145
5.2.2.2 Pilot face-to-face interviews in Adelaide, South Australia ......................... 146
5.2.2.3 “Finding Australia’s Social Enterprise Sector” (FASES) database ................. 147
5.2.2.4 Face-to-face interviews in Sydney, New South Wales ............................... 148
5.2.2.5 Remaining interviews conducted by telephone ............................................ 149
5.2.2.6 Purposive sampling and interview transcription ......................................... 150
5.2.2.7 Confidentiality of reporting and incentives ............................................... 150
5.2.2.8 Data completeness .................................................................................... 151
5.2.2.9 Characteristics of the sample ..................................................................... 152
5.2.3 Steps to create the “business model” definition concept map ....................... 153
5.2.3.1 Collect statements provided by participants .............................................. 154
5.2.3.2 Link similar business model definitions to each other ............................... 155
5.2.3.3 Enter data into UCINET 6.0 ....................................................................... 156
5.2.3.4 Generate the concept map using UCINET 6.0 ........................................... 157
5.2.3.5 Conduct Girvan-Newman analysis ............................................................ 157
5.2.3.6 Name the clusters ..................................................................................... 158
5.2.4 Steps to create the “trading concepts” concept map ..................................... 159
5.2.4.1 Collect information on trading activities .................................................... 160
5.2.4.2 Verify participant statements with official documents .............................. 160
5.2.4.3 Link similar social enterprise trading activities to each other .................. 161
5.2.4.4 Enter data into UCINET 6.0 (add more detail) ......................................... 162
5.2.4.5 Generate the concept map using UCINET 6.0 ........................................... 162
5.2.4.6 Conduct Girvan-Newman analysis ............................................................ 163
5.2.4.7 Name the clusters ..................................................................................... 164
5.2.5 Steps to determine whether any trading concept(s) confer(s) a financial advantage .............................................................. 164
5.2.5.1 Designate the outcome to be explained ..................................................... 166
5.2.5.2 Designate the conditions ......................................................................... 166
5.2.5.3 Collect revenue performance information ............................................... 166
5.2.5.4 Calculate the percentage growth of revenue .............................................. 166
5.2.5.5 Identify social enterprises based on the outcome ..................................... 167
5.2.5.6 Identify the combination of conditions for each social enterprise .......... 167
5.2.5.7 Produce a data table .................................................................................. 167
5.2.5.8 Qualitatively analyse the truth table ......................................................... 168
5.2.5.9 Analyse the truth table using fsQCA 2.0 software .................................... 169
5.2.5.9.1 Convert the data table into a CSV file in the appropriate format ............ 169
5.2.5.9.2 Upload the CSV file into fsQCA 2.0 software ...................................... 170
5.2.5.9.3 Select “Crisp Truth Table Algorithm” .................................................. 171
5.2.5.9.4 Select the variables (causal conditions and outcome) .......................... 172
5.2.5.9.5 Sort the truth table based on consistency .............................................. 174
5.2.5.9.6 Undertake “Delete and code” analysis ................................................... 176
5.2.5.10 Boolean minimization using fsQCA 2.0 software .................................................. 177
5.2.5.11 Interpret the causal conditions and solution formulae ............................................. 179
5.2.5.12 Generalize the findings ......................................................................................... 179

5.3 Conclusion .................................................................................................................... 180

CHAPTER 6: BUSINESS MODEL DEFINITION FINDINGS ................................................. 182

6.1 Business model definition concept map ....................................................................... 183
6.2 Creating the business model definition concept map ..................................................... 185
6.3 Qualitative identification of clusters ............................................................................. 186
6.4 Validation using Girvan-Newman analysis: 7 clusters .................................................. 187
6.5 Validation using Girvan-Newman analysis: 6 clusters .................................................. 189
6.6 Naming the clusters ...................................................................................................... 190
6.7 Business model definition concept map findings ......................................................... 195

6.8 Examples of business model definitions in each cluster .............................................. 196
6.8.1 Cluster 1: “Sustainable revenue stream” ................................................................. 196
6.8.2 Cluster 2: “Organisational form” ............................................................................. 197
6.8.3 Cluster 3: “Value chain” ......................................................................................... 197
6.8.4 Cluster 4: “Business plan” ..................................................................................... 197
6.8.5 Cluster 5: “Unclear” ............................................................................................... 198

6.9 Business model definition concept map conclusion ..................................................... 199

CHAPTER 7: TRADING CONCEPTS FINDINGS ................................................................ 200

7.1 Trading concepts map .................................................................................................. 201
7.2 Creating the trading concepts map ............................................................................... 202
7.3 Qualitative identification of clusters ............................................................................ 203
7.4 Validation using Girvan-Newman analysis: 7 clusters .................................................. 205
7.5 Naming the clusters ...................................................................................................... 207

7.6 Trading concepts map findings ..................................................................................... 210
7.7 Trading activity examples for each cluster ................................................................... 212
7.7.1 Cluster 1: “Safety nest” ......................................................................................... 213
7.7.2 Cluster 2: “Activity coaching” ............................................................................... 214
7.7.3 Cluster 3: “Needs distribution” .............................................................................. 215
7.7.4 Cluster 4: “Social expertise” .................................................................................. 216
7.7.5 Cluster 5: “Mission engagement” .......................................................................... 218

7.8 Inter-dimensional relationships between concepts ....................................................... 219
7.9 Participant report #1 .................................................................................................... 220
7.10 Trading concepts map comparison with prior study .................................................... 220
7.11 Comparison between the business model definition and trading concept maps .......... 224
7.12 Trading concepts map conclusion ................................................................................ 226

CHAPTER 8: QUALITATIVE COMPARATIVE ANALYSIS (QCA) FINDINGS .................. 228

8.1 Designate the outcome to be explained ....................................................................... 230
8.2 Designate the five conditions ...................................................................................... 232
8.3 Collect revenue performance information ..................................................................... 234
8.4 Calculate the percentage growth of revenue ................................................................ 235
8.5 Identify social enterprises based on the outcome ........................................................ 236
8.6 Identify the combination of conditions for each social enterprise ............................................. 237
8.7 Produce a data table ............................................................................................................. 238
8.8 Qualitatively analyse the truth table ..................................................................................... 239
  8.8.1 Sort data table by outcome and condition value ................................................................. 240
  8.8.2 Examine the cases to identify similarities and/or contradictions ....................................... 241
  8.8.3 Refer back to the case information provided by participants ............................................... 242
  8.8.4 Review and resolve contradictory configurations ................................................................. 242
  8.8.4.1 Row 6 contradictory cases ................................................................................................. 245
  8.8.4.2 Row 7 contradictory cases ................................................................................................. 246
  8.8.4.3 Row 8 contradictory cases ................................................................................................. 247
  8.8.4.4 Row 9 contradictory cases ................................................................................................. 247
  8.8.4.5 Row 10 contradictory cases ............................................................................................... 248
  8.8.4.5 Summary of contradictory cases review ............................................................................ 249
8.9 Analyse the original truth table using fsQCA 2.0 software ..................................................... 250
  8.9.1 Convert the original data table a CSV file ........................................................................... 250
  8.9.2 Upload the original CSV file into fsQCA 2.0 software ......................................................... 250
  8.9.3 Select “Crisp Truth Table Algorithm” .................................................................................... 250
  8.9.4 Select the variables (causal conditions and outcome) ........................................................... 250
  8.9.5 Sort the truth table based on consistency ............................................................................ 251
  8.9.6 Undertake “Delete and code” analysis .................................................................................. 253
  8.9.2 Boolean minimization using fsQCA 2.0 software ................................................................. 254
    8.9.2.1 Original truth table complex solution formulae ................................................................. 255
    8.9.2.2 Original truth table parsimonious solution formulae ......................................................... 257
    8.9.2.3 Original truth table intermediate solution formulae ......................................................... 258
  8.9.3 Interpret the causal conditions and solution formulae ............................................................ 258
8.10 Analyse the reduced truth table using fsQCA 2.0 software ..................................................... 260
  8.10.1 Convert the data table into a CSV file in the appropriate format ......................................... 261
  8.10.2 Upload the reduced truth table into fsQCA 2.0 software .................................................... 261
  8.10.3 Select “Crisp Truth Table Algorithm” ................................................................................... 261
  8.10.4 Select the variables (causal conditions and outcome) ............................................................ 261
  8.10.5 Sort the truth table based on consistency ............................................................................ 262
  8.10.6 Undertake “Delete and code” analysis .................................................................................. 263
  8.10.7 Boolean minimization using fsQCA 2.0 software ................................................................. 264
    8.10.7.1 Reduced truth table complex solution formulae ................................................................. 264
    8.10.7.2 Reduced truth table parsimonious solution formulae ......................................................... 265
    8.10.7.3 Reduced truth table intermediate solution formulae ......................................................... 266
  8.10.8 Interpret the causal conditions and solution formulae ............................................................ 266
8.11 Generalize the findings ........................................................................................................ 267
8.12 Participant report #2 ........................................................................................................... 267
8.13 Conclusion .......................................................................................................................... 267

CHAPTER 9: SUMMARY .............................................................................................................. 270
9.1 The five trading concepts identified in this study ..................................................................... 273
9.2 Contribution to the literature ............................................................................................... 273
  9.2.1 Social enterprise .................................................................................................................. 273
Table of Figures and Tables

Figure 1  The five business model definitions revealed by the concept map ................................................................. 26
Figure 2  The five trading concepts revealed by the concept map ...................................................................................... 28
Figure 3  Flow of this thesis .................................................................................................................................................. 33
Figure 4  Austin et al.’s (2006, p.17) Social Entrepreneurship Framework (SVP, social value proposition) .............. 38
Figure 5  Bounded multidimensional model of social entrepreneurship (Weerawardena et al., p.32) ...................... 39
Figure 6  Dees’ (1998a) social enterprise hybrid spectrum ................................................................................................. 52
Figure 7  Porter’s (1985) Generic Value Chain .................................................................................................................. 75
Figure 8  Hindle’s (2009) conceptual framework ................................................................................................................ 80
Figure 9  Casadesus-Masanell et al.’s “Strategy, business model, and tactics” framework (2010, p. 204) .......... 87
Figure 10  Research approach analogy ............................................................................................................................... 88
Figure 11  Cases, Aspects of Cases, and Research Strategies (adapted from Ragin, 1994, p.49) ....................... 114
Figure 12  UCINET 6.0 interaction matrix to enter linking data ......................................................................................... 156
Figure 13  UCINET 6.0 interaction matrix to enter linking data

Figure 14  QCA and the “funnel of complexity” (Rihoux & Lobe, 2009, p.238)

Figure 15  Original truth uploaded into fsQCA 2.0 (Ragin et al., 2006)

Figure 16  Select “Crisp Truth Table Algorithm”

Figure 17  Select the outcome and causal conditions

Figure 18  Selected condition and causal conditions

Figure 19  Truth table results (part 1)

Figure 20  Truth table results (part 2)

Figure 21  “Delete and code” analysis (part 1)

Figure 22  “Delete and code” analysis (part 2)

Figure 23  “Delete and code” results

Figure 24  Complexity / parsimony continuum of QCA solution formulae to explain outcome Y

Figure 25  Intermediate Solution options presented in fsQCA 2.0 (Ragin et al., 2006)

Figure 26  Initial business model definition concept map generated by UCINET 6.0

Figure 27  Concept map with the researcher’s qualitative identification of clusters

Figure 28  Girvan-Newman clustering analysis for seven clusters

Figure 29  Business model definition concept map with seven calculated clusters

Figure 30  Girvan-Newman clustering analysis for six clusters

Figure 31  Business model definition concept map with six calculated clusters

Figure 32  Business model definition concept map with final five clusters

Figure 33  Five business model definitions revealed by the concept mapping method

Figure 34  Initial trading concepts map generated by UCINET 6.0

Figure 35  Trading concepts map with the researcher’s initial clusters

Figure 36  Girvan-Newman clustering analysis for seven clusters

Figure 37  Trading concepts map with seven calculated clusters

Figure 38  Trading concepts map with the final five clusters

Figure 39  Five trading concepts revealed by the concept mapping method

Figure 40  Five trading concepts revealed by the researcher’s prior study

Figure 41  Sort data table by outcome and condition using Excel

Figure 42  The outcome and causal conditions are selected

Figure 43  Original truth table results – unsorted

Figure 44  Original truth table results – sorted by consistency

Figure 45  “Delete and code” results

Figure 46  Intermediate Solution options presented in fsQCA 2.0 (Ragin et al., 2006)

Figure 47  Reduced truth table results – sorted by consistency

Figure 48  “Delete and code” reduced truth table results

Figure 49  Intermediate solution preparation

Figure 50  Five business model definitions revealed by the concept mapping method
Table 1 Definitions used in this thesis ................................................................. 17
Table 2 Overview of research questions, interview questions, research methods and findings ............... 24
Table 3 Chapter 2 Overview ............................................................................. 35
Table 4 Examples of social entrepreneurship special issues in scholarly journals ..................................... 36
Table 5 Proposed social enterprise typology for this research ............................................................ 41
Table 6 Research focus within the organisational landscape .............................................................. 41
Table 7 Comparison of nonprofit social enterprises and traditional NPOs ............................................. 44
Table 8 The global presence of social enterprises .............................................................................. 49
Table 9 Comparison between Zahra et al.’s (2009) typology and Young’s (2006) social value dimensions .. 51
Table 10 Comparative overview of social enterprise in Europe and US (drawn from Kerlin, 2006) .......... 59
Table 11 Paradigm-building discourses of social entrepreneurship (Nicholls, 2010) .............................. 60
Table 12 Selected definitions of social enterprise (ordered by publication date) ..................................... 61
Table 13 Summary of definitions ......................................................................................... 64
Table 14 Chapter 3 Overview .................................................................................... 68
Table 15 Selected business model definitions (ordered by publication date) ......................................... 71
Table 16 Summary of the purpose of the business model (from the above references) ......................... 74
Table 17 Summary of operational dimensions listed in the literature ................................................. 74
Table 18 Casadesus-Masanell et al. (2010) definitions ......................................................................... 86
Table 19 Chapter 4 Overview ..................................................................................... 91
Table 20 Summary of alternative approaches .................................................................................. 111
Table 21 Chapter 5 Overview ..................................................................................... 112
Table 22 The Goals and Strategies of Social Research (Ragin, 1994, p.51) ............................................. 114
Table 23 Research questions, research strategies, and research goals ................................................. 115
Table 24 Chapter 5 data collection and analysis sections .................................................................. 136
Table 25 Research questions and associated data collection and research methods ............................ 137
Table 26 Types of income received by social enterprises .................................................................. 139
Table 27 Social enterprise selection criteria (Chalmers & Balan-Vnuk, 2012) ........................................ 142
Table 28 2011 Australian population data (Australian Bureau of Statistics, 2011) .............................. 144
Table 29 Summary of interviews conducted ................................................................................... 145
Table 30 Number of social enterprises participating in this research .................................................. 152
Table 31 Role of participants ......................................................................................... 153
Table 32 Industry sectors represented in this research ..................................................................... 153
Table 33 Six steps to create the “business model” definition concept map ............................................. 154
Table 34 Example of business model definition statements .............................................................. 154
Table 35 Description of the process to link similar statements ............................................................ 155
Table 36 Seven steps to create the “trading concepts” map ............................................................... 159
Table 37 Description of the process to link similar trading activities ..............................................................161
Table 38 Twelve steps to conduct Qualitative Comparative Analysis (QCA) ..........................................................165
Table 39 Characteristics of a quality truth table (Rihoux & De Meur, 2009) ..........................................................168
Table 40 Strategies for resolving contradictory configurations (Rihoux & De Meur, 2009) ........................................168
Table 41 Process to analyse the truth table using fsQCA 2.0 software ..................................................................169
Table 42 Chapter 6 Research Question ..............................................................................................................183
Table 43 Chapter 6 Overview ...............................................................................................................................183
Table 44 How the researcher initially identified each cluster .............................................................................186
Table 45 Seven clusters identified using Girvan-Newman analysis ..................................................................188
Table 46 Complete list of linked statements in the orange cluster ....................................................................191
Table 47 Selected linked statements in the grey and green clusters .................................................................192
Table 48 Summary of the five clusters .................................................................................................................194
Table 49 Descriptive and short name for each definition, with example verbatim ............................................195
Table 50 “Sustainable revenue stream” cluster verbatim (selected examples) ...................................................197
Table 51 “Business plan” cluster verbatim (selected examples) ..........................................................................198
Table 52 “Unclear” cluster verbatim ..................................................................................................................198
Table 53 Chapter 7 Research Question 2 .............................................................................................................200
Table 54 Chapter 7 Overview ..............................................................................................................................201
Table 55 How the researcher initially identified each cluster .............................................................................204
Table 56 Seven clusters identified using Girvan-Newman analysis ..................................................................207
Table 57 Selected linked statements in the black and green clusters ...............................................................208
Table 58 Summary of the five clusters .................................................................................................................210
Table 59 Descriptive and short name for each definition, with example verbatim ............................................211
Table 60 Trading activities in the “Safety nest” cluster .....................................................................................213
Table 61 Trading activities in the “Activity coaching” cluster ............................................................................214
Table 62 Trading activities in the “Needs distribution” cluster .........................................................................215
Table 63 Trading activities in the “Social expertise” cluster, identified by symbol ............................................217
Table 64 Trading activities in the “Mission engagement” cluster, by symbol .......................................................219
Table 65 Comparison between studies that reveal the trading concepts of social enterprises in Australia ....222
Table 66 Comparison of the five trading concepts between the two studies .....................................................223
Table 67 Comparison between the two concept maps (raw numbers) ...............................................................224
Table 68 Percentage of business model definitions provided by CEOs of social enterprises ..........................225
Table 69 Chapter 8 Research Question .............................................................................................................229
Table 70 Chapter 8 Overview ..............................................................................................................................230
Table 71 “Safety nest” trading concepts measure of financial success (example) ................................................231
Table 72 Summary of the five conditions under investigation (from Chapter 7) ................................................233
Table 73 Summary of contact with organisations .................................................................................................234
Table 74 Example of social enterprise trading activity revenue growth ...........................................................236
Table 75  Example of social enterprises identified by the outcome .................................................237
Table 76  Example of social enterprises identified by combination of conditions and outcome ........237
Table 77  Trading concept codes ................................................................................................238
Table 78  Extract from the data file ................................................................................................239
Table 79  Steps taken to create and qualitatively analyse the truth table ........................................240
Table 80  Truth table of “trading activity revenue growth” and five conditions .................................241
Table 81  Characteristics of a quality truth table (Rihou & De Meur, 2009) ........................................242
Table 82  Strategies for resolving contradictory configurations (Rihou & De Meur, 2009) ...............244
Table 83  Contradictory combinations of conditions .......................................................................245
Table 84  Row 6 contradictory cases ...............................................................................................245
Table 85  Row 7 contradictory cases ...............................................................................................246
Table 86  Row 8 contradictory cases ...............................................................................................247
Table 87  Row 9 contradictory cases ...............................................................................................247
Table 88  Row 10 contradictory cases ..............................................................................................248
Table 89  Summary of conclusions regarding the contradictory cases .............................................249
Table 90  Summary of two truth tables ............................................................................................249
Table 91  Process to analyse the truth table using fsQCA 2.0 software ...........................................250
Table 92  Trading concept name abbreviations .................................................................................251
Table 93  Original truth table complex solution formulae .................................................................255
Table 94  Original truth table parsimonious solution formulae .........................................................257
Table 95  Original truth table intermediate solution formulae ..........................................................258
Table 96  Summary of original truth solution formulae ......................................................................259
Table 97  Reduced truth table of 24 cases ..........................................................................................260
Table 98  Process to analyse the truth table using fsQCA 2.0 software ...........................................260
Table 99  Truth table of reduced set of cases ....................................................................................261
Table 100 Reduced truth table complex solution formulae ..............................................................265
Table 101 Reduced truth table parsimonious solution formulae ......................................................265
Table 102 Reduced truth table intermediate solution formulae .......................................................266
Table 103 Summary of the solutions for the original and reduced truth tables ...............................266
Table 104 Chapter 9 Overview .......................................................................................................270
Table 105 Summary of research contribution, limitations, and implications ....................................272
Table 106 Complete list of business model definitions, grouped by cluster in descending order ......297
Table 107 Complete list of social enterprise trading activities, grouped by cluster in descending order ....312
Table 108 Membership scores in csQCA and fsQCA (adopted from Ragin, 2007) .........................329
Table 109 List of trading activity revenue growth generated from the identified trading concepts (1) .....................................................................................................................332
Table 110 Data table sorted by growth and cluster ..........................................................................333
Table 111 Manually analysed truth table ..........................................................................................334
Table 112 Final truth table (developed manually) ..........................................................................335
Abstract

Social enterprises provide services and goods to alleviate social problems, and adopt business models to ensure financial sustainability. Differentiated from commercial enterprises due to their primary social mission, and from traditional nonprofit organisations due to their implementation of trading activities, little is known about how social enterprises understand the term “business model”, what the business models of social enterprises are, or what informs them. It is also unclear whether any particular social enterprise business model may confer a financial advantage. Although the business model construct is not yet clearly defined in the literature, there is a general understanding that business models are informed by an organisation’s strategy.

In-depth interviews were conducted with Chief Executive Officers of 65 nonprofit social enterprises from a diverse range of sectors in Australia. Four research questions are addressed using concept mapping and Qualitative Comparative Analysis (QCA). These research methods combine qualitative insights with quantitative analysis, provide transparent research processes, allow for contextual generalizations, and offer deeper insight into an increasingly important sector of the economy.

Despite growing consensus that the business model is driven by an organisation’s strategy, the operational components remain ambiguous. Business model definitions provided by the 65 CEOs were examined, similar statements were linked together, and, using a social network analysis software tool, a concept map was generated. The five resulting clusters revealed that participants defined business models as: “Sustainable revenue stream”, “Organisational form”, “Value chain”, “Business plan”, and “Unclear”. Although several of these clusters correspond with the literature, these inconsistencies clearly demonstrate that the business model has multivalent characteristics, and that investigating the business models as provided by participants would not provide useful or valid findings. The researcher therefore examined trading activity statements provided by the participants to articulate the trading concepts, or strategy, that informs this sector’s business models. Similar trading activities were linked, a concept map was generated, and five distinct trading concepts were identified after close examination of the trading activities included in each cluster: “Safety nest”, “Activity coaching”, “Needs distribution”, “Social expertise”, and “Mission engagement”.

12
To examine whether any particular combination of trading concepts confers a financial advantage, the revenue growth of the social enterprise trading activities was evaluated using QCA. Based on Boolean algebraic logic, QCA revealed that no specific combination is financially advantageous to nonprofit social enterprises, suggesting that each trading concept is equally useful or valid. Social enterprise managers and strategists may use this set of five trading concepts to both appraise existing and creatively design new trading activities. This unusual but relevant application of the concept mapping and QCA methods contributes to a growing area of academic research.
Statement

This work contains no material which has been accepted for the award of any other
degree or diploma in any university or other tertiary institution and, to the best of my
knowledge and belief, contains no material previously published or written by another
person, except where due reference has been made in the text.

I give consent to this copy of my thesis, when deposited in the University Library, being
made available for loan and photocopying, subject to the provisions of the Copyright Act
1968.

I also give permission for the digital version of my thesis to be made available on the
web, via the University’s digital research repository, the Library catalogue, the
Australasian Digital Theses Program (ADTP) and also through web search engines,
unless permission has been granted by the University to restrict access for a period of
time.
Acknowledgements

This doctoral thesis could only have been undertaken with the support, guidance, and encouragement of those people who consistently demonstrated their belief in my abilities throughout this challenging yet very rewarding journey.

I am indebted to my supervisors Professor Noel Lindsay and Associate Professor Fredric Kropp for the many thought-provoking and insightful discussions that helped me to refine my research questions and to produce this work. My sincere thanks.

The collegial, supportive, and motivating environment at the ECIC provided me with a strong foundation from which to conduct my research, and I wish to thank my peers for their feedback on my research over the three years. I would particularly like to acknowledge Dr Barry Elsey as the driving force behind the ECIC PhD research networking events. I also wish to thank and acknowledge the ECIC academic and professional staff for their encouragement and support. I look forward to future collaboration.

In particular, I owe special thanks and recognition to Associate Professor Mike Metcalfe who helped me to define and construct the original research questions, and who generously provided mentorship and many hours of enjoyable academic debate.

I was fortunate to meet many inspiring and encouraging academics and fellow PhD students at events and conferences that provided me with additional insights and ideas to improve my research: Professor Tom Lumpkin’s Social Entrepreneurship Doctoral Seminar in June 2011, the Babson College Entrepreneurship Research Conferences in 2011 and 2012, the QUT Social Enterprise Doctoral Seminar Day in November 2011, and the QUT ACERE Bootcamp led by Professor Per Davidsson in December 2012. This exposure to the broader research community helped me to further develop and refine my ideas.

I also wish to thank collaborators in other related research topics who provided me with opportunities to broaden my knowledge, in particular Associate Professor Mike Metcalfe, Associate Professor Francine Schlosser, Dr Allan O’Connor, Dominic Chalmers, Peter Balan, and Richard Tuck.
I wish to acknowledge the assistance and support of Social Traders Ltd, Victoria, for providing access to the “Finding Australia’s Social Enterprise Sector (FASES)” database developed by Barraket, Collyer, O’Connor, and Anderson (2010b) at Queensland University of Technology. This database provided the sampling frame for this research. Importantly, this research was only possible due to the 65 social enterprise CEOs who so generously gave their time to share their experiences and insights. My sincere thanks to these inspiring individuals who provide critical and valuable services to our community.

Although undertaking research can sometimes be a lonely journey, I am so grateful for the support, love, and encouragement of my family and friends who kept me motivated. I would like to thank my parents, Peter and Elizabeth, who fostered in me the love of learning, the confidence to take on big challenges, and provided support while settling back in Australia. To my grandparents, Evelyn and Pierre, Kazik and Dana, thank you for being such positive role models.

Finally, I dedicate this work to my husband Luboš who challenged, supported, and encouraged me every step of the way. To our wonderful girls, Sophia and Olivia, may you have the courage and resilience to follow your dreams, and make a positive difference in the world.
Definitions of key terms

Definitions of key terms used in this thesis are summarised below in Table 1.

Table 1  Definitions used in this thesis

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition used in this thesis</th>
<th>Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asymmetric causality</td>
<td>Asymmetric causality exists when the explanation for the existence of a phenomenon, such as a democracy, does not mean that the opposite explanation results in the absence of the phenomenon, such as an autocracy. QCA links conditions with an outcome through asymmetric set-theoretic relations (Wagemann &amp; Schneider, 2010).</td>
<td>5</td>
</tr>
<tr>
<td>Boolean algebra</td>
<td>Set-theoretic methods use Boolean algebra to examine different configurations of conditions (Fiss, 2007; Ragin, 1987). Boolean algebra is a notational system that allows for the algebraic manipulation of logical statements. Boolean algebra complements configurational theory as it offers “a sophisticated assessment of just how different causes [or causal conditions] combine to affect relevant outcomes” (Fiss, 2007, p. 1181).</td>
<td>5, 8</td>
</tr>
<tr>
<td>Business models</td>
<td>The business model is “a statement of how a firm will make money and sustain its profit stream over time.” (Stewart et al., 2000, p. 290), while recognising that it is the way an organisation converts a set of strategic choices into value, and how the organisation creates and captures this value (Smith, Binns, &amp; Tushman, 2010a, p. 450) through revenue generating activities. Business models are discussed in Chapter 3, and five definitional themes based on the responses of the 65 social enterprise Chief Executive Officers in this sample are identified in Chapter 6.</td>
<td>2, 3</td>
</tr>
<tr>
<td>Causal conditions</td>
<td>QCA identifies “conditions” rather than “independent variables”. Causal conditions are conditions that are either necessary or sufficient for a particular outcome to occur.</td>
<td>5, 8</td>
</tr>
<tr>
<td>Community structure analysis</td>
<td>Networks are inhomogeneous in nature, and consist of a set of distinct groups (Newman, 2004a). There exist many different statistical methods of community detection within a network. The Girvan-Newman (2002) community structure analysis of the concept map quantitatively verifies the number of clusters within a network. Although the term “community structure” is used in this research, this does not refer to a community of people, but rather a community of statements that belong together.</td>
<td>5</td>
</tr>
<tr>
<td>Comparative research</td>
<td>Comparison is inherent in all social science research (Ragin, 1987), and comparative research adopts a comprehensive view of the cases under investigation, focusing on the diversity between cases (Ragin, 1994).</td>
<td>5</td>
</tr>
<tr>
<td>Concept mapping</td>
<td>Concept mapping (Alexander, 1964) is a mixed methods approach (Mingers, 2001) where qualitative judgment and quantitative analysis are integrated to create a visual network or map from which concepts and ideas can emerge (Trochim &amp; Kane, 2007). Concept mapping is discussed in Chapter 5, and is used as the research method to identify five business model themes based on responses from the 65 participants (Chapter 6) and five trading concepts that inform the business models of nonprofit social enterprises in Australia (Chapter 7).</td>
<td>5, 6, 7</td>
</tr>
<tr>
<td><strong>Configurational theory</strong></td>
<td>Configurational theory proposes that organisations are best investigated and explained “as clusters of interconnected structures and practices, rather than modular or loosely coupled entities whose components can be understood in isolation” (Fiss, 2007, p.1180). This leads naturally to a set-theoretic approach.</td>
<td>5</td>
</tr>
<tr>
<td><strong>Conjunctural conditions</strong></td>
<td>Conjunctural conditions are those conditions that cause effect only when combined with other conditions (Wagemann &amp; Schneider, 2010).</td>
<td>5</td>
</tr>
<tr>
<td><strong>Corporate social responsibility</strong></td>
<td>A concept that informs how managers of for-profit firms manage public policy and social issues (Windsor, 2006).</td>
<td>2.12</td>
</tr>
<tr>
<td><strong>Crisp set QCA (csQCA)</strong></td>
<td>In crisp set QCA conditions are either in or out of a category (Wagemann et al., 2010) and are identified using “presence/absence dichotomies” represented as ‘1’ (present) and ‘0’ (absent) (Ragin, 1999b, p.1230).</td>
<td>5, 8</td>
</tr>
<tr>
<td><strong>Equifinality</strong></td>
<td>Where different paths can be perceived as equivalent or “equifinal” alternatives that lead to the same outcomes (Fiss, 2007).</td>
<td>5</td>
</tr>
<tr>
<td><strong>fsQCA software</strong></td>
<td>Fuzzy-Set/Qualitative Comparative Analysis 2.0. (fsQCA) software (Ragin et al., 2006)</td>
<td>5, 8</td>
</tr>
<tr>
<td><strong>Fuzzy set QCA (fsQCA)</strong></td>
<td>Fuzzy sets QCA extend crisp set QCA by allowing membership scores of conditions in the interval between ‘0’ and ‘1’, such as 0.8 (Ragin, 2007). This research uses crisp set QCA.</td>
<td>5</td>
</tr>
<tr>
<td><strong>Girvan-Newman analysis</strong></td>
<td>Girvan-Newman sub-group structure analysis (2002) recognises that even within a single sub-group there exist smaller sub-groups. Based on the number of interconnecting links between each of the nodes, Girvan-Newman analysis (2002) identifies “groups within the group”. Girvan-Newman analysis is used to analyse the concept maps created in Chapters 6 and 7.</td>
<td>5, 6, 7</td>
</tr>
<tr>
<td><strong>Governance</strong></td>
<td>“The relationship among various participants in determining the direction and performance of corporations.” (Monks &amp; Minow, 1995).</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>INUS condition</strong></td>
<td>INUS stands for “insufficient but necessary part of a condition which is itself unnecessary but sufficient for the result” (Mahoney, 2008). This means that A on its own is insufficient, but it is a necessary part of the combined condition AB, which itself is not necessary but only sufficient for Y.</td>
<td>5.1.3.2</td>
</tr>
<tr>
<td><strong>Legitimacy</strong></td>
<td>Legitimacy is “a generalized perception or assumption that the actions of an entity are socially desirable, proper or appropriate within some socially constructed system of norms, values, beliefs and definitions” (Suchman, 1995, p.571).</td>
<td>2.9</td>
</tr>
<tr>
<td><strong>Nonprofit organisations (NPOs)</strong></td>
<td>Nonprofit organisations (NPOs) exist to fulfil a social mission, and are prohibited from distributing profits to shareholders or individual stakeholders (Considine, 2003).</td>
<td>2.3, 2.4</td>
</tr>
<tr>
<td><strong>Nonprofit sector or third sector</strong></td>
<td>Also referred to as the social sector, or third sector, the nonprofit sector is comprised of social organisations such as charities, voluntary organisations, churches, educational institutions, and social enterprises (cf. Shaw et al., 2007).</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td>The phenomenon under examination in QCA is called the “outcome” instead of the “dependent variable” (Schneider &amp; Wagemann, 2010).</td>
<td>5, 8</td>
</tr>
<tr>
<td><strong>Qualitative Comparative Analysis (QCA)</strong></td>
<td>QCA is specifically designed to address causal heterogeneity and the inherent complexity of case-oriented research. QCA is founded on a set-theoretic approach that uses Boolean and fuzzy algebra to identify configurations of conditions that lead to a</td>
<td>5, 8</td>
</tr>
</tbody>
</table>
specific outcome, or explain a specific phenomenon (Ragin, 2007; Schneider & Wagemann, 2010).

<table>
<thead>
<tr>
<th>Set-theoretic approach</th>
<th>A set-theoretic approach conceives cases as configurations of conditions, and overcomes limitations of standard statistical techniques where aspects of cases are disaggregated for independent analysis. Set-theoretic methods use Boolean algebra to examine different configurations of conditions.</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social enterprises</td>
<td>Social enterprises “use trading activities to achieve social goals and financial self-sufficiency” (Shaw et al., 2007, p. 421), may not distribute profits to shareholders or individual stakeholders (Bull et al., 2006; Hart et al., 2007), and are not run by government (Leadbeater, 1997; Lyons, 2001). This research focuses on social enterprises operating under the organisational form of a nonprofit (called nonprofit social enterprises). Social enterprises are discussed in Chapter 2.</td>
<td>2</td>
</tr>
<tr>
<td>Social entrepreneurship</td>
<td>Social entrepreneurship is “entrepreneurial activity with an embedded social purpose” (Austin et al., 2006, p.1)</td>
<td>2</td>
</tr>
<tr>
<td>Social mission</td>
<td>The social mission articulates the purpose of the organisation.</td>
<td>2</td>
</tr>
<tr>
<td>Social value</td>
<td>To create non-economic outcomes, such as reduced unemployment, and improved access to health care (cf. Haugh, 2005).</td>
<td>2.6</td>
</tr>
<tr>
<td>Solution formula</td>
<td>The final set of conditions that lead to an outcome in QCA is called the solution formula, rather than an equation.</td>
<td>5, 8</td>
</tr>
<tr>
<td>Strategy</td>
<td>Strategy is defined in this research as “a pattern in a stream of decisions” (Mintzberg &amp; Waters, 1985, p. 257).</td>
<td>3</td>
</tr>
<tr>
<td>Sustainability</td>
<td>The financial viability of social enterprises that undertake trading activities (cf. Zahra et al., 2009). Although sustainability has many aspects, this research focuses on the financial sustainability of social enterprises, or their ability to survive long-term due to sufficient funds and resources. The sustainability of social enterprises is discussed in Chapter 2.</td>
<td>2.11</td>
</tr>
<tr>
<td>Trading activities</td>
<td>Trading is the “continuous activity producing goods and/or selling services” (Borzaga &amp; Defourny, 2004, p. 16). It is through analysing the trading activities of the nonprofit social enterprises in this sample that trading concepts are identified. Trading concepts are discussed in Chapter 4.</td>
<td>2.2</td>
</tr>
<tr>
<td>Trading concepts</td>
<td>Concepts inform our logic or understanding of whatever object, event or phenomenon we are thinking about, and guide our actions (Ormerod, 2006), and are a label that help us interpret or understand something (Schon, 1963). Trading concepts allow social enterprise strategists to explicitly think about and label what is informing their business model. Trading concepts are discussed in Chapter 4, and the five trading concepts identified in this research are discussed in Chapter 7.</td>
<td>4</td>
</tr>
<tr>
<td>Truth table</td>
<td>The truth table lists all the possible logical combinations of the causal conditions with the cases that conform to each combination (Ragin, 1987).</td>
<td>5, 8</td>
</tr>
<tr>
<td>UCINET 6.0 software</td>
<td>Social network analysis software used to create concept maps (Borgatti, Everett, &amp; Freeman, 2002).</td>
<td>5, 6, 7</td>
</tr>
</tbody>
</table>