

The Role of the User in Accounting for SME Wine Businesses

by

Melanie Reddaway

A thesis submitted for the degree of

Doctor of Philosophy

Adelaide Business School
The University of Adelaide

12 August, 2017

Contents

List of Figures	6
List of Tables	7
Summary	8
Declaration.....	10
Acknowledgments.....	11
1. Introduction.....	13
1.1 Motivation.....	13
1.1.1 The Management Accounting Practices of SMEs	13
1.1.2 SMEs from the Australian Wine Industry.....	14
1.2 Overview of the Papers	15
1.2.1 Paper 1: Vernacular Accounting in the SME Context.....	15
1.2.2 Paper 2: Incorporating the User when Considering SME Costing Systems	16
1.2.3 Paper 3: Stakeholder Experiences of Isomorphic Forces in a Patchy Institutional Field	16
1.2.4 Paper 4: The Role of Logic-Carriers in the Management of Institutional Complexity ..	17
1.3 Structure of the Thesis	17
References.....	18
2. Methodology	21
2.1 Laughlin’s “Middle-Range” Research Approach	21
2.2 Qualitative Case Study Approach.....	23
2.3 Research Procedures.....	24
2.3.1 SMEs from Australia’s Wine Industry	24
2.3.2 Case Selection	26
2.3.3 Data Collection.....	27
2.3.4 Data Management and Organisation.....	30
2.4 Conclusion	30
References.....	31
3. Vernacular Accounting in the SME Context.....	35
Abstract	35
3.1 Introduction.....	35
3.2 Background Literature.....	36

3.2.1	“Informal” Accounting Systems	36
3.2.2	Informal Accounting in the SME Context.....	38
3.2.3	Kilfoyle et al.’s (2013) Vernacular Accountings.....	38
3.3	Method.....	40
3.4	Findings and Discussion: SME Vernacular Accounting Ideal Types	41
3.4.1	Type 1 – Vernacular Accounting as Inventory of Knowledge	41
3.4.2	Type 2 – Vernacular Accountings as a Defensive Resource / Affective Technology	43
3.5	Conclusion, Limitations and Future Research.....	46
	References.....	48
4.	Incorporating the User when Considering Sophistication in SME Costing Systems	52
	Abstract	52
4.1	Introduction.....	52
4.2	Background Literature.....	53
4.2.1	Sophistication of Product Costing Systems.....	53
4.2.2	Management Accounting as Practice	55
4.3	The Research Study	56
4.3.1	The Participant Firms	58
4.3.2	The Sensitizing Concepts.....	61
4.4	Findings	67
4.4.1	The Firms’ Calculations of the Cost of a Bottle of Wine	68
4.4.2	The Firms’ Capacity to Cope with Non-Wine Product Costings.....	73
4.5	Discussion.....	75
4.5.1	The Typology	76
4.6	Conclusion	78
	References.....	80
5.	Stakeholder Experiences of Isomorphic Forces in a Patchy Institutional Field.....	85
	Abstract	85
5.1	Introduction.....	85
5.2	Theoretical Framework: Isomorphic Forces, Organisational Fields and Frames.....	86
5.2.1	Institutions	86
5.2.2	Isomorphic Forces and Organisational Fields	87
5.2.3	Frames.....	88

5.2.4	Institutional Theory and Contingency Theory Alignment	89
5.3	Methods	90
5.3.1	The Australian Wine Industry Field	90
5.3.2	The Focal Frame: WFA’s Costing Initiatives	91
5.3.3	The Case Studies	92
5.3.4	Data Collection and Analysis	94
5.4	Findings	95
5.4.1	Mimetic Isomorphism	95
5.4.2	Coercive Isomorphism	98
5.4.3	Normative Pressures	99
5.5	Discussion and Conclusion	100
	References	103
6.	The Role of Logic-Carriers in the Management of Institutional Complexity	108
	Abstract	108
6.1	Introduction	108
6.2	Theoretical Background	109
6.2.1	Institutional Logics	109
6.2.2	Institutional Logics and the Link to Practice	112
6.2.3	Reconciling Agency and Structure	113
6.3	Method	114
6.3.1	The Research Setting	114
6.3.2	Data Collection and Analysis	114
6.3.3	Theoretical Model	115
6.4	Findings	117
6.4.1	Enacting Aesthetic and Market Logics in the Australian Wine Industry	117
6.4.2	Logic Segmentation	118
6.4.3	Logic Bridging	120
6.4.4	Logic Demarcation	121
6.5	Discussion	122
6.6	Conclusion	123
	References	125
7.	Summary and Conclusions	130
7.1	Introduction	130

7.2	Findings	130
7.2.1	Paper 1: Vernacular Accounting in the SME Context.....	130
7.2.2	Paper 2: Incorporating the User when Considering Sophistication in SME Costing Systems	131
7.2.3	Paper 3: Stakeholders’ Experiences of Isomorphic Forces in a Patchy Institutional Field	131
7.2.4	Paper 4: The Role of Logic Carriers in the Management of Institutional Complexity	132
7.3	Contributions and Recommendations	132
7.3.1	Theoretical Contributions and Implications.....	132
7.3.2	Practical Contributions and Recommendations	133
7.4	Limitations and Suggestions for Future Research.....	134
	Full Reference List	135
Appendix A	Summary of Firm Characteristics.....	147
Appendix B	Participant Firms – Background Information	150
Appendix C	Key Informants	155
Appendix D	Overview of Winemaking Processes.....	156

List of Figures

Figure 1 - Dimensions on the choice framework for empirical research - reproduced from Laughlin (1995, p.68)	22
Figure 2 - Kilfoyle, Richardson and MacDonald's (2013) varieties of accountings.....	38
Figure 3 - Sensitizing concepts employed in the examination of SME winery costing systems	63
Figure 4 - Typology of SME costing system sophistication styles.....	77
Figure 5 - Smets et al. (2015) theoretical model: Balancing conflicting-yet-complementary logics in practice	115

List of Tables

Table 1 - Firm sampling characteristics	57
Table 2 - Interview List.....	58
Table 3 - Participant firm characteristics	61
Table 4 - Summary of goods and services categories sold by participant firms.....	66
Table 5 - Firm A - Components captured in the cost of a bottle of wine	69
Table 6 - Participant firm characteristics	94
Table 7 - Key stakeholders from participant firms	95
Table 8 - Summary of relative strength of firms' experience of isomorphic forces	100
Table 9 – Summary of firm characteristics.....	101
Table 10 - Characteristics of participant firms	147

Summary

This thesis consists of four papers exploring the role of the user in accounting for wine businesses that are small or medium enterprises (SMEs). The first paper considers the concept of vernacular accounting, as contributed by Kilfoyle, Richardson and MacDonald (2013) in the context of SMEs. Kilfoyle et al.'s (2013) vernacular accounting ideal types are translated to the SME context via descriptions of observed uses of vernacular accounting in firm level contexts. It is noted that in all examples provided, owners and/or top level management were involved, rendering the consideration of sanction redundant. The animation of Kilfoyle et al.'s (2013) ideal types shows, in the SME context at least, the distinction between “formal” and “informal” systems is not important. What is vital, however, is researcher awareness of the fundamental importance of these types of systems. Research that focuses only on more traditional concepts of what constitutes a firm’s accounting system runs the risk of considering an incomplete section of a firm’s system, and therefore invalidly underestimating its capabilities.

The second paper explores sophistication of product costing systems, expanding the work of Brierley (2008) in the context of SMEs, with an emphasis on the role of the users of the systems. Using the SME setting removes the assumption implicit in existing research that product costing systems are developed, operated and translated to non-accountants by accounting experts. In the scarcely resourced SME environment, approaches to product costing can be observed where costing is used by staff with a range of skill sets, facilitating the examination of the differences generated by the absence and availability of in-house costing expertise. I argue that the concept of sophistication as measured in existing literature needs to be broadened to encapsulate informal types of sophistication, and our conceptualisation of systems need to be expanded to explicitly incorporate the users of the system. This paper works towards achieving a synthesis of knowledge by proposing a typology for conceptualising the sophistication of SME costing systems. Overall, I argue the value of moving beyond preoccupations with informality and formality, and similarly looking beyond system specific measures of sophistication.

The third paper explores stakeholders’ experiences of isomorphic forces in a patchy institutional field. A wine industry endorsed costing approach was adopted as a proxy for a strong field level frame. DiMaggio and Powell’s (1983) typology of isomorphic forces was

employed as a conceptual lens to examine four different responses to the frame: a firm displaying an approach aligned to the focal frame, a firm that aspired towards compliance, a firm that had rejected the frame, and a firm that was not knowledgeable about the frame. Through a process of comparison and contrast of key stakeholders' experiences, each stakeholder is shown to experience one or two of the categories of isomorphic forces, but not all. It also became apparent that, for the small data set, each of Di Maggio and Powell's isomorphic forces could be aligned to consideration of a firm characteristic; thus aligning institutional and contingency theory driven observations.

The fourth paper explores the coexistence of conflicting institutional logics displayed by key stakeholders from SME wineries. While initial developments on institutional logics focussed on the change from one dominant logic to another, recent work has developed an understanding of how conflicting logics can coexist in a state of relative stability. This paper contributes the concept of "logic-carriers" – stakeholders who are trusted to consistently display a dominance of a particular logic. Interactions between winemakers displaying a dominant aesthetic logic and their counterpart market logic-carrier are examined using Smets, Jarzabkowski, Burke and Spee's (2015) mechanisms of segregating, bridging and demarcating. Stakeholders are shown to not only tolerate conflicting institutional logics, but actively seek out and bestow power in stakeholders displaying conflicting yet complementary logics.

Declaration

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, 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. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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 Search and also through web search engines, unless permission has been granted by the University to restrict access for a period of time.

I acknowledge the support I have received for my research through the provision of an Australian Government Research Training Program Scholarship.

Melanie Reddaway

12 August 2017

Acknowledgments

I owe a huge debt of gratitude to my patient, supportive, insightful and exacting supervisors, Dr Chris Graves, Dr Steve Goodman and Associate Professor Bruce Gurd. Thank you for cheerleading and challenging me. Thank you for giving so much of your time and attention. I admire all of you professionally and personally because of the way you have guided me through this journey.

I am grateful to the wine businesses that opened their doors, books and minds to participate in my study. Their cooperation and generosity made this research possible.

Lastly, I am thankful for the love of my family. My children, Stephanie, Ashton and Audrey, my husband, Luke, my parents, Steve and Wendy, and my brother, Ashley. I would not have been able to pull this off without such a wonderful support network.

Chapter 1

Introduction

1. Introduction

1.1 Motivation

1.1.1 The Management Accounting Practices of SMEs

The motivations for this project sit within the “accounting in use” domain, driven by a desire to understand what management actually *do*, and how management accounting is implicated. Jonsson (1998, p. 411) implored researchers to “relate management accounting research to managerial work!” He argued a need to focus on communication and the importance of contextual information. However, Hall (2010) laments that subsequent research has generated few studies that contribute understanding about how managers use accounting information in their work. Three studies are offered by Hall (2010, p. 302) as notable exceptions on the grounds that they set aside assumptions about the role of accounting and investigate “*if* a role exists and what it might be”:

- Simon et al. (1954, p. 22) examined the “use (or non-use) of accounting data” by managers. The openness to a lack of usefulness of accounting data is an important contribution from this study.
- Preston (1986) examined how managers from a plastics factory used accounting and other information in the course of their work and found informal sources of information are of particular importance to managers’ sense making processes.
- McKinnon and Bruns (1992) explored how a variety of production, sales and finance managers use a “mosaic” of different information sources. The contributions of this study emphasise the importance of a holistic approach to attempted understanding of systems, because a focus on one information source is likely to provide incomplete comprehension.

This project set out to contribute to these conversations by exploring how the owners and managers of Australian SME wineries gather, compile and invoke management accounting in the discharge of their duties.

The importance of context when considering management accounting systems has long been promoted (e.g. Birnberg, Turopolec, & Young, 1983; Flamholtz, 1983; Hopwood, 1999; Laughlin, 1987; Roberts & Scapens, 1985) yet there has been an enduring focus on the design

and dissemination of the “products” of accounting i.e. written reports and analyses (Hall, 2010). This ongoing preoccupation with the outputs of accounting is evidenced in the SME literature, where academic journals are still publishing articles that contribute a description of the technical accounting practices of SMEs in a particular geographical area or industry (see, for example, Dyt & Halabi, 2007; Halabi, Barrett, & Dyt, 2010; Kennedy & Tennent, 2006; Perera & Baker, 2007; Sian & Roberts, 2009). It is common for such studies to conclude that the accounting practices of SMEs are limited or suboptimal, and/or that SMEs lack access to accounting expertise. Such findings can often be extrapolated to claims or implications that SMEs lack sophistication and are disadvantaged by, or flawed because of, their accounting systems, approaches or routines (Marriott & Marriott, 2000; Sian & Roberts, 2009). However, a body of literature that questions such findings on methodological grounds is developing and has led to qualitative research examining the use (or non-use) of accounting information within SMEs. These studies have found that SME accounting systems commonly feature informality, but do not necessarily lack sophistication (Curran, Jarvis, Kitching, & Lightfoot, 1997; Greenbank, 1999; Perren & Grant, 2000). On the other hand, research has also alerted us to the fact that there can be significant differences between information produced and information used by SMEs. DeThomas and Fredenberger (1985) found that 81% of the small businesses they surveyed produced summary financial reports, but only 11% used those reports to inform decision making, despite the fact that 61% felt the information could be useful. Overall, it is apparent that our understanding of the role played by accounting information in the management of SMEs is still poorly understood.

1.1.2 SMEs from the Australian Wine Industry

Two decades of tough times in the Australian wine industry have seen participants struggle through an oversupply glut, increasing competition, fluctuating exchange rates, adverse weather conditions and falling prices. All of these challenges could be expected to increase the importance of product costing information. However, small and medium enterprises (SMEs), which represent the vast majority of firm types in Australia’s wine industry, face resource constraints, potentially limiting their capacity to compile and use high quality costing information. Charters et al. (2008) interviewed owners and/or managers of Western Australian SME wineries and while most identified financial management skills as important for long term survival, many also assessed their skills as deficient in this area. This echoed the findings of an earlier survey of SME tourism and hospitality businesses from Victoria (Becton & Graetz, 2001).

Using a qualitative case study research design, data from nine Australian SME wineries was collected and analysed to explore their product costing practices, with a particular focus on the interactions of key managers and owners. Emergent themes triggered deeper exploration and evolved into the four papers that comprise this thesis. The overarching theme of this thesis is not on the numbers generated by SME accounting, or even the processes used to derive those numbers, but on the people that compile, calculate and use (or do not use) those numbers. This thesis focuses on how accounting is used in practice. Paper 1 grew out of difficulties encountered when attempting to describe informal components of the firms' management accounting practices. Similarly, existing definitions of sophistication in the costing literature were found to be wanting with regards to conveying the nuanced benefits and limitations of observed compilation, calculation and use of costing information, leading to the development of paper 2. Neo institutional theory emerged as offering useful frameworks to understand stakeholders' interactions with management accounting information, but existing literature has been critical of over application and simplification of seminal contributions from institutional theory. Paper 3 explores an apparent contradiction between institutional expectations and outcomes of an industry led accounting intervention, further highlighting the importance of contextual awareness in research. The final paper embraces the concept of institutional logics, showing how stakeholders not only interact with accounting information, but rely on interactions with each other, to help manage the institutional complexity present in the Australian wine industry.

1.2 Overview of the Papers

1.2.1 Paper 1: Vernacular Accounting in the SME Context

This paper considers the concept of vernacular accounting, as contributed by Kilfoyle, Richardson and MacDonald (2013) in the context of SMEs. Kilfoyle et al. (2013, p. 385) describe vernacular accountings as “those accounting systems that are regarded as legitimate by participants within local social orders and are regarded as “hard” or actionable.” Illustrations of vernacular use of accounting in firm level contexts are provided, facilitating the translation of Kilfoyle et al.'s (2013) ideal types of vernacular accounting to the SME context. It is noted that in all examples provided, owners and/or top-level management were involved, rendering the consideration of sanction redundant. The paper confirms the theoretical relevance of the concept of vernacular accountings in the SME context and the need for SME-specific definitional clarity with regards to the concept of informality. The

observation based data presented highlights the importance of immersive, contextually aware data collection methods. Research that focuses only on more traditional concepts of what constitutes a firm's accounting system runs the risk of only considering a section of a firm's overall system, and therefore invalidly underestimating its capabilities.

1.2.2 Paper 2: Incorporating the User when Considering SME Costing Systems

This paper explores sophistication of product costing systems, expanding the work of Brierley (2008) in the context of SMEs, with an emphasis on the role of the users of the systems. The SME setting removes the assumption implicit in existing research that product costing systems are developed, operated and translated to non-accountants by accounting experts. In the scarcely resourced SME environment, staff with a range of skills sets were observed engaging with costing information, facilitating the examination of the differences generated by the absence and availability of in-house costing expertise. This paper argues for a broadening of the concept of sophistication as measured in existing literature to encapsulate informal types of sophistication. Further, our conceptualisation of systems need to be expanded to explicitly incorporate the users of the system. This paper works towards achieving a synthesis of knowledge by proposing a typology for conceptualising the sophistication of SME costing systems. Overall, I argue the value of moving beyond preoccupations with informality and formality, and similarly looking beyond system specific measures of sophistication.

1.2.3 Paper 3: Stakeholder Experiences of Isomorphic Forces in a Patchy Institutional Field

This paper explores stakeholders' experiences of isomorphic forces in a patchy field. The multiple competing logics at play in the Australian wine industry, and the lack of regulation specific to management accounting, are aligned with Quirke's (2013) description of a patchy field. An industry endorsed set of costing recommendations for wineries was embraced as a proxy for a strong field level frame. DiMaggio and Powell's (1983) typology of isomorphic institutional forces was employed as a conceptual lens to examine four different responses to the frame: a firm displaying an approach aligned to the focal frame, a firm that aspired towards compliance, a firm that had rejected the frame, and a firm that was not knowledgeable about the frame. Stakeholders from each firm were found to have experienced one or two of the categories of isomorphic forces, but not all. It was also apparent that, for the small data set, each of Di Maggio and Powell's (1983) isomorphic forces could be aligned

to consideration of a firm characteristic; thus aligning institutional and contingency theory driven observations.

1.2.4 Paper 4: The Role of Logic-Carriers in the Management of Institutional Complexity

Early advancements in the field of institutional logics focussed on field level shifts from one dominant logic to another. Recent advancements have acknowledged the normality of institutional complexity and have explored the ways that individuals manage the everyday consequences of this complexity. This paper advances this knowledge by showing that stakeholders can use “logic carriers” to reduce the need to switch between logics, both internally and in terms of the scripts employed when interacting with customers and suppliers. Using ethnographic data from Australian SME wineries, the study shows how a stakeholder displaying a dominant aesthetic logic and a stakeholder displaying a dominant market logic, can partner and interact to the benefit of the firm, while reducing their need to switch between the two logics. Smets et al.’s (2015) work on the mechanisms used to balance conflicting-yet-complementary logics is extended by showing how stakeholders can use logic carriers when segmenting, bridging and demarcating logics.

1.3 Structure of the Thesis

Chapter 2 explains the methodology and research methods employed for this study.

The four papers are self-contained and are presented in Chapters 3 - 6 of this thesis. Reference lists are provided at the end of each chapter and a complete reference list is given at the end of the thesis.

Chapter 7 summarizes the findings of this research and highlights the theoretical and practical contributions of the research. Limitations and suggestions for future research are also addressed.

References

- Becton, S & Graetz, B 2001, 'Small business - small minded? Training attitudes and needs of the tourism and hospitality industry', *International Journal of Tourism Research*, vol. 3, pp. 105-113.
- Birnberg, JG, Turopolec, L & Young, SM 1983, 'The organizational context of accounting', *Accounting, Organizations and Society*, vol. 8, no. 2/3, pp. 111-129.
- Brierley, JA 2008, 'Towards an understanding of the sophistication of product costing systems', *Journal of Management Accounting Research*, vol. 20, no. Special Issue, pp. 61-78.
- Charters, S, Clark-Murphy, M, Davis, N, Brown, A & Walker, E 2008, 'An exploration of managerial expertise in the Western Australian wine industry', *International Journal of Wine Business Research*, vol. 20, no. 2, pp. 138-152.
- Curran, J, Jarvis, R, Kitching, J & Lightfoot, G 1997, 'The pricing decision in small firms: complexities and the deprioritising of economic determinants', *International Small Business Journal*, vol. 15, no. 2, pp. 17-32.
- DeThomas, AR & Fredenberger, WB 1985, 'Accounting needs of very small business', *CPA Journal*, vol. 55, no. 10, pp. 14-23.
- DiMaggio, PJ & Powell, WW 1983, 'The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields', *American Sociological Review*, vol. 48, no. 2, pp. 147-160.
- Dyt, R & Halabi, AK 2007, 'Empirical evidence examining the accounting information systems and accounting reports of small and micro business in Australia', *Small Enterprise Research*, vol. 15, no. 2, pp. 1-9.
- Flamholtz, EG 1983, 'Accounting, budgeting and control systems in their organizational context: theoretical and empirical perspectives', *Accounting, Organizations and Society*, vol. 8, no. 2/3, pp. 153-169.
- Greenbank, P 1999, 'The pricing decision in the micro-business: a study of accountants, builders and printers', *International Small Business Journal*, vol. 17, no. 3, pp. 60-73.
- Halabi, AK, Barrett, R & Dyt, R 2010, 'Understanding financial information used to assess small firm performance: an Australian qualitative study', *Qualitative Research in Accounting & Management*, vol. 7, no. 2, pp. 163-179.
- Hall, M 2010, 'Accounting information and managerial work', *Accounting, Organizations and Society*, no. 35, pp. 301-315.
- Hopwood, AG 1999, 'Situating the practice of management accounting in its cultural context', *Accounting, Organizations and Society*, vol. 24, no. 5/6, pp. 377-378.
- Jonsson, S 1998, 'Relate management accounting research to managerial work!', *Accounting, Organizations and Society*, vol. 23, no. 4, pp. 411-434.

- Kennedy, J & Tennent, B 2006, 'Financial management practices in small businesses: regional and metropolitan', *Small Enterprise Research*, vol. 14, no. 1, pp. 55-63.
- Kilfoyle, E, Richardson, AJ & MacDonald, LD 2013, 'Vernacular accountings: Bridging the cognitive and the social in the analysis of employee-generated accounting systems', *Accounting, Organizations and Society*, vol. 38, pp. 382-396.
- Laughlin, R 1987, 'Accounting systems in organisational contexts: a case for critical theory', *Accounting, Organizations and Society*, vol. 12, no. 5, pp. 479-502.
- Marriott, N & Marriott, P 2000, 'Professional accountants and the development of a management accounting service for the small firm: barriers and possibilities', *Management Accounting Research*, vol. 11, pp. 475-492.
- McKinnon, SM & Bruns, WJ 1992, *The information mosaic*, Harvard Business School Press, Boston.
- Perera, S & Baker, P 2007, 'Performance management practices in small and medium size manufacturing enterprises in Australia', *Small Enterprise Research*, vol. 15, no. 2, pp. 10-30.
- Perren, L & Grant, P 2000, 'The evolution of management accounting routines in small businesses: a social construction perspective', *Management Accounting Research*, vol. 11, pp. 391-411.
- Preston, A 1986, 'Interactions and arrangements in the process of informing', *Accounting, Organizations and Society*, vol. 11, no. 6, pp. 521-540.
- Roberts, J & Scapens, RW 1985, 'Accounting systems and systems of accountability - understanding accounting practices in their organisational contexts', *Accounting, Organizations and Society*, vol. 10, no. 4, pp. 443-456.
- Sian, S & Roberts, C 2009, 'UK small owner-managed businesses: accounting and financial reporting needs', *Journal of Small Business and Enterprise Development*, vol. 16, no. 2, pp. 289-305.
- Simon, HA, Kozmetsky, G, Guetzkow, H & Tyndall, G 1954, *Centralization vs. decentralization in organizing the controller's department*, The Controllershship Foundation, New York.
- Smets, M, Jarzabkowski, P, Burke, GT & Spee, P 2015, 'Reinsurance trading in Lloyd's of London: Balancing conflicting-yet-complementary logics in practice', *Academy of Management Journal*, vol. 58, no. 3, pp. 932-970.

Chapter 2

Methodology

2. Methodology

The purpose of this section is to justify and explain the research methodology and method selected to explore the product costing practices of Australian SME wineries.

2.1 Laughlin's "Middle-Range" Research Approach

Laughlin's (1995) "middle-range" framework for empirical research in accounting was employed when planning and conducting the original research project which evolved to provide the case study findings presented in the four papers that constitute this thesis.

Laughlin (1995) considers choices relating to theory, methodology and change. Each of these choices is conceptualised as offering a continuum ranging from low to high, and argues for the merits of employing a "middle-range" i.e. neither high nor low, approach when conducting empirical accounting research, as illustrated in Figure 1. Theory choice relates to the level of prior theorization brought to the empirical investigation and is linked to ontological assumptions and intentions for generalization. High levels of prior theorization are associated with an assumed material world featuring high levels of generality and order and understanding established from previous research. Such research has the purpose of testing a prior existing theory. Conversely, low levels of prior theorization are associated with a constructivist view of reality and a connected view that generalities are impossible. Research in this vein aims at generating theory. Methodology choice relates to the extent of theoretical definition applied to the methods used to conduct the study, especially with regard to the role of the researcher, their perceptual abilities, and their effects on the research. High levels of theoretical definition are associated with a view of the researcher as an impartial observer who is

able to collect value-free information without affecting the observed phenomenon. On the other hand, low levels of theoretical definition are associated with embracement, as opposed to denial, of subjectivity and variability. The researcher’s involvement in the project is seen as an important component of the data collected. Change choice refers to the attitude of the researcher with regards to maintaining the status quo or seeking change in the observed phenomenon. A high change choice is associated with a view that change is needed, desirable and important to pursue, while a low change choice is associated with an acceptance of the status quo. Employing Laughlin’s (1995) middle range approach meant that the case studies were undertaken following an extensive review of extant literature, but with an open mind as to which theoretical lenses might become most useful. The theoretical lenses were applied ex post so they did not specifically inform the data collection. Similarly, the level of involvement with case study firms was approached in a flexible manner, responding to the desires and needs of participant firms. The attitude towards change was an embraced acceptance that participant firms may be employing the systems and processes that are most appropriate to their particular circumstances, but also that firms may appreciate, at minimum, confirmation that they are “on the right track” and the documented problems of the industry may also be mitigated.

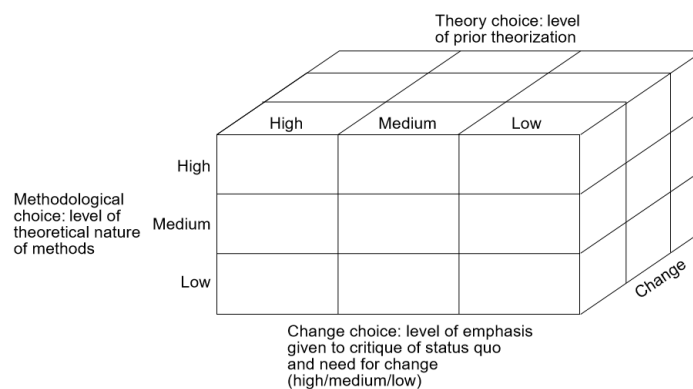


Figure 1 - Dimensions on the choice framework for empirical research - reproduced from Laughlin (1995, p.68)

2.2 Qualitative Case Study Approach

This study uses qualitative case studies.

A case study is an empirical enquiry that:

- *investigates a contemporary phenomenon within its real-life context; when*
- *the boundaries between phenomenon and context are not clearly evident; and in which*
- *multiple sources of evidence are used*

(Yin, 1984, p. 23)

The use of a qualitative case study approach to explore product costing answers calls from a number of management accounting academics (Al-Omiri & Drury, 2007; Drury & Tayles, 1995; Lucas & Rafferty, 2008). The reasons why case studies were deemed the most appropriate method to address the research problem are detailed below:

There is a lack of existing knowledge

In the late 80's Laughlin called for critical research to be undertaken in the field of accounting, arguing that despite high levels of knowledge about technical aspects of accounting, "little is understood about either accounting's social roots or the interconnection and interrelationship between the social and technical" (Laughlin, 1987, p. 479). He suggested that dominant frameworks for analysis restricted discovery to technical or tangible findings, ignoring the need for social understanding. The case study approach is noted as being useful for the in-depth study of events in a particular context, enabling the collection of descriptive data that can be useful for theory generation (Eisenhardt, 1989).

There is a need for rich understanding

Case study research is noted for its usefulness in addressing "why" based questions (Yin, 1984). A limitation imbedded in much of the existing costing literature is succinctly explained by Drury and Tayles (1994, p. 463):

*We have offered some tentative explanations for the use of simplistic techniques but it is extremely difficult to ascertain from a postal questionnaire **why** some techniques are or are not used. Further field study research is required that*

adopts a case study approach (see Scapens, 1990) to explain why simplistic techniques are used.

Brierley et al. (2001) suggest questionnaire and interview based costing research has led to superficial or ambiguous findings whereas case study based research can offer richer and more meaningful insights.

Context has been identified as important

In discussing limitations to existing research into costing practices, scholars have called for examination of the contextual, organizational, and cultural factors at play (Brierley et al., 2001; Drury & Tayles, 1995). Case studies facilitate the inclusion of context in the examination of a phenomena (Cooper & Morgan, 2008). Assertions that accounting should be considered in context and with reference to social considerations (Birnberg et al., 1983; Flamholtz, 1983; Hopwood, 1999; Laughlin, 1987) were embraced.

There are concerns about truthful reporting

Existing studies have identified a propensity for managers to over report their use of sophisticated costing approaches, either intentionally (Bright, Davies, Downes, & Sweeting, 1992) or through differing definitions of approaches (Dugdale & Jones, 1997). The case study approach enables the employment of multiple research methods to collect multiple sources of evidence, facilitating triangulation of findings and therefore increasing the likelihood of complete and accurate understanding (Neuman, 2003).

2.3 Research Procedures

2.3.1 SMEs from Australia's Wine Industry

SMEs from Australia's wine industry were selected as the population for this study on the following grounds:

- The Australian wine industry is an important component of Australia's economy, currently contributing \$40.2 billion per annum (WineAustralia, 2015), and the vast majority of participants are SMEs. Out of the 2,468 wineries operating in Australia in 2016, 2,133 crushed less than 500 tonnes of grapes. 177 industry participants crushed between 500 and 10,000 tonnes, and only 21 players processed more than

10,000 tonnes (the remaining 177 wineries are classified as “unknown or unspecified”) (Winetitles, 2016).

- For the past two decades, the Australian wine industry has been facing significant challenges including oversupply, increased global competition, climate change, water shortages and reducing per litre sales prices in domestic and international markets. Industry level stakeholders have urged participants to respond to these challenges by adopting a quality over quantity strategy (WineAustralia, 2007).
- From an academic perspective, these pressures can be expected to increase both the importance of high quality costing information to inform production and sales decisions (Gonzalez-Gomez & Morini, 2006, p. 195) and the complexity involved in obtaining it (Blake, Amat, & Dowds, 1998).
- However, anecdotal evidence suggests SMEs are using product costing approaches that would, from an academic perspective, be considered suboptimal. For example, the industry-produced document *Directions to 2025 Small Business Benchmarking Guide* (Deloitte Touche Tomatsu, 2007c, p. 24) reports that many small businesses are expensing production costs that “should” form part of the cost of inventory.

There is no universally accepted definition of SME. Classifications are usually made on the basis of employee numbers with or without reference to turnover (Graves & Thomas, 2006; Maguire, Koh, & Magrys, 2007; Sousa, Aspinwall, & Rodrigues, 2006). A definition commonly applied in Australian research is that of the Australian Bureau of Statistics (2010): entities with less than 20 employees are regarded as small and entities with between 20 and 200 employees as medium. However, number of employees can be a problematic measure in the wine industry because labour demands are seasonal and the use of outsourcing and/or contract labour is common. As such it was decided that industry imposed size delineators would be applied to define small and medium entities. The *Directions to 2025* benchmarking guides refer to small businesses as having wine sales of less than 50,000 cases generating revenue up to \$5 million and a production capacity of up to 750 tonnes of grapes (Deloitte Touche Tomatsu, 2007c), while a medium business is classified as having sales of between 50,000 and 350,000 cases generating revenue between \$5 million and \$20 million, with a production capacity between 750 tonnes and 5,000 tonnes of grapes (Deloitte Touche Tomatsu, 2007b). Since reference to three different metrics, i.e., turnover in dollars, tonnes crushed and cases sold, may not all line up to place a firm in one category, tonnes

crushed was decided to be the over-ruling metric. This is because, unlike sales data, tonnage information is readily available: most firms report this information in the Australian Wine Directory. Firms processing less than 750 tonnes of grapes were considered small and firms processing between 750 tonnes and 5,000 tonnes were considered medium. Firms processing more than 5,000 tonnes were excluded from this study.

2.3.2 Case Selection

A multiple case design was selected to facilitate cross-case analysis, which is promoted as increasing the likelihood of creative insight while reducing the likelihood of findings that are idiosyncratic to a particular case (Eisenhardt, 1989, p. 547). In total, 9 SME wineries were explored in depth using qualitative approaches.

Theoretical sampling was used to ensure cases were all Australian SME wineries that calculated costs in house (i.e. the function was not outsourced, for example to an accounting firm). Combinations of opportunistic, snowball and extreme case sampling were used to secure participation (Given, 2008). An example of opportunistic extreme case sampling is that the researcher visited a cellar door and noticed (through an open office door) cash flow forecasts written on a chalkboard, suggesting a simplistic system but a proactive approach to business management, so this winery was approached to participate. An example of snowball and extreme case sampling was when an existing participant was asked to identify, and provide an introduction to, another winery that was thought by them to have highly formalized and sophisticated product costing systems.

Within the firms, everyone approached was happy to participate in the study, apart from the bookkeeper from one firm who was resistant to the owner's enthusiasm for change and did not wish to be interviewed as part of the study. Nonetheless, she candidly shared her views and explained her opinions with the researcher during the course of day-to-day operations.

Firm characteristics are summarised in Appendix A and background information on each firm is detailed in Appendix B.

2.3.3 Data Collection

Participant observation, semi-structured interviews and document analysis were used to collect data.

It was originally anticipated that interviews would serve as the main data collection approach for this study. Arskey and Knight (1999) describe interviewing as “a powerful way of helping people to make explicit things that have hitherto been implicit – to articulate their tacit perceptions, feelings and understandings.” However, informal conversations with key informants from the first case study contrasted against observed practices quickly lead to the realization that those participants lacked the vocabulary and/or explicit awareness (even when prompted) to articulate their contextual knowledge, systems and practices. Their verbal accounts were understating the merits and benefits of their approaches. This led to a revision of the planned research approach, and more time and focus was invested in participant observation.

Explanations of the data collection approaches are provided below, and a detailed listing of key informants is provided in Appendix C.

2.3.3.1 Participant Observation

Overt participant observation was employed in all cases. “Overt” refers to the informant’s awareness of the reason for my presence; all were aware that I was a PhD student who was interested in the firm’s management accounting practices. Participant observation is defined by DeWalt and DeWalt (2010, p. 13) as “a method in which a researcher takes part in the daily activities, rituals, interactions, and events of a group of people as one of the means of learning the explicit and tacit aspects of their life routines and their culture.” The research was not action research; I did not participate in or advise on the compilation, calculation or use of management accounting information. Rather, taking part in daily activities took the form of, for example:

- Participating in firm routines and rituals such as morning coffee and after work drinks.
- Sitting in on board and management meetings.
- Participating in blending trials and comparative tastings
- Attending firm level and industry level social events

Participant observation was undertaken over a two year period. One of the firms was located in Victoria, so in-person participant observation was limited to one week during the busy harvest period. This was followed up by several phone calls and emails with the two main informants, to clarify and expand upon issues identified during data coding and analysis. The other eight cases were located in my home state of South Australia, facilitating longer term, more flexible data collection arrangements. For these firms, data collection included:

- Days spent shadowing each key informant as they went about their business.
- Days spent in each firms' office space, regardless of who was or was not present.
- If the firm had a winery (several used contract processing), time spent in the winery during vintage.
- Sitting in on staff, sales, management and board meetings.
- Accepting invitations to join informants at informal gatherings such as meeting up with customers, suppliers or other industry participants for a coffee or a beer.
- Accepting invitations to accompany informants to industry events including lunches, dinners, a music festival, and tastings associated with wine competitions.

During observation opportunities, data was captured using research notes, photographs, audio recordings and collection of some tangible items, for example "back of the envelope" calculations used and discarded by participants (such items were retrieved and retained with the participant's express permission). During data coding and analysis, if any point was unclear or ambiguous, or my recollection as to *why* it had been recorded was hazy, the informant was re-engaged with via phone, email or in person, to seek clarification.

2.3.3.2 Interviews

Semi-structured interviews with 26 informants were used to obtain detailed explanations of the firms' costing systems, use of resultant information, and approach towards pricing. As firms were noted to have diverse practices and because the intention was to understand costing practices in their specific context, a semi structured interview approach was employed. Before each interview, a list of issues to be covered was compiled, some of which were relevant to all cases and some of which were case specific. Gray (2009, p. 373) describes the ad-hoc probing of views and opinions facilitated by semi structured interviewing as "vital when a phenomenological approach

is being taken where the objective is to explore subjective meanings that respondents ascribe to concepts or events.”

Interviews were used to clarify, confirm or correct the researcher’s understanding and interpretation of the firm’s costing systems and approaches that were obtained from informal discussions and observations.

In each of the firms, as a minimum, an interview was sought with the person responsible for the product costing system and, if separate, the person responsible for making pricing related decisions. Interestingly, while the subject matter was not expected to be considered controversial in nature, several participants were happy to share their thoughts and experiences candidly in informal discussions, but hesitant to discuss matters in the more formal context of an interview.

The interviews tended to last between one and two hours and were all undertaken at the informant’s usual place of work. Whilst it was my intention to digitally tape all interviews, two participants refused permission to record the interviews – both justifying their refusal along the lines of “Let’s just talk about it for now, you can interview me on tape again if you need later.” Unfortunately, equipment failure led to the loss of a digital record of a third interview.

In addition to the interviews, unrecorded discussions with participants constituted useful data sources. This included discussions undertaken during participant observations, and discussions undertaken subsequent to data collection, seeking further input or clarification during data coding and analysis. In addition to listing interviewed participants, Appendix C lists a further 15 informants who did not participate in a semi-structured interview but engaged in discussions that became the source of coded data.

2.3.3.3 Documentation

Copies of sample costing calculations and reports were retrieved from all firms. Willingness to provide access to reports varied from firm to firm ranging from one firm only releasing reports that had identifying information removed, through to another firm providing access to their server and an invitation to take copies of anything that might be useful.

2.3.4 Data Management and Organisation

The computer program NVivo was used to organize, store and record the analysis of the data collected for this study.

NVivo supports the importation of an array of file types including the following file types that were important to this study:

- Scanned images (e.g. of case study firm's financial statements)
- Digital audio files
- Word documents containing observations or research notes
- Copies of company documentation supplied by participants in original formats (including Excel, Word, and PDF Documents)
- Images (e.g. photographs taken at case study firms or obtained from firm websites)

Initially, collected data was reviewed and codes were added as themes emerged, and applied as themes were repeated. Codes were subsequently reviewed and, where relevant consolidated. As important themes became apparent through repeated identification of codes, data was revisited to check for un-coded occurrences.

When the themes explored in the four papers that constitute this thesis were settled on, the data was revisited, as detailed in the method sections of the individual papers.

2.4 Conclusion

This chapter explained the methodological approach employed for this study. The selection of Australian SME wineries as the research setting, and case studies as the overall research approach were justified. Finally, research procedures relating to case selection, data collection and data management and analysis were detailed.

References

- Al-Omiri, M & Drury, C 2007, 'A survey of factors influencing the choice of product costing systems in UK organizations', *Management Accounting Research*, no. 18, pp. 399-424.
- Arskey, H & Knight, P 1999, *Interviewing for Social Scientists*, Sage, London.
- Australian Bureau of Statistics 2010, *8165.0 - Counts of Australian Businesses, including Entries and Exits, Jun 2007 to Jun 2009*, viewed 15 December 2010, <<http://www.abs.gov.au/ausstats/abs@.nsf/mf/8165.0>>.
- Birnberg, JG, Turopolec, L & Young, SM 1983, 'The organizational context of accounting', *Accounting, Organizations and Society*, vol. 8, no. 2/3, pp. 111-129.
- Blake, J, Amat, O & Dowds, J 1998, 'The drive for quality - the impact on accounting in the wine industry', *Journal of Wine Research*, vol. 9, no. 2, pp. 75-85.
- Brierley, JA, Cowton, CJ & Drury, C 2001, 'Research into product costing practice: a European perspective', *The European Accounting Review*, vol. 10, no. 2, pp. 215-256.
- Bright, J, Davies, RE, Downes, CA & Sweeting, RC 1992, 'The deployment of costing techniques and practices: a UK study', *Management Accounting Research*, no. 3, pp. 201-211.
- Cooper, DJ & Morgan, W 2008, 'Case study research in accounting', *Accounting Horizons*, vol. 22, no. 2, pp. 159-178.
- Deloitte Touche Tomatsu 2007b, *Wine Australia: Directions to 2025 Benchmarking Guide Medium Wine Business*.
- Deloitte Touche Tomatsu 2007c, *Wine Australia: Directions to 2025 Benchmarking Guide Small Wine Business*.
- DeWalt, K & DeWalt, B 2010, *Participant Observation: a Guide for Fieldworkers*, AltaMira Press, California.
- Drury, C & Tayles, M 1994, 'Product costing in UK manufacturing organisations', *The European Accounting Review*, vol. 3, no. 3, pp. 443-469.
- Drury, C & Tayles, M 1995, 'Issues arising from surveys of management accounting practice', *Management Accounting Research*, no. 6, pp. 267-280.
- Dugdale, D & Jones, TC 1997, 'How many companies use ABC for stock valuation? A comment on Innes and Mitchell's questionnaire findings ', *Management Accounting Research*, vol. 8, no. 2, pp. 233-240.
- Eisenhardt, KM 1989, 'Building theories from case study research', *The Academy of Management Review*, vol. 14, no. 4, pp. 532-550.

Flamholtz, EG 1983, 'Accounting, budgeting and control systems in their organizational context: theoretical and empirical perspectives', *Accounting, Organizations and Society*, vol. 8, no. 2/3, pp. 153-169.

Given, LM 2008, *The SAGE Encyclopedia of Qualitative Research*, SAGE, Thousand Oaks.

Gonzalez-Gomez, JI & Morini, S 2006, 'An activity-based costing of wine', *Journal of Wine Research*, vol. 17, no. 3, pp. 195-203.

Graves, C & Thomas, J 2006, 'Internationalization of Australian family businesses: a managerial capabilities perspective', *Family Business Review*, vol. XIX, no. 3, pp. 207-224.

Gray, DE 2009, *Doing Research in the Real World*, 2nd edn, Sage, London.

Hopwood, AG 1999, 'Situating the practice of management accounting in its cultural context', *Accounting, Organizations and Society*, vol. 24, no. 5/6, pp. 377-378.

Laughlin, R 1987, 'Accounting systems in organisational contexts: a case for critical theory', *Accounting, Organizations and Society*, vol. 12, no. 5, pp. 479-502.

Laughlin, R 1995, 'Methodological themes. Empirical research in accounting: alternative approaches and a case for "middle-range" thinking ', *Accounting, Auditing & Accountability Journal*, vol. 8, no. 1, pp. 63-87.

Lucas, M & Rafferty, J 2008, 'Cost analysis for pricing: exploring the gap between theory and practice', *The British Accounting Review*, no. 40, pp. 148-160.

Maguire, S, Koh, SCL & Magrys, A 2007, 'The adoption of e business and knowledge management in SMEs', *Benchmarking: an International Journal*, vol. 14, no. 1, pp. 37-58.

Neuman, WL 2003, *Social Research Methods: Qualitative and Quantitative Approaches*, 5th edn, Allyn and Bacon, MA.

Sousa, SD, Aspinwall, EM & Rodrigues, AG 2006, 'Performance measures in English small and medium enterprises: survey results', *Benchmarking: an International Journal*, vol. 13, no. 1/2, pp. 120-134.

WineAustralia 2007, *Wine Australia: Directions to 2025*.

WineAustralia 2015, 'Economic Contribution of the Australian Wine Sector'.

Winetitles 2016, *The Australian and New Zealand Wine Industry Directory*, viewed Jan 1 2017, <<http://winetitles.com.au/statistics/wineriestable22.asp>>.

Yin, RR 1984, *Case Study Research*, Applied social research methods series, vol. 5, Sage Publications, California.

Chapter 3

Paper 1 – Vernacular Accounting in the SME Context

Statement of Authorship

Title of Paper	Vernacular Accounting in the SME Context
Publication Status	<input type="checkbox"/> Published <input type="checkbox"/> Accepted for Publication <input type="checkbox"/> Submitted for Publication <input checked="" type="checkbox"/> Unpublished and Unsubmitted work written in manuscript style
Publication Details	

Principal Author

Name of Principal Author (Candidate)	Melanie Reddaway		
Contribution to the Paper			
Overall percentage (%)	100%		
Certification:	This paper reports on original research I conducted during the period of my Higher Degree by Research candidature and is not subject to any obligations or contractual agreements with a third party that would constrain its inclusion in this thesis. I am the primary author of this paper.		
Signature		Date	12/8/2017

Co-Author Contributions

By signing the Statement of Authorship, each author certifies that:

- i. the candidate's stated contribution to the publication is accurate (as detailed above);
- ii. permission is granted for the candidate to include the publication in the thesis; and
- iii. the sum of all co-author contributions is equal to 100% less the candidate's stated contribution.

Name of Co-Author			
Contribution to the Paper			
Signature		Date	

3. Vernacular Accounting in the SME Context

Abstract

This paper considers the concept of vernacular accounting, as contributed by Kilfoyle, Richardson & MacDonald (2013) in the context of SMEs. Illustrations of vernacular use of accounting in firm level contexts are provided, facilitating the translation of Kilfoyle et al.'s (2013) ideal types of vernacular accounting to the SME context. It is noted that in all examples provided, owners and/or top level management were involved, rendering the consideration of sanction redundant. The paper confirms the relevance of the concept of vernacular accountings in the SME context and the need for SME-specific definitional clarity. Further, the observation based data presented highlights the importance of immersive, contextually aware data collection methods. Research that focuses only on more traditional concepts of what constitutes a firm's accounting system runs the risk of only considering a section of a firm's overall system, and therefore invalidly underestimating its capabilities.

3.1 Introduction

The literature has been discussing management's use of informal information sources for more than 60 years (e.g. Simon et al., 1954), yet we still lack definitional clarity of terms including formal and informal systems and formal and informal information (Kilfoyle et al., 2013). This is despite the fact that the terms are commonly used in the literature and it has been established that informal information sources are important to managers (e.g. McKinnon & Bruns, 1992; Preston, 1986). This paper extends a recent examination of vernacular accounting (Kilfoyle et al., 2013) by applying the authors' contributions in the SME context. Kilfoyle et al. (2013, p. 382) define vernacular accountings as, "accounting and control systems that are self-generated by organizational actors in the context of their work and not officially sanctioned within the organizational hierarchy." They contribute three ideal types of vernacular accountings: inventory of knowledge, defensive resource and organisational practice. I argue that in the flat hierarchical structure of SMEs, the consideration of sanction is far less relevant. Nonetheless, the ideal types proposed by Kilfoyle et al. (2013) offer a useful framework for considering the ways that SME stakeholders use and interact with accounting information. This paper embraces Kilfoyle et al.'s (2013) call for

accounting to be studied as a practical activity (Chua, 2007). After broadening the defensive resource ideal type to include offensive campaigning, vignettes drawn from case study data are provided to illustrate each of the ideal types in action. Thus this paper makes two contributions: firstly by highlighting the continuing need for definitional clarity of the concept of informality in the SME context and secondly by showing the importance of rich, contextually aware data collection in the SME context. The vignettes discussed in this paper all show instances of accounting that are outside the entities “formal” or documented systems.

The remainder of this paper is structured as follows: Section 3.2 reviews the background literature relevant to the topic. This is followed by section 3.3 containing an explanation of the methods employed. Findings are presented and discussed in section 3.4. Finally, conclusions, limitations and proposed future research directions are discussed in section 3.5

3.2 Background Literature

This section reviews the limited existing literature that is relevant to this topic. It begins with a discussion of the concept of “informal” in accounting systems research. Then, references to informality in SME specific literature are addressed. This section concludes with a detailed discussion of the contributions of Kilfoyle et al. (2013) to the field of vernacular accounting.

3.2.1 “Informal” Accounting Systems

Kilfoyle et al. (2013, p. 384) point out that references to “informal” accounting have been made in relation to four phenomena:

1. (From an audit perspective) accounting systems that lack appropriate internal controls. In this context, “informal” has negative connotations i.e. “informal” systems are potentially not auditable and therefore are not reliable (Auditor General of Canada, 2005). This audit specific use of the term is outside of the scope of the current study’s concern with the management accounting systems of SMEs.
2. Information systems that are subjective or non-financial. For example the works of Langfield-Smith (1997) and Chenhall (2006) acknowledge the importance of informal controls alongside formal controls as part of broader management control systems.

3. Systems of informing based on word-of-mouth as opposed to written reports. The importance of verbal sharing of information is well established in the literature, and often described as “informal”. Preston’s (1986) observations regarding managers tendencies to informally communicate information with each other have been echoed by others including Ahrens (1997) and Frow et al. (2005).
4. Records and calculations that support decision making but are not officially sanctioned. Simon et al. (1954) considered the “bootleg” information collected by managers, while Clancy and Collins (1979, p. 22) referred to local systems as being based on “non-legitimate” records.

The broad range of phenomena referenced in relation to the concept of “informal” accounting systems and the variety of terms previously applied prompted Kilfoyle et al. (2013) to adopt the distinct terminology of “vernacular” because ‘in the absence of a consistent conceptual reference across studies, the systems described in distinct terms may be the same; the systems described using the same term may be distinct’ (Kilfoyle et al., 2013, p. 384). They intend the term vernacular to refer to the fourth variety of informal accounting; that which informs decision making yet is not sanctioned by the organization. The challenge for this current paper is that it’s these types of accounting, that would not typically fit within the normally identified concept of a “formal” accounting system, but yet are generated by users who are owner/operators or empowered employees, removing the need to consider sanction. To illustrate, Clancy and Collins (1979, p. 22) were amongst the first to explore formal and informal accounting, describing the formal accounting system as being responsible for collection, storage, analysis and reporting of events. They associate the formal system with reliance on highly developed technical language and note that the outputs are reports used for “monitoring activities, controlling costs, planning, making specific decisions, and performance valuation.” In contrast, they suggest that informal accounting systems are the non-legitimized sets of records usually maintained by the person who directly uses the data. As discussed below, SME accounting can frequently lack highly developed technical language, and explicit planning and performance evaluation. In contrast, stakeholders do keep records for personal use. While there is an apparent contradiction between Kilfoyle et al.’s (2013) intended definition and the SME context of the research setting, elsewhere in their paper Kilfoyle et al. (2013, p. 393) describe

vernacular accounts as “management accounting and control systems developed and used by managers in their daily activities that contain information deemed relevant by these managers based on the context of their work, and on their knowledge and experience.” This description was highly relevant to the SME research context.

3.2.2 Informal Accounting in the SME Context

The concept of “informality” is important to the study of management accounting in SMEs because there is an acknowledged contradiction (Perren, Berry, & Partridge, 1998; Perren & Grant, 2000) between research which suggests that management accounting practices in the SME context are deficient (e.g. Nayak & Greenfield, 1994) and research which shows that SMEs access adequate, albeit informal information (e.g. Curran et al., 1997; Greenbank, 1999; Schafer, 1990). However, studies that support the usefulness of “informal” information sources fail to offer a definitive description of what such systems look or feel like, instead referencing such systems in passing. For example, Curran et al. (1997), in discussing an absence of reliance on formal costing systems, explained:

...what was increasingly clear from the detailed accounts offered by respondents was that descriptions of the processes as “simple” cost-plus price making were wide of the mark. Respondents often had a very detailed knowledge based on experience, wide knowledge and a highly intelligent assessment of the market in which the business operated. This knowledge was not committed to paper as it might be in a large enterprise but invoked as required.

(Curran et al., 1997, pp. 21-22)

3.2.3 Kilfoyle et al.’s (2013) Vernacular Accountings

Kilfoyle et al. (2013, p. 385) describe vernacular accountings as “those accounting systems that are regarded as legitimate by participants within local social orders and are regarded as “hard” or actionable.” They summarise the varieties of accountings they include in the term “vernacular” through the provision of a framework that considers the modality of accountings and the source of legitimacy of the resultant information (Figure 2).

Figure 2 - Kilfoyle, Richardson and MacDonald's (2013) varieties of accountings

		Modality of accounting	
		Hard	Soft
Source of legitimacy	Hierarchical	Formal management accounting and control systems	Cultural and clan control
	Local	Vernacular management accounting and control systems	Informal processes of informing

The distinction between “hard” and “soft” modalities of accounting was originated by Ijiri (1975) with hard implying information is objective and verifiable and soft implying information is subjective and context-dependent. The terms have also been used with reference to medium of transmission, where hard can imply that the information is quantitative and written while soft can imply that the information is verbal and qualitative (Langfield-Smith, 1997; Petersen, 2004). Kilfoyle et al. (2013) propose the key distinction should be epistemological, arguing that because the “hardness” of information can be changed by agents (i.e. they can choose whether or not to write something down), we should focus on the social processes involved and the hardness of information should be considered to be subject-dependent and socially constructed. They de-emphasise the importance of the format of the information, instead focusing on “the probability that the individual attaches to the information being actionable” (Kilfoyle et al., 2013, p. 385). In summary, it does not matter whether the information is documented or not, it matters whether the user feels that the information is reliable enough to take action in response to that information.

Source of legitimacy is included in the Kilfoyle et al. (2013) framework to acknowledge that a user’s perception of the hardness of information may differ from the level of hardness assigned to the information by the organisation. The formal accounting systems of an organisation are assigned hierarchical legitimacy, while other information collected and used by an individual can be considered as having a local source of legitimacy.

Vernacular accountings are positioned in the local/hard quadrant of the Kilfoyle et al. (2013) framework, described as “those accounting systems that are regarded as legitimate by participants within local social orders and are regarded as “hard” or actionable information” (Kilfoyle et al., 2013, p. 385). Local social orders can include individuals and task groups, where a shared regard for the legitimacy of specific information sources has been negotiated.

To further illustrate the intended meaning of vernacular accountings, Kilfoyle et al. (2013) offer three ideal types (Weber, 1949), constructed from extant literature that describes (often in passing, and usually using differing terminology) such systems. These three ideal types were employed as a sensitising device in the consideration of accounting in SME wineries used in this study, and are as follows:

3.2.3.1 Type 1: Vernacular accounting as a source of information and “inventory of knowledge”

Managers work within an information mosaic (McKinnon & Bruns, 1992) where they rely heavily on informal information networks (Perren & Grant, 2000; Vandenbosch, 1999). Vernacular accounting systems reflect the users’ identification of needed information, determination of validity of information, and retention for future use, capturing local strategic knowledge (Kilfoyle et al., 2013).

3.2.3.2 Type 2: Vernacular accountings: a defensive resource

When contrasted against the outputs of ratified systems, vernacular accounting can reflect an alternative interpretation of reality. They can be used to trigger or justify reactions that are not in accordance with the formal system (Kilfoyle et al., 2013).

3.2.3.3 Type 3: Vernacular accountings as organisational practice

Drawing on practice theory (Ahrens & Chapman, 2007; Schatzki, 2005), vernacular accountings are seen as both an outcome and constitutive of organizational practices. While the first ideal type focussed on the users’ perspective, this ideal type is focussed on the practices that “distributed cognition” of a task group, where “an action requires multiple cognitive tasks to be coordinated through time and/or space” (Kilfoyle et al., 2013, p. 391).

3.3 Method

Case studies were undertaken to examine the management accounting systems and practices of SME Australian wineries. The wine industry is an important component of Australia’s economy and, by numbers, is dominated by small and medium producers. The industry was identified as being of particular interest because typical firms were small and frequently family run, but participants are required to face a diverse variety of challenges commonly including agricultural considerations, marketing, manufacturing, packaging, distribution, retail, and export.

The case studies involved observation of day-to-day operations, interviews of firm participants and review of company documents. Observations provided the data discussed in the current paper. Data collection occurred over the course of two years, with opportunities for participant observation including:

- Spending time present at a particular location, regardless of which stakeholders were or were not present,
- Shadowing particular stakeholders as they went about their daily business
- Sitting in on staff meetings
- Sitting in on management or board meetings
- Being present during meetings with suppliers and customers
- Attending staff social functions and industry events
- Dropping in, calling or emailing stakeholders to enquire about the outcomes of issues left in progress during prior observation sessions.

Throughout these data collection opportunities, written field notes were compiled and stored using the software NVivo, which was later used to facilitate the coding process.

3.4 Findings and Discussion: SME Vernacular Accounting Ideal Types

This section presents and discusses the findings of the study. Vignettes drawn from the case study data are provided to show each of Kilfoyle et al.'s (2013) ideal types of vernacular accounting in action. The discussion addresses translation of the ideal types for application to the SME context.

3.4.1 Type 1 – Vernacular Accounting as Inventory of Knowledge

The vignette demonstrating vernacular accounting as an inventory of knowledge was drawn from a conversation with a small winery owner/operator/winemaker. His distributor had called to pass on an offer to sell a large (relative to the size of his business) volume of a particular product to an interstate customer. He explained to me after the phone call that he did not admit to the distributor that he did not have enough product on hand; he was hoping to purchase more of the same bulk wine to enable him to bottle a second batch of the same product.

I asked Jack how much the original product had cost to make. He replied, “About forty?” (per dozen).

I asked, “Do you have a calculation I could take a copy of for my files?”

He grabbed a piece of scrap paper and proceeded to work through the costing of the product. The wine had been acquired as bulk (already made), meaning that cost component was straight forward (compared to tracing through the allocation of costs from vineyard and winery through to a finished wine). Jack compiled a list ranging from bulk wine through transport, external lab work, bottling, glass, labels, corks and cartons. Mostly he knew the information off the top of his head but he did confirm one item with his wife, who dug out the invoice to advise the amount. The tallied costs were divided by the number of cases produced, and calculated out to be remarkably close to \$40 per dozen. Triumphantly, he offered me the scrap paper list for my files.

I clarified, “So you don’t already have these costs written down somewhere?”

He said, “No. I know I should, but it’s just one of those things you never get around to, you know? When you’re busy running the business that kind of stuff never happens. And the thing is when you’re the one negotiating all this stuff anyway you already know if it all adds up or not, so it’s not really that urgent to write it down.”

Out of interest, I later checked his recollected costs against the actual costs paid according to accounts payable invoices, and the recollected information was materially correct.

Jack’s display of a detailed, yet undocumented understanding of his business’ costing structure illuminates vernacular accounting as an inventory of knowledge. Jack himself contains the inventory of knowledge that is the cost of the products his business sells. Jack’s understanding of his product costs in the absence of a “formal” system echoes the findings of other studies that explored pricing decision of small business owners (Curran et al., 1997; Greenbank, 1999).

However, this interpretation of vernacular accounting as an inventory of knowledge varies from the description provided by Kilfoyle et al. (2013) in that there is an absence of an alternative “formal” system. Kilfoyle et al.’s (2013) conceptualisation emphasises the emergence of vernacular accountings to meet the gap between managers’ information needs and information provided by the formal system (Fisher, 1994; Jonsson & Gronlund, 1988). I posit that in the flat hierarchical structure of the SME context, there need not be an ineffective system leading to the evolution of an alternative. The SME owner/operator has the power to only have the system that would, in a large business context, look and operate like the “vernacular” system.

3.4.2 Type 2 – Vernacular Accountings as a Defensive Resource / Affective Technology

While Kilfoyle et al. (2013, p. 389) emphasize the defensive use of vernacular accountings, they describe this type as occurring “where managers create accountings consistent with their framing of organizational realities to counter other accountings.” Consistent with this notion of countering an alternative view, stakeholders were observed using self-generated accounting figures not only to defend themselves but also to launch an offense against decisions they disagreed with. The vignette presented to illustrate this phenomenon describes an interaction between a husband and wife ownership team. John is a winemaker and his wife, Jane, comes from an IT background but now juggles looking after the bookkeeping and administration of the winery while also caring for their three young children. In addition to hand crafting wines for their own brand, the winery offers contract processing facilities to small virtual brands.

One day, during the rush of vintage, John dropped in to the winery office and verbally passed on multiple pieces of information to his wife, including, “We picked Smith’s last night. Only got 8 tonnes, but what’s there is looking amazing. I told him we’ll process it for free if I can keep 2 tonnes.”

After John rushed off to inspect another vineyard, Jane looked thoughtful and picked up a calculator. A few moments later she called John’s mobile, “You’re crazy. If we charged him for his processing it’d be over five grand. So that’s like paying two and a half per tonne. It can’t be that good.”

On the other end of the phone, John argued that what they charged for processing is different from their cost, so the grapes were not that expensive.

Jane responded, “Yes, but it’s cash we don’t see and it’s time you’ve spent being busy with that instead of doing other stuff we could have got paid for, and don’t forget you had how many staff working last night at exactly what penalty rate?” Jane didn’t even need to specify the number of staff or their hourly pay rate; John agreed he would call the grower and renegotiate their agreement.

Kilfoyle et al. (2013) draw on the likes of Neergard (1998) and Clancy and Collins (1979) to argue that users generate vernacular accountings to protect themselves from the inaccuracies or injustices of the “formal” system. Having already argued that the SME context removes the need to develop secondary systems to compensate for inefficient or ineffective imposed systems, I now posit that SME stakeholders are less likely to need to deploy alternative accountings to protect themselves from such systems. In contrast, since SME stakeholders are empowered to develop systems that suit their needs, stakeholders are more likely to need to use their vernacular accountings to protect themselves (or the organisation) against the injustices or inaccuracies of another stakeholder’s vernacular accountings.

John’s calculations during the excitement of an unusually high quality but very low volume pick had led him to set the firm down one path of action. After having shared his interpretation with his wife, she deployed her vernacular accounting to justify the launch of a campaign to change directions. She was not protecting herself against an unjust or ineffective formal system, but rather protecting her business from an alternative interpretation that she perceived to be suboptimal. This observation is aligned with Boedker and Chua’s (2013) conceptualisation of accounting as an affective technology. They showed how accounting was invoked to recruit and secure the active support of stakeholders. I posit that this more encompassing view is more fitted with the use of vernacular accounting in SMEs, where accounting can be deployed to promote a cause. Therefore, it is proposed that, for the SME context, Kilfoyle et al.’s (2013) second ideal type of vernacular accountings is broadened to become “vernacular accounting as an affective technology”.

3.4.2.1 Type 3 – Vernacular Accounting as Organizational Practice

The vignette used to illustrate vernacular accounting as organizational practice in action is drawn from observing the management meetings of a small, family owned winery.

The general manager and viticulturist are family members, while the sales manager and winemaker are unrelated employees.

At Winery X, weekly management meetings are an important part of their decision making processes. The general manager, winemaker, viticulturist and sales manager attend. At these meetings, proposed plans and opportunities are discussed. The financial consequences of potential actions are at the forefront of discussions. The winery has a suite of spreadsheets which are used to assess the profitability of potential deals and were developed by a consultant accountant. Reports from these spreadsheets are presented in support of arguments, but are readily countered by industry ballparks or arguments relating to their limitations. For example, in one meeting, one manager wanted to proceed with an opportunity while another argued the return (based on a cost analysis spreadsheet) was not high enough. The manager who wanted to proceed with the deal argued that the overhead allocation attributed to the job should be disregarded because it was based on already achieved volume levels. The meeting participants demonstrate a relatively sophisticated understanding of costing principles and the cost drivers of the business, but they do not “capture” many of their discussions or decisions. In this instance, it was agreed that they would proceed with the deal, but there was subsequently no revision made to the costing calculations to formally record the verbally presented amendments to the initial spreadsheet. Aside from notes in the general manager’s diary to remind him what to ask about next meeting, there is no system for documenting agreed outcomes.

The managers’ shared understanding of the alternative cost calculation is aligned to Kilfoyle et al.’s (2013) practice theory perspective driven assertions that vernacular accounting can facilitate task group functioning through distributed cognition (Hutchins, 1995).

This vignette again highlights the lack of relevance of sanction to the SME setting. The spreadsheets can be considered the formal system and the stakeholders mutual acceptance of a verbally expressed alternative calculation to be the vernacular accounting. However, the stakeholders all agreed on the alternative calculation, and they constitute all of the managerial decision making power of the organisation. The

same coalition that selectively rejected the outputs of the formal system both engaged the development of the formal system and continued to use and rely upon the formal system. However, even beyond the SME context, the long term coexistence of dual systems is not unusual; Preston (1986) noted that managers maintained their own records regardless of the capabilities or limitations of the formal systems made available to them.

3.5 Conclusion, Limitations and Future Research

This paper employed Kilfoyle et al.'s (2013) ideal types of vernacular accountings as a sensitising device to review the management accounting practices of SME case study participants from Australia's wine industry. While Kilfoyle et al. (2013) focussed on the lack of organizational sanction as a defining characteristic of vernacular accountings, sanction was found to lack relevance in the flat hierarchical structures typical of SMEs. Nonetheless, the ideal types were shown to be a useful sensitising device, and vignettes showing SME vernacular accounting in operation were provided.

Theoretically, the paper contributes a revised and validated set of SME specific vernacular accounting ideal types. Further, the paper demonstrates the importance of immersive, contextually aware data collection methods. Had it not been for the case study research method, the existence of these interactions with accounting would likely have gone undetected and unreported.

From a practical perspective, the findings indicate that a more holistic approach should be employed by practitioners attempting assist firms with the development of costing practices. Failing to consider informal/vernacular components of SME consisting systems could result in an underestimation of existing capabilities, and risk the introduction of inefficiencies or redundant features.

Further research efforts are required to reconcile the lack of relevance of sanction in the SME context to Kilfoyle et al.'s (2013) explicit reference to sanction in the definition of vernacular accountings; SME specific vocabulary is required. Further, the current study employed Kilfoyle et al.'s (2013) identified ideal types of vernacular accountings as a sensitising device, and while one of the ideal types was expanded, the study did not actively seek out alternative ideal types. The exploration of further potential ideal types

of SME vernacular accountings may lead to a richer understanding of SME vernacular accountings.

References

- Ahrens, T 1997, 'Talking accounting: an ethnography of management knowledge in British and German brewers', *Accounting, Organizations and Society*, vol. 22, no. 7, pp. 617-637.
- Ahrens, T & Chapman, CS 2007, 'Management accounting as practice', *Accounting, Organizations and Society*, vol. 32, no. 1, pp. 1-27.
- Auditor General of Canada 2005, *Report of the Auditor General of Canada to the Legislative Assembly of Nanavut*.
- Boedker, C & Chua, WF 2013, 'Accounting as an affective technology: A study of circulation, agency and entrancement', *Accounting, Organizations and Society*, vol. 38, pp. 245-267.
- Chenhall, RH 2006, 'Theorizing contingencies in management control systems research', *Handbooks of management Accounting Research*, vol. 1, pp. 163-205.
- Chua, WF 2007, 'Accounting, measuring, reporting and strategizing - Re-using verbs: A review essay', *Accounting, Organizations and Society*, vol. 32, no. 4/5, pp. 487-494.
- Clancy, DK & Collins, F 1979, 'Informal accounting information systems: some tentative findings', *Accounting, Organizations and Society*, vol. 4, no. 1/2, pp. 21-30.
- Curran, J, Jarvis, R, Kitching, J & Lightfoot, G 1997, 'The pricing decision in small firms: complexities and the deprioritising of economic determinants', *International Small Business Journal*, vol. 15, no. 2, pp. 17-32.
- Fisher, JS 1994, 'The new finance: New technology is challenging the accounting profession to redefine itself', *Journal of Accountancy*, vol. 178, no. 2, pp. 73-76.
- Frow, N, Marginson, D & Ogden, S 2005, 'Encouraging strategic behavior while maintaining management control: Multi-functional project teams, budgets and the negotiation of shared accountabilities in contemporary enterprises', *Management Accounting Research*, vol. 16, no. 3, pp. 269-292.
- Greenbank, P 1999, 'The pricing decision in the micro-business: a study of accountants, builders and printers', *International Small Business Journal*, vol. 17, no. 3, pp. 60-73.
- Hutchins, E 1995, *Cognition in the wild*, MIT Press, Cambridge, MA.
- Ijiri, Y 1975, *Theory of Accounting Measurement*. Sarasota, FL: American Accounting Association.
- Jonsson, S & Gronlund, A 1988, 'Life with a sub-contractor: New technology and management accounting', *Accounting, Organizations and Society*, vol. 13, no. 5, pp. 512-532.

- Kilfoyle, E, Richardson, AJ & MacDonald, LD 2013, 'Vernacular accountings: Bridging the cognitive and the social in the analysis of employee-generated accounting systems', *Accounting, Organizations and Society*, vol. 38, pp. 382-396.
- Langfield-Smith, K 1997, 'Management control systems and strategy: a critical review', *Accounting, Organizations and Society*, vol. 22, no. 2, pp. 207-232.
- McKinnon, SM & Bruns, WJ 1992, *The information mosaic*, Harvard Business School Press, Boston.
- Nayak, A & Greenfield, S 1994, 'The Use of Management Accounting Information for Managing Micro Businesses', in A Hughes & SD J. (eds), *Finance and the Small Firm*, Routledge, London.
- Neergard, P 1998, *Informal information systems. Management Accounting and Uncertainty*, Samfundslitteratur, Copenhagen.
- Perren, L, Berry, A & Partridge, M 1998, 'The evolution of management information, control and decision-making processes in small growth orientated service sector businesses: exploratory lessons from four cases of success', *Journal of Small Business and Enterprise Development*, vol. 5, no. 4, pp. 351-362.
- Perren, L & Grant, P 2000, 'The evolution of management accounting routines in small businesses: a social construction perspective', *Management Accounting Research*, vol. 11, pp. 391-411.
- Petersen, MA 2004, *Information: Hard and Soft*, Northwest University. Working paper.
- Preston, A 1986, 'Interactions and arrangements in the process of informing', *Accounting, Organizations and Society*, vol. 11, no. 6, pp. 521-540.
- Schafer, DS 1990, 'Level of entrepreneurship and scanning source usage in very small businesses', *Entrepreneurship: Theory and Practice*, vol. 15, no. 2, pp. 19-31.
- Schatzki, TR 2005, 'The sites of organizations', *Organization Studies*, vol. 26, no. 3, pp. 465-484.
- Simon, HA, Kozmetsky, G, Guetzkow, H & Tyndall, G 1954, *Centralization vs. decentralization in organizing the controller's department*, The Controllershship Foundation, New York.
- Vandenbosch, B 1999, 'An empirical analysis of the association between the use of executive support systems and perceived organizational competitiveness', *Accounting, Organizations and Society*, vol. 24, no. 1, pp. 77-92.
- Weber, M 1949, 'Objectivity in social science and social policy', in EA Shils & HA Finch (eds), *The methodology of the social sciences*, Free Press, New York.

Chapter 4

Paper 2 – Incorporating the User when Considering Sophistication in SME Costing Systems

Statement of Authorship

Title of Paper	Incorporating the User when Considering Sophistication in SME Costing Systems
Publication Status	<input type="checkbox"/> Published <input type="checkbox"/> Accepted for Publication <input type="checkbox"/> Submitted for Publication <input checked="" type="checkbox"/> Unpublished and Unsubmitted work written in manuscript style
Publication Details	

Principal Author

Name of Principal Author (Candidate)	Melanie Reddaway		
Contribution to the Paper			
Overall percentage (%)	100%		
Certification:	This paper reports on original research I conducted during the period of my Higher Degree by Research candidature and is not subject to any obligations or contractual agreements with a third party that would constrain its inclusion in this thesis. I am the primary author of this paper.		
Signature		Date	12/8/2017

Co-Author Contributions

By signing the Statement of Authorship, each author certifies that:

- i. the candidate's stated contribution to the publication is accurate (as detailed above);
- ii. permission is granted for the candidate to include the publication in the thesis; and
- iii. the sum of all co-author contributions is equal to 100% less the candidate's stated contribution.

Name of Co-Author			
Contribution to the Paper			
Signature		Date	

4. Incorporating the User when Considering Sophistication in SME Costing Systems

Abstract

This paper explores sophistication of product costing systems, expanding the work of Brierley (2008) in the context of SMEs, with an emphasis on the role of the users of the systems. The SME setting removes the assumption implicit in existing research that product costing systems are developed, operated and translated to non-accountants by accounting experts. In the scarcely resourced SME environment, staff with a range of skills sets were observed engaging with costing information, facilitating the examination of the differences generated by the absence and availability of in-house costing expertise. This paper argues for a broadening of the concept of sophistication as measured in existing literature to encapsulate informal types of sophistication. Further, our conceptualisation of systems needs to be expanded to explicitly incorporate the users of the system. This paper works towards achieving a synthesis of knowledge by proposing a typology for conceptualising the sophistication of SME costing systems. Overall, I argue the value of moving beyond preoccupations with informality and formality, and similarly looking beyond system specific measures of sophistication.

4.1 Introduction

This paper continues the work of Brierley (2008) in exploring sophistication of product costing systems through the use of multiple case study research in the context of SMEs, employing a practice perspective to bring the user into focus. The SME setting removes the assumption implicit in existing research that product costing systems are developed, operated and translated to non-accountants by specialist experts (e.g. Brierley (2008) and Drury & Tayles (2005) both surveyed CIMA members to collect data).

The importance of context when considering management accounting systems has long been promoted (e.g. Birnberg et al., 1983; Flamholtz, 1983; Hopwood, 1999; Laughlin, 1987; Roberts & Scapens, 1985). Yet existing research has typically focussed exclusively on technical aspects of the product costing system when assessing or describing costing system sophistication (Abernethy, Lillis, Brownell, & Carter, 2001; Al-Omiri & Drury, 2007; Drury & Tayles, 2005), and ignored other important

contextual factors such as characteristics of the users. The study places costing systems into context by using a practice perspective to acknowledge the user's role as a fundamental component of the in-use functionality of the product costing system.

This paper argues that the concept of sophistication as measured in existing literature needs to be broadened to encapsulate non-technical types of sophistication, and our conceptualisation of a system needs to be expanded to explicitly incorporate the users of the system. This paper works towards achieving a synthesis of knowledge through proposing a typology for conceptualising the sophistication of SME costing systems. In an attempt to move towards a more overall consideration of sophistication, while retaining some of the benefits of structured assessment, I propose considering sophistication with reference to two axes: the documented capacity of the firms' formalised technical systems, and the costing-related cognitive capacity of key users. Paradoxically, I "bring the user in" by separately examining the users of the system and the non-human, observable parts of the system. These components are then re-joined to argue that the style of in-use sophistication that can be observed in a system is a product of the users and the non-human components of the system. A typology for considering different types of sophistication in SME costing systems is proposed, and its theoretical and practical applications are demonstrated.

This paper progresses as follows: Section 4.2 places the study within existing literature. Section 4.3 explains the research approach. Findings are presented in section 4.5, and the paper is concluded in section 4.6.

4.2 Background Literature

4.2.1 Sophistication of Product Costing Systems

The existing body of literature concerned with sophistication of product costing systems has implicitly been limited to consideration of the documented, technical components of firms costing systems, with sophistication commonly being defined with reference to the methods used to identify indirect overhead costs with product costs (e.g., Abernethy et al., 2001; Al-Omiri & Drury, 2007; Drury & Tayles, 2000; Drury & Tayles, 2005). There has, however, been some acknowledgement in the literature that this could be an inappropriate definition. For example, Drury and Tayles (2005) noted that sophistication could cover other areas (that were not elaborated on) and suggested that it might be better to use "complexity" when talking about method of identifying indirect

costs with product costs. Brierley (2008) surveyed CIMA members about their understanding of costing system sophistication and identified 16 different definitions which could be grouped into three categories: calculation of product costs, use of product costs, and a combination of calculation and use. The three most popular responses were: the assignment of indirect overhead costs to product costs, the inclusion of all costs in product costs and the understandability of product costs by non-accountants. While the survey supported the assignment of indirect costs to product costs as being of primary importance, the inclusion of a non-technical consideration, i.e. understandability, in practicing accountants' top three considerations of what constitutes "sophistication" confirms the need for broader consideration and exploration of the issue. The result shows that practicing accountants are concerned with issues beyond the technical sophistication of firms' formalised costing systems.

This study embraced the definition put forward by Abdel-Kader and Luther (2008, p. 5): "Sophistication refers to the capability of an organisation's management accounting system to provide a broad spectrum of information relevant for planning, controlling, and decision-making all in the aim of creating or enhancing value." The definition is utilized because it includes reference to the applications and desirable outcomes of management accounting; management accounting is presented as something that is *used* as opposed to just something that is calculated. Abdel-Kader and Luther, employing contingency theory, go on to measure sophistication with reference to a list of accounting concepts i.e. there is again an implicit focus on the technical components of the firms' documented system. However, this current study used a broader viewpoint, viewing the user as an integral component of the system's capacity to provide information for activities intended to enhance value. This research posits that a system's potential capacity for providing information for planning, control and decision making is important; but so is whether (and how) the users of that system utilise such outputs when undertaking those activities. Chenhall (2006) noted that contingency-based research of management accounting controls had typically focussed on specific elements of accounting controls, despite our understanding that accounting controls form only a part of broader control systems (Chapman, 1998; Merchant, 1985; Otley, 1994), thereby risking "serious model under-specification" (Chenhall, 2006, p. 167). Research that fails to consider important links between accounting systems and other

factors, such as how users actually make use of the outputs of the system, may report incomplete or incorrect conclusions.

4.2.2 Management Accounting as Practice

The practice theory approach set out by Ahrens and Chapman (2007) is employed in this study to facilitate the inclusion of users as an integral component of the management accounting systems that they create and reconstitute through activity. Early interpretive studies have been applauded for advancing awareness of accounting's political, symbolic and ritual functions, but also criticized for privileging these functions to the extent that commercial and strategic functions have been left relatively unexplored (Ahrens & Chapman, 2007).

In contrast to contingency theory driven, survey-based approaches that seek to analyse the fit between the context and the accounting system, practice theory seeks to understand the functioning of the system. Stakeholders are viewed “not (as) passive actors but active members, members who reconstitute the system of shared practices by drawing upon it as a set of shared resources” (Barnes, 2001, pp. 17-18).

Ahrens and Chapman's (2007) practice theory approach adopts Schatzki's (2005) vision of social order and associated definition of practices:

The site of the social is composed of nexuses of practices and material arrangements. This means that social life inherently transpires as part of such nexuses. By practices, I mean organized human activities. Examples are political practices, cooking practices, educational practices, management practices, shop floor practices, and design practices. Any practice is an organized, open-ended, special-temporal manifold of actions.

(Schatzki, 2005, p. 471)

Accordingly, this study adopts the view that costing systems can be understood as “a bundle of practices and material arrangements” (Ahrens & Chapman, 2007, p. 9).

The approach has some parallels to Actor Network Theory (ANT); a method intended to trace and describe heterogeneous networks of humans and non-human actants (Latour, 1987). ANT is relevant to the present study in that humans and non-humans can be considered actants; an actant is “something that acts or to which activity is granted by

others” (Latour, 1996, p. 373). In the canon of ANT, a person, thing, or network becomes worthy of study if it leaves a mark, deeming it an actant in a network. This is relevant in this study, which seeks to explore the role of the user in product costing systems. ANT removes the distinction between the humans and the technical components of the system, viewing them as one network. The problem, however, is that ANT does not a priori privilege any network locations or actants, while the practice perspective acknowledges that powerful stakeholders can exert influence in the design and interpretation of management control systems (Quattrone & Hopper, 2005).

4.3 The Research Study

The data presented in this paper was collected as part of a larger study exploring the management accounting practices of SME Australian wineries. The Australian wine industry is an important component of Australia’s economy, and the vast majority of participants are SMEs. For the past two decades, the Australian wine industry has been facing significant challenges including oversupply, increased global competition, climate change, water shortages and reducing per litre sales prices in domestic and international markets. Industry level stakeholders have urged participants to respond to these challenges by adopting a quality over quantity strategy (WineAustralia, 2007). From an academic perspective, these pressures can be expected to increase both the importance of high quality costing information to inform production and sales decisions (Gonzalez-Gomez & Morini, 2006, p. 195) and the complexity involved in obtaining it (Blake et al., 1998). However, anecdotal evidence suggests SMEs are using product costing approaches that would, from an academic perspective, be considered suboptimal. For example, the industry-produced document *Directions to 2025 Small Business Benchmarking Guide* (Deloitte Touche Tomatsu, 2007c, p. 24) reports that many small businesses are expensing production costs that “should” form part of the cost of inventory. This apparent gap between academic recommendations and practiced reality inspired this exploration of wineries’ interactions with product costing information.

The cases examined in this paper were purposively sampled out of a larger pool of case studies. During the data collection phase of the larger study, interaction between the user and the technical components of the system emerged as a theme worthy of more in depth exploration. During the larger study, a broad range of practices with regards to

the extent to which product costing information was captured, calculated and documented was observed, ranging from firms that documented the calculation of little to no costing information, through to firms that could offer a report to substantiate all costing related information that they calculated or used. A broad range of understanding of cost accounting concepts and ability to make decisions informed by costing information was also observed. Importantly, these two aspects of sophistication (technical aspects of costing system, ability to understand and use costing information) were not necessarily correlated. Firms that displayed a high level of cognition with regards to costing did not always have systems that formally captured and documented the costing information that they were capable of collecting and compiling. Firms that invested significant resources in formally capturing and documenting costing information did not necessarily have the internal expertise to appropriately calculate the information they thought they were compiling, or a disconnect between collection and use of information was observed.

Four firms were selected on the basis that they displayed different relevant characteristics: Two of the firms had a qualified accountant with product costing expertise working in-house and the other two firms did not. Within both of these groups, one of the firms was committed to having extensive non-human technical product costing systems and documentation, while the other firm was not. The firm sampling characteristics are summarised in Table 1.

Table 1 - Firm sampling characteristics

		Committed to extensive technical systems and documentation	
		Yes	No
Qualified accountant in-house	Yes	Firm A	Firm B
	No	Firm C	Firm D

Interviews, observation and document analysis were used to collect data. Semi structured, in-depth interviews were conducted with three key stakeholders from each firm (see Table 2). Document analysis involved examining the outputs of the firms’ systems, such as costing reports from accounting packages, excel spreadsheet models,

and lists of cost components compiled by stakeholders. Observation was undertaken over the course of two years and included:

- Spending time in at the businesses, observing stakeholders interacting with their costing systems and each other.
- Shadowing stakeholders while they undertook tasks that I expected to involve costing considerations e.g. sitting in on blending trials.
- Becoming familiar with the accounting software packages used by their firms. Examining the software’s hypothetical costing capabilities and the extent to which the capabilities were being utilised.

The qualitative research software package NVivo was used to collate and code all interview transcripts, sample reports and field notes.

Table 2 - Interview List

Interview List	
Firm A	<ul style="list-style-type: none"> - CFO - Managing Director - Winemaker
Firm B	<ul style="list-style-type: none"> - CFO - Managing Director (father) - Chief Winemaker (son)
Firm C	<ul style="list-style-type: none"> - Winemaker (husband) - Office Manager (wife) - Bookkeeper
Firm D	<ul style="list-style-type: none"> - Owner (father) - Viticulturist (daughter) - Bookkeeper

4.3.1 The Participant Firms

Background information of the participant firms is presented in Table 3 and described below.

Firm A: In-house costing expert, extensive focus on technical systems and documentation

Firm A was selected for inclusion in this study because it had an experienced, qualified CFO and displayed high levels of investment (both financially and in terms of attention)

in the extensive, non-human artefact components of its costing systems. Specialised winery software is used to its full capabilities and is supplemented by complex spreadsheets that calculate and track cost allocations to individual product lines. Separate costs are maintained for management decision making purposes and taxation reporting obligations. The firms' stakeholders value the documented outputs of the highly technical costing system.

The business is not actively adding new products or pursuing new markets.

Grapes are sourced from owned and leased vineyards and purchased from growers with short and long term contracts. The business owns a winery, but outsources bottling.

Firm B: In-house costing expert, less focus on technical systems and documentation

Firm B was similar to Firm A in many ways including being similar in size, age and market maturity, operating in the same wine region, having a qualified CFO of approximately the same tenure and employing the same industry specific software. While the two CFOs demonstrated approximately equal awareness and understanding of costing considerations, Firm B's costing systems featured less focus on the technical system and documentation. Firm B was not using the full capabilities of their accounting software, did not document separate cost calculations for management decision making and used a blanket overhead allocation across all products, despite being aware that use of winery equipment and labour varied significantly across different product lines.

Grapes are sourced from owned and leased vineyards and purchased from growers with short and long term contracts. The business owns a winery and a bottling line.

Firm C: No in-house costing expert, extensive focus on technical systems and documentation

Firm C was owned and operated by a husband and wife team, supported by a bookkeeper, cellar hand and casual cellar door staff. They were pursuing growth both in terms of product offerings, domestic and export markets, and volumes.

Firm C was working towards using an off-the-shelf accounting package to trace and calculate average cost prices for individual product lines. Grapes, bottling and dry goods were all purchased, and were being successfully allocated to relevant products. However, the business owned and operated the winery plant used to produce the wines, and they did not know how to allocate these costs through to individual product lines. For decision making, they had an established and relatively complicated system of spreadsheets to cost out products for decision making purposes (separate tax values were calculated by their external accountant at year end). The spreadsheets relied upon hypothetical costs per litre of bulk wines, calculated by their external accountant from historical data.

Firm D: No in-house costing expert, less focus on technical systems and documentation

Firm D had evolved out of three brothers' love of wine. The owner himself described the firm as having been "an expensive hobby". At the time of participating in the case studies, the firm was going through succession planning and was to be transferred to the brother I have described as the "owner" (the other brothers were keeping different business interests). Part of the succession transfer included having an adult daughter return to the firm from external but related employment. This daughter was keen to increase both the formality of the firm's systems and the costing related skills of decision makers. However, at the time of the case study, the firm was unable to calculate specific costs for products, and key personnel did not demonstrate high levels of industry relevant tacit knowledge. Historically, costs were simply paid as incurred, and wine prices were set with reference to competitors' products of similar quality. The owner acknowledged that they had never known what the costs of their various products were, and reported being shocked at the cost of their inventories, as calculated by an external consultant as part of their succession planning processes.

Table 3 - Participant firm characteristics

Characteristic	Firm A	Firm B	Firm C	Firm D
Firm Size (based on WFA crush metrics)	Medium	Medium	Small	Small
Family Firm Status	Owned by two families, all management are non family members	Family owned; family members is Head Winemaker / Managing Director. CFO is not a family member.	Family owned and operated. Non family member bookkeeper.	Family owned and operated. Non family member bookkeeper.
Growth status	Mature	Mature	Growing	Mature but planning for a growth phase
Source of grapes	Own and leased vineyards, short and long term contracts with growers	Own and leased vineyards, short and long term contracts with growers	Leased vineyards, short term contracts with growers	Own vineyards
Source of processing	Own winery	Own winery	Own winery. Also provide contract processing to other businesses	Use contract processing
Bottling	Outsourced	Own bottling plant	Outsourced	Outsourced
Software involved in costing related functions	EzyWine (wine industry specific software) Excel spreadsheets	EzyWine (wine industry specific software) Excel spreadsheets	MYOB (off the shelf software) Excel spreadsheets	Quickbooks (off the shelf software)

4.3.2 The Sensitizing Concepts

Sensitizing concepts (Blumer, 1954) were applied in the collection and analysis of data. As the role of the users of the systems was a primary concern, in addition to the observable, tangible components of the firms' costing systems, the user's interaction with the system, and the ways that costing information was produced and applied by the user were explored.

As per Abdel-Kader and Luther's (2008) definition of sophistication, the decision usefulness of the system outputs in context was a key concern. To this end, two industry relevant costing-related issues were employed as sensitising devices during the collection and analysis of data: the calculation of the cost of a bottle of wine, and the ability to cope with costing non-wine product offerings. Bottled wine is the core business of the study's research population so it follows that the calculation of a bottle of wine is a critical output of a firm's product costing system. The ability to cope with the calculation of alternative products was examined as a secondary factor because it is common for wine businesses to have associated tertiary business activities, which complicate their business management requirements (Charters et al., 2008). While examining the firm's costing systems with reference to these issues, three factors were considered: the capacity of the system's non-human / technical components, the capacity of the system's human components (i.e. users), and the user's attitudes towards the system. The sensitizing concepts are displayed in Figure 3. To provide context to these issues, the following section provides overview information about cost structures in the wine industry. Product diversity and production processes are addressed with reference to how costs and their calculation can be affected.

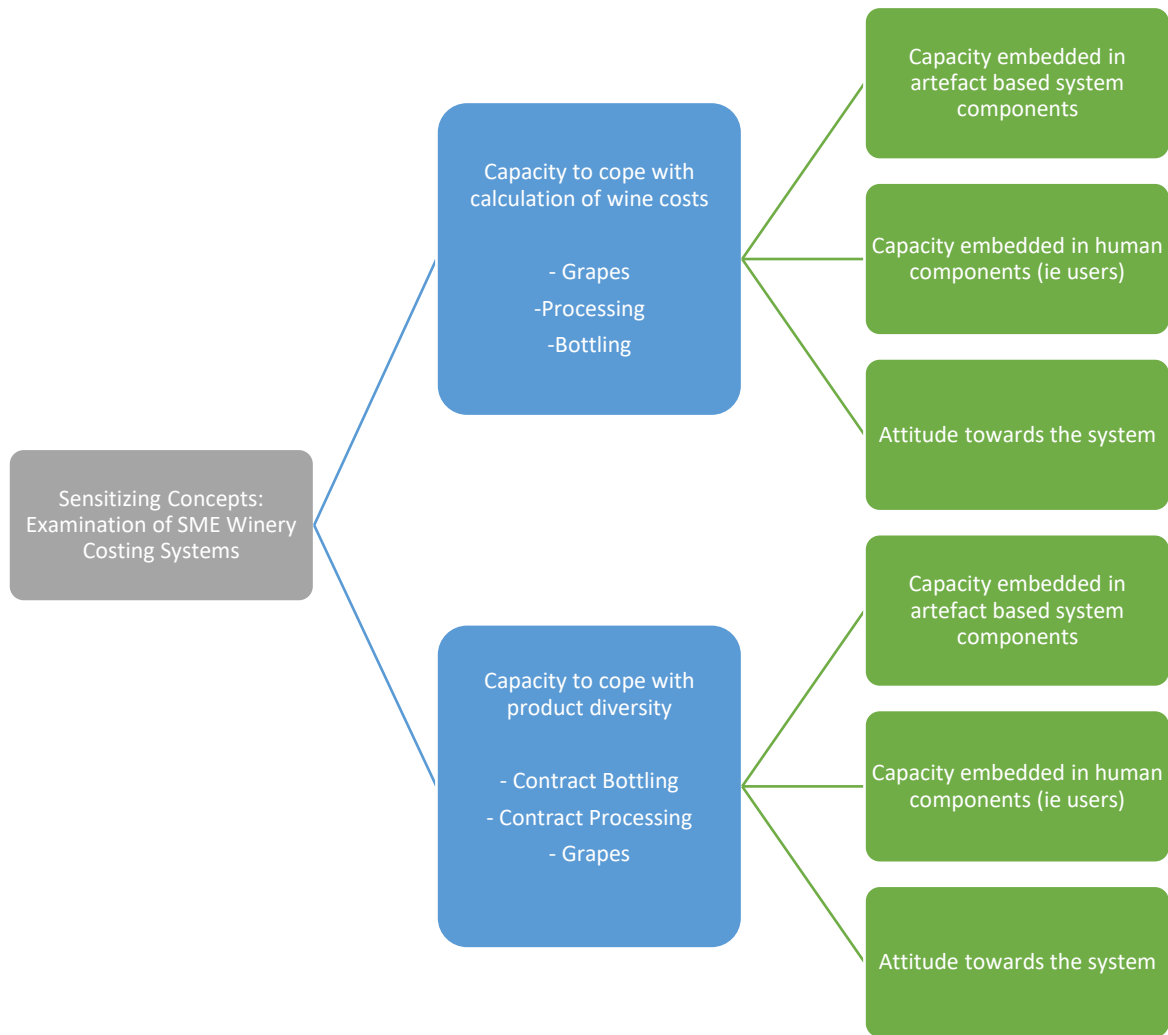


Figure 3 - Sensitizing concepts employed in the examination of SME winery costing systems

4.3.2.1 Calculating the cost of a bottle of wine

Calculating the cost of a bottle of wine is not a straightforward endeavour. Winemaking is a complex and flexible process which is frequently overhead and variable cost intensive (Gonzalez-Gomez & Morini, 2006). A summary of the main processes involved in converting grapes into wine is included as Appendix D. To demonstrate the potential complexity of cost structures in the wine industry, while avoiding getting lost in the details, data collection focussed on three of the major cost input categories in the wine manufacturing chain: grapes, processing and bottling. Costing issues stemming from production processes can be closely related to product diversity because different wines can have different production processes and inputs. However, this section looks at the wineries' cost inputs from production processes from a higher, firm-wide level, as opposed to at the product level.

Wineries can source grapes from vineyards that they (or related entities) own or lease, or they can purchase grapes from arm's length growers, on an ad-hoc or longer term contract basis. Purchasing grapes simplifies the calculation of costs because the input comes with an invoice, whereas owned or leased vineyards incur costs including staff, chemicals, water and harvesting, which need to be traced and allocated through to the resultant grapes. Grapes from associated entities are frequently transferred at prices that are appropriate from a tax planning perspective, as opposed to the price being a straight reflection of the costs of production or the market value. It is common for SMEs to use the same numbers for tax and management reporting (Blake et al., 1998), meaning such practices introduce cost distortions.

Grapes can be crushed, pressed and fermented into wine using equipment owned by the producer, or by paying another producer to provide contract processing services. A wine brand that owns its own winery is faced with the product costing challenge of determining how to allocate staff, depreciation, chemicals, electricity and other overheads through to the various wines produced. In contrast, a wine brand that uses contract processing is issued an invoice for the conversion of its grapes into storage (and other related processes such as storage and filtration).

While some wineries own their own bottling plants, many outsource the process. Wineries that own and operate their own bottling lines have another set of fixed and variable costs to allocate through to products, while, again, those that outsource the process are provided with a product specific invoice to allocate. In addition to the processes of bottling, costs are incurred to purchase bottles, labels, cartons, and screw-cap or corks closures. The aggregate of these costs are typically referred to as "dry goods".

Across all of these inputs, it is common for SME owner operators to be actively engaged in the manufacturing process, but not pay themselves a commercial salary (Deloitte Touche Tomatsu, 2007a). The lack of inclusion of commercially realistic wages in production costs is a further opportunity for cost distortion.

4.3.2.2 Capacity to cope with non-wine product costing

Product diversity was one of the factors identified as complicating product costing when the academy was promoting innovative costing approaches in the 1980s (Cooper & Kaplan, 1988; Jonsson & Gronlund, 1988). While the activity based costing approaches

that evolved from these concerns failed to change the face of applied product costing approaches, the hypothetical concerns are still valid in our SME winery case study settings.

In the wine industry, product diversity could be considered from a number of levels. At a high level; many businesses run simultaneous offerings for example restaurants and tourists attractions along with bottled wine. This study focussed only on wine and grapes. At the production level, but still from a broader point of view, all of the firms sold wines both in bulk format (to other wine businesses) and in bottled format (to wholesalers, retailers or consumers). Firm C offered contract processing services to other wineries, which would affect the share of winery overheads that should be absorbed by the firm's own wines. Firm B owned its own bottling line, but sold excess capacity to other wine brands, again spreading the overhead load and potentially complicating the allocation of overheads. Firm D sold grapes to other wine businesses. The goods and services categories sold by the participant firms are summarised in Table 4.

At a product specific level, the production process for red wine compared to white wine is typically more time consuming and labour intensive. The colour in red wine comes from the wine being fermented along with the grape skins. The fermentation needs to be plunged or turned regularly because the skins float to the top, reducing contact and potentially forming a hard crust. Even within the colours, there exists a myriad of winemaking approaches, each with their own distinct equipment, labour and additive requirements. Seasonal variation within grapes will mean no two wines will be produced in precisely the same way vintage-to-vintage; let alone product-to-product. All of the participants produced an assortment of wines incorporating reds and whites of several varieties and varying quality levels - higher quality wines typically being associated with more labour intensive winemaking approaches compared to their lower quality counterparts.

Table 4 - Summary of goods and services categories sold by participant firms

Income From	Firm A	Firm B	Firm C	Firm D
Bottled Wines	✓	✓	✓	✓
Bulk Wines	✓	✓	✓	✓
Contract Processing for other wine brands			✓	
Contract bottling for other wine brands		✓		
Selling grapes to other wine producers				✓

4.3.2.3 Distinguishing between the human and non-human components of the system

This study's focus on the system's capacity to provide information that can be used to add value highlights the relevance of context. We posit that the users of that information, and their ability to apply the information to add value, should be considered an integral component of the overall system. As we were particularly concerned with the effect of the users' contribution to the system, we attempted to distinguish between the capabilities of the human components and the non-human artefacts of the system. In examining the system, we imagined a separation between these two sections of the system and separately examined the costing related capacities of each:

Capacity of the firms' artefact based system components

Imagine considering a system completely devoid of its human users, all that is left to consider is that which has been calculated and captured; written down to be observed without the expression or interpretation of an insider. Looking at all of the "things" in the system – the computers and their software programs, the spreadsheets, the printed reports and the hand written notes. Understanding, that in using this definition, such artefacts are human creations. This does not imagine a world devoid of humans, just the system with its usual humans removed. If a different set of humans were inserted in the system, what artefacts would be available to them? This imagined scenario is in the realm of factors considered in prior contingency driven research. However, it's different because all observed firms were far from "sophisticated" with reference to factors like number of cost drivers considered. In contrast to research of the likes of

Bedford et al. (2016), where the research population was limited to firms that had more than 100 employees and revenues over \$20 million in order to “ensure that formal accounting and other MC practices are in place” (p15), those populating the current study were SMEs – the landscape is very different.

As a Chartered Accountant, knowledgeable in product costing approaches and experienced in winery operations, I imagined: *if the key stakeholders disappeared from the firm and you had to step in to run the firm, what pre-existing costing system information and capabilities would be available to you?*

In the imagined scenario of managerial disappearance and a winery specialist accountant researcher being sent in as a substitute, it is obvious that a replacement would be better placed to hit the ground running and make optimal decisions in a firm that could offer a higher level of non-human costing practice sophistication. However, this scenario was only imagined. A researcher is not being sent in to take over management of a firm. Instead, the costing practices are undertaken, and the outputs are used, by key stakeholders in the firms. Thus, the costing related cognitive capacity of the firm’s key stakeholders was considered.

Capacity of firms’ human components of the costing system

For this component, the non-human components of the system were set aside and only the human stakeholders’ abilities to identify, critically consider, calculate and apply costing related information were considered. Objective measures, such as whether or not the firm had a qualified accountant in house, or whether or not the participant understood what the term “full absorption costing” means, were considered. Use of information in relation to costing related matters was subjectively assessed. This was necessary because several participants dismissed their costing systems as being non-existent and declared a lack of understanding, yet were observed invoking relevant costing information to take value-adding action.

4.4 Findings

This section presents and discusses the findings. Firstly, each firms’ calculation of a bottle of wine is examined. The three cost components discussed above: grapes, processing and bottling, were used to direct enquiry. The system is considered with reference to artefact-only (non-human) components, and then human-only components.

The user's attitudes towards the system are integrated into these considerations. Next, capacity to cope with product diversity is examined via consideration of the diverse (non-wine) product offerings of firms B, C and D (bottling services, contract processing and grapes). None of the firms maintained separate, documented systems to calculate and account for the costing consequences of their diverse product offerings, so the discussion for this section is limited to examining how the users dealt with costing (or not costing) the diverse product offering, and their attitudes towards this approach.

4.4.1 The Firms' Calculations of the Cost of a Bottle of Wine

Firm A - Artefact-only system components

Firm A's costing system featured the most extensive documentation, and, relatively speaking, was the most sophisticated. The firm used industry specific software to track wine production volumes and cost allocations. The calculation of cost allocations was performed in a separate spreadsheet model. An additional spreadsheet model tracked the costs allocated to bottled products. The cost components captured in the spreadsheets and subsequently updated in the industry specific software are shown in Table 5.

Table 5 - Firm A - Components captured in the cost of a bottle of wine

	Firm A
Grapes – own vineyard	Included at average market value (as opposed to actual cost), with an overall average extraction rate applied.
Grapes – purchased	Included at average per tonne rate paid for that grade/variety with an overall average extraction rate applied.
Oak	Estimated cost relies on assumptions applied for average cost of different barrel types, percentage of the wine aged in barrels, and how old the barrels are when used.
Processing	Winery costs are applied on a per litre basis, broken down into labour, other production costs, and a storage component. Storage recognises the cost of holding wines over the nonvintage period, and is charged to the wines based on how long they will be kept in the winery before release to market. Labour and other production costs are calculated by adding all of the vintage costs and dividing across production, but the allocations are weighted to recognise which wines are more labour intensive. These wines are also allocated non labour production costs at a higher percentage on the assumption they use more equipment time, electricity etc.
Packaging costs	Included at actual cost. Bottling is outsourced and dry goods are purchased as required.

Firm A - Human Components – Firm A boasts a highly qualified and experienced CFO of long tenure. He offered critical analysis of benefits and limitations of the firm’s systems. The CFO and MD independently reported valuing knowing “where they stood” with all products and referred to the product cost calculation when asked questions about distribution and market segmentation decisions. However, both also independently acknowledged that the costing information was mostly used to validate that they were on the right track, as they had little flexibility to change their pricing or cost structures. Both managers participated in conversations about hypothetical situations using broad, rule-of-thumb type information, and answered in-passing questions about their firm with reference to broad-based averages, as opposed to looking up specific answers. The winemaker was relatively indifferent to the costing

consequences of production, deferring responsibility and authority for the topic to the CFO.

Firm B - Artefact Components - Firm B's wines were valued at the end of each vintage by adding all vineyard costs incurred since the previous vintage, all grapes purchased, and all winery costs incurred since the end of the previous vintage, including the cost of running the bottling plant, but excluding oak. The total was then split across all litres produced, regardless of variety or end product, but wines that went in to oak were allocated three times the cost of wines that did not go in to oak. The cost of oak was then evenly split across the wines that went into oak. Upon bottling, finished goods were allocated the per-litre cost equivalent of the volume bottled as well as a ballpark estimate of the cost of dry goods. The bottling process was not separately added to finished goods, as bottling line costs are included in the production costs already allocated to bulk wines.

Firm B - Human Component – Firm B's CFO was similar to Firm A's CFO in terms of age, qualifications, experience and tenure. While Firm B's documented costing systems were more simple than Firm A's, Firm B's CFO displayed an understanding of cost accounting concepts that was on par with that of Firm A's CFO. He was well aware of the limitations of the firm's technical system, yet displayed a sophisticated understanding of the firm's various products and their associated production inputs. He described the staffing consequences of the various boutique production processes that the winemaker favoured, and the cross-subsidizations resulting from averaging costs despite some products using much more expensive inputs or labour intensive processes compared to other products.

He explained the following factors as being relevant to the firm's minimalist approach to allocating costs to wine:

- The outputs of the documented costing system are only used as aggregates for reports, not on an individual product level. They don't inform decision making with regards to individual products, because the management team are conscious of the distortions and cross subsidizations occurring in the reports.
- He understands the limitations of the documented system – for example he explained that because production costs are taken from the end of the vintage period

the year before, seasonal variations can distort the following year's production costs. He also explained that because the bottling line is not separately accounted for, products incur a share of historical bottling costs as part of their vintage cost allocation; long before they are bottled.

- When making decisions, key stakeholders have a detailed, intimate working knowledge of which grapes go into which products, which products are using more labour intensive approaches, and which products feature premium (therefore more expensive) packaging inputs (eg premium glass).
- The CFO explained that they were “all about working back” when making wine. By this he meant the price is set by the market, and they work back through to determine acceptable dry goods, production process inputs and grape prices, to be able to deliver a profitable product at a given price point. Therefore, they were less interested in “building up” costs because all of the costing decisions were made before the product was actually manufactured.

The head winemaker echoed many of the ideas expressed by the CFO, describing himself as having a “good feel” for the cost consequences of production decisions. He also explained that he was happy with the brand's overall product mix portfolio and felt that all products played an important role in presenting a complete range to the public. He explained that while the brand is profitable overall, he is happy for the portfolio to “carry a couple of products that are borderline profitable”, because they contribute to the overall appeal of the portfolio.

The managing director (the head winemaker's over 80 year old father) was cynical about the value to be obtained from investing time and resources in costing systems. He asserted that there is no substitute for decades of experience when it comes to understanding what makes a business tick. He displayed an intricate knowledge of the cost structures of the business “that you can't learn from doing a PhD!”

Firm C - Artefact Components

Similar to Firm A, Firm C uses a spreadsheet model to track the cost of each of their bottled wine products. Historically, a set per litre rate for bulk wine, as calculated by an external advisor a few years prior, was used to represent the cost of grapes and processing. To this, actual costs for purchased dry goods, transport and outsourced bottling were added. At the time of data collection, Firm C had started tracing through

specific grape parcels to finished bottled products, but had not yet adjusted the system to include an allocation for processing – they used the difference between the captured grape cost and the original per-litre allocation rate to arrive back where they had started in terms of the allocation of processing costs.

Firm C - Human Components

Firm C did not have an in-house product costing expert. The firm was run by a winemaker and his wife, with back office processes being assisted by a bookkeeper. They were enthusiastic documenters and calculators, but struggled to identify the limitations of their systems. For example, they knew that the per litre proxy for the wine cost component was inappropriately general, because they were paying different rates for different types of grapes. However, after the wife and bookkeeper had drafted some reports that included actual grape prices, the winemaker expressed delight at finally having “real” information he could use for decision making. Unfortunately, the reports did not include any costs incurred in processing those grapes into wine. When the bookkeeper pointed that out, they settled on grossing up by the difference between the grapes amounts and the original proxy per litre amount.

Firm D - Artefact Components: Firm D lacked an artefact based system for the in house calculation of bottled costs. All costs were expensed as incurred. Inventory was valued for tax purposes by an external adviser, as part of year-end reporting activities, using broad assumptions. At the time of data collection, a detailed calculation of the inventory had recently been undertaken by an external consultant as part of the succession planning that the firm had commenced.

Firm D - Human Components: The patriarch of Firm D reported being shocked when the cost of firms’ inventories were calculated by the external accountant, and jokingly referred to the firm as “an expensive hobby”. At the time of data collection, a viticulturist daughter had just resigned from an interstate-based position to return to the family farm. She had a desire to develop and expand the bottled wine brand. She viewed improving the costing systems as an important priority, but reported lacking skills and experience in this area (her external employment had been with a large firm, where she was not involved in the calculation or use of costing information).

4.4.2 The Firms' Capacity to Cope with Non-Wine Product Costings

This section discusses how firms B, C and D dealt with the costing consequences of their non-wine product offerings of contract bottling, contract processing and grapes (Firm A is not considered in this section as they did not have a distinct non-wine product offering). None of the firms maintained a documented system for the separate capture and calculation of the costs of their additional revenue stream. Firm B's bottling line costs were included in the single winery cost pool and therefore allocated through to the production costs allocated to bulk wines. Firm C made no distinction between costs incurred to produce their own wines versus costs incurred to produce wine for others (at the time of data collection, Firm C was using a standard per litre cost allocation for production). Similarly, Firm D made no distinction between costs incurred to produce grapes that would be manufactured into their own wines, and grapes that would be sold to other businesses; all costs were expensed as incurred. The stakeholders' attitudes towards the cost consequences of these alternative revenue streams are explored below.

Firm B – Contract Bottling: Firm B was committed to having a bottling line for their own, qualitative purposes. They don't actively pursue contract bottling work from other wineries, but are happy to sell excess capacity at market rates. The CFO reported being certain, thanks to "gut feel" and "calculations that were done years and years ago", that the market price exceeds their variable operating costs, so it makes sense to sell the excess capacity. He explained that a more confident understanding of profit margins for this activity would not change any buy or sell decisions, so there was little to be gained from pursuing further detail. The head winemaker and MD supported the CFO's assertions by being quite indifferent to the firm's contract bottling activities. Both explained that the bottling line was "needed" for quality control purposes and selling excess capacity was described as making sense from a cash flow and cost sharing point of view.

Firm C – Contract Processing: Firm C's Contract processing prices were set with reference to what they used to be, several years earlier, back when the winemaker was less focussed on his own production and more focussed on consultant winemaking services and boutique contract processing. At that time, he had had a business partner, who had developed the price list. The current stakeholders of Firm C did not know what costing information, if any, had been involved in the generation of the original

price list. The business partner had since moved on (on bad terms) but the winemaker had more or less stuck with the same price list. Firm C was attempting to shift towards a more user-pays pricing approach whereby the more the customer took care of their own wines, the less they paid. At the base level, the customers were effectively renting production equipment and storage space, but providing all of their own labour and product inputs. At the top price point, the customer delivered their grapes into the full care of the winemaker. This move in processing charges was driven by a frustration with some clients being overly reliant on the winemakers' time and labour. This suggests that a better understanding of cost inputs could inform the development of a fairer pricing structure. However, Firm C's stakeholders reported being concerned that sudden dramatic price changes would trigger the loss of contract processing clients. The contract processing revenue stream was valued because it generated upfront cash flows (compared to the long turnaround times typical of wine manufacture and sale) and provide economies of scale, meaning the firm could access cheaper pricing for inputs like chemicals, because they were buying at higher volumes. Therefore the winemaker knew he was benefiting financially from having them, and was unlikely to risk losing them by chasing higher prices, even if further costing information showed he should dramatically change his structures.

Firm D – Grapes: The grapes were sold to a large corporate under long term contracts. The owners (father and daughter) lamented not understanding where the costs of their business were being incurred and therefore not knowing where the business was making or losing money. In contrast to the stakeholders from firms A and B, who referred to per hectare rules of thumb for reasonable vineyard running costs and spoke of long term averages, the stakeholders of firm D did not mention any rules of thumb or ball park averages. The bookkeeper reported simply following instructions to record expenses to expense accounts as invoices were received; she had no other exposure to the wine or grape industries and reported having little understanding of the production processes involved. The stakeholders could have argued that the long term contracts meant an expert user might argue this diminished the decision consequences of potential information and the financial risk of decisions. However, as with Firm C, the owners were not arguing this logic; they simply did not have the capacity of the resources to compile the information, even if they wanted to.

4.5 Discussion

The findings demonstrate that the in-use sophistication of SME firms' costing systems is not necessarily a linear relationship to the documented system's capacity *or* the users' costing-related cognitive capacity. The CFOs from firms A and B displayed similar levels of capacity to understand costing information, yet the information documented by their firms was quite different. The users from firm C were industrious in their capture and documentation of information, yet their capacity to understand costing information was limited. The findings suggest that an expert human user can compensate for limitations in a firm's documented costing system, but increasing the technical capacity of a costing system cannot compensate for limitations in the user's costing-related cognitive capacities.

This study applied the accounting as practice approach set out by Ahrens and Chapman (2007). They flagged the trustworthiness of stakeholder accounts as a potential issue of concern, describing stakeholder accounts of their own activities as "categorically unlike the complex cognitive processes through which they go about accomplishing them" (Ahrens & Chapman, 2007, p. 9). Bloch (1991, pp. 193-194) warned that when a participant explains how and why they do something, "instead of being pleased we should be suspicious and ask what kind of peculiar knowledge is this which can take such an explicit, linguistic form?" However, in the cases presented here, I believe that the stakeholders provided trustworthy accounts. Embracing a long term data collection method meant that I was involved with the cases long enough for trust to be established. The CFOs of Firm A and B candidly discussed the ways that they did not make use of the information available to them, or why they failed to calculate and report information to the extent of their capabilities. Just as I invested time in learning and understanding their approaches and routines, they spent time critically assessing their reporting systems within the context of the exploratory purposes of my study. As accountants with a background in the wine industry, we shared a professional vocabulary that facilitated mutual understanding. Similarly, the stakeholders from firms C and D had agreed to participate in the study because they were keen to improve their management accounting systems. Whilst they lacked much of the professional vocabulary I shared with the CFOs, they were still keen to critically assess and understand their existing systems with a view to achieving improvements.

The findings also highlight the importance of understanding stakeholder's desired information requirements, and the extent to which they feel the information available to them meets their needs. To illustrate, if the data collection had not included examination of users' perspectives, a contingency theory based explanation for the documented systems' lack of capacity to deal with costs associated with alternative product offerings could have been applied to all cases. Previous work has established that the scope of management accounting systems is positively related to the size of potential financial consequences of having clearer information and inversely related to the clarity of the financial outcomes of the problem (Tillema, 2005). In cases B, C, and D, all of the firms were certain that the additional income stream was financially positive i.e. they perceived that they high clarity, and they all anticipated that they would continue the alternative product offering even if they had "better" information available to them. Therefore; their lack of documented detailed costing information is, on face value, explainable with reference to contingency theory based insights. However, only the CFO from firm B explained his firm's lack of documented systems in ways that reconciled; he noted that they were confident that it was profitable, and they'd be keeping the bottling line regardless, so investment in more formalised systems was not warranted. On the other hand, even though the stakeholders of firms C and D were similarly confident that their alternative offerings were financial positive and that they would be continued indefinitely, they still self-criticised their lack of documented costing information. They were not making a rational trade-off between resources and return of information, like the CFO from Firm B was.

4.5.1 The Typology

In response to the observations discussed above, a typology was developed to consider the overall sophistication of firms' product costing systems with regards to two different but important dimensions: extent to which the system involved formalised documentation of costing-relevant information, and extent to which key users of the system display cognition of costing-relevant costing concepts. The participant firms have been placed in the typology, and below, a description of the "ideal types" (Weber, 1949) of firms that could expect to be located in each quadrant are presented. It is noted that the typology is intended for use as a methodological tool, not a definitive assessment of the firms discussed.

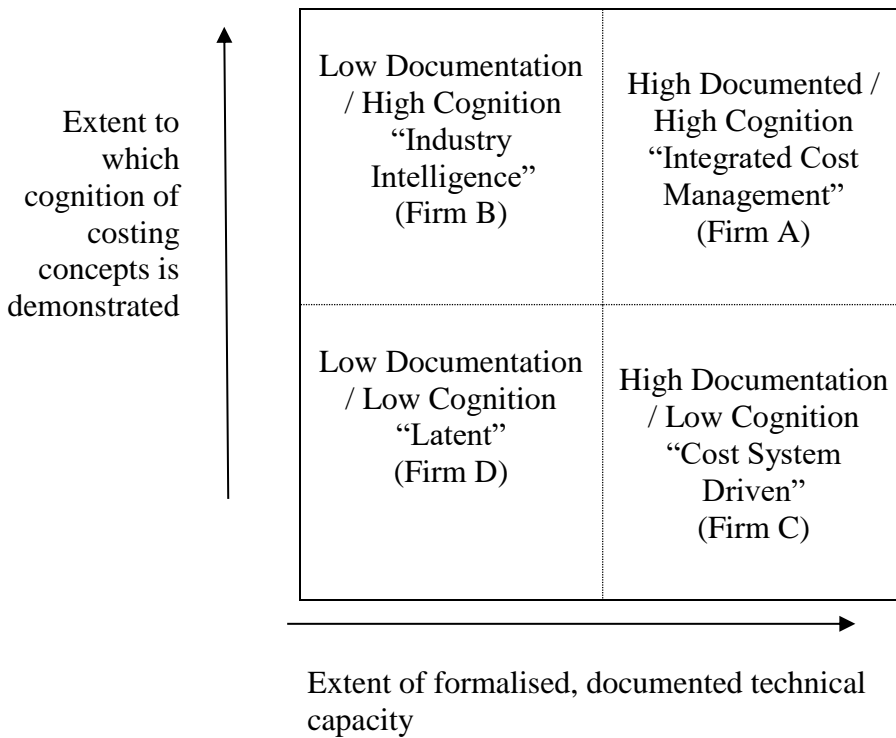


Figure 4 - Typology of SME costing system sophistication styles

Firm A: High Formalisation / High Cognition – “Integrated Cost Management”

A product costing system belonging in this quadrant can be conceptualised as boasting both a highly developed formalised costing system and key personnel that can demonstrate advanced costing-related cognitive capacity. Such personnel have access to formalised information sources, but they may not necessarily refer to this information for day to day decision making. Formal information can be useful for non-routine decision making, or confirmation of decisions that were made informally. Such firms could be described as possessing “the best of both worlds”. Barriers to entry in this quadrant are resources in terms of developing the sophisticated costing system, and access to (and retention of) personnel with advanced costing capacity.

Firm B: High Cognition / Low Formalisation – “Industry Intelligence”

A costing system belonging in this quadrant can be conceptualised as having lower levels of formalisation, but a strong mitigation of this potential deficiency through access to personnel that have advanced levels of costing related cognitive capacity.

The benefit of having a costing system in this quadrant is that firms are able to make informed, sophisticated decisions, without investing significant resources in formalised

systems that are not valued. The potential downsides are that the strength of the system is completely reliant on retaining the personnel who possess high levels of costing related cognitive capacity, industry specific and firm specific knowledge. Additionally, this approach can be seen to be useful where costs and the decisions to be made with reference to them are both relatively stable. In periods of change or uncertainty, the informal approaches to information collection and use may not be sufficient.

Firm C: High Formalisation / Low Cognition – “Cost System Driven”

A “cost system driven” costing system is one that is conceptualised as being reliant on a highly formalised costing system that is able to calculate and document valued costing information, yet the users of the system and its outputs have questionable understanding of the costing concepts involved. They are described as “cost system driven” because the system is delivering information, but the users cannot necessarily be relied upon to use the outputs critically.

Firm D: Low Cognition / Low Formalisation – “Latent”

Firms in this quadrant are characterised as having a costing system that incorporates both sub-optimal formalised systems and a lack of costing related cognitive capacity. They are described as “Latent” because they have significant room for improvement on both axes, but it may be unclear how or whether improvement will be achieved.

4.6 Conclusion

This paper examined the product costing practices of four Australian SME wineries, considering the separate and combined contributions of the documented, technical components of the firms costing systems, and the input of key users.

The typology presented in this paper constitutes a useful and novel contribution to knowledge by emphasising the importance of adding explicit consideration of the stakeholder’s capacity for making sophisticated costing relating decisions, with reference to (or in spite of) the documented information, (or lack of documented information), prepared by or presented to them. It was found that a broader consideration of the types of sophistication displayed by participant firms was useful for better understanding and explaining the differences with the systems. Consider firms A and B as an example. If the study had looked at only one dimension of costing system

sophistication, a thorough understanding of the differences between those firms would not have been obtained. If the study only examined the costing related cognitive capacities of the two CFOs, it would have found them to be similar. Had the study focussed only on the formalised documentation resulting from their systems, it would have concluded that Firm A's system was highly sophisticated relative to Firm B. Use of the typology as a theoretical tool can help to develop a better understanding of the types of costing systems employed by SMEs which will be important in developing a comprehensive theoretical understanding of how SMEs function.

The typology also has potential practical applications. The typology can help advisors form a more complete view of firms' costing systems and therefore deliver more context-appropriate solutions. For example, a highly technically sophisticated system would not be used to its full capabilities in a firm where the users lack the costing related cognitive capacity to fully comprehend and respond to the technical system's outputs. Similarly, a firm that has stable access to users that display a very high level of costing related cognitive capacity, may be able to make an informed decision to allocate scarce resources to causes other than the technical capacity of their formalised costing system, if the users are able to informally compensate for the existing system's deficiencies.

The findings also suggest that resources invested with the intention of improving the in-use sophistication of costing systems may be better spent on increasing user capacity as opposed to technical system capacity. This is of particular relevance to owners and industry bodies; pursuing an increase in the financial literacy of wine industry participants may serve them better than supplying costing tools and approaches. Future interventionist research could assess outcomes of skills focussed interventions to determine whether this is the case, and if so, explore optimal balances between technical system capacity and user skills.

References

- Abdel-Kader, M & Luther, R 2008, 'The impact of firm characteristics on management accounting practices: A UK-based empirical analysis.', *British Accounting Review*, vol. 40, no. 1, pp. 2-27.
- Abernethy, MA, Lillis, P, Brownell, P & Carter, P 2001, 'Product diversity and costing system design choice: field study evidence', *Management Accounting Research*, vol. 12, pp. 261-279.
- Ahrens, T & Chapman, CS 2007, 'Management accounting as practice', *Accounting, Organizations and Society*, vol. 32, no. 1, pp. 1-27.
- Al-Omiri, M & Drury, C 2007, 'A survey of factors influencing the choice of product costing systems in UK organizations', *Management Accounting Research*, no. 18, pp. 399-424.
- Barnes, B 2001, 'Practice as collective action', in TR Schatzki, K Knorr Cetina & E von Savigny (eds), *The practice turn in contemporary theory*, Routledge, London, pp. 17-28.
- Bedford, DS, Malmi, T & Sandelin, M 2016, 'Management control effectiveness and strategy: An empirical analysis of packages and systems', *Accounting, Organizations and Society*, vol. 51, pp. 12-28.
- Birnberg, JG, Turopolec, L & Young, SM 1983, 'The organizational context of accounting', *Accounting, Organizations and Society*, vol. 8, no. 2/3, pp. 111-129.
- Blake, J, Amat, O & Dowds, J 1998, 'The drive for quality - the impact on accounting in the wine industry', *Journal of Wine Research*, vol. 9, no. 2, pp. 75-85.
- Bloch, M 1991, 'Language, anthropology and cognitive science', *Man*, pp. 183-198.
- Blumer, H 1954, 'What is wrong with social theory? ', *American Sociological Review*, vol. 18, pp. 3-10.
- Brierley, JA 2008, 'Towards an understanding of the sophistication of product costing systems', *Journal of Management Accounting Research*, vol. 20, no. Special Issue, pp. 61-78.
- Chapman, CS 1998, 'Accountants in organizational networks', *Accounting, Organizations and Society*, vol. 23, no. 8, pp. 737-766.
- Charters, S, Clark-Murphy, M, Davis, N, Brown, A & Walker, E 2008, 'An exploration of managerial expertise in the Western Australian wine industry', *International Journal of Wine Business Research*, vol. 20, no. 2, pp. 138-152.
- Chenhall, RH 2006, 'Theorizing contingencies in management control systems research', *Handbooks of management Accounting Research*, vol. 1, pp. 163-205.

- Cooper, R & Kaplan, RS 1988, 'How cost accounting distorts product costs', *Management Accounting*, vol. 69, no. 10, pp. 20-27.
- Deloitte Touche Tomatsu 2007a, *Wine Australia: Directions to 2025 - An industry strategy for sustainable success*.
- Deloitte Touche Tomatsu 2007c, *Wine Australia: Directions to 2025 Benchmarking Guide Small Wine Business*.
- Drury, C & Tayles, M 2000, 'Cost systems and profitability analysis in UK companies: discussing survey findings', in *23rd Annual Congress of EAA*, Munich.
- Drury, C & Tayles, M 2005, 'Explicating the design of overhead absorption procedures in UK organisations', *British Accounting Review*, vol. 37, no. 1, pp. 47-84.
- Flamholtz, EG 1983, 'Accounting, budgeting and control systems in their organizational context: theoretical and empirical perspectives', *Accounting, Organizations and Society*, vol. 8, no. 2/3, pp. 153-169.
- Gonzalez-Gomez, JI & Morini, S 2006, 'An activity-based costing of wine', *Journal of Wine Research*, vol. 17, no. 3, pp. 195-203.
- Hopwood, AG 1999, 'Situating the practice of management accounting in its cultural context', *Accounting, Organizations and Society*, vol. 24, no. 5/6, pp. 377-378.
- Jonsson, S & Gronlund, A 1988, 'Life with a sub-contractor: New technology and management accounting', *Accounting, Organizations and Society*, vol. 13, no. 5, pp. 512-532.
- Latour, B 1987, *Science in action*, Harvard University Press, Cambridge, MA.
- Latour, B 1996, 'On actor-network theory: a few clarifications', *Sociale Welt*, vol. 47, no. 4, pp. 369-381.
- Laughlin, R 1987, 'Accounting systems in organisational contexts: a case for critical theory', *Accounting, Organizations and Society*, vol. 12, no. 5, pp. 479-502.
- Merchant, K 1985, *Control in business organizations*, Pitman, Boston, MA.
- Otley, DT 1994, 'Management control in contemporary organizations: a wider perspective', *Management Accounting Research*, vol. 5, pp. 289-299.
- Quattrone, P & Hopper, T 2005, 'A 'time-space odyssey': management control systems in two multinational organisations', *Accounting, Organizations and Society*, vol. 30, no. 7-8, pp. 735-764.
- Roberts, J & Scapens, RW 1985, 'Accounting systems and systems of accountability - understanding accounting practices in their organisational contexts', *Accounting, Organizations and Society*, vol. 10, no. 4, pp. 443-456.

Schatzki, TR 2005, 'The sites of organizations', *Organization Studies*, vol. 26, no. 3, pp. 465-484.

Tillema, S 2005, 'Towards an integrated contingency framework for MAS sophistication. Case studies on the scope of accounting instruments in Dutch power and gas companies', *Management Accounting Research*, vol. 16, pp. 101-129.

Weber, M 1949, 'Objectivity in social science and social policy', in EA Shils & HA Finch (eds), *The methodology of the social sciences*, Free Press, New York.

WineAustralia 2007, *Wine Australia: Directions to 2025*.

Chapter 5

Paper 3 - Stakeholder Experiences of Isomorphic Forces in a Patchy Institutional Field

Statement of Authorship

Title of Paper	Stakeholder Experiences of Isomorphic Forces in a Patchy Institutional Field
Publication Status	<input type="checkbox"/> Published <input type="checkbox"/> Accepted for Publication <input type="checkbox"/> Submitted for Publication <input checked="" type="checkbox"/> Unpublished and Unsubmitted work written in manuscript style
Publication Details	

Principal Author

Name of Principal Author (Candidate)	Melanie Reddaway		
Contribution to the Paper			
Overall percentage (%)	100%		
Certification:	This paper reports on original research I conducted during the period of my Higher Degree by Research candidature and is not subject to any obligations or contractual agreements with a third party that would constrain its inclusion in this thesis. I am the primary author of this paper.		
Signature		Date	12/8/2017

Co-Author Contributions

By signing the Statement of Authorship, each author certifies that:

- i. the candidate's stated contribution to the publication is accurate (as detailed above);
- ii. permission is granted for the candidate to include the publication in the thesis; and
- iii. the sum of all co-author contributions is equal to 100% less the candidate's stated contribution.

Name of Co-Author			
Contribution to the Paper			
Signature		Date	

5. Stakeholder Experiences of Isomorphic Forces in a Patchy Institutional Field

Abstract

This paper explores stakeholders' experiences of isomorphic forces in a patchy field. The study is set in the wine industry where an industry endorsed costing approach was embraced as a proxy for a strong field level frame. DiMaggio and Powell's typology of isomorphic institutional forces was employed as a conceptual lens to examine four different responses to the frame: a firm displaying an approach aligned to the focal frame, a firm that aspired towards compliance, a firm that had rejected the frame, and a firm that was not knowledgeable about the frame. Stakeholders from each firm were found to have experienced one or two of the categories of isomorphic forces, but not all. It was also apparent that, for the small data set, each of Di Maggio and Powell's isomorphic forces could be aligned to consideration of a firm characteristic; thus aligning institutional and contingency theory driven observations.

5.1 Introduction

This paper explores four firms' different experiences of isomorphic institutional forces relating to the same frame within a patchy organizational field. In the early 1980s, DiMaggio and Powell identified and described isomorphic forces as being responsible for firms' tendency to resemble each other over time. They triggered an enduring preoccupation with the processes of homogenisation. Over time, the field's outputs were criticised for employing overly narrow interpretations in institutional dynamics, in effect creating a distinction between rational action on the one hand and institutional forces on the other. Calls for institutionalists to embrace a "Weberian understanding of rationality as institutionally contingent" (Lounsbury, 2008, p. 350) were embraced, and a swing towards exploration of heterogeneity ensued. The existence of "patchy" institutional fields, featuring a multiplicity of competing logics, was illustrated by Quirke (2013). She emphasised the agentic nature of organisations, noting that actors can actively evade isomorphic pressures. While Quirke focussed on the rogue firms that did not comply with institutional homogenisation, this paper reports on four firms displaying different responses to a field level frame, exploring their varying experiences of the same isomorphic institutional forces. DiMaggio and Powell's typology of

isomorphic institutional forces: mimetic, coercive and normative, is applied to examine four firms' responses to an industry promoted product costing guide, employed as a proxy for a strong field level frame. The four firms were purposively selected out of a broader group of case studies because they each responded differently to the frame. It was found that the firm's experiences of each of Di Maggio and Powell's isomorphic forces could be aligned to consideration of a firm characteristic; thus aligning institutional and contingency theory driven observations. Across such a small data set, these alignments are not proposed to be explanatory, but rather to illustrate the importance of firm level context, and the futility of examining institutional forces without reference to the often complex field in which they are operating.

The rest of this paper is organised as follows. The next section presents the theoretical framework employed, placing it within the associated literature. This is followed by an explanation of the methods employed for the study. The findings section details the firms' experiences of isomorphic institutional forces. Finally, a discussion of the findings and conclusions are provided.

5.2 Theoretical Framework: Isomorphic Forces, Organisational Fields and Frames

5.2.1 Institutions

This paper draws on key contributions from the stream of organizational institutional theory known interchangeably as new institutional theory or neo institutional theory, and often simply as institutional theory.

An institution can be defined simply as “an organised, established procedure” (Jepperson, 1991, p. 143). Institutions are characterised by structure and persistence and are relative to context and level of analysis (Friedland & Alford, 1991; Jepperson, 1991). Examples of institutions offered by Jepperson (1991, p. 144) include marriage, sexism, voting, the army, the handshake and the corporation. Institutions may or may not be organizations and some are best described as “cultural” while others are more “structural”. However, all can be considered “enabling structures” or performance scripts, providing human actors with the “rules of the game” (Jepperson, 1991, p. 143).

Institutional theory, as opposed to being a single theory, has evolved over the decades into a collection of related theories and perspectives employed across a variety of disciplines including economics, politics and sociology (Powell & DiMaggio, 1991).

5.2.2 Isomorphic Forces and Organisational Fields

Understanding the emergence of collective meaning is central to institutionalism (Berger & Luckmann, 1967). The earliest incarnations of (neo)institutional theory emphasised taken-for-granted rules, and shared social realities (Meyer & Rowan, 1977). They showed us how institutional forces shape and reinforce dominant conceptions of reality to create a template of practice that is the “appropriate, right and proper way of doing things” (Greenwood & Hinings, 1996, p. 1027). For a time, much of the accounting research in this space became preoccupied with notions of isomorphism; the propensity for organizations to become increasingly similar over time. DiMaggio and Powell’s (1983) seminal paper identified three sources of isomorphic forces that drive organisational similarity: coercive, mimetic, and normative. Coercive isomorphism is associated with political and authoritative pressures and the pursuit of legitimacy; for example a government’s ability to require firms to comply with a particular directive can be seen as coercive diffusion of an institution. Mimetic isomorphism is associated with uncertainty; when firms are unsure of what to do, they may look to successful peers for a model course of action, leading to diffusion of institutions through mimesis. Normative isomorphism is associated with professionalism; a class of peers working together seeking legitimacy from outsiders and each other, can lead to the development of institutions. The insights of DiMaggio and Powell (1983) were applied in the generation of a significant body of accounting research focussed on the study of diffusion, which has subsequently been criticised for often maintaining a distinction between technical, rational forces on the one hand and institutional forces (implicitly irrational) on the other. Lounsbury (2008) was explicitly critical of such approaches, describing some contributions to the field as anachronistic caricatures of the intended theory. He argued for a move away from assumptions that actors, in particular late adopters, are mindless “institutional dopes” engaging in a-rational mimicry. Lounsbury (2008) argues for rationality of actors to be allowed for by researchers, and he argues that one way to do this is through the use of institutional logics. Institutional logics are defined by Thornton (2004, p69) as “the socially constructed, historical pattern of material practices, assumptions, values beliefs and rules by which individuals produce

and reproduce their material subsistence, organize time and space, and provide meaning to their social reality.” By considering that actors are subject to multiple institutional logics, we can extrapolate the existence of multiple forms of institutional rationality.

A concept important to the study of rational actors engaging with institutions is the field. Bourdieu and Wacquant (1992) assert that the field is primary to social science and must be the focus of research questions; with the individuals in that field being important to social science because they socially construct the field in which they exist, and the data needed for analysis of institutions is attached to them. DiMaggio and Powell (1983, p. 148) discussed organizational fields and explained that they intended to refer to “those organizations that, in aggregate, constitute a recognised area of organisational life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce services or products.” They endorse this unit of analysis for directing attention to the totality of relevant actors. However, while DiMaggio and Powell note that organizations may exist in the same field because they are structurally equivalent, yet do not interact with each other in any direct way, Scott (1994, pp. 207-208) defined a field as “a community of organizations that partakes of a common meaning system and whose participants interact more frequently and fatefully with one another than with actors outside of the field”. This lack of definitional clarity has persisted (Wooten & Hoffman, 2008), with Quirke (2013) recently suggesting that the most salient features of a field are regulations and environmental conditions. This definition allows for previous demonstrations of the heterogeneous and segmented nature of organization fields (Kraatz & Zajac, 1996; Lune & Martinez, 1999) and facilitated Quirke’s (2013) exploration of the “patchy” and uneven institutional field experienced by Toronto private schools, which are subject to relatively low levels of regulation. Patchy or fragmented fields, characterised by the existence of multiple logics, can offer actors choice about conformity (Quirke 2013), the potential to undermine a dominant logic by drawing on an alternative logic (Durand & Jourdan, 2012) and possibly even to ignore normative pressures, when alternative sources of legitimacy are available (Dhalla & Oliver, 2013).

5.2.3 Frames

A “frame” is the label applied to shared thought structures or cognitive representations that provide actors with legitimate ways of conducting themselves socially (Schneiberg & Clemens, 2006). Frames are “composed of little tacit theories about what exists,

what happens, and what matters” (Gitlin, 1980, p. 6). Similar concepts have been labelled as categories, templates, schemas, mental models, logics, myths or scripts (Cornellissen, Durand, Fiss, Lammers, & Vaara, 2015). Gray, Purdi and Ansari (2015) use frames as the building blocks of institutions, describing some of the ways that, through interactions, frames can evolve into institutions. This study embraces a frame that was, ultimately not successfully elevated to an institution. A costing guide promoted to the Australian wine industry was considered to be a crystallised frame; a potential institution that could have been widely employed, replicated and ultimately absorbed into the common understanding of industry participants as being the appropriate way for Australian wine businesses to conduct themselves with regards to the calculation of the costs of their products. It did not lead to homogenisation of product costing practices of firms in the industry, despite being authored by a top tier accounting firm, and commissioned, endorsed, and promoted by the peak industry body and the government.

5.2.4 Institutional Theory and Contingency Theory Alignment

While institutional theory’s isomorphic forces assume organisations to be interdependent entities with common beliefs and understandings (Argyris & Schon, 1978; DiMaggio & Powell, 1991; Weick, 1979), contingency theory assumes organisations to be goal oriented activity systems that learn to respond to environmental demands by repeating successful behaviours and abandoning unsuccessful ones (Cyert & March, 1963; Levinthal, 1991; March, 1981). These two types of organisational environmental synergy can be complementary in some circumstances, and create paradoxical demands in others (Donaldson, 2008). Three decades ago, Scott (1987) observed that both contingency and institutional theory explanations were at risk of offering incomplete understanding when applied separately, but suggested that the theories combined could help us to better understand instrumental and symbolic roles of organisational practices. Despite this observation, studies that have explicitly combined institutional and contingency theories have remained sparse. Notable exceptions include:

- Lee and Miller (1996) who found evidence that firms can trade-off between contingency theory and institutional theory aligned strategies in the pursuit of success by way of pursuing internal effectiveness or seeking external legitimacy and support.

- Greening and Gray (1994) who proposed a contingency model to integrate institutional effects on firm structures and managerial discretion exercised with constraints placed on firms by other resource-controlling entities
- Boiral (2003) who found that the identical models adopted by firms in accordance with institutional expectations are modified and reinterpreted by the stakeholders within the organization.
- Volberda et al. (2012) who showed that firms with lower levels of contingency fit can improve their performance by seeking institutional fit, while firms with high levels of contingency fit only stand to gain marginal performance improvement benefits by simultaneously pursuing institutional fit.

This study seeks to continue in the tradition of these contributions by further exploring alignments between two theories.

5.3 Methods

5.3.1 The Australian Wine Industry Field

The Australian wine industry is an important component of Australia's economy, and the vast majority of participants are SMEs. For the past two decades, the Australian wine industry has been facing significant challenges including oversupply, increased global competition, climate change, water shortages and reducing per litre sales prices in domestic and international markets, all of which can be expected to increase the importance of high quality costing information to inform production and sales decisions (Gonzalez-Gomez & Morini, 2006, p. 195). Industry level stakeholders have urged organizations to respond to these challenges with a quality over quantity strategy (WineAustralia, 2007), and a push towards quality has been associated with increased costing complexity (Blake et al., 1998). Anecdotal evidence suggests SMEs are using product costing approaches that would, from an academic perspective, be considered suboptimal. For example, the industry-produced document *Directions to 2025 Small Business Benchmarking Guide* (Deloitte Touche Tomatsu, 2007c, p. 24) reports that many small businesses are expensing production costs that "should" form part of the cost of inventory. This anomaly makes the Australian wine industry an ideal field for this study; high quality product costing information can be expected to be valuable to participant firms and a push to support firms in the pursuit of this information was spearheaded by a powerful industry body with the support of the government. Their

ultimately unsuccessful efforts offered a rich data source to search for evidence of isomorphic institutional forces at play.

5.3.2 The Focal Frame: WFA's Costing Initiatives

In this paper, the Winemakers Federation of Australia's "Directions for 2025" (Deloitte Touche Tomatsu, 2007a) instructions for product costing are used as an institutional frame, available to individual actants within the institutional field of the Australian wine industry. The instructions constitute a best practice guide and call for the use of full absorption costing, including consideration of the commercial value of owners' contributions, and a need to allow for future replacement of capital investments. In 2007, the Australian Wine and Brandy Corporation (AWBC), the Winemakers Federation of Australia (WFA) and Deloitte Touche Tohmatsu worked together to produce and disseminate benchmarking guides for Australian wine industry participants, including directives on how wine inventory values should be calculated. AWBC, the government body (at the time) responsible for regulating the industry, and WFA, the peak industry funded body, constituted a powerful coalition, and they offered (in their own words) "a world-leading range of resources for wine producers and growers that will assist the making of correct strategic decisions" (Deloitte Touche Tomatsu, 2007a, p. 3). As an accountant employed and well networked in the Australian wine industry during 2007, I was aware that the directives were widely acknowledged and positively received, yet not widely implemented. I set out to undertake a bottom-up exploration of how an approach that is arguably so ideal as to be documented and disseminated by an industry's leading regulatory and representative bodies, can be considered but rejected by knowledgeable industry participants.

The costing recommendations could be expected to be associated with strong isomorphic forces in all categories of the DiMaggio and Powell (1983) typology:

- WFA and Wine Australia are politically strong institutions, with a capacity to bestow legitimacy; therefore associated with coercive isomorphism
- The frame was promoted because of a perceived lack of knowledge in the market, suggesting the existence of firms that would value a lead to follow, and as such be likely candidates to experience mimetic isomorphism.
- Finally, the frame being examined relates to the promotion of a particular approach to costing. The guide was co-authored by a major accounting firm. This

incorporates the profession of accounting, bringing in to play the consideration of normative isomorphism.

5.3.3 The Case Studies

The cases examined in this paper were drawn from a larger, exploratory study of the management accounting practices of SME Australian wineries. The WFA costing approach initiatives had been discussed with all case study participants, and it was apparent that the data offered rich insights into the ways that individuals were involved in determining the firm level response to an industry level institutional force.

Purposive, critical case sampling (Given, 2008; Patton, 1990) was used to select the four firms featured in the present study because they best represented the broadest range of responses to the focal frame. The aim was not to draw generalisations with the intention of determining a typical response to the focal frame, but rather to explore the different ways that firms responded to the institutional forces at play.

Characteristics of the four firms are summarised in

Table 6. Each firm was assigned a label summarising their response to the frame: divergent, compliant, aspirationally compliant and incidentally divergent. The responses can be summarised as:

- FIRM 1 – **DIVERGENT** – focal actants were able to rationally justify why the focal frame was not an appropriate or relevant solution for their firm.
- FIRM 2 - **COMPLIANT** – the firm’s costing systems were aligned with the recommendations of the focal frame.
- FIRM 3 - **ASPIRATIONALLY COMPLIANT** – focal actants aspired to compliance but had not achieved compliance.
- FIRM 4 – **INCIDENTALLY DIVERGENT** – focal actants were not adequately aware of the frame to be able to justify why their firm was not compliant, or assess whether they would like to be.

Table 6 - Participant firm characteristics

	Firm 1 - Divergent	Firm 2 – Compliant	Firm 3 – Aspirationally Compliant	Firm 4 – Incidentally Divergent
State	South Australia	South Australia	South Australia	Victoria
Crush Size Range	2500-5000 tonnes	2500-5000 tonnes	< 100 tonnes	< 100 tonnes
Ownership / Management	Family owned. Patriarch is Managing Director, son is Chief Winemaker.	Family owned. Family members on board, but no family members involved in day-to-day management.	Family owned. Husband is winemaker and manages sales, wife runs the office.	Family owned. Father as business manager, daughter as Viticulturist. External winemaker.
Financial Member of WFA	Yes	Yes	Yes	No
Inhouse accounting resources	Qualified, experienced, non-family member CFO.	Qualified, experienced, non-family member CFO.	Part time non-family member bookkeeper assists wife. This is the bookkeeper's first wine industry role.	Part time non-family member bookkeeper. The bookkeeper mostly works on the family's building related business, but also does the books for the wine business.

5.3.4 Data Collection and Analysis

Key stakeholders from each of the firms were asked about their awareness of, interaction with and attitude towards the WFA costing recommendations. In some cases, the questions were included as part of a semi structured interview that was taped and transcribed. In other cases, where the participant had previously been interviewed but the picture of their experience of the frame was incomplete, they were asked about the WFA initiatives during the course of field observation sessions. Written field notes and recorded voice memos were used to detail observations. In all cases, stakeholder accounts were compared to the firms' management accounting systems and reports (or lack thereof). All data was collated, stored and coded using NVivo software.

DiMaggio and Powell's (1983) typology of isomorphic forces was employed as a

sensitising device. Data was reviewed and coded with reference to the three isomorphic forces. The isomorphic forces were also used as a start point for analysis and the data was examined looking for evidence of the isomorphic forces. The key stakeholders that served as informants for each firm are summarised in Table 7.

Table 7 - Key stakeholders from participant firms

	Firm 1 – Divergent	Firm 2 – Compliant	Firm 3 – Aspirationally Compliant	Firm 4 – Incidentally Divergent
Key stakeholders	CFO, Chief Winemaker, Managing Director	CFO, Managing Director	Husband / Winemaker, Wife / Office Manager, Bookkeeper	Father / Business Manager, Daughter / Viticulturist, Bookkeeper, Consultant Winemaker

5.4 Findings

The four firm’s responses to the focal frame were analysed using DiMaggio and Powell’s (1983) isomorphic institutional forces as a conceptual lens: mimetic processes, coercive isomorphism and normative pressures. The original authors specify that the typology is analytic: types are not always analytically distinct. Indeed, in the current research setting, factors could readily be argued as reflecting more than one force. The descriptions included are not intended to exclude other forces, rather allocations were made to facilitate systematic analysis.

5.4.1 Mimetic Isomorphism

Di Maggio and Powell (1983) argue that when uncertainty is high, organisations will model themselves on other organisations that they perceive to be successful. Expected examples of manifestations include organisations facing poorly understood technologies, ambiguous goals, or environmental uncertainty. An organisation facing such challenges may, consciously or unconsciously, engage a strategy of modelling itself on a similar organisation which has (or is perceived to have) successfully resolved the same problem. Di Maggio and Powell (1983) suggest that mimicked models can diffuse unintentionally, indirectly via employee transfer or explicitly via consultants or industry trade associations.

In the SME setting of the current study, firms are not required to disclose financial information to the market, and efficient, value-adding costing approaches can remain confidential. While employee transfer and consultant engagement can facilitate modelling, the resourced-constrained environment of the often unprofitable SME wine sector can be anticipated to limit these effects. In contrast, WFA, as an industry trade association, issued a free best-practice guide to all industry participants. Therefore, I looked for instances of the firms experiencing mimetic pressures to embrace the recommendations as a solution to perceived problems with their existing approaches or because the recommendations were promoted as best practices.

Stakeholders from the aspirationally compliant firm displayed viewed the WFA recommendations as a “best practice” solution to their problem of lack of timely and reliable costing information. The owner/winemaker, referring to efforts to comply with the WFA recommendations enthused, “It’s going to be really good for me to have access to proper costing information; it’ll mean when opportunities come up, I can know for sure what’s in it for me financially. Running on gut feel means I can end up getting burnt, it’ll be good to know where I really stand from the outset.”

The owner/operator of the incidentally divergent firm was not initially familiar with the WFA initiatives, but was asked to consider them for the purposes of this study. His sentiments were similar to the aspirationally compliant winemaker and included, “Yes, that’s all precisely what we need. We’re just flying blind at the moment. We’d be much better placed if we had this information available to us.” The incidentally divergent and aspirationally compliant firms’ view of the WFA initiative as a panacea to their costing woes is aligned to Di Maggio and Powell’s assertions that firms facing uncertainty will model themselves on other firms that are perceived to have found solutions to the uncertainty. Similarly, Oliver’s (1991) strategic responses for acquiescence to an institutional force include “imitate” which is described as being consistent with the concept of mimetic isomorphism and can include “the imitation of successful organizations and the acceptance of advice from consulting firms or professional associations” (Oliver, 1991, p. 152). While the aspirationally compliant and incidentally divergent firms did not have access to the inner workings of other successful firms’ costing systems, the WFA recommendations were accepted as a suitable model for best practice mimicry. As such, these firms were ranked as experiencing a high level of mimetic isomorphic pressure in relation to the focal field.

In contrast, the compliant and rationally divergent firms did not appear to be experiencing mimetic isomorphic pressures. The CFO of the rationally divergent firm explained that the firm had calculated full absorption costs in the past, and found that the value of the data obtained did not match the time and effort (and therefore cost) involved in the process. As a mature business operating in mature markets, he was satisfied that the costing information he produced was sufficient to enable him to make informed decisions, despite being incomplete and incorporating known, but not quantified, cross subsidisations of product costs. Similarly, the CFO of the compliant firm admitted that while his firm did produce costing information compliant with the WFA recommendations, its dominant application was board reporting purposes, and it was rarely referred to for day-to-day decision making purposes. Both CFOs discuss their own approaches to product costing calculations, and detailed firm specific issues that implied a one-size-fits-all approach was not appropriate. There was no evidence of these firms searching for external solutions for costing issues, as they were already satisfied with the solutions they had employed.

Di Maggio and Powell argue that when uncertainty is high, organisations will model themselves on other organisations that they perceive to be successful. The aspirationally compliant and incidentally divergent firms appeared to be attracted to mimicking the recommendations of WFA in order to reduce their cost information uncertainty. Both firms acknowledged that their existing costing information was deficient: they each relied on bookkeepers who were both relatively new to the wine industry and were not confident in their ability to calculate product costs. Due to resource limitations, both firms' external accountants were only involved in product costing in terms of post-hoc valuation for income tax calculations. In contrast, the compliant and rationally divergent firms both had experienced, qualified accountants working in CFO roles, offering years of wine industry experience and a high level of understanding of costing, both broadly and with specific reference to the idiosyncrasies of the industry.

In contrast, the firms that had in-house expertise offered a more critical assessment of the value of the approach to their firm's specific circumstances. Having the knowledge to critically assess the usefulness of a potential approach reduced the stakeholder's experience of mimetic isomorphic pressures. Having internal technical expertise in the product costing field meant the compliant and rationally divergent firms did not need to

look for modelled solutions to the problem of product costing, and therefore reduced their experience of mimetic isomorphic forces.

5.4.2 Coercive Isomorphism

Coercive isomorphism is associated with political and authoritative pressures and the pursuit of legitimacy. Costing approaches, being an internal, non-regulated issue, could be expected to be associated with low levels of coercive isomorphic force. If the focal frame had instead related to, say, the wineries' policies for the responsible service of alcohol, I would have anticipated larger experiences of the effects of the force. This is because there are associated government regulations and societal expectations. In contrast, wineries are free to calculate their management accounting product costs as they please, and the public is both uninformed of and unaffected by their policies. However, evidence of coercive isomorphic effect was found in the compliant firm. The CFO explained that the problem with full absorption costing, as promoted in the recommendations, was that it needs to be completed after a period has ended, and therefore there is a timing lag in the availability of the information. This means the information is often not available as decisions are made, and the management team reverts to other information sources including rules of thumb, rough estimates, an awareness of historical patterns, and gut feel. Nonetheless, the firm complied with the WFA recommendations, including calculation of full absorption costs primarily for the purpose of reporting to the board of directors. Segregation between management and ownership (in this case, represented by the board) creates a need for management to establish legitimacy which in this case is satisfied by complying with best practice costing approaches, as endorsed by the industry's peak representative body. Accounting inscriptions facilitate control from afar (Robson, 1992) and the board value the costing system because it gives them confidence that the firm is being run carefully with rational decisions being made.

In contrast, in the other three firms, ownership and control were localised and formed part of the day-to-day management team. In the case of the rationally divergent firm, the CFO was not an owner, but he worked directly with the managing director, who was. The managing director preferred to make decisions based on rules of thumb determined during his many years of industry experience, reducing the value (and therefore legitimacy) he perceived the WFA recommended approach to offer.

Therefore, even though the CFO acknowledged the approach as “best practice”, the lack of value placed on the information by the managing director meant the CFO experienced very little coercive isomorphic pressure to comply with the WFA initiative. Similar conditions existed in the incidentally divergent and aspirationally compliant firms. In both cases, the owner was also at the head of day-to-day management, removing the potential value in complying with the initiative in order to demonstrate legitimacy to a segregated, powerful stakeholder.

5.4.3 Normative Pressures

Normative pressures are associated with professionalization, defined by Di Maggio and Powell as “the collective struggle of members of an organisation to define the conditions and methods of their work” (DiMaggio & Powell, 1983, p. 152). As a directive from the industry’s peak industry body about how firms should calculate product costs, the focal frame is an example of the industry’s aspirations towards professionalization. I looked for evidence of the firms feeling pressure to conform with the recommendations as part of an intention to increase actual or perceived professionalism. When explaining why he did not comply with the WFA costing recommendations, the CFO from the rationally divergent firm prefaced his explanation with, “Obviously the WFA stuff is best practice, but...” The conversation then revolved around an assortment of reasons why the solution was not appropriate for the organisation, and yet the CFO had still prefaced his rational rejection of the frame by describing the solution as best practice. This suggested that, even though he had used his professional judgement in deciding not to comply with the recommendations, he had still experienced normative isomorphic forces. Similarly, the CFO of the compliant firm asserted that if more firms complied with the initiative, the industry would have access to meaningful benchmarking data. The winemaker from the aspirationally compliant firm spoke of his desire to have access to “proper” costing information. I observed that the higher the level of the firms’ involvement with the broader industry level field, the more pressure the firm’s key stakeholders experienced to comply with the WFA directives. The compliant, rationally divergent and aspirationally compliant firms were all financial members of WFA. A staff member from the compliant firm served on WFA’s volunteer board. Their active engagement with their industry’s peak representative body can be expected to increase the obligations they experience to professionalize their approach to the business of producing and selling wine.

In contrast, the incidentally divergent firm was not a member of WFA and had not engaged with any of their initiatives. This firm was geographically segregated from most other firms and the owners were also involved in employment that was external to the industry. As such, they were far less engaged with the field in comparison to the other three firms, demonstrating Quirke’s (2013) concept of a patchy field. Being less embedded in the field than the other firms meant they experienced significantly lower normative isomorphic pressures in relation to the focal frame.

Table 8 - Summary of relative strength of firms' experience of isomorphic forces

	Observed experience of mimetic isomorphic forces	Observed experience of coercive isomorphic forces	Observed experience of normative isomorphic forces
Firm 1 – Divergent	No	No	Yes
Firm 2 – Compliant	No	Yes (from board)	Yes
Firm 3 – Aspirationally Compliant	Yes	No	Yes
Firm 4 – Incidentally Divergent	Yes	No	No

5.5 Discussion and Conclusion

The aim of this paper was to explore firms’ differing experiences of isomorphic institutional forces within a patchy institutional field. A focal frame that was ultimately unsuccessful in being elevated to an institution was selected as the focus of the study because it offered a selection of firm-level responses for examination. Di Maggio and Powell’s (1983) typology was embraced as a conceptual lens, sensitising us to expected manifestations of isomorphic forces.

Through a process of comparison and contrast of key stakeholders’ experiences, I found evidence of each stakeholder experiencing one or two of the categories of isomorphic forces, but not all. It also became apparent that, for the small data set, each of Di Maggio and Powell’s isomorphic forces could be aligned to consideration of a firm characteristic; thus aligning institutional and contingency theory driven observations:

- Mimetic force was observed in the firms that did not have in-house costing expertise, whereas the firms that had CFOs were confident in their abilities to

calculate useful data, seemingly immunising them from mimetic isomorphic pressures.

- The only coercive pressure observed was within the firm that reported to an external board; the board valued the recommendations and imposed an obligation on management. The other firms had little segregation between management and ownership and did not appear to experience coercive pressure to comply with the recommendations.
- The firms that were more actively involved with WFA experienced normative pressure to comply with WFA’s recommendations, while the firm that was less engaged with the industry body was less aware of the recommendations and therefore obviously experienced less pressure to comply.

Table 9 – Summary of firm characteristics

	Technical Expertise/ Experience of mimetic force	External Board / Experience of coercive force	Field Involvement / Experience of normative force
Firm 1 – Divergent	High / No	No / No	High / Yes
Firm 2 – Compliant	High / No	Yes / Yes	High / Yes
Firm 3 – Aspirationally Compliant	Low / Yes	No / No	High / Yes
Firm 4 – Incidental Divergence	Low / Yes	No / No	Low / No

These firm characteristics are not proposed to be a comprehensive explanatory list intended for translation to different contexts. The forces discussed relate specifically to a product costing recommendation intended for privately held SME wineries. As noted in the discussion, coercive forces relating to an unregulated issue such as product costing can be expected to be low, but if the issue examined had instead been within the scope of liquor licensing provisions, then the expectation of coercive forces would have been much higher. Nonetheless, comparison of only three contingent factors across four firms provided a vast richness of data to illustrate that stakeholders are subjected to multiple institutional forces, and the relative strength of these varying forces is dependent of their specific local context.

The key contribution of this paper is the demonstration that four different responses to one focal field can be explained through the consideration of only three different contingent considerations, examined with reference to institutional forces. This highlights the importance of context and the futility of attempting to consider a single institutional force in isolation. This contribution has practical implications for those seeking to drive change; a detailed awareness of context and examination of institutional complexities is vital for increasing the likelihood of affecting change.

It was noted that the frame selected was not associated with a regulated issue, thereby minimising anticipated coercive force effects. It would be useful for future research endeavours to examine frames with differing combinations of sources of legitimacy and associated regulation, in order to examine the effects of experiences of isomorphic forces.

References

- Argyris, C & A, SD 1978, *Organizational Learning: A Theory in Action Perspective*, Addison-Wesley, Reading, MA.
- Berger, PL & Luckmann, T 1967, *The Social Construction of Reality*, Doubleday, New York.
- Blake, J, Amat, O & Dowds, J 1998, 'The drive for quality - the impact on accounting in the wine industry', *Journal of Wine Research*, vol. 9, no. 2, pp. 75-85.
- Boiral, O 2003, 'ISO 9000: Outside the iron cage', *Organization Science*, vol. 14, no. 6, pp. 720-737.
- Bourdieu, P & Wacquant, LJD 1992, *An invitation to reflexive sociology*, University of Chicago Press, Chicago.
- Cornellissen, JP, Durand, R, Fiss, PC, Lammers, JC & Vaara, E 2015, 'Putting communication front and center in institutional theory and analysis', *Academy of Management Review*, vol. 40, no. 1, pp. 10-27.
- Cyert, RM & March, JG 1963, *A Behavioral Theory of the Firm*, 2nd edn, Prentice Hall, Englewood Cliffs, NJ.
- Deloitte Touche Tomatsu 2007a, *Wine Australia: Directions to 2025 - An industry strategy for sustainable success*.
- Deloitte Touche Tomatsu 2007c, *Wine Australia: Directions to 2025 Benchmarking Guide Small Wine Business*.
- Dhalla, R & Oliver, C 2013, 'Industry identity in an oligopolistic market and firms' responses to institutional pressures', *Organization Studies*, vol. 34, no. 12, pp. 1803-1834.
- DiMaggio, PJ & Powell, WW 1983, 'The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields', *American Sociological Review*, vol. 48, no. 2, pp. 147-160.
- DiMaggio, PJ & Powell, WW 1991, *The New Institutionalism in Organizational Analysis*, University of Chicago Press, Chicago, IL.
- Donaldson, L 2008, 'The conflict between contingency and institutional theories of organizational design', in RM Burton, BH Erikson, DD Håkonsson, T Knudsen & CC Snow (eds), *Designing Organizations: 21st Century Approaches*, Springer, New York, pp. 3-20.
- Durand, R & Jourdan, J 2012, 'Jules or Jim: Alternative conformity to minority logics', *Academy of Management Journal*, vol. 55, no. 6, pp. 1295-1313.

- Friedland, R & Alford, RR 1991, 'Bringing society back in: Symbols, practices and institutional contradictions', in WW Powell & PJ DiMaggio (eds), *The New Institutionalism in Organizational Analysis*, The University of Chicago Press, Chicago, pp. 232-266.
- Gitlin, T 1980, *The whole world is watching: Mass media in the making and unmaking of the new left*, University of California New Press, Berkley.
- Given, LM 2008, *The SAGE Encyclopedia of Qualitative Research*, SAGE, Thousand Oaks.
- Gonzalez-Gomez, JI & Morini, S 2006, 'An activity-based costing of wine', *Journal of Wine Research*, vol. 17, no. 3, pp. 195-203.
- Gray, B, Purdy, JM & Ansari, S 2015, 'From interactions to institutions: Microprocesses of framing and mechanisms for the structuring of institutional fields', *Academy of Management Review*, vol. 40, no. 1, pp. 115-143.
- Greening, DW & Gray, B 1994, 'Testing a model of organizational response to social and political issues', *Academy of Management Journal*, vol. 37, no. 3, pp. 467-498.
- Greenwood, R & Hinings, CR 1996, 'Understanding radical organizational change: bringing together the old and the new institutionalism', *Academy of Management Review*, vol. 21, no. 4, pp. 1022-1054.
- Jepperson, R 1991, 'Institutions, Institutional Effects, and Institutionalism', in WW Powell & PJ DiMaggio (eds), *The New Institutionalism in Organizational Analysis*, The University of Chicago Press, Chicago, pp. 143-163.
- Kraatz, M & Zajac, EJ 1996, 'Exploring the limits of the new institutionalism: The causes and consequences of illegitimate organizational change', *American Sociological Review*, vol. 61, pp. 812-836.
- Lee, J & Miller, D 1996, 'Strategy, environment and performance in two technological contexts: Contingency theory in Korea', *Organization Studies*, vol. 17, no. 5, pp. 729-750.
- Levinthal, DA 1991, 'Organizational adaptation and environmental selection—Interrelated processes of change', *Organization Science*, vol. 2, no. 1, pp. 140-145.
- Lounsbury, M 2008, 'Institutional rationality and practice variation: New directions in the institutional analysis of practice', *Accounting, Organizations and Society*, vol. 33, pp. 349-361.
- Lune, H & Martinez, M 1999, 'Old structures, new relations: How community development credit unions define organizational boundaries', *Sociological Forum*, vol. 14, pp. 609-634.
- March, JG 1981, 'Footnotes to organizational change', *Administrative Science Quarterly*, vol. 26, no. 4, pp. 563-577.

- Meyer, J & Rowan, B 1977, 'Institutionalized organizations: Formal structure as myth and ceremony', *The American Journal of Sociology*, vol. 83, no. 2, pp. 340-363.
- Oliver, C 1991, 'Strategic responses to institutional processes', *Academy of Management Review*, vol. 16, no. 1, pp. 145-179.
- Patton, M 1990, 'Qualitative evaluation and research methods', in Sage, Beverly Hills, pp. 169-186.
- Powell, WW & DiMaggio, PJ 1991, 'Introduction', in WW Powell & PJ DiMaggio (eds), *The new institutionalism in organizational analysis*, The University of Chicago Press, Chicago.
- Quirke, L 2013, 'Rogue resistance: Sidestepping isomorphic pressures in a patchy institutional field', *Organization Studies*, vol. 34, no. 11, pp. 1675-1699.
- Robson, K 1992, 'Accounting numbers as "inscription": action at a distance and the development of accounting', *Accounting, Organizations and Society*, vol. 17, no. 7, pp. 685-708.
- Schneiberg, M & Clemens, ES 2006, 'The typical tools for the job: Research strategies in institutional analysis', *Sociological Theory*, vol. 3, pp. 195-227.
- Scott, WR 1987, 'The adolescence of institutional theory', *Administrative Science Quarterly*, vol. 32, pp. 493-511.
- Scott, WR 1994, 'Conceptualizing organizational fields: linking organizations and societal systems', in H-U Derlien, Gerhardt, Uta, Scharpf, Fritz W. (Eds.) (ed.), *Systems Rationality and Partial Interests*, Nomos Verlagsgesellschaft, Baden-Baden, Germany, pp. 203-221.
- Thornton, PH 2004, *Markets from Culture: Institutional Logics and Organizational Decisions in Higher Education Publishing*, Stanford University Press, Stanford, CA.
- Volberda, HW, van der Weerdt, N, Verwaal, E, Stienstra, M & Verdu, AJ 2012, 'Contingency fit, institutional fit, and firm performance: a metafit approach to organization-environment relationships', *Organization Science*, vol. 23, no. 4, pp. 1040-1054.
- Weick, KE 1979, *The Social Psychology of Organizing*, 2nd edn, Random House, New York.
- WineAustralia 2007, *Wine Australia: Directions to 2025*.
- Wooten, M & Hoffman, A 2008, 'Organizational fields: Past, present and future', in R Greenwood, C Oliver, K Sahlin & R Suddaby (eds), *The Sage Handbook of Organizational Institutionalism*, SAGE Publications, London, pp. 78-98.

Chapter 6

Paper 4 – The Role of Logic-Carriers in the Management of Institutional Complexity

Statement of Authorship

Title of Paper	The Role of Logic-Carriers in the Management of Institutional Complexity
Publication Status	<input type="checkbox"/> Published <input type="checkbox"/> Accepted for Publication <input type="checkbox"/> Submitted for Publication <input checked="" type="checkbox"/> Unpublished and Unsubmitted work written in manuscript style
Publication Details	

Principal Author

Name of Principal Author (Candidate)	Melanie Reddaway		
Contribution to the Paper			
Overall percentage (%)	100%		
Certification:	This paper reports on original research I conducted during the period of my Higher Degree by Research candidature and is not subject to any obligations or contractual agreements with a third party that would constrain its inclusion in this thesis. I am the primary author of this paper.		
Signature		Date	12/8/2017

Co-Author Contributions

By signing the Statement of Authorship, each author certifies that:

- i. the candidate's stated contribution to the publication is accurate (as detailed above);
- ii. permission is granted for the candidate to include the publication in the thesis; and
- iii. the sum of all co-author contributions is equal to 100% less the candidate's stated contribution.

Name of Co-Author			
Contribution to the Paper			
Signature		Date	

6. The Role of Logic-Carriers in the Management of Institutional Complexity

Abstract

Early advancements in the field of institutional logics focussed on field level shifts from one dominant logic to another. Recent advancements have acknowledged the normality of institutional complexity and have explored the ways that individuals manage the everyday consequences of this complexity. This paper advances this knowledge by showing that stakeholders can use “logic carriers” to reduce the need to switch between logics, both internally and in terms of the scripts employed when interacting with customers and suppliers. Using ethnographic data from Australian SME wineries, the study shows how a stakeholder displaying a dominant aesthetic logic and a stakeholder displaying a dominant market logic, can partner and interact to the benefit of the firm, while reducing their need to switch between the two logics. Smets, Jarzabkowski, Burke and Spee’s (2015) work on the mechanisms used to balance conflicting-yet-complementary logics is extended by showing how stakeholders can use logic carriers when segmenting, bridging and demarcating logics.

6.1 Introduction

This paper contributes to growing understanding about how stakeholders can not only cope with institutional complexity, but harvest benefits. Early examinations of institutional logics mapped field level transfers from one dominant logic to another (e.g. Thornton, 2004; Thornton & Ocasio, 1999), even though Friedland and Alford’s seminal work suggested logics could be “mutually dependent, yet contradictory” (1991, p. 250). More recent advancements have acknowledged that institutional complexity can be established and ongoing (Helms, Oliver, & Webb, 2012; Rao & Kenney, 2008), leading to the exploration of “hybrid” organizations that seemingly embrace competing logics (Battilana & Dorado, 2010; Jay, 2013; Pache & Santos, 2013).

Applying the theoretical model contributed by Smets et al. (2015) to case study data from Australian SME wineries, the present study examines stakeholders’ interactions with the dominant aesthetic and market logics. This study contributes to knowledge by showing that interactions between stakeholders displaying contradictory-yet-

complementary logics can be part of the mechanisms used to manage institutional complexity.

The rest of this paper is organised as follows. Section 6.2 explores the theoretical background by examining existing literature. This is followed by an explanation of the methods and theoretical model employed for the study in section 6.3. Findings are presented in section 6.4 and discussed in section 6.5. Finally, section 6.6 offers conclusions.

6.2 Theoretical Background

6.2.1 Institutional Logics

This paper utilises the institutional logics perspective, which has grown out of the stream of organizational institutional theory known interchangeably as new institutional theory or neo institutional theory, and often simply as institutional theory. Before explaining the applied perspective, it is relevant to briefly acknowledge institutional theory and the foundational theory of the Institutional Logics Perspective.

An institution can be defined simply as “an organised, established procedure” (Jepperson, 1991, p. 143). Institutions are characterised by structure and persistence and are relative to context and level of analysis (Friedland & Alford, 1991; Jepperson, 1991). Examples of institutions offered by Jepperson (1991, p. 144) include marriage, sexism, voting, the army, the handshake and the corporation. Institutions may or may not be organizations and some are best described as “cultural” while others are more “structural”. However, all can be considered “enabling structures” or performance scripts, providing human actors with the “rules of the game” (Jepperson, 1991, p. 143).

Institutional theory, as opposed to being a single theory, has evolved over the decades into a collection of related theories and perspectives employed across a variety of disciplines including economics, politics and sociology (Powell & DiMaggio, 1991). Scott (2008) grouped institutional thinking into three “pillars”: the regulative, normative and cognitive pillars. The regulative pillar focuses on formal, explicit rules and laws. The normative pillar emphasizes the values and norms associated with expectations of appropriate behaviour. The cognitive pillar addresses human meaning-making with emphasis on symbolic frameworks and social constructions. Cognitive streams of institutional theory have been leveraged in sociological streams of organizational

research analysing varying group interests and perspectives (e.g. DiMaggio & Powell, 1983; Meyer & Rowan, 1977). Such works stress the “centrality of cognitive elements of institutions: the rules that constitute the nature of reality and the frames through which meaning is made” (Scott, 2008, p. 40). The cognitive pillar was identified as being most relevant and richly useful in the present research setting. SME wineries are undeniably subject to significant regulatory and normative pressures, but it is the symbolic frameworks and social constructions of internal stakeholders, made tangibly evident through costing practices, that are the fascinating focus of this study. Within the cognitive pillar, the institutional logics perspective has been used to structure and focus data collection and analysis for this study.

Friedland and Alford (1991) sparked the evolution of the institutional logics perspective when they criticised existing applications of organizational and neoinstitutional theory for not situating actors in their societal context. Taking a macro perspective and considering societal level institutions, they introduced the notion of logics by arguing:

Each of the most important institutional orders of contemporary Western societies has a central logic – a set of material practices and symbolic constructions – which constitutes its organizing principles and which is available to organizations and individuals to elaborate.

(Friedland & Alford, 1991, p. 248)

To illustrate this assertion, Friedland and Alford (1991, p. 248) associated different societal level institutions with distinct overriding logics, for example, capitalism with accumulation and commodification of human activity, the state with rationalisation and regulation, and family with community and unconditional loyalty.

Since this time, a body of literature focussed on institutional logics has evolved, informed by the understanding that institutional logics are:

...the socially constructed, historical patterns of cultural symbols and material practices, including assumptions, values and beliefs, by which individuals and organizations provide meaning to their daily activity, organise time and space, and reproduce their lives and experiences.

(Thornton, Ocasio, & Lounsbury, 2012, p. 2)

Several published studies have employed institutional logics to explain shifts from one state to another. Examples include:

- Explaining a shift in savings and loan organizational forms with reference to the rise of progressive thought (Haveman & Rao, 1997).
- Examining changes in healthcare via the valorisation of different actors, behaviours and governance structures (Scott, Ruef, Mendel, & Caronna, 2000).
- Explaining the professionalization of various finance related occupations (Lounsbury, 2002).

Whilst acknowledged as being important to the theoretical development of institutional logics, the above studies have also been criticised (Lounsbury, 2008) for their focus on transfer from one stable state to another, thereby reinforcing notions of stability and overlooking the pluralistic view of institutions originally introduced by Meyer and Rowan (1977) and emphasised by Friedland and Alford (1991). The present study avoids this limitation by embracing multiple logics and accepting that firms can display logics that exist in a constant state of clashing. Lounsbury argues:

By focusing on how fields are comprised of multiple logics, and thus, multiple forms of institutionally-based rationality, institutional analysts can provide new insight into practice variation and the dynamics of practice. Multiple logics can create diversity in practice by enabling variety in cognitive orientation and contestation over which practices are appropriate. As a result, such multiplicity can create enormous ambiguity, leading to logic blending, the creation of new logics, and the continued emergence of new practice variants.

(Lounsbury, 2008, p. 354)

6.2.2 Institutional Logics and the Link to Practice

Existing research has usefully applied institutional logics to a wide variety of research settings including savings and loans organizations (Haveman & Rao, 1997), universities (Townley, 1997), the publishing industry (Thornton & Ocasio, 1999), the health care industry (Scott et al., 2000), French cuisine (Rao, Morrill, & Zald, 2003), equity markets (Zajac & Westphal, 2004), symphony orchestras (Glynn & Lounsbury, 2005), banking (Marquis & Lounsbury, 2007), architects (Jones & Livne-Tarandach, 2008), and medical education (Dunn & Jones, 2010).

Individual and organisational actions are affected by institutional logics via four key mechanisms (Thornton & Ocasio, 2008, pp. 111-114):

1 – Collective identities and identification

A collective identity is the “cognitive, normative and emotional connection experienced by members of a social group” (Thornton & Ocasio, 2008, p. 111). Collective identities are associated with their own specific institutional logics, which individuals and organizations apply when abiding by norms and expectations. For example, Thornton and Ocasio’s (1999) seminal work on executive succession in the higher education publishing market mapped the industry’s move from an editorial logic to a market logic, as evidenced by a change in collective identities shared by industry participants.

Collective identities can be found in any type of social grouping including occupations, gender, race, social movements and organizations (Thornton & Ocasio, 2008).

2 – Contests for status and power

Contests for status and power are widely recognised as mechanisms for action, and the institutional logics perspective suggests such mechanisms are conditioned by prevailing institutions (Fligstein, 1996). Prevailing institutional logics shape and create the rules of the game, enabling actors to understand the ways by which status and power can be obtained, maintained or lost (Lounsbury & Ventresca, 2003). Thornton and Ocasio’s (1999) publishing industry study found that under an editorial logic, publishers focussed on author-editor relationships, with power being determined via organization size and structure. A change to market logic saw editors focus on resource competition and acquisitions, with power concentrated in the product market and the market for corporate control.

3 – Classification and categorization

Institutional logics provide actors with definitions of social classifications and categories that are employed in a field (DiMaggio, 1997), which are argued to be “a necessary component of all mindful, agentive behaviour” (Thornton & Ocasio, 2008, p. 113). For example, the aesthetic logic facilitates winemakers’ conceptions of themselves as artisans of their craft.

4 – Attention

Institutional logics focus decision makers’ attention on issues and solutions that are consistent with prevailing logics (Ocasio, 1995; Thornton & Ocasio, 1999). For example, the aesthetic logic directs stakeholders to assess the sensory components of a wine, while the market logic directs stakeholders to consider its price relative to quality.

6.2.3 Reconciling Agency and Structure

An important benefit offered by the institutional logics perspective is its ability to reconcile agency and structure. Early incarnations of institutional theory were criticised on the grounds that they failed to account for how institutions can change. They focussed on the social environment and embedded “belief systems” to explain behaviour (Meyer & Rowan, 1977). Subsequent work pointed out a theoretical paradox: “How can actors shape institutions if their actions, intentions and rationality are all conditioned by the very institution they wish to change?” (Holm, 1995, p. 398). This paradox can be resolved through the notion of embedded agency: individuals and organizations pursue self-interest while embedded in institutions that simultaneously enable and constrain their actions (Seo & Creed, 2002). The institutional logics perspective employed in the present study embraces the notion of embedded agency by acknowledging that individuals are, at any given time, subject to an assortment of institutions. Institutional logics present social life as an interplay of both structure and agency. As discussed in detail in sections following, theories of dynamic constructivism, social identity and attention are all used to explain how dominant logics come to prevail over alternative available logics, and actors can simultaneously and bi-directionally be influenced by, and exert influence over, the logics that are relevant to their field (Thornton et al., 2012).

The capacity of individuals to internally cope with conflicting logics has been noted in prior literature. Gendron (2001) examined auditors' client acceptance decisions and observed participants juggling mechanistic, organic, professional, and commercial forces. Carlsson-Wall, Kraus and Messner (2016) detailed participants making situation-specific compromises between conflicting logics, facilitating the ongoing coexistence of those logics.

6.3 Method

6.3.1 The Research Setting

Research was conducted in the Australian Wine Industry. Prior research has established that wine industries feature institutional complexity via the contradictory yet complementary presence of aesthetic and market logics (Beverland, 2005; Peterson, 2005; Ulin, 1995; Voronov, De Clercq, & Hinings, 2013). The aesthetic logic is associated with a passionate enthusiasm for fine wines; the winemaker is a creative artisan pursuing a labour of love. In contrast, the market logic is associated with a rational pursuit of profit. These dominant logics are similar to those identified in other experiential industries including classical music (Glynn & Lounsbury, 2005), food (Rao et al., 2003) and art (DiMaggio, 1887).

6.3.2 Data Collection and Analysis

Case studies were deemed to be the most appropriate data collection method to explore stakeholders' experiences balancing complementary-yet-contradictory logics, because they facilitate in-depth, contextually informed examination of a phenomenon while explicitly addressing theory (Cooper & Morgan, 2008; Stake, 2000). Data collection was ethnographic in nature, relying on a mix of semi-structured interviews, informal interviews, participant observation, and document analysis, always with a focus on the actions, experiences and interactions of key stakeholders. My previous experience as a qualified accountant was invaluable in that networks were utilised to secure access to firms, and informants quickly realised I had a high level of practical wine industry knowledge so did not censor responses to remove technical winemaking terms. The approach to data collection was flexible, responding to insights as they occurred, or further digging where matters remained unclear.

6.3.3 Theoretical Model

This study employed the theoretical model set out by Smets, Jarzabkowski, Burke, and Spee (2015), which shows how stakeholders balance conflicting yet complementary logics through mechanisms of segmenting, bridging and demarcating, as duplicated in Figure 5.

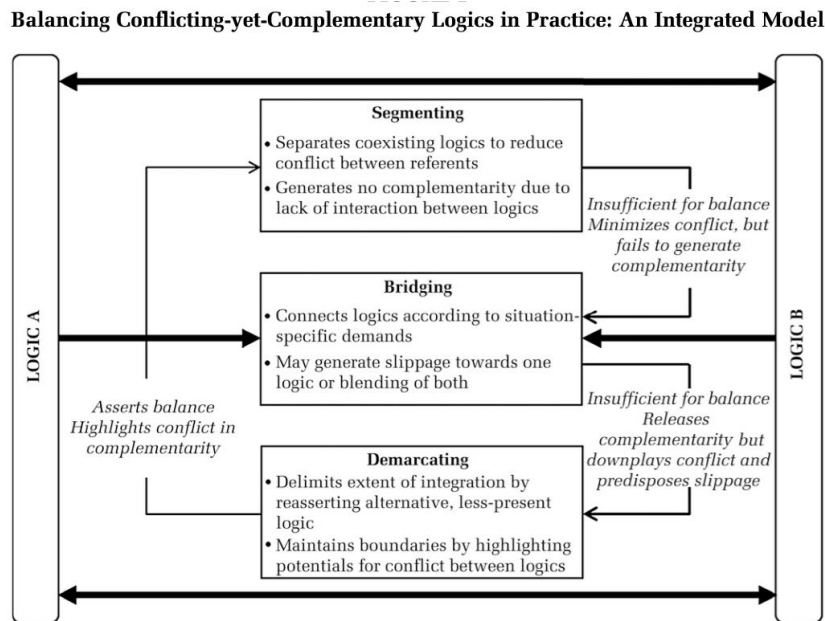


Figure 5 - Smets et al. (2015) theoretical model: Balancing conflicting-yet-complementary logics in practice

Segmenting is enabled through having different locations, dress codes, and patterns of interactions that are appropriate for the enacted logic's referent audience. These structural arrangements protect stakeholders from the negative consequences of logic enactments being observed by the representatives of another logic. However, while segmentation minimises conflict, it offers no capacity to generate complementarity. This is achieved through bridging, which involves the temporarily combining logics to exploit complementarities. While bridging activities empower actors to dynamically balance competing logics with reference to fluctuating salience in a given context, they also introduce the risk of slippage or blending of logics, which can erode the benefits of the individual conflicting logics (Jay, 2013; Smith, 2014; Smith & Lewis, 2011). Demarcating prevents the over privileging of one logic over another through self-monitoring and organizational peer monitoring structures.

Smets et al.'s (2015) model was adapted and extended for the current study in the following ways:

- The model was developed with reference to interactions between reinsurance traders in Lloyd's of London. Lloyd's is a large organization that has been a part of London's business world since before Europeans settled in Australia. In contrast, the SME businesses that were the focus of the current study were, at most, three generations old. Nonetheless, preliminary examinations of the data with reference to the model found it was readily transferrable, so its use was proceeded with.
- The dominant logics used in the original study were labelled *community*, associated with shared identity, unity of purpose, commitment to community and *market*, associated with seeking superior profitability and financial market reputation. The current study focussed on the *aesthetic* and *market* logics, which previous studies have established as being highly salient to fine wine businesses (Beverland, 2005; Peterson, 2005; Ulin, 1995; Voronov et al., 2013). The aesthetic logic is associated with the production and promotion of fine wines, and can be maintained through rules and regulations about production inputs or processes, as well as informal norms and standards about what constitutes "proper" winemaking (Johnson & Robinson, 2007; Robinson, 2006; Zhao, 2005). The market logic in the wine industry echoes the market logic in other industries; it is a recognition that wine businesses are profit seeking enterprises, often operating in highly competitive markets (Colman, 2008; Robinson, 2006).
- The original model focussed on individuals, yet noted the importance of interactions with other stakeholders, for example by highlighting informally disciplining peers as a demarcation mechanism. The authors suggest their model "provides opportunities for scholars to scale up and down their levels of analysis to better understand how contradictory forces ... can be navigated to mitigate tensions and reap the benefits of coexistence" (Smets et al., 2015, p. 967). The current study expands the model by examining not only how stakeholders internally manage contradictory forces, but also how they can benefit from interacting and partnering with other stakeholders.

6.4 Findings

This section presents the findings of the study. After first confirming the relevance of the aesthetic and market logics in the Australian wine industry, the findings are then detailed with reference to the mechanisms identified in the Smets et al. (2015) theoretical model: segmenting, bridging and demarcating. Extensive parallels to the findings reported by Smets et al. (2015) were observed. As opposed to duplicating this study, examples are provided to establish the applicability of the theoretical model in the research setting, but the findings are focussed on exploring interaction based practices related to the theoretical model mechanisms.

6.4.1 Enacting Aesthetic and Market Logics in the Australian Wine Industry

The market and aesthetic logics that were applied to this study were documented by Voronov et al. (2013) to describe the Ontario wine industry, with reference to Canadian, French and American wine industry resources (Ulin, 1995; Zhao, 2005). Observations confirmed the dominance of these logics in the Australian wine industry.

All of the firms included stakeholders that would wear their aesthetic logic as a badge of honour. They were passionate about high quality wine and knowledgeable about wine and grape production. It was commonplace for stakeholders to refer to “living the dream”, talk about being “in it for love” or make jokes about how “Do you know how to make a small fortune in the wine industry? Start out with a large one.” They would proudly describe vineyard features, talk passionately about wine characteristics, and publically distance themselves from being perceived as savvy business people; “I’m just a simple farmer, working my family’s land.” However, when trust was gained, and my status as a pro-profits accountant was understood, guards were lowered and the same stakeholders would display a market logic by acknowledging the fundamental importance of operating a profitable business. One stakeholder explained, “Punters want us to sell the romance of blood and toil and magic created, but at the end of the day, we have school fees to pay just like they do.” Similarly, another noted, “You might be able to make the most spectacular wine in the world, but if you can’t get the market to pay an appropriate price for the privilege of enjoying it, you won’t be able to produce it for long.”

Legitimacy associated with the aesthetic logic was achieved through ways including developing a reputation as a premium winemaker, receiving high scores from respected

wine writers and having products included on the wine lists of high end restaurants. Market logic legitimacy tended to be a more private pursuit and included the achievement of profitable returns, increasing sales volumes and increasing gross profit margins. An example of conflict between these two sources of legitimacy was when one winemaker was approached by a retailer to participate in a large scale promotion. The promotion would have moved a lot of stock at a profitable price, in accordance with gaining market logic legitimacy. However the winemaker refused the opportunity because the retailer intended to offer the wines to market at a significant discount, and the winemaker did not want to damage his image in the market as a premium producer. While the discounted price would still have returned a financial profit to the winemaker, the opportunity would have reduced his legitimacy associated with the aesthetic logic.

While the aesthetic and market logics are conflicting; they are also complementary. A wine brand that is too driven by the aesthetic logic, operating at an insufficient profit level, could quickly become unsustainable. A wine brand that is too market logic driven is unlikely to engage with customers with a meaningful value proposition and could struggle to generate enough sales to be sustainable. It was apparent that all actants were tacitly aware of this dynamic and the need for an appropriate balance to be maintained.

6.4.2 Logic Segmentation

Smets et al.'s (2015) observations of segmentation mechanisms focussed on task specific spaces being used for logic engagement and dressing to align one's appearance to the engaged logic. The comparison of these observations to the current study is as follows:

- Stakeholders used clothing to symbolically separate logics. Examples include:
 - An owner/operator winemaker changing out of jeans and a work shirt into slacks and a business shirt before attending a meeting with his bank manager; swapping from an aesthetic logic to a market logic.
 - A CFO typically dressed in business casual clothes and wore high heeled shoes. The winery invited wine club members to help hand pick a vineyard and then have lunch with the owners and management team. In contrast to her usual market logic, the CFO displayed an aesthetic logic throughout the

event, e.g. discussing vineyard management practices, and guiding guests through wine tastings. She attended the event dressed in a branded work shirt, jeans and steel capped boots.

- Stakeholders typically maintained aesthetic logics while in cellar door spaces. Market logics were more likely to appear in office spaces where customers were not allowed. However, this observation appears to be more related to a consciousness of displaying audience appropriate logics. While winemakers would refrain from displaying market logics while in cellar door spaces during opening hours, the same spaces were observed being repurposed for staff meetings out of hours, when market logics would be engaged.

While Smets et al. (2015) observed stakeholders using symbolic demarcations to signal switches between logics, the stakeholders in the current study tended to use such symbols to emphasise their preferred dominant logic. It was also common for stakeholders to highlight the contrast between the symbols of their dominant logic and the symbols of an alternative logic displayed by another stakeholder from within the organization. Illustrations include:

- An aesthetic-dominant winemaker joked about the safety implications of his market-dominant CFO walking through the laboratory wearing open toed high heel shoes. The joke was that his work boots were so worn they had a hole in them. Implicit in this joke was that the laboratory is a space focussed on quality wine production, where an aesthetic logic should be engaged, and the CFO's dominant market logic is out of place.
- Another aesthetic-dominant viticulturist kept particularly early hours, explaining "I'm a farmer, I get up with the sun!" His brother, as a market-dominant general manager, would attend the office during normal business hours.
- Stakeholders verbally separated their roles, and associated logics, using statements like, "I'm the wine guy; she's the numbers girl." When asked how much the firm had paid for a particular item, an aesthetic-dominant winemaker replied, "I don't pay any attention to that sort of stuff. John's all over it, so I just stay out of his way." Alternatively, when John was asked why he wasn't using a reporting system to its full capabilities, he joked, "When you're working with a head winemaker who will only look at pictures, what's the point?"

6.4.3 Logic Bridging

Bridging is used to reconnect segregated logics. Bridging mechanisms facilitate the harvesting of benefits of working across two logics. Logic bridging strategies documented by Smets et al. (2015) centered around gathering information under one logic and employing that knowledge while engaging the alternative logic. In accordance with the Smets et al. (2015) observations, stakeholders were observed readily switching to the alternative logic when situationally appropriate:

- A market-dominant accountant took a call; a premium wine was about to be bottled at a local contract bottling facility, but the aesthetic-dominant winemaker had forgotten and was a couple of hours away, so was unable to attend to sign off on the bottling. Cursing the winemaker, the accountant drove the short distance to attend the bottling. At the bottling hall, she exchanged warm greetings with the workers and was handed a sample of the wine. She swirled the glass, put it to her nose, tasted and, as is customary, spat the mouthful of wine into the long drain running through the floor of the bottling hall. “Yep, that’s ours. So much green apple going on with this batch, don’t you think?” The accountant switched seamlessly to display an aesthetic logic while representing the wine brand to sign off on a premium wine bottling.
- Recall the aesthetic-dominant winemaker who claimed, “I don’t pay any attention to that sort of stuff” when asked about a specific expenditure. After trust had been established, I was present while they picked a disappointingly low yield, but surprisingly high quality harvest of grapes. That same winemaker engaged in a candid discussion about how the winery could respond to seasons where costs were higher by limiting export market allocations and retaining more stock for higher margin domestic markets. While the winemaker was careful to maintain his aesthetic logic façade around customers and most suppliers, he was entirely capable of switching to a market logic, tapping into a rich and detailed understanding of the financial workings of the business.

The stakeholders were more frequently observed bridging logics by referring to other stakeholders from the organisation, who displayed the opposite dominant logic.

Examples included:

- An aesthetic-dominant winemaker was offered an amount for a parcel of wine and responded, “I’m interested but I’ll have to check with Dave and get back to you.” The statement implied he’d be seeking permission for the transaction, but the winemaker was an owner of the business and Dave was a market-dominant employee. What the winemaker really meant was, “I’ll need to confirm that the transaction makes commercial sense before I agree to it.” Deferring to Dave enabled the winemaker to delay his decision for market-logic aligned reasons, without having to acknowledge to those he was interacting with that he had engaged a market logic as opposed to his usual dominant aesthetic logic.
- Similarly, an aesthetic-dominant winemaker was asked by an interstate distributor to help cover freight costs associated with a mistake the distributor had made. He responded, “I don’t know. I don’t think I’ll get that one past Jane. She’s not here right now, why don’t you call back this afternoon and plead your case direct to her? She likes you – you might have more luck than I would!” Again, the winemaker was a business owner and Jane was a market-dominant employee. The winemaker doesn’t need to “get things past” Jane, as Jane’s power to make decisions was bestowed upon her by the winemaker. The winemaker was relying on Jane to deploy her market logic and refuse the distributor’s request, thereby saving the winemaker money and aligning with his market logic driven interpretation of the situation, while also preserving his aesthetic logic facade.

Stakeholders were also observed bridging logics by seeking the direct input of other stakeholders who displayed an alternative dominant logic. An aesthetic-dominant winemaker invited a CFO and me to offer our opinions on a blend he was putting together. “When it’s a commercial blend, I like to see what Dave thinks about what I come up with. He’s got a good punter’s palette,” the winemaker explained. Dave joked in response, “What do the blend costs come out to? Cos I’m telling you right now the cheapest one gets my vote. There’s no margin in this deal.”

6.4.4 Logic Demarcation

Demarcation mechanisms prevent bridging activities from over-privileging a contested logic. Smets et al. (2015) observed insurance traders maintaining cynicism, establishing hard limits, and sanctioning colleagues who had appeared to over privilege a logic.

The same stakeholders who deferred to the authority of a stakeholder displaying the alternative logic were also observed contesting the authority of that stakeholder. A market-dominant CFO and an aesthetic-dominant owner/operator winemaker clashed because the CFO felt the winemaker was foolish to have accepted an offer to supply wines to a new market at very low margins. The winemaker declared that the CFO did not understand the marketing benefits to be realised from the arrangement and insisted that the arrangement would proceed.

6.5 Discussion

While Smets et al. (2015) focussed on the mechanisms that individuals deploy to switch between conflicting logics, the data presented in the present case focussed on interactions between stakeholders who partner to mutually benefit from conflicting-yet-complementary logics. The findings highlight the important role that interactions between key stakeholders can play in managing institutional complexity. Observations included many instances of stakeholders seemingly staying true to their preferred dominant logic, yet seeking out, consulting with, or deferring to another stakeholder who displayed an alternative logic. Previous research has established that engagement with institutional complexity is effortful, requiring ongoing creativity and improvisation (Emirbayer & Mische, 1998; Rouleau, 2010). I propose that partnering with a stakeholder who displays a dominant conflicting-yet-complementary logic enables actants to harvest the benefits of institutional complexity with a reduced need to switch between logics. This approach can reduce the mental energy actants expend switching between logics, and reduce the chances of being caught out acting in the wrong logic by a referent audience (Voronov et al., 2013).

I propose that actants who can be relied upon to represent a dominant logic, despite being capable of invoking other conflicting-yet-complementary logics, be labelled as *logic carriers*. The presence of a logic carrier means other stakeholders in the organisation can more confidently focus on the pursuit of their preferred dominant logic, secure in the knowledge that the logic carrier will represent the interests of the conflicting-yet-complementary logic. Consider, as an example, the passionate owner/operator winemakers. Typically, they enjoyed engaging with the aesthetic logic, focussing on premium grape and wine production. However, at the same time, their business was a profit seeking enterprise; they were also highly capable of displaying a

market logic. Engaging a CFO to be the firm's *logic carrier* for the market logic meant that the owner/operator winemaker could more freely enjoy operating under the aesthetic logic. I am not suggesting that the winemakers stopped internally engaging with the market logic; deferring authority to the CFO to avoid displaying a market logic evidenced the internal engagement of the market logic. Instead I posit that the presence of the logic carrier afford the owner/operator comfort that the alternative logic will be adequately represented, and can help to avoid the need to display the alternative logic to an incorrect referent audience.

The proposed concept of logic carrier is aligned to the concepts of institutional entrepreneurs. However, institutional entrepreneurship refers to the “activities of actors who have an interest in particular institutional arrangements and who leverage resources to create new institutions or to transform existing ones” (Maguire, Hardy, & Lawrence, 2004, p. 657). Whilst a logic carrier represents, supports and maintains a particular institutional logic, they do not seek to create or transform logics. In fact, while a logic carrier can be relied upon to represent a logic, they do not seek to over privilege it. The CFO who invested a lot of energy arguing with a head winemaker over “indulgently expensive production inputs” (her words) and insufficient sales margins, was the same wine business professional who slipped seamlessly into an aesthetic logic when required to represent the brand at a bottling sign off. This is why an alternative term to institutional entrepreneur is warranted.

6.6 Conclusion

Drawing on case studies undertaken in Australian SME wineries, this study applied the theoretical model contributed by Smets et al. (2015) to explore stakeholders' use of segmenting, bridging and demarcation mechanisms to manage institutional complexity. While parallels to the Smets et al. (2015) observations were noted, the current study advances theoretical understanding by highlighting the important role that interactions between key stakeholders can play in the management of institutional complexity. The concept of *logic carriers* was suggested to label stakeholders who can be relied upon to represent the interests of a particular institutional logic, enabling other stakeholders to focus on an alternative conflicting-yet-complementary logic.

The existence of logic carriers has practical implications because the concept suggests a purposeful delegation of trust and power from SME owner operators. Interventions intended to assist SME owner operators with, for example, increasing financial literacy, may benefit from an awareness that the responsibility and power associated with the market logic has been entrusted to an employee logic carrier.

The notion of the logic carrier suggested in this paper is tentative, based on exploratory research. The concept would obviously benefit from further research efforts to validate whether the concept is relevant to other research context, and from efforts to understand the circumstances that lead to a stakeholder being entrusted to represent a logic.

References

- Battilana, J & Dorado, S 2010, 'Building sustainable hybrid organizations: The case of commercial micro-finance organizations', *Academy of Management Journal*, vol. 53, pp. 1419-1440.
- Beverland, M 2005, 'Crafting brand authenticity: The case of luxury wines', *Journal of Management Studies*, vol. 42, no. 5, pp. 1003-1029.
- Carlsson-Wall, M, Kraus, K & Messner, M 2016, 'Performance measurement systems and the enactment of different institutional logics: insights from a football association', *Management Accounting Research*, vol. 32, pp. 45-61.
- Colman, T 2008, *Wine politics: How governments, environmentalists, mobsters and critics influence the wines we drink* University of California Press, Berkley
- Cooper, DJ & Morgan, W 2008, 'Case study research in accounting', *Accounting Horizons*, vol. 22, no. 2, pp. 159-178.
- DiMaggio, PJ 1887, 'Classification in Art', *American Sociological Review*, vol. 52, no. 4, pp. 440-455.
- DiMaggio, PJ 1997, 'Culture and cognition', *Annual Review of Sociology*, vol. 23, pp. 263-287.
- DiMaggio, PJ & Powell, WW 1983, 'The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields', *American Sociological Review*, vol. 48, no. 2, pp. 147-160.
- Dunn, MB & Jones, C 2010, 'Institutional logics and institutional pluralism: the contestation of care and science logics in medical education, 1967-2005', *Administrative Science Quarterly*, vol. 55, pp. 114-149.
- Emirbayer, M & Mische, A 1998, 'What is agency?', *American Journal of Sociology*, vol. 103, no. 4, pp. 962-1023.
- Fligstein, N 1996, 'Market as politics: A political-cultural approach to market institutions', *American Sociological Review*, vol. 61, no. 4, pp. 656-673.
- Friedland, R & Alford, RR 1991, 'Bringing society back in: Symbols, practices and institutional contradictions', in WW Powell & PJ DiMaggio (eds), *The New Institutionalism in Organizational Analysis*, The University of Chicago Press, Chicago, pp. 232-266.
- Gendron, Y 2001, 'The difficult client-acceptance decision in Canadian audit firms: a field investigation', *Contemporary Accounting Research*, vol. 18, no. 2, pp. 283-310.
- Glynn, M & Lounsbury, M 2005, 'From the critics' corner: logic blending, discursive change and authenticity in a cultural production system', *Journal of Management Studies*, vol. 42, pp. 1031-1055.

- Haveman, HA & Rao, H 1997, 'Structuring a theory of moral sentiments: Institutional and organizational coevolution in the early thrift industry', *American Journal of Sociology*, vol. 102, pp. 1606-1651.
- Helms, W, Oliver, C & Webb, K 2012, 'Antecedents of settlement on a new institutional practice: Negotiation of the ISO 26000 standard on social responsibility', *Academy of Management Journal*, vol. 55, no. 5, pp. 1120-1145.
- Holm, P 1995, 'The dynamics of institutionalization: Transformation processes in Norwegian fisheries', *Administrative Science Quarterly*, vol. 40, pp. 398-422.
- Jay, J 2013, 'Navigating paradox as a mechanism of change and innovation in hybrid organizations', *Academy of Management Journal*, vol. 56, pp. 137-159.
- Jepperson, R 1991, 'Institutions, Institutional Effects, and Institutionalism', in WW Powell & PJ DiMaggio (eds), *The New Institutionalism in Organizational Analysis*, The University of Chicago Press, Chicago, pp. 143-163.
- Johnson, H & Robinson, J 2007, *The world atlas of wine*, Mitchell Beazley, London.
- Jones, C & Livne-Tarandach, R 2008, 'Designing a frame: rhetorical strategies of architects ', *Journal of Organizational Behavior*, vol. 29, pp. 1075-1099.
- Lounsbury, M 2002, 'Institutional transformation and status mobility: The professionalization of the field of finance', *Academy of Management Journal*, vol. 45, pp. 255-266.
- Lounsbury, M 2008, 'Institutional rationality and practice variation: New directions in the institutional analysis of practice', *Accounting, Organizations and Society*, vol. 33, pp. 349-361.
- Lounsbury, M & Ventresca, M 2003, 'The new structuralism in organization theory', *Organization*, vol. 10, no. 3, pp. 457-480.
- Maguire, S, Hardy, C & Lawrence, T 2004, 'Institutional entrepreneurship in emerging fields: HIV/AIDS treatment advocacy in Canada', *Academy of Management Journal*, vol. 47, no. 5, pp. 657-679.
- Marquis, C & Lounsbury, M 2007, 'Vibe la resistance: competing logics and the consolidation of U.S. community banking', *Academy of Management Journal*, vol. 50, pp. 799-820.
- Meyer, J & Rowan, B 1977, 'Institutionalized organizations: Formal structure as myth and ceremony ', *The American Journal of Sociology*, vol. 83, no. 2, pp. 340-363.
- Ocasio, W 1995, 'The enactment of economic adversity: A reconciliation of theories of failure-induced change and thread-rigidity', *Research in Organizational Behaviour*, vol. 17, pp. 287-331.

- Pache, A & Santos, F 2013, 'Inside the hybrid organization: selective coupling as a response to conflicting institutional demands', *Academy of Management Journal*, vol. 56, pp. 972-1001.
- Peterson, R 2005, 'In search of authenticity', *Journal of Management Studies*, vol. 42, no. 5, pp. 1083-1098.
- Powell, WW & DiMaggio, PJ 1991, 'Introduction', in WW Powell & PJ DiMaggio (eds), *The new institutionalism in organizational analysis*, The University of Chicago Press, Chicago.
- Rao, H & Kenney, M 2008, 'New forms as settlements', in R Greenwood, C Oliver, K Sahlin & R Suddaby (eds), *The SAGE Handbook of Organizational Institutionalism*, SAGE, Los Angeles, pp. 352-370.
- Rao, H, Morrill, C & Zald, M 2003, 'Institutional change in Toque Ville: Nouvelle cuisine as an identity movement in French gastronomy', *American Journal of Sociology*, vol. 108, pp. 795-843.
- Robinson, J 2006, *The Oxford companion to wine*, Oxford University Press, Oxford.
- Rouleau, L 2010, 'Studying strategizing through narratives of practice', in D Golsorkhi, L Rouleau, D Seidl & E Vaara (eds), *Cambridge Handbook Strategy as Practice*, Cambridge University Press, Cambridge, pp. 258-270.
- Scott, WR 2008, *Institutions and Organizations*, Sage Publications, Thousand Oaks.
- Scott, WR, Ruef, M, Mendel, PJ & Caronna, CA 2000, *Institutional Change and Healthcare Organizations: From Professional Dominance to Managed Care*, University of Chicago Press, Chicago.
- Seo, MG & Creed, WED 2002, 'Institutional contradictions, praxis, and institutional change: A dialectical perspective', *Academy of Management Journal*, vol. 27, pp. 222-248.
- Smets, M, Jarzabkowski, P, Burke, GT & Spee, P 2015, 'Reinsurance trading in Lloyd's of London: Balancing conflicting-yet-complementary logics in practice', *Academy of Management Journal*, vol. 58, no. 3, pp. 932-970.
- Smith, WK 2014, 'Dynamic decision making: A model of senior leaders managing strategic paradoxes', *Academy of Management Journal*, vol. 57, pp. 1592-1623.
- Smith, WK & Lewis, MW 2011, 'Toward a theory of paradox: A dynamic equilibrium model of organizing', *Academy of Management Review*, vol. 36, pp. 381-403.
- Stake, RE 2000, *Handbook of Qualitative Research*, 2nd edn, SAGE, Thousand Oaks.
- Thornton, PH 2004, *Markets from Culture: Institutional Logics and Organizational Decisions in Higher Education Publishing*, Stanford University Press, Stanford, CA.

Thornton, PH & Ocasio, W 1999, 'Institutional logics and the historical contingency of power in organizations: Executive succession in the higher education publishing industry, 1958-1990', *American Journal of Sociology*, vol. 105, no. 3, pp. 801-843.

Thornton, PH & Ocasio, W 2008, 'Institutional Logics', in R Greenwood, C Oliver, R Suddaby & K Sahlin (eds), *The Sage Handbook of Organizational Institutionalism*, SAGE, London.

Thornton, PH, Ocasio, W & Lounsbury, M 2012, *The Institutional Logics Perspective*, Oxford University Press, Inc., New York.

Townley, B 1997, 'The institutional logic of performance appraisal', *Organization Studies*, vol. 18, no. 261-285.

Ulin, R 1995, 'Invention and representation as cultural capital: Southwest French winegrowing history', *American Anthropologist*, vol. 97, no. 3, pp. 519-527.

Voronov, M, De Clercq, D & Hinings, CR 2013, 'Institutional complexity and logic engagement: An investigation of Ontario fine wine', *Human Relations*, vol. 66, no. 12, pp. 1562-1596.

Zajac, EJ & Westphal, JD 2004, 'The social construction of market value: institutionalization and learning perspectives on stock market reactions', *American Sociological Review*, vol. 69, no. 433-457.

Zhao, W 2005, 'Understanding classifications: Empirical evidence from the American and French wine industries', *Poetics*, vol. 33, no. 3-4, pp. 179-200.

Chapter 7

Summary and Conclusions

7. Summary and Conclusions

7.1 Introduction

This thesis was motivated by a desire to better understand the role that accounting plays in the discharge of managers' duties. A contextually aware exploration of how the owners and managers of Australian SME wineries gather, compile and invoke management accounting was undertaken. Emergent issues were investigated in depth, leading to the evolution of the four papers that constitute this thesis. The papers stand alone, but share an emphasis on the role of the user.

This chapter is organized into three sections: Section 2 summarises the findings of the four stand-alone papers that constitute this thesis. Section 3 discusses the theoretical and practical contributions of this thesis and provides recommendations while Section 4 acknowledges limitations and presents suggestions for future research.

7.2 Findings

7.2.1 Paper 1: Vernacular Accounting in the SME Context

This paper grew out of a difficulties encountered when attempting to describe informal components of the firms' management accounting practices. As a step towards addressing a lack of definitional clarity relating to the informality, the concept of vernacular accounting, as contributed by Kilfoyle et al. (2013) was considered in the context of SMEs. Illustrations of vernacular use of accounting in firm level contexts were provided, facilitating the translation of Kilfoyle et al.'s (2013) ideal types of vernacular accounting to the SME context. It was noted that in all examples provided, owners and/or top level management were involved, rendering the consideration of sanction redundant. The paper confirmed the theoretical relevance of the concept of vernacular accountings in the SME context and the need for SME-specific definitional clarity with regards to the concept of informality. The importance of immersive, contextually aware data collection methods was highlighted.

7.2.2 Paper 2: Incorporating the User when Considering Sophistication in SME Costing Systems

Paper 2 evolved because existing definitions of sophistication in the costing literature were found to be wanting with regards to conveying the nuanced benefits and limitations of observed compilation, calculation and use of costing information. The work of Brierley (2008) was extended in the context of SMEs, introducing an emphasis on the role of the users of the systems. The SME setting removed the assumption implicit in previous research that product costing systems are developed, operated and translated to non-accountants by accounting experts. In the scarcely resourced SME environment, use of product costing information by staff with a range of skill sets was observed, facilitating the examination of the differences generated by the absence and availability of in-house costing expertise. The paper argued that the concept of sophistication as measured in existing literature needs to be broadened to encapsulate informal types of sophistication, and our conceptualisation of systems need to be expanded to explicitly incorporate the users of the system. A typology for conceptualising the sophistication of SME costing systems was contributed.

7.2.3 Paper 3: Stakeholders' Experiences of Isomorphic Forces in a Patchy Institutional Field

Neo institutional theory emerged as offering useful frameworks to understand stakeholders' interactions with management accounting information, but existing literature has been critical of over application and simplification of seminal contributions from institutional theory.

This paper explored stakeholders' experiences of isomorphic forces in a patchy field. An industry endorsed set of costing recommendations for wineries that failed to generate increased homogeneity of firm practices was embraced as a proxy for a strong field level frame. DiMaggio and Powell's typology of isomorphic institutional forces was employed as a conceptual lens to examine four different responses to the frame: a firm displaying an approach aligned to the focal frame, a firm that aspired towards compliance, a firm that had rejected the frame, and a firm that was not knowledgeable about the frame. Stakeholders from each firm were found to have experienced one or two of the categories of isomorphic forces, but not all. It was also apparent that, for the small data set, each of Di Maggio and Powell's isomorphic forces could be aligned to

consideration of a firm characteristic; thus aligning institutional and contingency theory driven observations.

7.2.4 Paper 4: The Role of Logic Carriers in the Management of Institutional Complexity

Paper 4 embraced the concept of institutional logics, showing how stakeholders not only interact with accounting information, but also rely on interactions with each other, to help manage the institutional complexity present in the Australian wine industry. Early advancements in the field of institutional logics focussed on field level shifts from one dominant logic to another. Recent advancements have acknowledged the normality of institutional complexity and have explored the ways that individuals manage the everyday consequences of this complexity. This paper further advanced this knowledge by showing how an SME winery stakeholder displaying a dominant aesthetic logic and an SME winery stakeholder displaying a dominant market logic, can partner and interact to the benefit of the firm, while reducing their need to switch between the two logics. The term “logic carrier” was proposed to label this institutional complexity management techniques.

7.3 Contributions and Recommendations

The practical and theoretical contributions of this thesis are explained in the following sections.

7.3.1 Theoretical Contributions and Implications

The overarching theme across the four papers was the importance of the user. Through contextually aware, user inclusive exploration, this study showed the integral importance of the human components of costing systems. Research that focuses only on more traditional concepts of what constitutes a firm’s accounting system runs the risk of only considering a section of a firm’s overall system, and therefore invalidly underestimating its capabilities.

Paper 1 and 2 highlighted definition based limitations in the literature and worked towards resolutions. In paper 1, Kilfoyle et al’s (2013) vernacular accounting ideal types were translated for the SME contexts. Paper 2 contributed a typology for facilitating a broader interpretation of the concept of sophistication in costing systems.

Papers 3 and 4 engaged with neo institutional theory. Paper 3 contributed an alignment between contingency theory considerations and firm's experiences of isomorphic forces. While prior work had established that firms can sidestep isomorphic forces in patchy institutional fields (Quirke 2013), paper 3 helped to explain this phenomenon by showing that firms only experienced one or two of the isomorphic forces, not all of them.

Paper 4 advanced understanding of how stakeholders manage institutional complexity by showing that they can partner with another stakeholder who displays a conflicting-yet-complementary logic when engaging in complexity management mechanisms.

7.3.2 Practical Contributions and Recommendations

WFA, as the wine industry's peak body, with the support of the Australian government, has previously led industry interventions intended to improve the management accounting practices of SME industry participants. The papers contained in this thesis made the following practical contributions which would be relevant to future wine industry interventions, and potentially more broadly applicable to SME practitioners in general:

- Issues relating to a lack of definitional clarity, as mentioned above, were exacerbated by the SME stakeholders' lack of accounting vocabulary in terms of their ability to articulate the in-use sophistication of their systems. Interventions should be aware that stakeholders usage of costing information, while informal, may be more sophisticated than they articulate.
- Users' preference for informal interaction with and recording (or lack of recording) of costing information mean that the documented system may also poorly reflect the in-use capabilities of costing within SME wine business firms.
- Paper 3's alignment of contingency theory considerations with firms' experience of isomorphic forces has practical implications for those seeking to drive change; a detailed awareness of context and examination of institutional complexities is vital for increasing the likelihood of affecting change.
- The existence of logic carriers, as proposed in paper 4, has practical implications because the concept suggests a purposeful delegation of trust and power from SME owner operators. Interventions intended to assist SME owner operators with, for example, increasing financial literacy, may benefit from an awareness that the

responsibility and power associated with the market logic has been entrusted to an employee logic carrier.

7.4 Limitations and Suggestions for Future Research

The insights and contributions gained through this study are likely to be transferrable to SME businesses beyond the wine industry, but this expectation would need to be validated through further research.

Paper 1 translated the concept of vernacular accounting to the SME context, rejecting the relevance of sanction and showing the difficulty in drawing a boundary between the formal and vernacular systems. Further research is required to clarify these concepts in the SME setting.

The findings of paper 2 indicated that investing resources in increasing the financial literacy of wine industry participants may return a better result compared to investing resources in costing tools and the development of approaches. Future interventionist research could assess outcomes of skills focussed interventions to determine whether this is the case, and if so, explore optimal balances between technical system capacity and user skills.

In paper 3, the focal frame was not associated with a regulated issue, thereby minimising anticipated coercive force effects. It would be useful for future research endeavours to examine frames with differing combinations of sources of legitimacy and associated regulation, in order to examine the differing experiences of isomorphic forces.

The notion of the logic carrier suggested in paper 4 is tentative, based on exploratory research. The concept would obviously benefit from further research efforts to validate the concept is relevant to other research context, and from efforts to understand the circumstances that lead to a stakeholder being entrusted to represent a logic.

Full Reference List

Abdel-Kader, M & Luther, R 2008, 'The impact of firm characteristics on management accounting practices: A UK-based empirical analysis.', *British Accounting Review*, vol. 40, no. 1, pp. 2-27.

Abernethy, MA, Lillis, P, Brownell, P & Carter, P 2001, 'Product diversity and costing system design choice: field study evidence', *Management Accounting Research*, vol. 12, pp. 261-279.

Ahrens, T 1997, 'Talking accounting: an ethnography of management knowledge in British and German brewers', *Accounting, Organizations and Society*, vol. 22, no. 7, pp. 617-637.

Ahrens, T & Chapman, CS 2007, 'Management accounting as practice', *Accounting, Organizations and Society*, vol. 32, no. 1, pp. 1-27.

Al-Omiri, M & Drury, C 2007, 'A survey of factors influencing the choice of product costing systems in UK organizations', *Management Accounting Research*, no. 18, pp. 399-424.

Argyris, C & A, SD 1978, *Organizational Learning: A Theory in Action Perspective*, Addison-Wesley, Reading, MA.

Arskey, H & Knight, P 1999, *Interviewing for Social Scientists*, Sage, London.

Auditor General of Canada 2005, *Report of the Auditor General of Canada to the Legislative Assembly of Nanavut*. Retrieved from http://www.oag-bvg.gc.ca/internet/docs/2005nla_eng.pdf

Australian Bureau of Statistics 2010, *8165.0 - Counts of Australian Businesses, including Entries and Exits, Jun 2007 to Jun 2009*, viewed 15 December 2010, <<http://www.abs.gov.au/ausstats/abs@.nsf/mf/8165.0>>.

Barnes, B 2001, 'Practice as collective action', in TR Schatzki, K Knorr Cetina & E von Savigny (eds), *The practice turn in contemporary theory*, Routledge, London, pp. 17-28.

Battilana, J & Dorado, S 2010, 'Building sustainable hybrid organizations: The case of commercial micro-finance organizations', *Academy of Management Journal*, vol. 53, pp. 1419-1440.

Becton, S & Graetz, B 2001, 'Small business - small minded? Training attitudes and needs of the tourism and hospitality industry', *International Journal of Tourism Research*, vol. 3, pp. 105-113.

Bedford, DS, Malmi, T & Sandelin, M 2016, 'Management control effectiveness and strategy: An empirical analysis of packages and systems', *Accounting, Organizations and Society*, vol. 51, pp. 12-28.

- Berger, PL & Luckmann, T 1967, *The Social Construction of Reality*, Doubleday, New York.
- Beverland, M 2005, 'Crafting brand authenticity: The case of luxury wines', *Journal of Management Studies*, vol. 42, no. 5, pp. 1003-1029.
- Birnberg, JG, Turopolec, L & Young, SM 1983, 'The organizational context of accounting', *Accounting, Organizations and Society*, vol. 8, no. 2/3, pp. 111-129.
- Blake, J, Amat, O & Dowds, J 1998, 'The drive for quality - the impact on accounting in the wine industry', *Journal of Wine Research*, vol. 9, no. 2, pp. 75-85.
- Bloch, M 1991, 'Language, anthropology and cognitive science', *Man*, pp. 183-198.
- Blumer, H 1954, 'What is wrong with social theory? ', *American Sociological Review*, vol. 18, pp. 3-10.
- Boedker, C & Chua, WF 2013, 'Accounting as an affective technology: A study of circulation, agency and entracement', *Accounting, Organizations and Society*, vol. 38, pp. 245-267.
- Boiral, O 2003, 'ISO 9000: Outside the iron cage', *Organization Science*, vol. 14, no. 6, pp. 720-737.
- Bourdieu, P & Wacquant, LJD 1992, *An invitation to reflexive sociology*, University of Chicago Press, Chicago.
- Brierley, JA 2008, 'Towards an understanding of the sophistication of product costing systems', *Journal of Management Accounting Research*, vol. 20, no. Special Issue, pp. 61-78.
- Brierley, JA, Cowton, CJ & Drury, C 2001, 'Research into product costing practice: a European perspective', *The European Accounting Review*, vol. 10, no. 2, pp. 215-256.
- Bright, J, Davies, RE, Downes, CA & Sweeting, RC 1992, 'The deployment of costing techniques and practices: a UK study', *Management Accounting Research*, no. 3, pp. 201-211.
- Carlsson-Wall, M, Kraus, K, & Messner, M 2016, 'Performance measurement systems and the enactment of different institutional logics: insights from a football association', *Management Accounting Research*, no. 32, pp. 45-61.
- Chapman, CS 1998, 'Accountants in organizational networks', *Accounting, Organizations and Society*, vol. 23, no. 8, pp. 737-766.
- Charters, S, Clark-Murphy, M, Davis, N, Brown, A & Walker, E 2008, 'An exploration of managerial expertise in the Western Australian wine industry', *International Journal of Wine Business Research*, vol. 20, no. 2, pp. 138-152.

- Chenhall, RH 2006, 'Theorizing contingencies in management control systems research', *Handbooks of management Accounting Research*, vol. 1, pp. 163-205.
- Chua, WF 2007, 'Accounting, measuring, reporting and strategizing - Re-using verbs: A review essay', *Accounting, Organizations and Society*, vol. 32, no. 4/5, pp. 487-494.
- Clancy, DK & Collins, F 1979, 'Informal accounting information systems: some tentative findings', *Accounting, Organizations and Society*, vol. 4, no. 1/2, pp. 21-30.
- Colman, T 2008, *Wine politics: How governments, environmentalists, mobsters and critics influence the wines we drink* University of California Press, Berkley
- Cooke, G & Lapsley, JT 1988, *Making Table Wine at Home*, Department of Viticulture and Enology, University of California, viewed 23 January 2017, <http://wineserver.ucdavis.edu/local_resources/pdf/HWM1.pdf>.
- Cooper, DJ & Morgan, W 2008, 'Case study research in accounting', *Accounting Horizons*, vol. 22, no. 2, pp. 159-178.
- Cooper, R & Kaplan, RS 1988, 'How cost accounting distorts product costs', *Management Accounting*, vol. 69, no. 10, pp. 20-27.
- Cornellissen, JP, Durand, R, Fiss, PC, Lammers, JC & Vaara, E 2015, 'Putting communication front and center in institutional theory and analysis', *Academy of Management Review*, vol. 40, no. 1, pp. 10-27.
- Curran, J, Jarvis, R, Kitching, J & Lightfoot, G 1997, 'The pricing decision in small firms: complexities and the deprioritising of economic determinants', *International Small Business Journal*, vol. 15, no. 2, pp. 17-32.
- Cyert, RM & March, JG 1963, *A Behavioral Theory of the Firm*, 2nd edn, Prentice Hall, Englewood Cliffs, NJ.
- Deloitte Touche Tomatsu 2007a, *Wine Australia: Directions to 2025 - An industry strategy for sustainable success*.
- Deloitte Touche Tomatsu 2007b, *Wine Australia: Directions to 2025 Benchmarking Guide Medium Wine Business*.
- Deloitte Touche Tomatsu 2007c, *Wine Australia: Directions to 2025 Benchmarking Guide Small Wine Business*.
- DeThomas, AR & Fredenberger, WB 1985, 'Accounting needs of very small business', *CPA Journal*, vol. 55, no. 10, pp. 14-23.
- DeWalt, K & DeWalt, B 2010, *Participant Observation: a Guide for Fieldworkers*, AltaMira Press, California.

- Dhalla, R & Oliver, C 2013, 'Industry identity in an oligopolistic market and firms' responses to institutional pressures', *Organization Studies*, vol. 34, no. 12, pp. 1803-1834.
- DiMaggio, PJ 1887, 'Classification in Art', *American Sociological Review*, vol. 52, no. 4, pp. 440-455.
- DiMaggio, PJ 1997, 'Culture and cognition', *Annual Review of Sociology*, vol. 23, pp. 263-287.
- DiMaggio, PJ & Powell, WW 1983, 'The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields', *American Sociological Review*, vol. 48, no. 2, pp. 147-160.
- DiMaggio, PJ & Powell, WW 1991, *The New Institutionalism in Organizational Analysis*, University of Chicago Press, Chicago, IL.
- Donaldson, L 2008, 'The conflict between contingency and institutional theories of organizational design', in RM Burton, BH Erikson, DD Håkonsson, T Knudsen & CC Snow (eds), *Designing Organizations: 21st Century Approaches*, Springer, New York, pp. 3-20.
- Drury, C & Tayles, M 1994, 'Product costing in UK manufacturing organisations', *The European Accounting Review*, vol. 3, no. 3, pp. 443-469.
- Drury, C & Tayles, M 1995, 'Issues arising from surveys of management accounting practice', *Management Accounting Research*, no. 6, pp. 267-280.
- Drury, C & Tayles, M 2000, 'Cost systems and profitability analysis in UK companies: discussing survey findings', in *23rd Annual Congress of EAA*, Munich.
- Drury, C & Tayles, M 2005, 'Explicating the design of overhead absorption procedures in UK organisations', *British Accounting Review*, vol. 37, no. 1, pp. 47-84.
- Dugdale, D & Jones, TC 1997, 'How many companies use ABC for stock valuation? A comment on Innes and Mitchell's questionnaire findings ', *Management Accounting Research*, vol. 8, no. 2, pp. 233-240.
- Dunn, MB & Jones, C 2010, 'Institutional logics and institutional pluralism: the contestation of care and science logics in medical education, 1967-2005', *Administrative Science Quarterly*, vol. 55, pp. 114-149.
- Durand, R & Jourdan, J 2012, 'Jules or Jim: Alternative conformity to minority logics', *Academy of Management Journal*, vol. 55, no. 6, pp. 1295-1313.
- Dyt, R & Halabi, AK 2007, 'Empirical evidence examining the accounting information systems and accounting reports of small and micro business in Australia', *Small Enterprise Research*, vol. 15, no. 2, pp. 1-9.

- Eisenhardt, KM 1989, 'Building theories from case study research', *The Academy of Management Review*, vol. 14, no. 4, pp. 532-550.
- Emirbayer, M & Mische, A 1998, 'What is agency?', *American Journal of Sociology*, vol. 103, no. 4, pp. 962-1023.
- Fisher, JS 1994, 'The new finance: New technology is challenging the accounting profession to redefine itself', *Journal of Accountancy*, vol. 178, no. 2, pp. 73-76.
- Flamholtz, EG 1983, 'Accounting, budgeting and control systems in their organizational context: theoretical and empirical perspectives', *Accounting, Organizations and Society*, vol. 8, no. 2/3, pp. 153-169.
- Fligstein, N 1996, 'Market as politics: A political-cultural approach to market institutions', *American Sociological Review*, vol. 61, no. 4, pp. 656-673.
- Friedland, R & Alford, RR 1991, 'Bringing society back in: Symbols, practices and institutional contradictions', in WW Powell & PJ DiMaggio (eds), *The New Institutionalism in Organizational Analysis*, The University of Chicago Press, Chicago, pp. 232-266.
- Frow, N, Marginson, D & Ogden, S 2005, 'Encouraging strategic behavior while maintaining management control: Multi-functional project teams, budgets and the negotiation of shared accountabilities in contemporary enterprises', *Management Accounting Research*, vol. 16, no. 3, pp. 269-292.
- Gendron, Y 2001, 'The difficult client-acceptance decision in Canadian audit firms: a field investigation', *Contemporary Accounting Research*, vol. 18, no. 2, pp. 283-310.
- Gitlin, T 1980, *The whole world is watching: Mass media in the making and unmaking of the new left*, University of California New Press, Berkley.
- Given, LM 2008, *The SAGE Encyclopedia of Qualitative Research*, SAGE, Thousand Oaks.
- Glynn, M & Lounsbury, M 2005, 'From the critics' corner: logic blending, discursive change and authenticity in a cultural production system', *Journal of Management Studies*, vol. 42, pp. 1031-1055.
- Gonzalez-Gomez, JI & Morini, S 2006, 'An activity-based costing of wine', *Journal of Wine Research*, vol. 17, no. 3, pp. 195-203.
- Graves, C & Thomas, J 2006, 'Internationalization of Australian family businesses: a managerial capabilities perspective', *Family Business Review*, vol. XIX, no. 3, pp. 207-224.
- Gray, B, Purdy, JM & Ansari, S 2015, 'From interactions to institutions: Microprocesses of framing and mechanisms for the structuring of institutional fields', *Academy of Management Review*, vol. 40, no. 1, pp. 115-143.

- Gray, DE 2009, *Doing Research in the Real World*, 2nd edn, Sage, London.
- Greenbank, P 1999, 'The pricing decision in the micro-business: a study of accountants, builders and printers', *International Small Business Journal*, vol. 17, no. 3, pp. 60-73.
- Greening, DW & Gray, B 1994, 'Testing a model of organizational response to social and political issues', *Academy of Management Journal*, vol. 37, no. 3, pp. 467-498.
- Greenwood, R & Hinings, CR 1996, 'Understanding radical organizational change: bringing together the old and the new institutionalism', *Academy of Management Review*, vol. 21, no. 4, pp. 1022-1054.
- Halabi, AK, Barrett, R & Dyt, R 2010, 'Understanding financial information used to assess small firm performance: an Australian qualitative study', *Qualitative Research in Accounting & Management*, vol. 7, no. 2, pp. 163-179.
- Hall, M 2010, 'Accounting information and managerial work', *Accounting, Organizations and Society*, no. 35, pp. 301-315.
- Haveman, HA & Rao, H 1997, 'Structuring a theory of moral sentiments: Institutional and organizational coevolution in the early thrift industry', *American Journal of Sociology*, vol. 102, pp. 1606-1651.
- Helms, W, Oliver, C & Webb, K 2012, 'Antecedents of settlement on a new institutional practice: Negotiation of the ISO 26000 standard on social responsibility', *Academy of Management Journal*, vol. 55, no. 5, pp. 1120-1145.
- Holm, P 1995, 'The dynamics of institutionalization: Transformation processes in Norwegian fisheries', *Administrative Science Quarterly*, vol. 40, pp. 398-422.
- Hopwood, AG 1999, 'Situating the practice of management accounting in its cultural context', *Accounting, Organizations and Society*, vol. 24, no. 5/6, pp. 377-378.
- Hutchins, E 1995, *Cognition in the wild*, MIT Press, Cambridge, MA.
- Ijiri, Y 1975, *Theory of Accounting Measurement*. Sarasota, FL: American Accounting Association.
- Jay, J 2013, 'Navigating paradox as a mechanism of change and innovation in hybrid organizations', *Academy of Management Journal*, vol. 56, pp. 137-159.
- Jepperson, R 1991, 'Institutions, Institutional Effects, and Institutionalism', in WW Powell & PJ DiMaggio (eds), *The New Institutionalism in Organizational Analysis*, The University of Chicago Press, Chicago, pp. 143-163.
- Johnson, H & Robinson, J 2007, *The world atlas of wine*, Mitchell Beazley, London.
- Jones, C & Livne-Tarandach, R 2008, 'Designing a frame: rhetorical strategies of architects', *Journal of Organizational Behavior*, vol. 29, pp. 1075-1099.

- Jonsson, S 1998, 'Relate management accounting research to managerial work!', *Accounting, Organizations and Society*, vol. 23, no. 4, pp. 411-434.
- Jonsson, S & Gronlund, A 1988, 'Life with a sub-contractor: New technology and management accounting', *Accounting, Organizations and Society*, vol. 13, no. 5, pp. 512-532.
- Kennedy, J & Tennent, B 2006, 'Financial management practices in small businesses: regional and metropolitan', *Small Enterprise Research*, vol. 14, no. 1, pp. 55-63.
- Kilfoyle, E, Richardson, AJ & MacDonald, LD 2013, 'Vernacular accountings: Bridging the cognitive and the social in the analysis of employee-generated accounting systems', *Accounting, Organizations and Society*, vol. 38, pp. 382-396.
- Kraatz, M & Zajac, EJ 1996, 'Exploring the limits of the new institutionalism: The causes and consequences of illegitimate organizational change', *American Sociological Review*, vol. 61, pp. 812-836.
- Langfield-Smith, K 1997, 'Management control systems and strategy: a critical review', *Accounting, Organizations and Society*, vol. 22, no. 2, pp. 207-232.
- Latour, B 1987, *Science in action*, Harvard University Press, Cambridge, MA.
- Latour, B 1996, 'On actor-network theory: a few clarifications', *Sociale Welt*, vol. 47, no. 4, pp. 369-381.
- Laughlin, R 1987, 'Accounting systems in organisational contexts: a case for critical theory', *Accounting, Organizations and Society*, vol. 12, no. 5, pp. 479-502.
- Laughlin, R 1995, 'Methodological themes. Empirical research in accounting: alternative approaches and a case for "middle-range" thinking ', *Accounting, Auditing & Accountability Journal*, vol. 8, no. 1, pp. 63-87.
- Lee, J & Miller, D 1996, 'Strategy, environment and performance in two technological contexts: Contingency theory in Korea', *Organization Studies*, vol. 17, no. 5, pp. 729-750.
- Levinthal, DA 1991, 'Organizational adaptation and environmental selection—Interrelated processes of change', *Organization Science*, vol. 2, no. 1, pp. 140-145.
- Lounsbury, M 2002, 'Institutional transformation and status mobility: The professionalization of the field of finance', *Academy of Management Journal*, vol. 45, pp. 255-266.
- Lounsbury, M 2008, 'Institutional rationality and practice variation: New directions in the institutional analysis of practice', *Accounting, Organizations and Society*, vol. 33, pp. 349-361.

- Lounsbury, M & Ventresca, M 2003, 'The new structuralism in organization theory', *Organization*, vol. 10, no. 3, pp. 457-480.
- Lucas, M & Rafferty, J 2008, 'Cost analysis for pricing: exploring the gap between theory and practice', *The British Accounting Review*, no. 40, pp. 148-160.
- Lune, H & Martinez, M 1999, 'Old structures, new relations: How community development credit unions define organizational boundaries', *Sociological Forum*, vol. 14, pp. 609-634.
- Maguire, S, Hardy, C & Lawrence, T 2004, 'Institutional entrepreneurship in emerging fields: HIV/AIDS treatment advocacy in Canada', *Academy of Management Journal*, vol. 47, no. 5, pp. 657-679.
- Maguire, S, Koh, SCL & Magryst, A 2007, 'The adoption of e business and knowledge management in SMEs', *Benchmarking: an International Journal*, vol. 14, no. 1, pp. 37-58.
- March, JG 1981, 'Footnotes to organizational change', *Administrative Science Quarterly*, vol. 26, no. 4, pp. 563-577.
- Marquis, C & Lounsbury, M 2007, 'Vibe la resistance: competing logics and the consolidation of U.S. community banking', *Academy of Management Journal*, vol. 50, pp. 799-820.
- Marriott, N & Marriott, P 2000, 'Professional accountants and the development of a management accounting service for the small firm: barriers and possibilities', *Management Accounting Research*, vol. 11, pp. 475-492.
- McKinnon, SM & Bruns, WJ 1992, *The information mosaic*, Harvard Business School Press, Boston.
- Merchant, K 1985, *Control in business organizations*, Pitman, Boston, MA.
- Meyer, J & Rowan, B 1977, 'Institutionalized organizations: Formal structure as myth and ceremony', *The American Journal of Sociology*, vol. 83, no. 2, pp. 340-363.
- Nayak, A & Greenfield, S 1994, 'The Use of Management Accounting Information for Managing Micro Businesses', in A Hughes & SD J. (eds), *Finance and the Small Firm*, Routledge, London.
- Neergard, P 1998, *Informal information systems. Management Accounting and Uncertainty*, Samfundslitteratur, Copenhagen.
- Neuman, WL 2003, *Social Research Methods: Qualitative and Quantitative Approaches*, 5th edn, Allyn and Bacon, MA.
- Ocasio, W 1995, 'The enactment of economic adversity: A reconciliation of theories of failure-induced change and thread-rigidity', *Research in Organizational Behaviour*, vol. 17, pp. 287-331.

Oliver, C 1991, 'Strategic responses to institutional processes', *Academy of Management Review*, vol. 16, no. 1, pp. 145-179.

Otley, DT 1994, 'Management control in contemporary organizations: a wider perspective', *Management Accounting Research*, vol. 5, pp. 289-299.

Pache, A & Santos, F 2013, 'Inside the hybrid organization: selective coupling as a response to conflicting institutional demands', *Academy of Management Journal*, vol. 56, pp. 972-1001.

Patton, M 1990, 'Qualitative evaluation and research methods', in Sage, Beverly Hills, pp. 169-186.

Perera, S & Baker, P 2007, 'Performance management practices in small and medium size manufacturing enterprises in Australia', *Small Enterprise Research*, vol. 15, no. 2, pp. 10-30.

Perren, L, Berry, A & Partridge, M 1998, 'The evolution of management information, control and decision-making processes in small growth orientated service sector businesses: exploratory lessons from four cases of success', *Journal of Small Business and Enterprise Development*, vol. 5, no. 4, pp. 351-362.

Perren, L & Grant, P 2000, 'The evolution of management accounting routines in small businesses: a social construction perspective', *Management Accounting Research*, vol. 11, pp. 391-411.

Petersen, MA 2004, *Information: Hard and Soft*, Northwest University. Working paper.

Peterson, R 2005, 'In search of authenticity', *Journal of Management Studies*, vol. 42, no. 5, pp. 1083-1098.

Powell, WW & DiMaggio, PJ 1991, 'Introduction', in WW Powell & PJ DiMaggio (eds), *The new institutionalism in organizational analysis*, The University of Chicago Press, Chicago.

Preston, A 1986, 'Interactions and arrangements in the process of informing', *Accounting, Organizations and Society*, vol. 11, no. 6, pp. 521-540.

Quattrone, P & Hopper, T 2005, 'A 'time-space odyssey': management control systems in two multinational organisations', *Accounting, Organizations and Society*, vol. 30, no. 7-8, pp. 735-764.

Quirke, L 2013, 'Rogue resistance: Sidestepping isomorphic pressures in a patchy institutional field', *Organization Studies*, vol. 34, no. 11, pp. 1675-1699.

Rao, H & Kenney, M 2008, 'New forms as settlements', in R Greenwood, C Oliver, K Sahlin & R Suddaby (eds), *The SAGE Handbook of Organizational Institutionalism*, SAGE, Los Angeles, pp. 352-370.

Rao, H, Morrill, C & Zald, M 2003, 'Institutional change in Toque Ville: Nouvelle cuisine as an identity movement in French gastronomy', *American Journal of Sociology*, vol. 108, pp. 795-843.

Roberts, J & Scapens, RW 1985, 'Accounting systems and systems of accountability - understanding accounting practices in their organisational contexts', *Accounting, Organizations and Society*, vol. 10, no. 4, pp. 443-456.

Robinson, J 2006, *The Oxford companion to wine*, Oxford University Press, Oxford.

Robson, K 1992, 'Accounting numbers as "inscription": action at a distance and the development of accounting', *Accounting, Organizations and Society*, vol. 17, no. 7, pp. 685-708.

Rouleau, L 2010, 'Studying strategizing through narratives of practice', in D Golsorkhi, L Rouleau, D Seidl & E Vaara (eds), *Cambridge Handbook Strategy as Practice*, Cambridge University Press, Cambridge, pp. 258-270.

Schafer, DS 1990, 'Level of entrepreneurship and scanning source usage in very small businesses ', *Entrepreneurship: Theory and Practice*, vol. 15, no. 2, pp. 19-31.

Schatzki, TR 2005, 'The sites of organizations', *Organization Studies*, vol. 26, no. 3, pp. 465-484.

Schneiberg, M & Clemens, ES 2006, 'The typical tools for the job: Research strategies in institutional analysis', *Sociological Theory*, vol. 3, pp. 195-227.

Scott, WR 1987, 'The adolescence of institutional theory', *Administrative Science Quarterly*, vol. 32, pp. 493-511.

Scott, WR 1994, 'Conceptualizing organizational fields: linking organizations and societal systems', in H-U Derlien, Gerhardt, Uta, Scharpf, Fritz W. (Eds.) (ed.), *Systems Rationality and Partial Interests*, Nomos Verlagsgesellschaft, Baden-Baden, Germany, pp. 203-221.

Scott, WR 2008, *Institutions and Organizations*, Sage Publications, Thousand Oaks.

Scott, WR, Ruef, M, Mendel, PJ & Caronna, CA 2000, *Institutional Change and Healthcare Organizations: From Professional Dominance to Managed Care*, University of Chicago Press, Chicago.

Seo, MG & Creed, WED 2002, 'Institutional contradictions, praxis, and institutional change: A dialectical perspective', *Academy of Management Journal*, vol. 27, pp. 222-248.

Sian, S & Roberts, C 2009, 'UK small owner-managed businesses: accounting and financial reporting needs', *Journal of Small Business and Enterprise Development*, vol. 16, no. 2, pp. 289-305.

- Simon, HA, Kozmetsky, G, Guetzkow, H & Tyndall, G 1954, *Centralization vs. decentralization in organizing the controller's department*, The Controllershship Foundation, New York.
- Smets, M, Jarzabkowski, P, Burke, GT & Spee, P 2015, 'Reinsurance trading in Lloyd's of London: Balancing conflicting-yet-complementary logics in practice', *Academy of Management Journal*, vol. 58, no. 3, pp. 932-970.
- Smith, WK 2014, 'Dynamic decision making: A model of senior leaders managing strategic paradoxes', *Academy of Management Journal*, vol. 57, pp. 1592-1623.
- Smith, WK & Lewis, MW 2011, 'Toward a theory of paradox: A dynamic equilibrium model of organizing', *Academy of Management Review*, vol. 36, pp. 381-403.
- Sousa, SD, Aspinwall, EM & Rodrigues, AG 2006, 'Performance measures in English small and medium enterprises: survey results', *Benchmarking: an International Journal*, vol. 13, no. 1/2, pp. 120-134.
- Stake, RE 2000, *Handbook of Qualitative Research*, 2nd edn, SAGE, Thousand Oaks.
- Thornton, PH 2004, *Markets from Culture: Institutional Logics and Organizational Decisions in Higher Education Publishing*, Stanford University Press, Stanford, CA.
- Thornton, PH & Ocasio, W 1999, 'Institutional logics and the historical contingency of power in organizations: Executive succession in the higher education publishing industry, 1958-1990', *American Journal of Sociology*, vol. 105, no. 3, pp. 801-843.
- Thornton, PH & Ocasio, W 2008, 'Institutional Logics', in R Greenwood, C Oliver, R Suddaby & K Sahlin (eds), *The Sage Handbook of Organizational Institutionalism*, SAGE, London.
- Thornton, PH, Ocasio, W & Lounsbury, M 2012, *The Institutional Logics Perspective*, Oxford University Press, Inc., New York.
- Tillema, S 2005, 'Towards an integrated contingency framework for MAS sophistication. Case studies on the scope of accounting instruments in Dutch power and gas companies', *Management Accounting Research*, vol. 16, pp. 101-129.
- Townley, B 1997, 'The institutional logic of performance appraisal', *Organization Studies*, vol. 18, no. 261-285.
- Ulin, R 1995, 'Invention and representation as cultural capital: Southwest French winegrowing history', *American Anthropologist*, vol. 97, no. 3, pp. 519-527.
- Vandenbosch, B 1999, 'An empirical analysis of the association between the use of executive support systems and perceived organizational competitiveness', *Accounting, Organizations and Society*, vol. 24, no. 1, pp. 77-92.
- Volberda, HW, van der Weerdt, N, Verwaal, E, Stienstra, M & Verdu, AJ 2012, 'Contingency fit, institutional fit, and firm performance: a metafit approach to

organization-environment relationships', *Organization Science*, vol. 23, no. 4, pp. 1040-1054.

Voronov, M, De Clercq, D & Hinings, CR 2013, 'Institutional complexity and logic engagement: An investigation of Ontario fine wine', *Human Relations*, vol. 66, no. 12, pp. 1562-1596.

Weber, M 1949, 'Objectivity in social science and social policy', in EA Shils & HA Finch (eds), *The methodology of the social sciences*, Free Press, New York.

Weick, KE 1979, *The Social Psychology of Organizing*, 2nd edn, Random House, New York.

WineAustralia 2007, *Wine Australia: Directions to 2025*.

WineAustralia 2015, 'Economic Contribution of the Australian Wine Sector'.

Winetitles 2016, *The Australian and New Zealand Wine Industry Directory*, viewed Jan 1 2017, <<http://winetitles.com.au/statistics/wineriestable22.asp>>.

Wooten, M & Hoffman, A 2008, 'Organizational fields: Past, present and future', in R Greenwood, C Oliver, K Sahlin & R Suddaby (eds), *The Sage Handbook of Organizational Institutionalism*, SAGE Publications, London, pp. 78-98.

Yin, RR 1984, *Case Study Research*, Applied social research methods series, vol. 5, Sage Publications, California.

Zajac, EJ & Waestphal, JD 2004, 'The social construction of market value: institutionalization and learning perspectives on stock market reactions', *American Sociological Review*, vol. 69, no. 4, pp. 433-457.

Zhao, W 2005, 'Understanding classifications: Empirical evidence from the American and French wine industries', *Poetics*, vol. 33, no. 3-4, pp. 179-200.

Appendix A Summary of Firm Characteristics

The characteristics of participant firms are summarised in Table 10. To protect confidentiality, the name and specific geographical region within which each winery is located are withheld. The annual crush range (reported using the same brackets used in the Australian and New Zealand Wine Industry Directory) was used as the key measure for size classifications. To provide perspective, each tonne of grapes translates to around 700 litres of finished wine. This translates to 900-950 finished bottles, or close around 75-80 standard dozen bottle cases.

Table 10 - Characteristics of participant firms

Case#	State	Ownership structure	Annual Crush Range	Own winery equipment or use contract processing?	Source of grapes?	Have a cellar door?	Internal accounting staff	Accounting software package
1	South Australia	First generation husband and wife owner operators	50-100t	Own winery	Leased vineyards and short term contracts	Fri- Sun only	2x part time bookkeepers	MYOB
2	South Australia	Owned by two families. Family members serve on the board but there is no family involvement in day-to-day management	4000-5000t	Own winery	Own vineyards, short and long term contracts	Yes	Qualified CFO	EzyWine

Case#	State	Ownership structure	Annual Crush Range	Own winery equipment or use contract processing?	Source of grapes?	Have a cellar door?	Internal accounting staff	Accounting software package
3	South Australia	Owned by father and his siblings (third generation), operated by son (fourth generation)	4000-5000t	Own winery	Own vineyards, short and long term contracts	Yes	Qualified CFO	EzyWine
4	Victoria	Started by three brothers, transitioning to being owned by one brother, with his daughter taking over operations	50-100t	Use contract processing	Own vineyards (originally owned by the parents of the 3 brothers)	Tasting room by appointment only	Bookkeeper who looks after several business interests of the family, including the wine brand	Quickbooks
5	South Australia	Second generation owner operated. Two brothers involved in day-to-day management. Mother and sister serve on board. Mother sits in on weekly production meetings, but has no other involvement in day-to-day management	50-100t	Use contract processing	Vineyards owned by 1 st generation. 2 nd generation has partial ownership of wine business	No	Bookkeeper. Managing director has a business degree.	MYOB
6	South Australia	Third generation owner operated (earlier generations deceased). Fourth generation involved in daily operations	250-500t	No	Own vineyards, short term contracts	Yes	Bookkeeper	MYOB

Case#	State	Ownership structure	Annual Crush Range	Own winery equipment or use contract processing?	Source of grapes?	Have a cellar door?	Internal accounting staff	Accounting software package
7	South Australia	First generation owner operated	1000-2000t	Yes, but also own processing equipment	Short and long term contracts	No	Business manager (business degree but not qualified accountant)	Ezy Wine
8	South Australia	Owner operated between 3 friends who were grape growers	100-250t	Yes	Vineyards owned separately by the owners (in entities with different ownership)	Tasting room by appointment only.	Qualified accountant (part time contract basis)	Ezy Wine
9	South Australia	Second generation owner operated	250-500t	Yes	Owned and leased vineyards and short term contracts	Yes	Qualified accountant	MYOB

Appendix B Participant Firms – Background Information

Background information on each of the firms is detailed below:

Case 1

Case 1 is run by a husband and wife. The husband is a passionate winemaker and the wife comes from an IT background. She has taken on running the office of the winery. Their small winery also provides contract processing services to other small producers. The husband consults as a winemaker to other businesses. They juggle all of these responsibilities with raising a young family.

In terms of staff, they have one cellar hand working year round on a labour for hire basis and an additional 2-3 cellar hands are employed casually during the vintage period. The cellar door is usually staffed by the husband/winemaker but casual staff are engaged to help out on occasion. They have two part time bookkeepers. One of the bookkeepers has worked with them for many years, initially at a previous wine business venture they were involved in. She has spoken of retiring, so a new bookkeeper has been employed to “learn the ropes”. This bookkeeper is new to accounting but is studying at TAFE and is enthusiastic about learning.

The business makes use of MYOB. During the time that site visits were conducted, the business worked towards using MYOB’s capacity to “build” stock items. This meant that costs were assigned to products as incurred, resulting in an average cost of all costs recorded. This system, however, did not involve allocating overheads to products.

MYOB is supplemented with Excel spreadsheets that were used for purposes including:

- Stock tracking
- Stock costing
- Pricing calculations (from a given retail price to different channels)
- A planned cashflow planning spreadsheet that was unfinished

Case 2

Case 2 is owned by a small group of families, with one family holding a controlling interest. The owners are not involved in the day to day running of the winery. There is a General Manager who has a CFO, Head Winemaker and Head of Sales reporting to him.

The CFO is a qualified accountant who has been with the company for around 10 years. He has been responsible for the design and maintenance of the costing system. This firm's systems were by far the most technically sophisticated out of the 9 firms observed. EzyWine, an industry specific software solution is employed. Product specific costs, such as grapes, are traced through to wine parcels as incurred. Other production costs and overheads are totalled up and then allocated to wines on a per litre basis at the end of vintage. On going costs are allocated per litre on a monthly basis.

Excel is used for formatting purposes to prepare the management reports. It is also used to reconcile between financial statements and management accountants. Material differences include that labour is included in costs allocated to inventory, but deducted for taxation rates, and methods of depreciation used for winery equipment and oak vary between the management accounts and tax records.

Samples of management accounts and various excel spreadsheets were collected.

Case 3

Case 3 was started by the current winemaker's grandfather and developed by the second generation. The father is still an active board member and controls the overall direction of the business, but the son is the head winemaker and is responsible for the day to day running of the business. There is a fully qualified CFO who has been on staff for around 10 years and he is responsible for the costing systems.

The CFO discussed known limitations to the accuracy of their costing systems. However, with stable, established product lines, the business reported that they do not perceive a strong need to change their systems, which have, from the winemaker's perspective, not changed a lot over the past 20 years.

The winery uses EzyWine but supplements with excel spreadsheets because they experience reconciliation difficulties between processing in EzyWine and what actually happened.

Sample reports were collected but as the company has a policy of not releasing such information, key numbers were changed by the CFO prior to the reports being released.

Case 4

This winery was created by three brothers whose parents owned high quality vineyards. The bulk of the grapes were contracted to a large winemaker but small, high quality parcels were retained to produce their own wines. These wines were processed at a local winery. A boutique business selling wines to restaurants and through a cellar door (located at an office that also houses other business interests) evolved.

Now that the brothers have grown-up children of their own, they recently separated their assorted farming and business interests. One of the brothers retained the vineyards and the associated wine business. His daughter is a viticulturist who has recently left her employment with a large winery in a different wine region, and she is keen to develop the family wine business. Historically it was perceived more as a hobby and had limited resources invested in it, but nonetheless the wines enjoy a reputation of high quality and the family perceives an opportunity for growth into a commercial enterprise.

This winery was observed over a period of three days. The researcher was stepped through systems and reports.

Quickbooks is used to record the records of the winery. This business had the most simplistic systems observed and were least aware of their costs. The owner commented that when the brothers went through the process of separating their business interests, they were surprised by the amount of money their external accountant had told them they had spent on their wine business over the years.

They were not able to confidently explain how costs were recorded in their system. This suggests they do not make regular use of the outputs! It appears costs are expensed to COGS as incurred. The external accountant records a stock value at year end which would account for any differences.

Case 5

Case 5 also evolved from grape farming. The parents had always owned vineyards and started making their own wine to share with friends and family. This evolved into a business of selling wine. The parents retain ownership of the vineyards but the wine business is owned by the parents along with their three adult children. The day to day winery operations are managed by the two sons. One is a viticulturist (university educated) who manages the family's vineyards as well as consulting to other businesses. The other returned to the family firm 4 years ago, leaving his employment as a state manager of a large company. He has wine marketing and business degrees. The father is effectively retired while the mother and the daughter sit on the board.

The firm uses contract processing and has a contract winemaker. The winemaker is quite involved in the business, for example she attends the weekly production meetings and was present at the offices (although their wines are off site) during several site visits. They also have four non family members employed in sales and marketing roles and a fifth non family member employed as a bookkeeper.

They use MYOB as their accounting software and supplement it with a variety of excel spreadsheets.

Case 6

The owner/operator of case 6 was a third generation winemaker, who was in the process of training his son to start taking some management responsibility for the firm. The firm originated in vineyard interests, with the winery and wine brands following. MYOB was used to track costs. The firm happened to have the same external accountant as case 5 and made use of some very similar excel spreadsheets; they had originally been provided by the external accountant as templates.

Case 6 employed a bookkeeper and an administration assistant who, in addition to normal administration tasks like answering phones and attending to mail, was tasked with helping to coordinate sales and bottling logistics. The firm had a significant cellar door operation, employing a manager and staff.

The winery was staffed by a winemaker and a cellar hand year round, with additional temporary staff being engaged over the vintage period.

Vineyard management was outsourced.

Case 7

Case 7 was a first generation business started by a winemaker. The firm was focussed more on the bulk market than the consumer market and did not have a cellar door.

Despite using contract processing for production, the firm made use of the industry specific software EzyWine to track wine batches and trace costs.

Case 8

The owners of case 8 explained that one morning, after an overnight harvest of their vineyards, they opened a bottle of wine, got talking, and decided to start a winebrand. A decade later, the brand had grown to employ a winemaker, a marketing manager and a part time accountant.

As per case 7, despite using contract processing for production, the firm made use of the industry specific software EzyWine to track wine batches and trace costs.

Case 9

Case 9 was yet another instance of a wine business that had evolved out of vineyard ownership. The general manager / winemaker had started making and selling wine produced from his parents vineyards. While they continued to sell fruit to external parties, over the years the portion of the vineyard outputs allocated to the wine business had increased. The business made use of contract processing but had established a cellar door.

In addition to the General manager / winemaker, the business employed a qualified accountant, a cellar door manager, and cellar door staff.

MYOB was used to build and track product costs on a perpetual, average cost basis.

Appendix C Key Informants

Case	Semi-structured interview informants	Additional, unrecorded informal interview or discussions informants
1	Husband / Winemaker Wife / Office manager Bookkeeper 1	Bookkeeper 2 Cellar hand Cellar door staff
2	Managing Director CFO	Admin staff Winemaker
3	Head Winemaker / GM / Son CFO (unrelated)	Managing Director / Father Winemaker (unrelated)
4	Owner Viticulturist / Daughter Bookkeeper Consultant Winemaker	
5	General Manager / Brother Viticulturist / Brother Bookkeeper (unrelated)	Winemaker (unrelated) Mother (serves on board) Sister (serves on board) Sales manager (unrelated)
6	Owner / Winemaker	Bookkeeper Marketing manager
7	Owner / Head Winemaker Commercial Manager	Winemaker
8	Owner 1 Owner 2 (unrelated friends) Accountant Winemaker Marketing Manager	
9	Viticulturist / Father Mother General Manager / Winemaker / Son Accountant	Cellar Door Manager

Appendix D Overview of Winemaking Processes

The purpose of this section is to provide a brief overview of the winemaking processes, to assist readers who are not familiar with wine production. The below information was prepared based on the researcher's experience in the industry and with reference to Gonzalez-Gomez and Morini (2006), and Cooke and Lapsley (1988).

Winemaking is a complex and highly variable process. Winemakers are required to have both highly developed sensorial abilities and specialised scientific knowledge.

The period of time during which grapes are harvested and fermented into wine is referred to by industry participants as "vintage".

The main operations undertaken during vintage to convert harvested grapes into wine are:

1. Destemming and crushing, where stems are separated from the grape berries and the berries are crushed to break the skins and release the juice. Traditionally, this was done by stomping on the berries. Commercial volumes are typically put through a "crusher" machine which can process, depending on size, tonnes at a time.
2. Pressing, where skins and seeds are separated from the grape juice or wine. White wines are pressed before fermentation. Red wines are pressed after fermentation; the colour in red wines is derived from the juice spending time "on skins" – colour components come from tannins in the skins of grape berries.
3. Fermenting, where yeast converts sugar to alcohol, carbon dioxide and heat. In modern winemaking, fermentation can be influenced and controlled through the introduction of specific yeasts, and by heating or cooling the juice to influence (i.e. increase or decrease) the fermentation speed. There are different types of fermentation (e.g. alcoholic fermentation, malolactic fermentation, carbonic maceration) and modern winemaking techniques can be used to trigger or prevent fermentation stages.

4. Racking lees, where the fermented wine is separating from solids, mostly consisting of dead yeast cells.

5. Clarification and stabilization, where the wine becomes clear and stable. This can happen naturally over time, or be achieved through intervention processes including the use of additives and temperature changes.

6. Filtration, where the wines are further clarified either by passing through physical membranes, or through the use of additives that draw out unwanted particles for removal.

References

Cooke, G & Lapsley, JT 1988, *Making Table Wine at Home*, Department of Viticulture and Enology, University of California, viewed 23 January 2017, <http://wineserver.ucdavis.edu/local_resources/pdf/HWM1.pdf>.

Gonzalez-Gomez, JI & Morini, S 2006, 'An activity-based costing of wine', *Journal of Wine Research*, vol. 17, no. 3, pp. 195-203.