

REFEREED CONFERENCE PAPER

**STRATEGIC MANAGEMENT OF FARM BUSINESSES:
THE ROLE OF STRATEGY TOOLS WITH PARTICULAR
REFERENCE TO THE BALANCED SCORECARD***N. Shadbolt*

Strategic management has been described as being different from other levels of management in several ways. It is non-routine, non-programmable, unique and creative, more ambiguous, uncertain and complex than 'operational' management and yet it has the greatest impact on the future of the business. There are a number of strategy tools available that can be used by farm businesses to guide strategic thinking, strategic decision-making and strategy implementation. The range of strategy tools used by rural professionals is not wide; of particular note is the observed misuse of the SWOT analysis with subsequent poor identification of external opportunities. The use of the balanced scorecard (BSC) tool is described and how it has been adapted for use in farm and ranching businesses discussed. To be successful, both farm and non-farm businesses can and have utilised the flexibility provided by the BSC tool to design a framework that fits their purpose and delivers to their vision.

Keywords: strategic management, strategy tools, balanced scorecard, perspectives

Introduction

Strategic management has been described as being different from other levels of management in several ways. It is non-routine, non-programmable, unique and creative (Harrison, 1999), more ambiguous, uncertain and complex than 'operational' management (Johnson *et al*, 2005) and yet it has the greatest impact on the future of the business (Shadbolt & Bywater, 2005).

The three levels of management are operational (technical), tactical ('middle' management) and strategic (leadership). As described by Shadbolt & Bywater, 2005:

"The premise of an operation is that it is a well defined task. Similarly, but to a lesser extent, the premise of a tactic is that there is a plan and that systems are put in place to minimise variances from the plan. The premise of a strategic management system, however, is quite the opposite; strategy has been described as being more about the unknown than the known. Strategy defines the logical case for how value will be created for shareholders, it will define actions and resource use but, inevitably, it is based on a set of assumptions about the future that must be put to the test."

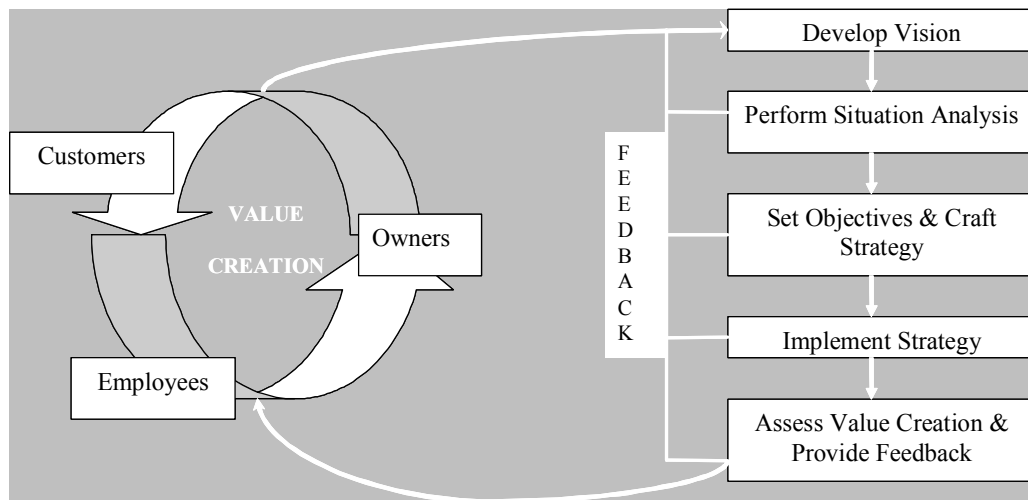
Distinction between levels can be lost when the most frequent issues that, by definition, will be operational ones dominate over less frequent ones (Shadbolt & Rawlings, 2001, Doonan, 2001).

1. This paper was originally presented at the 16th International Farm Management Congress, University College, Cork, Ireland in July 2007, and is reprinted by kind permission of the International Farm Management Association. It is extracted from the Academic Peer Reviewed Papers section of the Proceedings, ISBN 978-92-990038-6-2 which can be found on the IFMA website (www.ifmaonline.org)

Process and characteristics

Management is the continuous process of planning, implementation and control. Strategic management has been defined as the process of planning, implementing and controlling cross-functional decisions that enable the organisation to define and achieve its mission to create value (David, 2005; Porth, 2003). The strategic management process as illustrated in Figure 1 might appear to be a defined and formal process but research into smaller businesses has identified that in practice it can be haphazard and informal (Cuthbert & Johnston, 1997).

Figure 1: The Strategic Management Framework (Porth, 2003)



Tanewski *et al* (2000) found that significant predictors of business planning amongst farmers included level of farm entrepreneurship, perceptions of environmental uncertainty and farm owner's internal locus of control.

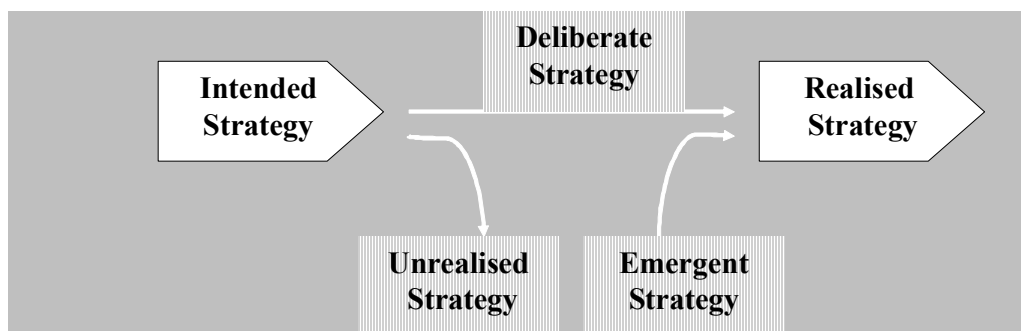
While it is not the purpose of this paper to describe in detail the strategic management process it is relevant to dwell for a moment on the 'vision' stage. There is significant debate in the literature as to what constitutes a mission and a vision, for family businesses this author prefers to take the Johnson *et al* (2005) approach of ensuring the core values of the business (and family) are understood and reconciled before defining what they term the 'organisational purpose'. Family businesses frequently have stakeholders with opposing value sets so it is important that those differences are recognised before a value set relevant to the business is devised.

Studies of farmers' goals and values discussed by Gasson and Errington (1993) identify that intrinsic aspects of being a farmer typically are ranked higher than the instrumental aspects. They conclude that autonomy, independence, survival and succession thus mingle with the more orthodox economic issues. This phenomenon is not unique to farming; in research with small to medium size enterprises (SMEs) it has been noted that owner intentions and attitudes along with the influence of lifestyle are critical factors in business growth (Lewis, 2006, McMahan, 2001, Massey *et al*, 2003). The business culture, owners/managers as economic agents, lifestyle, and/or security all influence the decision making of managers of these firms.

As pointed out by Giles and Stansfield (1990) objectives in this context are never likely to be in the singular and are seldom likely to be simple. There will always be conflicts and compromises. Atkinson (2006) identifies from the literature that in all businesses, regardless of size, strategic change requires a shared vision and consensus; failures are inevitable if competence, coordination and commitment are lacking.

Another aspect of strategic management requiring note is that although Figure 1 would indicate that strategy implementation is simply a matter of doing what is crafted, in practice, it is less straightforward. What is intended is not always possible and sometimes what might have seemed impossible becomes possible. Mintzberg and Waters (1985) differentiate *intended strategies* as patterns of decisions and *realised strategies* as patterns of actions. The comparison among intended and realised strategies, has allowed researchers to distinguish *deliberate strategies*, realised as intended, from *emergent strategies*, patterns realised despite, or in the absence of, intentions. Also all or part of an intended strategy might be unrealised (Mintzberg & Waters, 1985).

Figure 2: The progress of strategy. Source: Mintzberg & Waters, 1985



According to Porth (2003), realised strategy is a combination of rational planning and spontaneous, opportunistic thinking. A useful by-product of the strategic planning process therefore is that it sensitises the business to its capabilities and environment and improves its ability to execute strategy, it is this ability that Kaplan & Norton (2000) maintain is more important than the strategy itself. In academia there is some debate about which comes first, the deliberate strategy or the emergent strategy. A sequence of strategic activities is the connection between actions and thoughts (Mintzberg, 1994). Canales and Vilá (2005) state that "The nature of this sequence will determine which approach – emergent or deliberate – best fits the flow of strategic activities". Thinking will lead to action which is in line with the deliberate view, however if actions do not follow from prior thought then "thinking will be seen as a sense making process following from action". This second view is in line with the emergent view of strategy formation.

Failure to implement intended strategy can also be the result of poor management. Atkinson (2006) concludes that key implementation issues such as communication, identifying relevant performance indicators, the role of middle managers and the role of strategic control systems have been identified

as being critical. Her review of the literature highlights that the major challenges to overcome are more cultural and behavioural in nature including poor communication and diminished feelings of ownership and commitment.

She identifies that strategic controls are especially required to provide a balance between longer-term organisational goals and shorter-term operational demands and concludes that strategic control systems to be effective must address *“the tension between the rigour necessary for effective strategy implementation and the flexibility required for timely strategic adjustment”*. In other words emergent strategies must be able to be recognised and actioned within the discipline necessary to implement intended strategy.

The key words describing strategic management are summarised below from a literature review by Haapasalo et al (2006):

- Continuous – the plan is not the final product
- Systematic – the process has a deliberate and specific methodology and sequence of events
- Process – the value of planning lies more in the journey than the destination – from teamwork, vision and commitment gained through the process
- People – the process must involve the right people
- Decisions – decisions must be made as a result – “decision making is the most significant activity engaged in by managers”, Harrison (1999)
- Outcomes – the effects of the business on its customers and the outside world
- How outcomes are to be accomplished – select the road that will get you there
- How success is measured and evaluated – the plan will describe intended future outcomes either quantitatively or qualitatively, it always defines criteria for success

Strategy Tools

A strategy tool is described by Knott (2006) as a tool that encompasses the full range of concepts, ideas, techniques and approaches that structure or influence strategic activity. They are used to guide strategic thinking, strategic decision-making and strategy implementation. He states that according to surveys, strategy tools are extensively used by businesses and are also a key component of typical MBA strategy teaching and the associated texts. Based on the overview of strategic management in the previous section one would expect these tools to assist managers in the more challenging tasks such as:

understanding the strategic management process

ensuring the core values of the business (and family) are understood and reconciled

defining organisational purpose – a shared vision and consensus

sensitising the business to its capabilities and environment
crafting strategy and prioritising actions

identifying strategic control systems

There have been various initiatives taken to improve farmer strategic management skills in recent years. These have been driven either by government and industry bodies or by rural professionals independently, the author has been involved directly or indirectly both as a facilitator and a recipient of a wide number of these initiatives, her observations of these is provided within the context of each tool. The range of tools they espouse is not wide but there is differing emphasis on each stage in the process (Figure 1).

Many of the programmes and courses developed for farmers have been designed to introduce them to the process, often in study groups or at one to two day courses, for example the strategic planning programme described by Bergevoet et al (2005). In so doing the emphasis has been on devising a plan ‘..if it isn’t written down it will not happen..’ The deliberate approach to strategy formation has dominated with many, often with an undue emphasis on decomposition resulting in the most operational steps receiving the most attention (Mintzberg, 1990). The risk of this compartmentalisation is that strategic planning can be reduced to little more than a numbers game or a box ticking exercise, with little to do with strategy. Recognizing the role of both the deliberate and the emerging view in strategy formation is essential if the programme is to improve the skills of strategic management. Enabling managers to recognize emergent strategy as it evolves and providing them with the skills to capture it within the confines of the ‘business plan’ should be a key outcome.

Knott (2006) identifies various dimensions of strategy tools and then combines them into five generic modes of tool application. These are listed below and their application in farm management is reviewed where applicable.

Analytical mode

This looks in detail at a specified aspect of the problem and seeks to generate specific output using a defined method (Knott, 2006). An example of this mode is the 5-forces model for industry competition (Porter, 1980). It provides an explanation of the competitive, profit eroding, forces impacting on a business. The use of the 5-forces model in farm management tends to be as an aid to the situation analysis (external audit) stage, specifically to gain a better understanding of the industry and the place of the farm in the supply chain. Although Knott (2006) states that normally the same five forces are always used Nell & Napier (2005) have modified and extended them to six and present them within the context of the macro-environmental PESTE analysis.

Dynamic mode

A dynamic application focuses on the drivers of the evolution of a firm or its environment. Concepts that lend themselves to this type of application include the industry life cycle (Porter, 1980) and strategic intent (Hamel and Prahalad, 1989) both of which are sometimes found in farm management applications. Knott (2006) states neither this dynamic nor the static analytical

mode can predict or cope with major discontinuities but are useful as a decision support tool in that they can provide reasoned justification for expecting certain events and trends.

Metaphorical mode

Metaphorical applications are used to inspire fresh thinking about a situation and possible responses. Knott (2006) states the power of metaphors lies in their expression of experiential knowledge, their value lies in expression and thought processes. Various forms of them are found in farm management applications particularly when assisting farmers identify their vision and mission and most often in a group setting.

Facilitative mode

Facilitative applications aid the strategy activity by fostering creativity and structuring communication. Suited to strategy workshops, techniques often used in this mode include SWOT and TOWS techniques and scenario planning. Knott (2006) states the categories they provide can be used to inspire expansive, divergent thinking about possible future strategies, but can also bound thinking, the outcome can be driven by the perspective held by participants at a point in time. He concludes that the value gained from a facilitative application is often as much in the understanding gained by participants as in any specific outcome. The SWOT technique is used for situation analysis in all the farm management programmes observed although in one instance it was also used as a tool to explore implementation options for goals. The premise on which the SWOT is based (internal analysis to identify Strengths and Weaknesses, and external analysis to identify Opportunities and Threats) was not always clearly defined or understood. As the SWOT was mostly carried out in workshop conditions the ability to “inspire expansive, divergent thinking about possible future strategies” was limited by the knowledge held by the participants at the time. It is the authors observation that SWOT analyses are often found that are severely imbalanced and lacking an external focus. Take as examples the two SWOT analyses presented in Appendix A, they were presented at ‘Farmer of the Year’ field days which are public events at which information and strategies of the winners of the competition are discussed. The internal analysis is fairly robust for each farm and the threats are identified but the opportunities listed do not reflect any depth of external analyses. Too frequently the SWOT is used just to list a range of obvious features about the business with little thought going in to whether the items listed provide any particular competitive strength or weakness to the business. The external audit is often poor and too narrow in its focus; the opportunities section is used to list a range of options for the business to think about (created as a response to internal and external issues) rather than being an appreciation of the external issues that have a positive impact on the business. This lack of rigour in SWOT analyses is of concern as the tool is not being used to ‘inspire expansive, divergent thinking’ but is just confirming business as usual. It is this author’s observation that for those farmers unfamiliar with their business’s health, at the strategic level, and unaware of the strategic relevance of external issues the goals they devise are

nothing more than a wish list.

Ongoing situation analysis is the cornerstone to sensitising the business to its capabilities and environment and improves its ability to recognise emergent and execute realised strategy. According to McLeod & Schell (2001) successful strategic planning is influenced much more by external sources of data than internal; a SWOT analysis that fails to rigorously review external issues and identify opportunities from them is limiting the scope of the business to identify useful strategy.

Interventionist mode

Interventionist tool applications involve using ideas as a blueprint for action rather than simply as an input to decision making. Knott (2006) states they are useful when a tool suggests better performing processes or a defined approach with which participants can identify; he identifies tools in this mode to include the balanced scorecard (Kaplan and Norton, 1992), total quality management and benchmarking (Camp, 1989). Various farm management applications of the balanced scorecard have been reported in the literature (Shadbolt & Rawlings, 2001, Shadbolt et al, 2003, Lund, 2003, Lourenzani et al, 2005, Dunn et al, 2006). Subsequent sections discuss the balanced scorecard in further detail.

The Balanced Scorecard

A range of new strategy tools and performance measurement frameworks have evolved to assist strategy implementation. Non-financial measures have combined with or replaced traditional financial orientated metrics as strategic controls providing useful short-term targets on the long-term strategic road (Bungay & Goold, 1991).

One such tool, the balanced scorecard, devised by Kaplan and Norton (1992), was proposed as an approach to tracking a firm's performance that takes into account process, innovation and customer objectives as well as the financial position. In working with the scorecard they also found it performed an integrative function by bringing together disparate measures in a single report, and hence helped the senior management team to clarify and operationalise strategy (Knott, 2006). They devised a scorecard with four perspectives that permitted a balance to be struck between short and long-term objectives, between desired outcomes and the performance drivers of those outcomes and between hard objective measures and the softer, more subjective, measures (Haapsalo, 2006). In response to the 'emergent' versus 'intended' strategy tension they also claimed that the balanced scorecard

"...provides a framework for managing the implementation of strategy while also allowing the strategy itself to evolve in response to changes in the company's competitive market and technological environment..."
(Kaplan & Norton, 1996)

Some authors suggest having only four perspectives is a weakness in the BSC. Haapasalo et al (2006) identify additional perspectives could be human resources, environmental and supplier perspectives and innovation processes

and then explain how each can be included in one or two of the original perspectives. (Gifford, 2000) added a fifth 'core values' perspective, Russell (2003) added a supplier perspective in automobile companies, and Maltz (2003) suggested a BSC modified model with 5 dimensions, namely, finance, market, process, people and future. Similarly, Creelman (1998) empathises that organizations should not blindly adopt the normal four balanced scorecard perspectives, but rather choose the number of perspectives that reflect their own strategic needs. Working with on-farm agribusinesses Shadbolt et al (2003) found an extension of the customer perspective to include the suppliers, more of a supply chain approach, was relevant as was an extension of the shareholder/financial perspective to include non-financial shareholder goals such as lifestyle and environmental/ethical issues. Dunn *et al* (2006) captured these issues by suggesting six perspectives suitable for ranch strategic management to ensure the lifestyle and environmental (natural resources) aspects of the business were given equal weight as the more traditional financial, livestock production, customer and learning and growth.

The term 'Balanced Scorecard' reflects the balance between short- and long-term goals, financial and non-financial measures, outcome (lag) and driver (lead) indicators, and external and internal performance perspectives (Hepworth, 1998). It provides a balanced organisational assessment by recognising a variety of stakeholder views. Key metrics are also specified for each goal, if too many metrics are defined in a BSC it easily turns into a monitoring system; if it is to be used effectively as a management tool with strategic purposes the number of metrics must be low (Haapasalo *et al*, 2006). If the BSC becomes too complex the ability to be flexible and capture emergent strategies will be lost. The metrics must evolve as the organisation changes, it is not recommended that industry or other company/farmer metrics be used.

Having a sound vision for the business is the key to the success of the BSC (Haapasalo *et al*, 2006). A common vision is a challenge in farm family businesses so a solution proposed by Andersson (2002) was to separate visions for business and for farm family lifestyle issues and to add a fifth perspective to the BSC, called 'life'. However to have two visions could be divisive and lead to family business dysfunction; Atkinson (2006) states for all businesses, regardless of size, strategic change requires a shared vision and consensus.

The BSC requires systematic strategic planning activity and a holistic approach. Kaplan & Norton (1996) suggested the BSC be viewed as a template not a strait-jacket (as interpreted by Voelpel *et al*, 2006) so it has the flexibility and adaptive capacity Knott (2006) suggests is critical to its successful application in an organisation.

When used to describe and explore strategic management on farms agribusinesses (Shadbolt & Rawling, 2001, Shadbolt *et al*, 2003) it has proven to provide an acceptable framework with which to capture the more holistic nature of farm systems and enable both financial and non-financial (including non-business) goals to be managed. Shadbolt (2004) further suggests how, in a policy context it can provide a framework to enable a specific plan, such as an environmental plan, to fit within the overall business. Similarly Lourenzani *et al* (2005) in their work with rural firms in Brazil describe it as an efficient tool

to concentrate and control the financial and non-financial aspects of the firm. In Denmark they are using the BSC as a strategy tool in extension work with farmers aiming to improve strategic planning (Lund, 2003) and in the Ukraine it is also being implemented with farms (Lissitsa, 2005).

Conclusions

It is important to recognise that a strategy tool is likely to assist with part of the activity rather than provide a substitute for the capabilities and experience of the manager, it does not provide a blueprint but can act as a guide to thinking and a starting point for structuring the activity (Knott, 2006). There is a risk that the tool or framework that a manager uses will channel or constrain thinking as it focuses and guides in which case alternative tools or adaptation of the tool may be required to ensure robust strategy is crafted. Rural professionals working with farmers should assist their clients to be continuously sensitised to their farm's capabilities and external environment so as to develop useful SWOT analyses and be able to recognise emergent strategy as it appears.

The section on the Balanced Scorecard should be read with the above caution in mind; the tool is not a recipe for success but a means by which a business can assess its direction, craft strategy and define success. However the BSC has evolved into a useful framework as it forces the perspectives of human resources (innovation, continuous improvement and learning), internal processes (turning inputs into outputs), the market (customer relationships, product and service criteria) and shareholders (profitability, return on assets, wealth, non-financial and ethical goals) to be managed simultaneously and the linkages between them to be determined (Shadbolt, 2004). The BSC used by farm managers would provide an on-going learning opportunity for the farm as it facilitates in-depth discussion about the business' vision, strategy and critical success factors and translating them into specific measures and objectives in action.

About the author

Nicola M Shadbolt (N.M.Shadbolt@massey.ac.nz) is Associate Professor in Farm and Agribusiness Management at Massey University, New Zealand, where she has worked for twelve years. Her specific research interests include strategic management and business analysis. She has recently been made a Fellow of the NZ Institute of Primary Industry Management. In 2005 Nicola published a textbook, 'Farm Management in New Zealand', that was jointly produced with Dr Sandra Martin from Lincoln University. Before joining Massey Nicola spent 15 years working in a variety of jobs in government, agribusiness and consultancy. Outside academia she is involved in four equity partnerships, two are for forestry, one a dairy farm and the fourth is a 1300 hectare pastoral farm on which is produced milk, beef, sheepmeat, wool, venison, velvet and timber. The farm business has just won the Supreme Farm Environment Award in its region.

References

Andersson P. (2002) Competence Development Program for the Farmer with reference to life as well as business. *Proceedings of the 13th International Farm Management Association Congress*, The Netherlands July 7-12, 2002

Atkinson H. (2006) Strategy implementation: a role for the balanced scorecard? *Management Decision*. Vol. 44 No.10 pp.1441-1460

Bergevoet R.H.M, Giesen G.W.J, Saatkamp H.W., van Woerkum C.M.J, Huirne R.B.M. (2005) Improving Entrepreneurship in Farming: the impact of a training programme in Dutch Dairy farming. *Proceedings of the 15th International Farm Management Congress*. August 14-19, 2005. Brazil. www.ifmaonline.org

Bungay S., Goold M. (1991) Creating strategic control systems. *Long range planning*. Vol. 24 No. 3 pp.32-9

Camp, R.C. (1989), Benchmarking: The Search for Industry Best Practices That Lead to Superior Performance, *Quality Resources*, Milwaukee, WI.

Canales, J. I., & Vilá, J. (2005). Sequence of thinking and acting in strategy-making. *Advances in Strategic Management*, 22, 93-116.

Creelman, J. (1998). *Building and implementing a Balanced Scorecard - International Best Practice in Strategy Implementation*. London: Business Intelligence Ltd.

Cuthbert R.H. and Johnston T.R.R. (1997). The Strategic Planning Process of Agricultural Niche Marketers: A Case Study Approach. *Proceedings of the 11th International Farm Management Congress*: 961-975.

David, F. R. (2005). *Strategic management: Concepts and cases*. 10th ed. South Carolina: Pearson Prentice Hall.

Doonan B.M. (2001) Strategic Planning in the Dairy Industry – the Tasmanian experience. *Proceedings of the South Africa Large Herds Conference*. Port Elizabeth, 2001

Duncan W.J. (1999). *Management: ideas and actions*. New York, Oxford University Press.

Dunn et al ,2006 cited in Shadbolt N.M. (2006) The Balanced Scorecard : a strategic management tool for ranchers. *King Ranch Institute of Range Management Symposium, Kingsville, Texas*. October 25-27, 2006

Gasson R., Errington A.(1993) *The Farm Family Business*. CAB International.

Gifford, J. D. (2000). Small Orange Juice Processor Gets Big Results with the Balanced Scorecard. *Balanced Scorecard Report*, 2(5), 8-10.

Giles T., Stansfield M. (1990) *The Farmer as Manager*, 2nd Edn. Wallingford: CAB International.

Haapasalo H., Ingalsuo K., Lenkkeri T. (2006) Linking strategy into operational management. *Benchmarking: An International Journal*. Vol. 13 No. 6 pp.701-717

Hamel, G. and Prahalad, C.K. (1989), "Strategic intent", *Harvard Business Review*, Vol. 67 No. 3, pp. 63-76.

Harrison E.F. (1999) *The Managerial Decision Making Process*. Houghton Mifflin, Boston, MA.

Hepworth, P. (1998). Weighing it up - a literature review for the balanced scorecard. *The Journal of Management Development*, 17(8), 559-563.

Johnson, G., Scholes, K., Whittington, R. (2005). *Exploring corporate strategy: Text and cases* (Seventh ed.). London: Pearson Education Limited.

Kaplan, R. S., & Norton, D. P. (1992). Using the Balanced Scorecard as a Strategic Management System. *Harvard Business Review*, 70(1), 71-80.

Kaplan, R. S., & Norton, D. P. (1996). The Balanced Scorecard - Measures that drive performance. *Harvard Business Review*, 74(1).

Kaplan, S. R., & Norton, D. P. (2000). *The strategy-focused organization: how balanced scorecard companies thrive in the new business environment*. Boston: Harvard Business School Press.

Knott, P. (2006). A typology of strategy tool applications. *Management Decision*, 44(8), 1090-1105.

Lewis, K. (2006). New Zealand SME owners: In it for 'lifestyle' or 'freestyle'? : *New Zealand Centre for SME Research*, Massey University.

Lissitsa A. (2005) The Balanced Scorecard Implementation in Farm Enterprises - A Case Study from Ukraine. *Proceedings of the 15th International Farm Management Congress*. August 14-19, 2005. Brazil. (www.ifmaonline.org)

Lourenzani W.L., Queiroz T.R., Filho H.M.deS. (2005) Strategic Mapping of the Rural Farm: A Balanced Scorecard Approach. *Proceedings of the 15th International Farm Management Congress*. August 14-19, 2005. Brazil. (www.ifmaonline.org)

Lund M. (2003) use of the Balanced Scorecard as a new advisory approach in

the implementation of strategic planning to farm managers. *Proceedings of the 14th International Farm Management Congress*. August 10-15, 2003. Perth, Australia. www.ifmaonline.org

Massey, C., Harris, C., Tweed, D., Warriner, V., & Lewis, K. (2003), "Speaking up: Stories of SME growth in New Zealand", presented at A Research forum: Growing up? SME in NZ Wellington, New Zealand.

McLeod R & Schell G (2001) *Management information systems* (8 ed.), Prentice-Hall, Inc, New Jersey.

McMahan. (2001). Deriving an empirical development taxonomy for manufacturing SMEs using data from Australia's business longitudinal survey. *Small Business Economics*, 17(3), 197-212.

Maltz, A. C., Shenhar, A. J., & Reilly, R. R. (2003). Beyond the Balanced Scorecard:: Refining the Search for Organizational Success Measures. Long Range Planning, In Press, Corrected Proof.

Mintzberg, H., and J. A. Waters. (1985). Of strategies, deliberate and emergent. *Strategic Management Journal* 6:257-272.

Mintzberg, H. (1990). Strategy formation schools of thought. In J. Frederickson (Ed.), *Perspectives on Strategic Management* (pp. 105-235). New York: Harper Business.

Mintzberg, H. (1994). *The Rise and Fall of Strategic Planning*. New York: Prentice-Hall

Nell W.T., Napier R.J. (2005) *Strategic Approach to Farming Success*. Wim Nell, Agricultural Management Consultant, Bloemfontein, South Africa

Porter, M.E. (1980), *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, The Free Press (Macmillan), New York, NY.

Porth, S. J. (2003). *Strategic management: A cross-functional approach*. New Jersey: Prentice Hall.

Russell, R. (2003). *The International Perspective: Balanced Scorecard Usage in Europe*. *Balanced Scorecard Report*, 5(3), 13-14.

Ryan K. (2000) *Business Planning for Farmers*.

Shadbolt N.M., Beeby N., Brier B., Gardner J.W.G. (2003) A Critique Of The Use Of The Balanced Scorecard In Multi-Enterprise Family Farm Businesses. *Proceedings of the 14th International Farm Management Congress*: Pat 1, 602-609. August 10-15, 2003. Perth, Australia

Shadbolt, N.M. Rawlings, M. (2001). *Successful benchmarking by balanced planning and identifying key performance indicators for goal attainment in dairy farming*. Dairy Research & Development Corporation (Australia). Project Code: MUNZ001

Shadbolt N.M., Bywater, A (2005) *The Dimensions of Management*. In: *Farm Management in New Zealand* Ed. Shadbolt N.M. & Martin S. Oxford University Press.

Shadbolt N.M. (2004) Agri-environmental indicators put into perspective: their fit and relationship with other relevant farm business indicators. In Fraser, N. (ed) *Farm Management Indicators and the Environment, Proceedings of an OECD Expert Meeting*, Palmerston North, New Zealand, March 2004

Tanewski G.A., Romano C.A. and Smyrnios K.X (2000). Owner Characteristics and Business Planning as Determinants of Australian Family Farm Performance. *Australian Agri-Food 2000 Research Forum*. Melbourne. (www.agribusiness.asn.au)

Voelpel S.C., Leibold M., Eckhoff R.A. (2006) The tyranny of the Balanced Scorecard in the innovation economy. *Journal of Intellectual Capital* Vol. 7 No. 1 pp 43-60

Appendix A: SWOT analyses presented at ‘Farmer of the Year’ field days on sheep and beef cattle farms in New Zealand

SWOT Analysis	
Strengths • Scale • Land Quality • Balance of country and climatic zones • Cadet labour resource • Current dedicated staff • Supportive board	Strengths: ➤ Staff ➤ Mix of country ➤ Scale ➤ Relationships with business partners
Weaknesses • Harder country reversion (gorse) • Lack of water systems • Base fertility limiting in some areas • Lack of intensive subdivision • Deer productivity • Sheep reproductive performance • Cattle reproductive performance • Climatic uncertainty • Complexity of enterprise mix (training requirement)	Weaknesses: ➤ Long winters ➤ Livestock reproduction and performance ➤ High debt servicing ➤ Building stock numbers , don't cull as hard as would like ➤ Lack of formal monitoring
Opportunities • Intensification of easy country • Increase carrying capacity • Improved fertility hills • Improve livestock per head productivity especially sheep and deer • Land development, subdivision scrub and gorse	Opportunities: ➤ To improve stock reproductive and growth performance ➤ Increase carrying capacity
Threats • Abortion storms sheep • Droughts • Pest and disease • Staff changes lack of suitable replacements	Threats: ➤ Pests and disease ➤ Loss of leases ➤ Need to maintain high quality staff