STRATEGIC PLANNING TECHNIQUES AND THEIR POTENTIAL APPLICATION TO FARM MANAGEMENT PROBLEMS

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INTRODUCTION

Papers presented at these Conferences in the last few years imply that all is not well in the domain of academic farm management. Malcolm (1988) essentially concluded that farm management research is littered with approaches which have had little impact on farm managers. He urged future farm management academics to pay closer attention to the range of limitations and complexities of analysing the management of farm business.

Wright (1989) echoed this sentiment, and suggested that academic farm management might feel more at home within the multi-disciplinary realm of academic business management, rather than remaining firmly wedded to the single discipline of economics. In illustrating this point, he noted that strategic management deals with allocative efficiency in a manner which may be of greater prescriptive value to managers than the insights provided by an agricultural economics framework.

Woodford (1989) came to a similar conclusion when focussing on the management of risk in farming. His concern was that there appeared to be no obvious methodology which linked sources of business risks to the strategies which tend to be adopted to overcome these risks. He further commented that the types of issues in risk management which are capable of being analysed using the traditional tools of decision analysis are tactical ones rather than the more fundamental strategic issues which many farmers have faced in recent years. He too argued that concepts from strategic management may have something to offer the farm management discipline. Renborg (1988), in following a similar line of enquiry, goes a stage further, and attempts to show how strategic management concepts might be used to evaluate strategic risks which are likely to be encountered in farming. In doing so, he uses a Swedish example to illustrate his discussion.

It is hardly surprising that a focus on strategic issues in farm management should arise at this time. The farming industry in New Zealand, for example, has been in the forefront of much of the adjustment which has occurred as a result of economic deregulation, and there can be few farmers who have not questioned whether their current products and production methods represent the most suitable options available to them.

However, much of the business management literature which deals with such strategic issues tends to focus on corporate strategies for large organisations. These large corporate businesses tend to have ownership structures which differ from those of farm businesses. Likewise the level and composition of inputs and outputs will vary, and in addition, these large corporate businesses often face industry and marketing structures which differ from those in agricultural industries. Given such differences, it would seem prudent to exercise some caution when advocating the adoption of corporate techniques of strategic management by what is essentially a specialised type of small business, namely farming.

In this paper, a strategic management framework which is similar to that advocated by Renborg (1988) is discussed. This does not purport to be a comprehensive review of the process, since the intention is to impart a flavour for the area, and in doing so, to identify potential pitfalls in the application of the approach to farm management problems. Scrutinising strategic management principles in this way should assist in identifying appropriate avenues for future research in this area.

A STRATEGIC MANAGEMENT FRAMEWORK

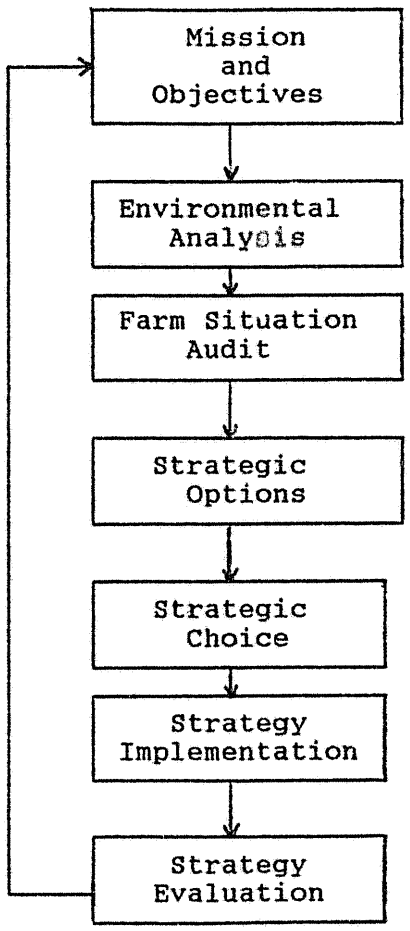
Strategic management has been defined in various ways by various authors. A simple (though hopefully not simplistic) definition is that strategic management is the way in which managers formulate and implement strategies which achieve the goals of their respective businesses. A farm manager would be operating in the strategic domain when fundamental business objectives and strategies are being formulated on re-evaluated. For example, with the lack of profitability of many traditional crops and cropping systems in the last few years, Canterbury mixed cropping farmers have been searching for alternative crop and livestock enterprises to restore incomes. Specialist grass seeds, vegetable crops, deer and bull beef have all increased in importance while the acreage of wheat and barley has declined dramatically. Tactical issues or more operational problems remain, as farmers learn the most effective cultural practices, fertiliser application rates and rotations for new crops.

The trigger to any re-evaluation of business direction often occurs when there is a sizeable perceived gap between the desired performance of the business and the expected actual performance. In a farming context, this may include properties heading towards a crisis situation, as illustrated above, and also those where performance may appear to be quite sound, but the aspirations of current owners or managers are such that they wish to enhance this performance.

The strategic management framework itself has been conceptualised in a number of ways, although these different models appear to be variations on a theme. A relatively standard framework is presented in Figure 1. In some respects, this representation of the strategic management process is somewhat naive, since it implies a series of sequential steps, whereas in fact, there is likely to be considerable feedback between the various stages with one stage not necessarily being fully completed before the next is initiated.

FIGURE 1

The Strategic Management Process



Adapted from Jauch, L.R. and Glueck, W.F. (1988) Business Policy and Strategic Management (5th Ed.) McGraw Hill

This strategic management process can be segmented into four phases, these being analysis and diagnosis, choice, implementation and evaluation, with the analysis and diagnosis and choice phases constituting the narrow planning component of the process. This planning process has five essential elements, these being setting enterprise goals, evaluating environmental threats and opportunities, diagnosing enterprise strengths and weaknesses, considering alternative strategies, and choosing the most appropriate strategy to follow. Once again, different authors appear to recommend slightly different procedures; for example, some advocate an internal audit before focussing on an environmental scan, while others reverse the procedure. Such differences seem to be unimportant, since the entire strategic planning process tends to be somewhat circular in nature.

The full strategic management process goes beyond the planning stage and encompasses implementation and control phases, which may in turn, trigger a further re-evaluation of objectives and strategies. In the remainder of this paper, the stages in the strategic planning process will be discussed using Canterbury mixed cropping as an example.

(1) Mission and Objectives

The first step in the strategic planning process is usually to focus the direction of the planning exercise by determining what the goals of the business are. Such goals tend to be structured hierarchically, with the fundamental business mission at the top.

This business mission is difficult to define, although doing so appropriately would appear to be crucial to the success of the strategic planning exercise. Jauch and Glueck (1988) define it as the 'common thread' of the business to which activities can be related, while Rowe et al (1986) discuss it in terms of values and corporate culture. A reasonable definition is given by Galloway (1987) who describes it as a broad but succinct definition which explains the reason for an organisation's existence, usually stated in terms of the organisation's line of business, the environment in which it operates and the clients it seeks to serve.

It would seem that a well-formulated mission statement should define the boundaries of a business in a way which allows the range of potential strategic options to be narrowed appropriately, while simultaneously ensuring that creative options are not excluded because the mission statement is too rigid. It needs to be concrete enough to guide the strategic management process and to give stability to the business, while also reflecting the fundamental values of those people who are intimately involved in the business, such as the owners, other involved family members and the manager if ownership and management are separate. In a farming

context, Renborg (1988) stresses the importance of comparative advantage in defining the mission, noting that it is important for a farmer to build on current expertise and to exploit the advantages offered by the existing resource base.

A blend of both financial and personal goals is often typical for family owned farms. A typical mission statement for a Canterbury mixed cropping farmer might be "to generate a sufficient level of income through farming to provide an acceptable standard of living, allow a good education for the children, and build sufficient equity in the business on which to base retirement provisions."

The introspection involved in formulating a mission statement would force a farmer to focus on the fundamental direction of the farm business, and if done properly, would seem to be of great value. However, if done poorly or superficially, it could be quite confusing and distinctly unhelpful! There appear to be a number of techniques used in corporate strategic planning which can help to guide the formulation of a mission statement. These centre on the values of the various stakeholders in the corporation, and corporate power relationships, and may be of limited use in a smaller business context. However, Carey and Olsen (1985) indicate how values might be elicited in a small business context. They list a range of 'values' such as profit, security, stability, social prestige, innovation, family cohensiveness and others, and suggest that owners, the manager and employees rank these on a scale of 1 to 9. The values of each group can then be compared, and the important values can be evaluated.

Given the importance of the mission statement and the problems which might be encountered in its formulation, it would necessary to review the appropriate literature with a view to identifying and adapting techniques (such as the above) which are capable of being appropriately adapted to a farming context.

Once a mission statement has been formulated, attention can be paid to the next level in the goal hierarchy, which is specifying more concrete operational business objectives. Such objectives emanate from both the mission statement and the strategy which is being pursued by the business. That is, specific business objectives cannot be set until the strategic direction the business has been finalised. In the context of strategic management, as opposed to operational management, setting these objectives may belong more appropriately to the implementation phase of the process. As with the mission statement there appears to be appropriate and inappropriate ways of stating objectives. For example, Renborg (1988) alludes to a concept of efficient goal structures and suggests that goals (or objectives) should be easily measurable and few in number. As with the mission statement, it would seem that the appropriate formulation of objectives needs to be more adequately developed in a farming context.

(2) Environmental Analysis

Environmental analysis is the process of analysing appropriate factors in the environment external to the business, and evaluating this information. Environmental factors may exert a positive or a negative influence on the business and these are classified as opportunities or threats accordingly. The analysis phase involves systematically searching for these opportunities and threats, while in the diagnostic phase, an opinion is formed on their likely impact on the business.

There appear to be various ways of classifying the environment and Galloway (1987) suggests that different classifications may be suitable for different types of business. However, regardless of which classification is used, many authors appear to advocate covering the same range of factors in one way or another. For example, Jauch and Glueck (1988) refer to the 'general' environment, which includes a socioeconomic sector incorporating the economy, social influences and climatic factors, and technological and government sectors. The more narrow 'industry' environment includes the customer sector (which incorporates buyer identification, geographic factors and demographic factors), the input supplier sector (including raw materials, labour, energy and finance), and the competitor sector (where entry and exit and strategic shifts by competitors are monitored). Carey and Olsen (1985) suggest that, in turbulent (uncertain) times, it is appropriate to focus on critical elements of change in the various facets of the environment.

Once a range of environmental signals have been identified, their strategic implication must be assessed. Various forecasting techniques can assist in this process. They include financial planning spreadsheet models, delphi techniques, scenario building and traditional decision analysis. However, in a small business context, those techniques which are likely to be used in practice would need to be relatively simple.

One method of summarising the impact of the various environmental signals involves constructing what is known as an Environmental Threat and Opportunity Profile (ETOP). The various signals are rated as an opportunity (+), a threat (-), or as having a neutral impact, (0). The result is a summary of critical factors in the environment; that is, opportunities which may be grasped, or threats which it may be possible to neutralise. An example of a partial profile is shown in Figure 2.

Figure 2

Partial Environmental Threat and Opportunity Profile (ETOP)

for a Canterbury Mixed Cropping Farm

Environmental Sector		Impact of Each Sector
Socioeconomic	+	Low Inflation
	-	Recession in NZ
	+	Growth in major trading partners
	-	Increased climatic variability
	-	Declining popularity of red meat
	.	
	.	
Technological	-	User pays in R & D
	+	New Developments in plant breeding
	.	
	.	
Government	-	Uncertainty in election year
	+	Competitive gains from economic restructuring
	.	
	.	
Customer	+	Lamb prices predicted to rise
	-	World grain stocks expected to rise
	+	Specialist niche products able to command premium prices
	+	End of Iran-Iraq war
	-	Concern about pesticide residues
	0	Eastern Europe political developments
	.	
	.	
Suppliers and Agents	-	Less competition in stock and station industry
	+	Greater availability of imports
	-	High Interest rates
	+	Rationalisation in meat industry
	.	
	.	
Competitor	+	Advances in Gatt round
	-	Excess production in US and EC
	.	
	.	

The polarisation of external variables as threats or opportunities has been criticized as insufficient for efficient environmental analysis. Galloway (1987) cites studies which essentially recommend an 8 point scale, covering threats, restrictions, problems, positive symptoms, stimuli and opportunities. In a similar vein, Rowe et al (1986) recommend evaluating the impact of a factor (ranging from strongly negative threats (-5) to strongly positive opportunities (+5). They then multiply this by the importance of a factor (ranging from 0 to 10) to come up with a number which signifies the strength of a signal as a threat or an opportunity. While there are obvious difficulties with this approach, such as distinguishing 'impact' from 'importance' and attaching too much significance to what are essentially arbitrary numbers, there would seem to be some merit in attempting to weight the strength or significance of environmental threats or opportunities to give a more balanced profile.

A more fundamental problem, however, is how to ensure that the threats and opportunities which emerge from the environment in its various dimensions are adequately and accurately monitored. Woodford (1989) comments that many of the sudden changes which appear to be characteristic of the current farming environment are a result of underlying physical, social and economic forces which develop quite slowly. These forces build up until the environment is stressed to such a point that rapid change or even a sudden shock occurs. Mastering the art of identifying and grasping the significance of these signals when they are still relatively weak would seem to be crucial to sound, proactive management of strategic risk.

Conversely, the ability to identify business opportunities in a turbulent, more deregulated environment would appear to be much more critical for business success in farming than it has been in the past. Renborg (1988) acknowledges that recommendations on how this might be achieved are very difficult to formulate. He notes that business management experts recommend a market or needs orientation rather than a production focus, with 'travel, search, see and ask' to assist in the early detection of changes in the world around the farm and in interpreting the production possibilities inherent in such changes. In the partial ETOP shown in Figure 2, concern over pesticide residues might well be perceived as an opportunity for organic production by a producer with a less conservative outlook on market opportunities.

There is an obvious need to focus much more carefully on how to monitor and interpret various environmental forces, and to evaluate the extent to which the business management literature can assist in this task. It seems certain that the development of these types of entrepreneurial skills will be much more important for most types of farming venture in the future.

(3) Farm Situation Audit

The situation audit of a business parallels the analysis of the external environment by focussing on the 'internal environment' or the farm itself. As with the external analysis, various facets of the farm business are viewed in either a positive or a negative light, and are classified as strengths or weaknesses accordingly.

A wide-ranging audit of the business is recommended, covering management areas such as marketing and distribution, research and development, production and operations, corporate resources and personnel, and finance and accounting. Marketing and distribution issues include monitoring whether products produced meet market needs, evaluating distribution and service requirements, and determining whether promotion strategies are appropriate. In a corporate context, R and D issues include evaluating whether the approach to R and D is too defensive, or at the opposite extreme, too offensive, and whether resources allocated to this area are appropriate. Production and operations issues focus on the efficiency and appropriateness of production processes, including the cost and availability of raw materials, efficient and effective use of assets such as machinery and buildings, control procedures for inventory and product quality, the appropriateness of relationships with suppliers in inputs and purchasers of outputs, and scale considerations. Corporate resources and personnel issues focus on the talents and weaknesses of management and employees, the appropriateness of existing employment contracts, and the effectiveness of management information systems. Finally finance and accounting issues involve evaluating the financial strength of the business and the appropriateness of financial management policies and procedures.

Obviously, an audit such as this is very wide-ranging, and appropriate and relatively standardised procedures and checklists for guiding such an analysis in a farming context would need to be developed. Various techniques are used to assist this process, including standard techniques for evaluating financial performance, staff turnover and morale analyses, sales forecasting, project analysis, business simulation models and a range of other operations research techniques.

The objective of such an audit is to identify the strengths and weaknesses of a farming business. As with external environmental analysis, a range of techniques are available to assist in the diagnosis, although once again, those which are likely to be used in practical farming situations would have to be relatively simple. As was the case with the external environment, a profile which summarises the conclusions of the audit, a Strategic Advantage Profile, can also be constructed.

The Strategic Advantage Profile (SAP) mirrors the ETOP with the identified features of the business being rated as strengths (+), weaknesses (-), or as having a neutral impact (0). A summary such as this can focus reflection on how business performance might be improved by identifying weaknesses which might remedied, and strengths which might be capitalised on. Figure 3 illustrates a set of strengths and weaknesses which were tentatively identified for the Canterbury mixed-cropping example.

Figure 3

Strategic Advantage Profile (SAP)

for a Canterbury Mixed Cropping Farm

Internal Area		Competitive Strength or Weakness
Marketing	+	Diversified enterprise mix
	+	Good relationship with marketing agencies
	-	Lack of market information for medium-term planning
	-	Limited evaluation and use of alternative marketing agencies
Production	+	Irrigation increases crop/livestock production potential
	+	Complementarity between arable crops and livestock
	-	Drought has reduced production potential of livestock
Farm Resources	-	Stony soils of low fertility limit output
	+	Farm size well above average
	+	Machinery has capacity to handle increased crop area
	+	Skilled labour supply available
Personal	+	Good husbandry skills
	+	Sound financial management skills
	-	Poor ability to analyse market opportunities
Finance	-	Profitability reduced by drought
	-	Educational requirements of children
	+	High equity
	+	Strong working capital position

As with the ETOP, criticisms can be levelled at the naivety of a summary which fails to rate the strength or significance of managerial features which emerge from the situation audit, although the SAP could obviously be modified to reflect such concerns. A more substantive issue is that the strengths and weaknesses of any organisation do not exist in a vacuum, but are dependent on the business mission, environmental factors, the time frame under consideration, and the strategies which are being pursued or contemplated. Jauch and Glueck (1989) conclude that diagnosis of business strengths and weaknesses is a crucial part of the strategic planning process which is extremely difficult to do properly. They caution that apparent weaknesses may be transformed to apparent strengths if differences in (or different perceptions of) the external environment exist. For example, carrying high levels of input inventories might be diagnosed as a managerial weakness which could be transformed into a managerial strength if uncertainty regarding the availability of inputs was diagnosed in the external environment. Similarly, carrying some extra machinery capacity would allow flexibility in cropping operations in a turbulent external environment, whereas in a more stable situation, this might be interpreted as unnecessary overcapitalisation.

When conducting a situation audit, therefore, the parameters of the exercise would need to be clearly specified if ambiguity is to be minimized. Great care is obviously needed when conducting this situation audit, and more attention to how this might be appropriately structured in a farming situation would seem to be warranted.

Another diagnostic technique described by Rowe et al (1986) and advocated by Renborg (1988) to evaluate the risk associated with alternative farming strategies is vulnerability analysis. In this procedure, those 'supportive elements' (or underpinnings) which, if suddenly taken away, might seriously damage or destroy a business, are identified. The potential impact on the business if each of these threats materialises can then be evaluated. This may include identifying possible contingencies for dealing with potential threats, thereby gaining some insight into the reactive ability of the business. Subjective probabilities of such events occurring can also be assigned to each threat, thereby forcing management to reflect upon the vulnerability of their current position or any proposed strategy.

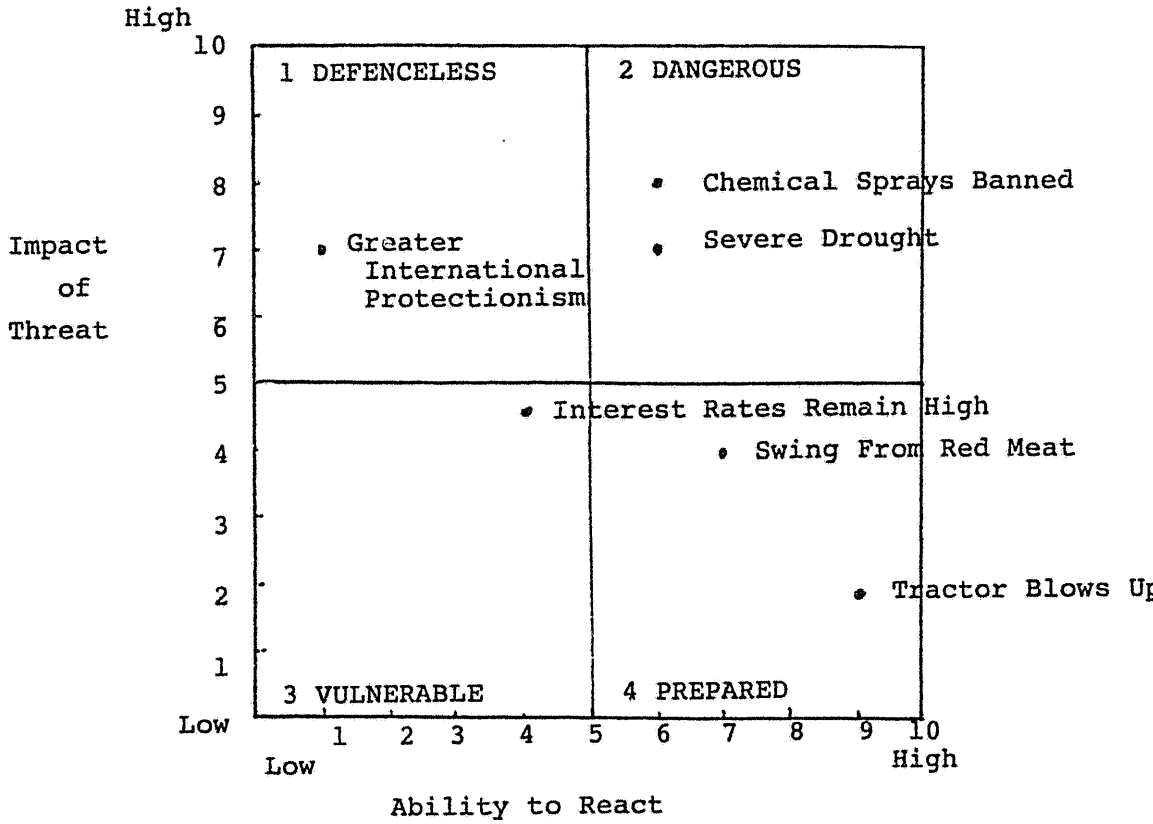
The information which emerges from such an exercise can be presented in a number of ways. Rowe et al (1986) recommended ranking both the impact of a threat on the business and the ability of the business to retaliate on a scale of 1 to 10, and plotting the results of this subjective assessment onto a chart, as is illustrated in Figure 4. A visual chart such as this has obvious prescriptive appeal. Entries in quadrant 1 signals a defenceless position against which the business is unable to retaliate, thereby suggesting that management should seriously consider abandoning its current (or contemplated) strategy. An entry in quadrant 2 suggests that a threat is relatively dangerous, but that the

business can retaliate. In this case, contingency plans could be developed. Entries in quadrant 3 suggest a light to moderate threat with little ability to retaliate. In these circumstances, Rowe et al (1986) recommend monitoring such threats. A business which has most entries in quadrant 4 would be in a preferred position being relatively insulated against potential strategic risks.

Figure 4

Partial Vulnerability Assessment

for a Canterbury Mixed Cropping Farm



This type of technique would appear, on the face of it, to be amenable to adaption to farming situations. A more critical examination of the most appropriate method of presenting such material would seem prudent, since it may not be possible to clearly differentiate between the impact of a threat and the ability of the business to retaliate, in the manner suggested by Rowe et al (1986). Furthermore, a chart such as this may imply a degree of quantification which is spurious, and may encourage a subscription to mechanistic prescriptions for strategy choice which

is unwarranted. Renborg (1988) presents a more qualitative assessment, ranking the ability of alternative strategies to withstand threats (or critical surprises as he terms them), with a +, - or 0. He also alludes to the more fundamental issue of how to generate critical surprises (or to identify underpinnings), suggesting that this is an art in itself which would obviously need to be researched and appropriately adapted to a farming context.

As with environmental analysis, the diagnosis and interpretation of managerial strengths and weaknesses would need to be carefully adapted to a farming context if useful strategic information is to emerge.

STRATEGIC OPTIONS AND CHOICE

The ultimate objective of the strategic planning process is to focus the strategic direction of the business. To recapitulate, the process is usually triggered initially when a gap between desired and actual performance is observed, even though the process may be ongoing once it has been initiated. This leads to reflection on the fundamental goals and values of the business, culminating in a mission statement which reflects these. Beyond this, the process becomes somewhat circular. An environmental analysis can identify opportunities and threats in the environment around the farm, which can assist in identifying potential strategies. Similarly, a situation audit can identify the strengths and weaknesses of the business with respect to its current strategy (and also with respect to potential strategies).

At some stage in the process, potential alternative strategies need to be explicitly generated and evaluated. Jauch and Glueck (1988) suggest focussing initially on the generic options available to the business, these being expansion, retrenchment or stability possibilities. They argue that expansion options may be warranted when the perceived performance gap is large and positive, the ETOP indicates a positive environment and the business appears to have strengths which would allow it to capitalise on these opportunities. Conversely, a large negative gap, coupled with a threatening environment and a business which has serious weaknesses may signal the need for retrenchment. A relatively neutral environment associated with an equally bland SAP and a small performance gap may indicate stability rather than strategic redirection. In this case, the business might find it advisable to fine-tune its existing strategy.

Regardless of whether or not the range of strategic alternatives is first narrowed by the use of generic prescriptions such as these, sooner or later more specific strategy alternatives need to be formulated. The strategic management literature appears to abound with prescriptions which are thought to be appropriate in given sets of circumstances, and simple techniques which can be used both to isolate appropriate strategies and to guide strategic choice.

Portfolio matrices provide a good example of such a technique. Matrices are constructed which are based on product growth rates (or stages in the product life cycle) and the competitive position of these products (often measured by market share). Individual products (or business units) are then assigned to specific cells in this matrix, with each cell tending to carry with it a prescription for further strategic action. One such matrix which is well known is the Boston Consulting Group (BCG) growth-share matrix. This particular matrix has been criticized on a number of counts; for example, it fails to represent new products in new industries. Consequently, a number of variations which attempt to overcome such deficiencies have emerged as a result. Although appealing, these matrices have no obvious analogue in a farming context. In addition, the mechanistic application of simple prescriptive 'rules' such as these could be quite misleading.

At the individual product (or business unit) level, there also tends to be a range of prescriptions which can help to guide strategic direction. Such prescriptions emerge from research into the strategic performance of a number of businesses. For example, a Boston Consulting Group (BCG) study of 24 products in 7 industries cited by Jauch and Glueck (1988) suggested that an appropriate expansion strategy would be to get the largest market share possible as quickly as possible by initially selling products below cost. As volume sold increases, costs should then fall, thereby increasing profitability. The business should reduce the attractiveness of entry to the market by keeping prices and costs low.

A range of such studies appear to exist, each carrying a set of associated prescriptions. However, there is a danger with this type of approach, since strategic prescriptions which may be appropriate for particular types of products and market structures may be extrapolated to inappropriate situations. Curtis (1983) implicity acknowledges this, noting that certain types of strategies (for example, those which he labels innovation, opportunism and customer efficiency) are more easily implemented in a small business context.

It would be foolish to attempt to apply any prescriptions from the business literature to a farming situation, when such prescriptions have not been evaluated in this context. There are obviously exciting research possibilities in determining which strategies have proved successful for farmers under a range of environmental conditions. This research could ultimately be used to derive sets of prescriptions which are appropriate in different circumstances. Such an approach is already used by agronomists and animal scientists to determine appropriate production management packages for a given range of conditions.

Without this research, techniques and prescriptions such as those described above can provide little input into the strategic planning process in a farming context. In the final analysis, a range of strategic alternatives would need to be generated, with each of these possibilities being systematically evaluated in some way and a choice of strategy made. Renborg (1988) suggests subjecting each strategy to a simple form of vulnerability analysis, and selecting the strategy which is least vulnerable to a range of stressing events. A more generalised approach would be to analyse the opportunities and threats, and strengths and weaknesses associated with each strategy to get some feel for the strategic fit associated with each of them before undertaking a vulnerability analysis. For example, it would be foolish to attempt to capitalise on specialist niche market opportunities when a SAP has diagnosed poor market skills. Once such a comparison has been undertaken, the appropriate strategic choice could then be made, bearing in mind the fundamental goals or mission of the farm business.

It is unclear whether an abbreviated adaptation such as this would leave the strategic planning process with enough rigour to engender confidence in the outcomes. Obviously, any type of analysis conducted in a cavalier fashion is likely to lead to nonsensical results, but strategic planning may be more prone to this danger because of the degree of subjectivity involved in the various stages of the process.

CONCLUSION

If strategic planning concepts are to be applied to farming situations, then a reasonable degree of adaptation is required. Attention needs to be given to appropriate ways of eliciting a farm business mission and setting performance targets after the strategic direction of the farm is determined. Methods of identifying and monitoring environmental signals need to be assessed. Similarly, techniques for evaluating the impact of these environmental forces on the farm business need to be scrutinised, as do appropriate ways of summarizing the resulting information. Likewise, procedures for conducting a farm situation audit would have to be developed, and recommendations made on how to arrange the outcomes of the audit. Research is needed on how to identify the underpinnings of a farm business, and how to most appropriately analyse farm vulnerability to stressing events. Finally, identifying strategies which have been successful for farmers in a range of environmental conditions could prove to be extremely illuminating.

In addition to focussing on the individual elements in the strategic planning process, the process itself needs to be scrutinised. Feedbacks exist between the various stages, and this would need to be reflected in any recommendations on how to structure a planning exercise.

An impression gleaned from the few references which support this paper is that the task of successfully adapting corporate techniques to a small business situation should not be underestimated. Curtis (1983) notes that small businesses are inherently much more vulnerable and volatile in their operation than larger businesses with the inertia of a large company enabling it to smooth out many shocks that might rock a smaller company dramatically. He comments that the uncertainty surrounding some of the data used in strategic planning is larger than the size of some smaller companies, thereby questioning the effectiveness of strategic planning under such circumstances. It is perhaps salutory to reflect upon the fact that many of the 'small' businesses which he refers to are larger than most farms!

The issue of whether strategic planning actually enhances performance also needs to be confronted. There seems to be a reasonable literature on this with reference to a corporate context. Galloway (1987) cites a study by Ansoff which suggests that those businesses which strategic plan performed more predictably and significantly outperformed those which didn't. It would be useful to determine whether more successful farmers undertake strategic planning intuitively if not formally.

Even if such research suggested that this is the case, it would not necessarily provide a rationale for formal strategic planning. Galloway (1987) notes that in a rapidly changing environment, effective planning requires imagination, analytical ability and creativity. He expresses concern that such qualities might be restrained if the strategic management process is too formalised or inflexible. In a similar vein, Curtis (1983), citing Mintzberg, comments that a strategy can arise either through the formal planned process (as described in this paper), through some sort of unstructured process, or through an entrepreneurial process, which he notes is more characteristic of organisations dominated by a single person, and thereby might include some proportion of farmers. He comments that entrepreneurial managers may become impatient with the cumbersome nature of a formalised planning process. However, Curtis (1983) suggests that strategies formed by this entrepreneurial approach tend to be narrowly defined and may be quite vulnerable to change, thereby implying that this type of manager might benefit from a more formalised planning approach!

These issues suggest that some degree of humility may be appropriate, since formal strategic planning may prove to be yet another technique which litters the farm management discipline. Malcolm (1987) judges techniques to be useful if they are actually used by farmers. This is a particularly stern test for any technique, since non-adoption may occur for a number of reasons. However, the non-adoption of a technique should, at the very least, lead to some reflection as to its relevance!

In some respects it is misleading to categorise strategic planning as a technique in the classical farm management tradition. It might be more appropriately viewed as a framework for guiding strategic decision-making, with some of the information which enters into this process being highly subjective.

Although there are obviously many issues to be resolved before strategic planning could be used as an extension tool with any confidence, the process does appear to have obvious merit. Proaction rather than reaction is encouraged, since a manager is forced to articulate a clear mission and objectives for an organisation. It provides a f amework for anticipating and analysing future opportunities and threats, allowing these to be respectively exploited or neutralised. It is interesting to speculate whether farmers in New Zealand would have been more prepared for deregulation of the agricultural sector if they had been more aware of principles of sound strategic management.

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REFERENCES

Carey, O.L. and Olsen, D.F. (1985), Opportunity Management - Strategic Planning for Smaller Businesses. Reston Publishing Company (Prentice - Hall).

Curtis, D.A. (1983), Strategic Planning for Smaller Businesses. Lexington Books.

Galloway, I.D. (1987), The Application of Strategic Management Concepts to an Agricultural Research Unit. Master of Agricultural Studies, University of Queensland, Brisbane.

Jauch, L.R. and Gleuck, W.F. (1988), Business Policy and Strategic Management (Fifth Edition). McGraw-Hill.

Malcolm, L.R. (1988), A Record of Fifty Years of Academic Work in Farm Management in Australia: An Idiosyncratic View. Paper presented to the 32nd Annual Conference of the Australian Agricultural Economics Society, La Trobe University, Melbourne, February 1988.

Renborg, U. (1988), Risk Management in Farming - an Approach to Turbulent Times. Proceedings of the 7th International Farm Management Congress, Copenhagen, June 1988.

Rowe, A.J.; Mason, R.O. and Dickel, K.E. (1986), Strategic Management and Business Policy - A Methodological Approach (Second Edition). Addison-Wesley.

Woodford, K. (1989), Risk Management in Farming and Some Implications for Agricultural Education. Paper presented to the 33rd Annual Conference of the Australian Agricultural Economics Society, Lincoln college, February 1989.

Wright, V. (1989), Agribusiness Management and Farm Management: Some Parallels and their Implication. Paper presented to the 33rd Annual Conference of the Australian Agricultural Economics Society, Lincoln College, February 1989.