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An Exploration Of The Use Of The Balanced Scorecard Approach To Achieve Better Farm Business Planning And Control

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Abstract

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ABSTRACT

The family farm is a complex business due to the intimate interaction between business and lifestyle goals. It is important to select and monitor a group of relevant, or key, performance indicators (KPIs) that can be used to measure how well the business is performing. Performance indicators must link to the goals of the farm business. No one measure can be used to assess how well the business has achieved it's various, and sometimes conflicting, goals. The aim of this study was to identify whether dairyfarmers have adequate performance indicators to measure progress towards goals and to explore how well dairyfarmers formally or systematically resolve and manage goal conflict by testing their goals against a 'balanced scorecard' framework adapted from business literature.

Keywords: balanced scorecard, key performance indicators, goal conflict resolution

INTRODUCTION

Business planning is incomplete if it focuses only on one or two aspects of the business. The goals of a business deliver to the vision the owners have for the future and must clearly reflect their values and ideals. Rigorous business analysis should identify strengths that the goals should capitalise on, weaknesses that the goals should minimise, opportunities that the goals should capture and threats that the goals should avoid. The goals will often reflect the lifecycle stages of the owners and their extended family and will cover both the farming and the property businesses they have invested in.

Each goal should be measurable and the indicators used to track and manage goal progress will be the key performance indicators for that business. Not all those indicators will be financial measures. In a family business where personal and business goals are inextricably linked it is essential that strategic management, the long-term plans and the successful achievement of those plans, combines all aspects of the family business that are relevant to that success.

FAMILY FARMS, GOAL CONFLICT & SUCCESS

To survive and succeed, a family farm business must be able to meet a number of conditions. It must be capable of responding to the pressures and challenges of the economic environment. A farm business must grow, at the very least, to combat the 'cost-price squeeze'. Falling real commodity returns require improvements in production and marketing efficiencies to be achieved just to maintain a financial

equilibrium in the business. The business must also be prepared to meet the changing needs and aspirations of family members over time, that is, the ‘family takeout'. At certain stages in the life cycle of a family farm business there are unavoidable requirements for extra family takeout, which must be recognised in the farm's strategic plan.

The goal of many farm businesses is to grow equity in order to improve viability and/or to prepare for its transition to the next generation. The farm business must be managed within the often-conflicting goals of achieving short-term viability and generating long-term wealth. If some members have a short-term focus and a requirement for cash while others are more focused on wealth creation over the longer term this can create a clash of goals that can be the cause of disharmony. These differences, real and potential, must be identified when drawing up the common goals of the business and strategies put in place to address them as they occur.

The family business mixes emotions and sentimentality with objectivity and rational calculation, the family and the business are inseparably linked despite the relative incompatibility of the two components. The family business, unlike its corporate colleagues must deal with the demands of family relationships as well as the demands of the market place (Robbins and Wallace 1992). In addition to this the family business is also subject to the difficulties associated with small businesses.

STRATEGIC PLANNING & IDENTIFICATION OF STRATEGIC CHOICES

If a farm business is going to better balance its priorities, and take account of the personal, family and off-farm interests and goals of its owners as well the on-farm issues, this must be addressed in its strategic plan. The process of strategic planning is necessary to determine a robust long-term plan that will focus the farm family on the future and identify the changes they must make now to achieve their shared vision of the future.

The success of a family business relies on all involved individuals being committed to it and discussing and understanding each other's aims and ambitions. It is made possible if the members agree on their shared vision and how they will achieve it. Identifying the values of each member is essential if their vision is to be understood (Gasson, 1973).

The problems of applying strategic planning to a family farm business are not so much that the businesses are often small or that they have a high fixed cost structure but rather that they deal with complex family interrelationships. If multiple objectives occur then it is important that strategies for coping with objectives, establishing priorities and solving conflicts are developed (Giles, 1990). "To succeed in business a family must have strong emotional bonds. They must have practical business skills and they must adopt effective and rational business structures and practices. But more than this they must encourage the natural strengths of family life and reduce the effect of the natural weaknesses" (Robbins and Wallace 1992)

Agreement of a shared vision for the business will be preceded by time spent identifying what are the driving forces of the business, the values that matter to the business and the culture or climate necessary to make it work. The next step is to carry out a full environmental assessment examining both the business itself (internal analysis) and the environment within which it operates (external analysis). Once this is complete it is possible to identify the ‘gap', that is, the difference between where the business is now and where it wants to be. The goals of the business at this level should specifically address how the business intends to close that gap. Strategies (strategic choices or goals) identified from the analysis may involve major change and upheaval or they might just be small progressive steps to fine-tune existing strategies.

DEFINITION & IDENTIFICATION OF KEY PERFORMANCE INDICATORS

From the business analysis the components making up the gap between current and desired positions are identified and appropriate metrics can be selected and/or developed to measure progress in reducing the size of the gap. On account of the time and cost required in measuring metrics only a limited number of both financial and physical measures should be used (Boehlje and Eidman,1984). This means that what is measured needs to be prioritised in relation to the goals that have been identified from the business analysis (Boehlje and Eidman ,1984; Camp, 1995).

The identification of indicators for each goal is the first stage at which the planning function of management links to the control function. If this is not done correctly the measures taken within the control phase will be meaningless and, possibly, also misleading as they may prompt a course of action that bears no resemblance to the direction stated in the farm's goals. Parker (1999) states that monitoring on farm generally has not been clearly related to the goals of the owner/manager. Kaplan & Norton (1996) identified the same lack of linkage between performance monitoring and strategy as a major reason for the failure of businesses in the corporate world to successfully implement plans.

Control indicators are described as being of either the feedback type or the predictive type. Which type is adopted sometimes is a factor of what is being measured and how that data can be collected but a blend of the two is commonly found on those farms that do actively utilise the control function.. The indicators used may be objectively or subjectively measured and may be formal or informal Parker (1999). Research quoted by Parker (1999) suggests that the adoption rates of formal objective measurements by farmers are not great.

Kaplan & Norton (1996) describe the cause and effect relationships that exist between a mix of outcome measures (feedback or lag indicators) and performance drivers (predictive or lead indicators). They state that a business that is made up of only lag indicators doesn't satisfy management's goal of providing early indicators of success or help focus on the drivers of future success. Too frequently farm business plans only use outcome measures as the indicators for stated goals. The challenge set by Kaplan & Norton that is the basis of the Balanced Scorecard framework that they have developed, is that businesses must endeavour to provide objectively grounded estimates of

cause and effect relationships for a good mix of core outcome measures and performance drivers. It is possible then to capture a systems dynamic model that provides a comprehensive quantified model of a business's value creation process.

The chain of cause and effect that Kaplan & Norton (1996) describe is also suggested by Eccles (1991) who stated that when devising new measures there are three questions that should be asked:

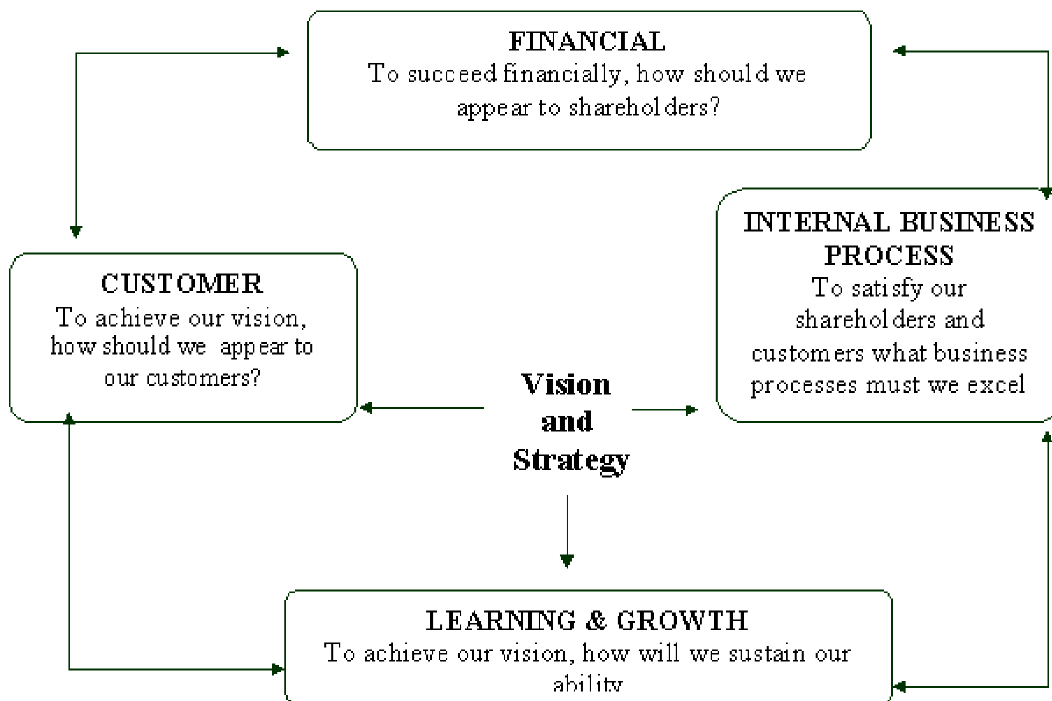
- Given our strategy, what are the most important measures of performance?
- How should these measures relate to one another?
- What measurements truly predict long term success in our business?

The suggestion that financial measures should be set and viewed more like milestones to indicate how well central parts of the business' strategy are being achieved, and so improve the focus on long-term objectives (CSBS 1996) is a good example of financial measures as lead indicators in the business. This cause and effect relationship has been explored in recent research into financial indicators of sustainability by Shadbolt (1998) in which the balance between short-term viability and long-term sustainability had to be reflected in the indicator(s) developed.

THE BALANCED SCORECARD

Robert Kaplan and David Norton conceived the Balanced Scorecard concept in 1990 after a yearlong research project with 12 companies at the leading edge of performance measurement (Kaplan and Norton 1992). It was developed in response to the change in focus they noted in current management styles; the style now being to focus on both financial and operational performance and measures. This is reinforced in the suggestion by Birchard (1995) that numbers alone are no longer deemed to be able to be used to run a business effectively, they have no predictive power; this does not mean they can be ignored however as it is still necessary to understand what factors influence the numbers.

The balanced scorecard approach places the business' vision and strategy firmly in the middle of the scorecard to ensure that focus is not lost. The business' goals (strategic choices) each with its stated measures and drivers of success are then allocated to one of four perspectives of the business.



Source (Kaplan and Norton 1992)

The absence of goals or abundance of goals in any one perspective would give a quick, visual indication of whether the business is in balance.

A balanced scorecard is a set of financial and non-financial performance measures that reflect the factors that are considered critical to the success of the business. It gives managers important information from four different perspectives, which together offer a holistic view of the business's health. It also allows managers to consider all the important operational measures at the same time, letting them see whether improvement in one area is achieved at the expense of another (Kaplan and Norton,1992;Butler *et al*, 1997).

A good balanced scorecard should have a mix of core outcome measures (lag indicators) and performance drivers (leading indicators). A chain of cause and effect between indicators should pervade all four perspectives of a balanced scorecard (Kaplan & Norton, 1996).

The four perspectives as identified by Kaplan and Norton are:

The financial perspective that looks at how the business' strategy is affecting the bottom-line. Therefore traditional measures such as growth, profitability and shareholder value are monitored. It would be unusual not to find a number of goals in this area of the balanced scorecard.

The customer perspective that asks the question "How do existing and new customers view and value us?" This area would not feature so prominently in many farm business plans yet it could be the very area to develop to ensure the farm business is a preferred supplier to its customer. The development of quality assurance systems on-farm would be a strategy aimed at improving the supplier-customer relationship for the common good. Similarly the development of some contractual arrangements and strategic alliances also address this perspective by exploring how the farm can be developing and improving the relationship it has with its customer.

The internal business perspective that focuses on the skills, competencies and technology of the business and its ability to meet the needs of the customer as well as the potential to add value to customers' businesses. This area would generally be more than adequately covered in many farm business plans. It covers the ability of the business to deliver and produce to specification, thus concentrating on the production process (feed, cows, resources, staffing etc.).

The focus of the innovation and learning perspective section is the business' ability to change, improve and adapt their products and processes as well as the ability to develop and introduce new improved products and services (Kaplan and Norton 1992). The importance of having goals in the farm business plan that fall into this area cannot be overemphasized. This is the area in which a number of the non-financial goals should be found, those goals that are aimed at ensuring the business' greatest assets, its people, are being developed and nurtured to deliver the innovation that is crucial to business success. This is also an area that does not always have the prominence it deserves in a number of farm business plans.

The balanced scorecard has been applied to a variety of businesses and some practitioners have suggested amendments to the framework. Gubman (1996) simplified the scorecard to three dimensions: shareholder value, customer value and employee value. These three dimensions were also presented as key components of an agribusiness firm by Brook (1997), not with any reference to the balanced scorecard, but rather as a way in which that firm had decided to expand the economic value added approach to its other key stakeholders and better identify the means by which value was being created in their firm.

Parker (1999) concludes that it is not the exact format of the scorecard that is critical but rather that the links between vision, strategy and measurement that are clearly understood. Kaplan & Norton (1996) refer to a test of whether the scorecard truly communicates both the outcomes and the performance drivers of a business unit's strategy as its sensitivity and its transparency.

CASE STUDY RESEARCH

Developing a balanced scorecard is not a quick and easy task. It requires a substantial amount of time and requires everyone in the business to understand the business strategy. It must be preceded by the recognised strategic planning steps of the business having a clear vision of where it wants to go and having identified the critical factors that are required for successful implementation of the strategy, that is, what steps need to be taken to achieve the goals of the business.

The study that is being reported in this paper consisted of a case study approach with ten dairy farmers. Each farm business was analysed thoroughly to provide an in-depth knowledge of the business. This analysis involved six years of physical and financial data analysis as well as interviews and surveys from which the subjective and personal issues were identified. The survey instruments used comprised an initial questionnaire and open-ended questions pertaining to the self-identification of the farming family's values and goals. A process of ‘double-checking' occurred through a series of value and goal statements which farming couples were asked to grade or scale. These statement checklists were sourced from Gasson (1973), Perkin and Rehman (1994) and McGregor et al (1996) as well as from personal experience as a consultant. A vision and strategic intent was described for each family farm business that reflected the values of that family and what it wanted itself, both as a business and as people to be in the future. The gap between where it wanted to be and where it was was not always obvious to the family. The size and type of the gap then dictated the strategic choices (goals) available to the respective farm families.

At this point the identified goals were applied to the balanced scorecard to see whether there was a balance between the goals. In nearly all cases there was an imbalance with financial and productive goals dominating over learning and customer goals. The lack of goals in the latter perspective is possibly a reflection of the structure of the dairy industry in New Zealand. The farmers own the processing and marketing arms of the industry so do not always see the relationship between themselves and the processor they supply milk to as a supplier:customer relationship. It is of interest to note that the one farmer who did recognise quality milk as a requirement in both the business' vision and in specific goals had recently been on the board of directors of one of the processing companies. An observation from comments made by the other farmers is that the quality control systems that have been imposed by the processing companies have tended to create tension between the farm and the processor. As quality management systems slowly replace these quality control systems the relationship may become clearer.

The next stage was then to determine from the farmers the methods by which they were going to achieve the goals that had been identified. How they were going to measure both the outcome of the goal (lag indicators) and progress towards the goal (lead indicators) was determined and mapped out where possible. A number of farmers needed more time to work out exactly how they were going to achieve the goals they had identified, this was particularly the case for those who had had no previous experience in strategic planning and who were still becoming familiar with the concept and how it was relevant for their businesses. Some of the farm case studies did have

business plans in various forms and guises; the performance measures already identified for each of their goals were mostly of the lag indicator type, and there was little evidence of any cause and effect relationships between indicators having been identified.

Further work is progressing with these farmers to develop the chain of cause and effect between a mix of core outcome measures and performance drivers within the balanced scorecard framework. An example of the type of cause and effect relationships that might be devised for a given farm is illustrated in Figure 2, this is based on one of the case study farm businesses for which goals and indicators had already been identified.

For most of the case study farmers it is envisaged that the identification of the indicators and the relationships between them will require the input of both the farm family and the researcher. The aim is to devise from this experience, a format that can be used by farm professionals and farmers by which they can develop the chain themselves. Part of this format may include the use of a generic chain in which the cause and effect relationships between recognised key lag and lead indicators that will be common to all dairy farm businesses has been devised. A number of these indicators will be based on physical relationships already identified by science, the exercise may identify where objectively grounded estimates of cause and effect relationships are hard to gauge and further science, business or farm management research is required.

Figure 2: Cause and effect relationships between Lag and Lead Indicators for the predetermined goals of a case study dairy farm business

SUMMARY

The balanced scorecard can assist the farm business as it enables the business to identify those measures (both core outcome and performance drivers) that are essential to goal achievement and so provides a focus to subsequent benchmarking that will speed up the adoption of ‘best practices'. Where identification of a difference between actual and desired performance occurs this is the trigger to return to and review the business plan and to develop strategies to close the gap, again.

While the literature on balanced scorecards is focused on the corporate sector it does not exclude it as a valuable tool for the family farming business. If anything its value to the family business is at least as great as it is to the corporate world. The balanced scorecard is a framework for integrating measures derived from strategy thereby offering the family business not only a measurement system but also a management system.

The scorecard can help family businesses by aligning and focussing them on implementing long term strategy (Kaplan and Norton 1996). In other words the balanced scorecard enables the business to not only put its financial and non-financial goals in perspective but also to better balance the conflict it often faces between short-term viability and long-term sustainability. The long-term vision that is a feature of strategic planning is less likely to be lost if the balanced scorecard is used in the strategic plan as it forces the farm business to link its goals to that vision. The scorecard also forces farm businesses to ensure that they have goals that will deliver to each of the four perspectives thereby achieving a balance that has been found, in a large number of other businesses, to be vital to the business' ability to deliver to its vision.

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