

“Strategic Control? – A Five Factor Model”

The area of strategic control is one that is replete with a confusing array of recipes, prescriptions and frameworks. This paper analyses and clarifies the various strands of literature culminating in a comprehensive strategic control framework. Strategic control is part of the evolution of concepts and thinking in the history of management control, which is no longer the sole pre-occupation of financial and management accountants. Control systems have moved on from the retrospective financial control approach to the development of feed forward, future oriented control systems tracking long term strategic goals and objectives. The paper proposes a five-factor model to ensure that major shifts in a single firm or business unit's environment are monitored and controlled and discusses the implications for managers. A central aim is to provide managers with a practical conceptual framework for strategic control which embraces contemporary developments in the area. The paper does not discuss some of the other important aspects of strategic control, such as the methods, systems and structures for good strategic control.

Introduction

Leaders at the strategic level, (chairmen, directors, managers and decision makers), need to have their fingers on the pulse of their organisations, to ascertain if they are on the right track, and are achieving their strategic objectives. Strategic control provides the means for reassurance at the strategic apex, much as operational controls do for other parts of the organisation. Strategic control can be defined as senior management activities that monitor the development path of intended and emergent strategies and provide early opportunities for appropriate action when variances occur.

Today most strategic control activity is based on a few financial measures, which have limited informational value for strategic purposes. The authors suggest that this is not adequate and can cause unnecessary surprises and below par performance in the long

term. The authors believe that the recommendations made in the academic literature are generally too narrow and do not encompass all the significant variables. The article explains the differences between strategic and operational control, the problems with current practice and what is advocated in management literature, and goes on to recommend a five factor model for strategic control.

The paper suggests that for strategic control a number of different variables need to be monitored rather than just financial measures. The authors advocate the use of specific measures that adequately represent the long term and qualitative nature of many strategic goals and the processes that underpin strategy development. The paper concentrates only on strategic control variables at the business unit and the single unit company. It does not deal with corporate level controls. Neither does it address issues relating to the methods of strategic control. Suffice it to say that the authors believe that because of the eclectic, uncertain, ambiguous and complex nature of strategy and the strategic environment the methods which are most suited to strategic control are the continuous, interactive and so called steering methods. The paper will explain the drawbacks with control variables used today in most companies and attempts to provide some solutions.

Why strategic control is necessary

Michael Goold (1991) has suggested three reasons for the necessity of strategic control:

- *The need for co-ordination*

This is a particularly complex issue in diversified companies. Wherever the performance of one department or business unit is important for the functioning of another, strategic control is essential. This is particularly critical where there are synergistic relationships between business units and divisions or where there is a high degree of vertical integration.

● *The need for intervention*

Intervention is needed when a strategy is working particularly well and when it is not. In each case adjustments may have to be made to the strategies. Intervention may also be necessary to control the boundaries of strategic activity to prevent managers and subordinates having a totally free choice to do what they please in the name of the corporation. This has special significance for companies in which high levels of decentralisation and empowerment take place.

● *The need for motivation*

As with all targets and objectives, strategic goals are energising and are needed as one mechanism for driving organisations forward.

To these three reasons the authors add two more arguments supporting strategic control.

● *The need for learning*

In today's changing world, organisations must learn from current events and use this knowledge for future action. Strategic choices that have led to superior performance can be extended, and sub-optimal choices adjusted or abandoned. Although 'review' and 'feed-forward' are recognised loops in the 'process' of strategic decision making suggested by classical models, the learning organisation of today accumulates and assimilates learning on a continuous and interactive basis. This is in contrast to the periodic activity inherent in the process model of strategy determination and implementation. Simons (1995) links learning to business strategies and suggests that pressures stimulate innovation and new strategic initiatives.

● *The need for performance and reward systems*

There is a need for measures of performance to feed into reward systems. Outcomes oriented reward systems make decentralisation, delegation and empowerment possible, qualities, which are essential for today's changing environment. Though true for both operational and strategic levels, outcomes oriented control-reward systems are more significant for the latter because of the greater potential organisational distance between the strategic apex, divisional and business unit levels in large diversified companies.

Differences between strategic and operational decision-making

Wright, Pringle and Kroll (1992), suggest that there are four main differences between strategic and operational decisions, as shown in table 1, which is self explanatory:

Table 1
Differences between strategic and operational decisions

Strategic	Operational
Time period lengthy: ranging from a few years to over ten years	Time period one year or less
Measurements quantitative and qualitative	Measurements mainly quantitative
Emphasis internal and external	Emphasis mainly internal
Corrective action is on-going	Corrective action may be taken after budget period has elapsed
From Wright, Pringle and Kroll (1992)	

The balanced scorecard

Robert Kaplan of the Harvard Business School and David Norton of the consultancy Knoll, Norton & Company (1996) have developed the widely adopted balanced scorecard as a means of generating targets and measuring performance. The model makes it possible for firms to go beyond the narrow and problematic measures discussed earlier such as return on investment. They have suggested a variety of indicators based on categories of performance to address different goals and perspectives, requiring a variety of measures, as indicated in table 2.

Table 2
Perspectives and Measures: the balanced scorecard

Goals and perspectives	Measures and indicators
*financial goals	Cash flow, quarterly profits, return on shareholder funds, share price
*consumer perspective	Customer surveys, on-time deliveries, repurchases
*operational goals	Competitive benchmarking, productivity, total quality
*internal perspective	Employee satisfaction surveys, sales growth, number of new products, training days
Source: Kaplan and Norton 1996	

The balanced scorecard represents a significant advance on previous models of measuring performance. The five factor model, however, while building on the balanced scorecard, proposes specific measures which are appropriate for strategic control.

The five factor model

The main thrust of this paper is that existing concepts and practices of strategic control need further devel-

opment. It is suggested that a robust strategic control system should parallel the process by which strategic decisions are made in the first place. The established 'recipe' for strategic decision making is for such decisions to be based on a thorough analysis of the firm's present and predicted future situations. This involves an analysis of the firm's macro environment and industry factors as well as internal capabilities.

Current practice in strategic control primarily involves the monitoring of planned strategic outcomes, mainly some measures of profit performance (Horovitz, 1979, Goold and Quinn 1990). Additional measures put forward by writers in the field, in the main, involve planning premises, the assumptions upon which forecasts are based, related primarily to industry and macro-environmental variables (Lorange 1988, Schreyogg and Steinman 1987, Preble 1992). While these two factors are essential for a good strategic control programme, they are not sufficient because they do not include the fundamentals that represent and underpin a firm's strategic position. These fundamentals include the industry key success factors, competitive advantage factors and strategic capabilities, as depicted in figure 1. Furthermore, strategic goals and planning premises are primarily used and usable only in planned, intended strategies. They have only a limited or no role in emergent strategy. It is accepted widely today that, in the more fluctuating business environments being experienced, emergent strategies are, and ought to be, developed alongside planned strategies (Quinn 1980, Mintzberg 1994, Stacey 2,000). However, if developments in planned strategies can be traced by monitoring strategic goals and planning premises, how can the development and direction of emergent strategies be controlled? The authors of this article suggest that the only way in which strategic leaders can keep tab on the developments and direction of emergent strategies is by ensuring that those

skills and resources upon which the firm's strategic position is built are watched continuously. These are its competitive advantage factors, strategic capabilities and industry key success factors. The remainder of this article is used to explain the five factors, their weaknesses and possible solutions.

● 1. Strategic goals

As mentioned, nearly all strategic planning and control systems contain one or more performance outcomes, which then double up as control measures as well as forming the basis for managerial rewards. Most such outcomes are quantitative, such as return on investment (ROI) and growth targets. The use of strategic goals is right and proper and we advocate their inclusion as the first of our five factors. However, strategic goals alone do not reflect the multidimensional nature of strategy, nor can they be readily used to monitor the underlying processes of strategic development. Furthermore quantitative goals can be misleading and damaging if not used carefully. Below we present some of the problems associated with quantitative and long-term goals and suggest possible solutions.

Sub-optimal Investments

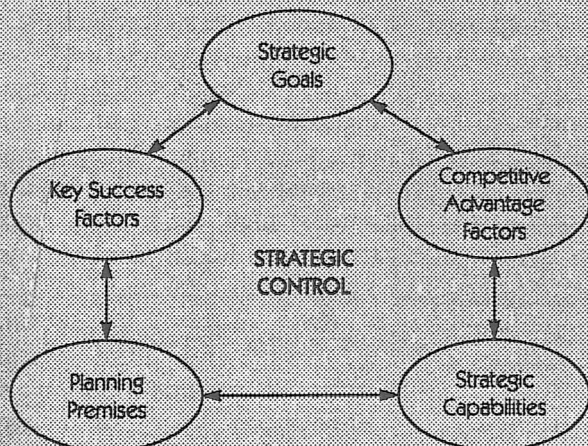
The use of ROI as the only or main control and reward measure for a business may not represent accurately it costs and returns because it does not make allowances for the true cost of capital.

A preferred quantitative measure is Economic Value Added (EVA), first used by the New York consulting company, Stern Stewart & Company (Tully, 1993) and later adopted by many others including the Burton Group, Coca-Cola and Eli Lilly. In its simplest form, it is calculated by deducting the firm's cost of capital from its accounting rate of return. This measure allows rewards for capital as well as the other factors of production and is the nearest single financial goal to maximising shareholder value. The use of this measure prevents adoption of investment projects with returns below the cost of capital.

The long term nature of strategic performance

A further problem with strategic goals is that their achievement may take several years but in the meantime the fundamentals on which basis they were determined may well change. Strategic choices and actions typically take between three and ten years to come to fruition. The long term time horizon of strategic goals means that it would be extremely risky to wait until the end year of a strategic plan to ascertain whether the goals have been achieved. One way of ensuring that problems or variations of any type are picked up well before the maturity of a strategic plan is to adopt a steering or feed forward strategic control

Figure 1
The five factor model of strategic control



system. Another way is to include, in the strategic control system, some process measures such as planning premises, (Preble, 1992), along with the other components of our proposed five factor model. A third way of dealing with this risk is to produce strategic milestones. These are sub-goals along the route of the planning horizon, which would indicate whether intended strategies are materialising in the firm's results. These three methods of ensuring that achievement of long term goals are measured are not mutually exclusive and all can be included in a comprehensive strategic control programme.

Short termism

A third problem associated with ROI type strategic goals is that they are usually used as the basis for executive rewards. However, as discussed, the environmental forces affecting strategic performance have a long term nature whereas most executive pay and bonus systems are based on an annual cycle, thereby encouraging short-termist attitudes and actions such as drastic cuts in research and development expenditure or training in order to boost profits. To overcome this problem, two solutions have been put forward, one by Hrebiniak and Joyce (1984) and one by Hax and Majluf (1984).

Hrebiniak and Joyce suggest that any year's executive rewards should be tied to more than one previous year's performance, with a minimum of two years. Each year's executive rewards would be determined partly by divisional or company performance during the past two or more years.

Hax and Majluf, on the other hand suggest the use of a split income statement in which current and strategic expenditures are separated. Strategic expenditures are those in which the majority of benefits accrue in the longer term. This is illustrated in table 3. Using this method, both current results and rewards are boosted, thereby not discouraging executives from expenditures which have long term results. This internal reporting device was widely adopted by companies in the United States including General Electric and Texas Instruments.

Qualitative nature of goals

It is essential that firms set themselves qualitative as well quantitative strategic goals. Setting such objectives as to be 'the technology leader in our industry', or to create a 'customer oriented company', are equally important and valid, and may be admirable strategic goals but are not easily measured. Exxon have a concept in their planning and control system called 'stewardship', by which they aim to instil a personal sense of ownership in each manager for the achievement of agreed goals. British Airways' now famous mission was to be 'the world's favourite airline'. At Tesco the mission has long been 'quality at low cost'. The problem with qualitative goals, however, is that they are not readily measurable.

To make qualitative goals measurable, proxy indicators can be devised. For 'technology leadership', for example, a combination of patents taken out, percentage of sales derived from new products (younger than x number of years) and comparative R&D spend

can be used. None of these indicators on their own are sufficiently robust or valid, but taken together they may provide a reasonable approximation to measurability. At Exxon concrete but diverse performance targets are set which represent the different dimensions of the 'stewardship' contract. To 'measure' leadership in technology, the following indicators (or more) can be used: number of patents in a year, percentage of sales coming from high technology products, and R&D spend as a percentage of total costs.

● 2. Planning premises

Planning premises are the assumptions upon which forecasts about the future move-

Table 3
Splitting the P&L statement of a business unit between operational and strategic spend

	Conventional Statement		Operational Expenses		Strategic Expenses	
Net sales		100		100		
Less: Variable mfg costs	30		30		-	
Depreciation	20		20		-	
Other fixed mfg costs	10		5		5	
		-		-		
GROSS MARGIN		40		45		
Less: Marketing expenses	15		5		10	
Admin expenses		10		5		5
Research expenses	5		0		5	
		-		-		DIVISION
MARGIN	10					
OPERATING MARGIN				35		
TOTAL STRATEGIC EXPENSES						25
From Hax and Majluf (1984)						

ments of environmental variables are made, such as possible changes in sales, costs, interest rates and so on. A significant difference between strategic and operational controls is the high complexity of strategic decision making due to the multitude of internal and external influences that have to be considered and the uncertainties associated with long term forecasting. To make the process manageable and valid, companies are advised by experts to make their planning premises or forecasting assumptions explicit and include them in strategic control (Lorange 1988, Schreyogg and Steinman 1987, Preble 1992).

Additionally, Argyris (1976), argues that the viability of strategic goals should be examined as well as whether they are being achieved or not. Using the concept of double loop learning, he suggests that the use of premise control would be the main means of achieving this.

The writers of this article suggest that, although the use of planning premises in the strategic control programme is necessary, it is not sufficient. This is because premises and variances in them only signal potential problems or opportunities but do not directly show the sources or reasons. The three additional factors proposed here, however, go to the heart of strategic management and strategic decisions and encompass the fundamentals behind a firm's strategic position.

● 3. Industry key success factors

Key success factors relate to the resources and capabilities that are essential for any firm to possess in order to survive in its industry (Hofer and Schendel 1977, Ohmae 1982, Grant 1998). These skills and resources are different for each industry and are drawn from the particular requirements of customers in that industry and the underlying competitive economics.

For example in the airline industry customers require cheap ticket prices and convenience, that is, availability of flights at convenient times and places, requiring frequent departure and arrival times and punctuality. The skills that can deliver these requirements are good cost management, skilful pricing and inventive scheduling. The economics of the industry dictate possession of large amounts of long term 'fixed' capital investment, and high operating costs including fuel costs, resulting in a high break even point. This characteristic demands that each flight be as full as possible, therefore, sales volume per flight, or load factor and sales value per flight, or yield factor gain paramount significance for each company in the industry, making 'yield management' a further key success factor. Airlines that are unable to perform these key success factors adequately will not be successful and will eventually go out of business or be taken over.

During the 1980s Nokia went strongly into consumer electronics by acquiring several large European manufacturers including Oceanic from France and SEL from Germany. The vision behind this tangential and rapid expansion was that they wanted to become a global player quickly and to benefit from their already substantial capabilities in microelectronics. However, in mid 1990s they had to come out of this business by selling off all their units because they realised that they lacked an important key success factor which was vital to success in that industry, mass production and distribution capabilities. Certainly what experiences they gained in these particular capabilities has served them well in their mobile phone business but they were not sufficient for survival in the appliances business.

In general, companies have to be good at their industries' key success factors to merely survive, let alone prosper. Firms that are weak in their industry's key success factors will eventually fail. On the other hand, companies that are comparatively superior in performing one or more of their industries' key success factors can establish competitive advantage and achieve superior results, provided that their customers value that superiority. There is little need to state that factors that are so vital to the survival of a firm need to be included in its strategic control programme.

● 4. Competitive advantage factors

Competitive advantage factors are the benefits and experiences that customers of a firm receive from its products or services and which they value. Competitive advantage is the basis of a firm's revenues and profits. Rumelt (1991) suggests that key success factors account for the portion of profits that accrue from an industry's economic and competitive dynamics and competitive advantage factors account for the remainder, the bulk of profits. One of the most difficult aspects of management is to ensure that competitive advantage is established, and more importantly, that it is continued (Porter 1985). A strategic leader, therefore, needs to monitor those benefits and experiences that represent his firm's competitive advantage and ensure that they are sustained.

For Benetton, the competitive advantage factors are its colours, availability and comparable prices. They must ensure that these differentiating variables continue to be available, superior and relevant. Therefore 'freshness of design and colour' must be important elements in the list of control measures. For Coca Cola, its competitive advantage are its image, the product's global availability, comparable prices and some say, its distinctive taste. Indicators representing these benefits need to be regularly re-

viewed. For FÉG the Hungarian manufacturer of convector-type heating appliances the competitive advantage lies in its reliable technical standard and in its relatively low prices (Rekettye, Vörös, 1999), For the Hungarian porcelain maker Zsolnay the competitive advantage are its special design, and the value of hand painting (Rekettye, Lipi, 1999)

● 5. Strategic capabilities

Resources and skills that are behind a firm's competitive advantage are its strategic capabilities. Diverse terminology has been used in this respect in recent years. Prahalad and Hamel (1990) have coined the term core competencies, Kay (1993) has called them distinctive capabilities and Stalk et al (1992), strategic capabilities. Although there are some differences of meaning between these terms, the authors believe their meaning to be nearer the latter's, hence its use here.

Competitive advantage and the strategic capabilities that create it, are at the heart of competing, the raison d'être of engaging in business and the nub of strategy as an activity. Therefore, the factors and variables that represent them must be continuously monitored by strategic leaders to ensure that they continue to be strong and valid. Regardless of whether a strategy is consciously worked out and planned, or whether it has emerged in action, the continuation, relevance and development of these factors is vital and needs to be monitored.

For Benetton, the capabilities that underpin its competitive advantage are design, market testing of new designs, advertising, supplier management and establishing franchises. For Coca Cola the capabilities and resources behind its competitive advantage variables are image management, distribution management, scale advantages in both production and distribution, franchising experience and tight control of the drink's concentrate. For FÉG the competitive advantage is backed by strict quality control, committed, loyal, and relatively cheap labour. For Zsolnay the capabilities can be found in the artistic performance of famous designers.

To differentiate the five factors more clearly, the situation in the personal computer industry and two of its more significant players, Dell and Compaq, is presented below.

The personal computer industry, Compaq and Dell computers and the five strategic control factors

Strategic Goals.

Unknown but presumably some ambitious goals along the lines of their superb performances in recent

years (e.g. Net profit margin in 1997: Compaq 7.7%, Dell 6.8%)

Key Success Factors.

The key success factors in the PC business would include:

- Low cost/price
- Standard software
- Compatibility
- Ease of use
- Regular upgrading

Competitive Advantage Factors.

COMPAQ

- Competitive Prices
- Ease of use
- Availability
- Back up services
- Compatibility

DELL Primarily as above with Compaq with the addition of customisation

Distinctive Capabilities.

COMPAQ Mass production

- Distribution network and management
- Inbound and outbound logistics management
- Advertising and promotion
- Fast response to market and technology changes
- Corporate relationship management

DELL Mass customisation

- Direct sales
- Inbound and outbound logistics management (mainly subcontracted)
- Supplier partnerships
- Flexible manufacturing
- Advertising and promotion
- Fast response to market and technology changes

Planning Premises.

These would be particular to the computer industry and macroenvironmental variables such as industry growth rate, industry capacity and utilisation, component prices, distribution costs, (US) interest rates, (US) GDP trends and so on.

Conclusions and implications for managers

The article proposes a framework for managers at the business units or single firm level concerning strategic control. The five factor model argues that:

- Strategic control is a legitimate and important senior management activity.
- It is essential for early detection of divergence from intended strategy and keeping tabs on developments in emergent strategy .
- Strategic control is different from operational control.
- Currently used and recommended strategic control variables, goals and premises, are not suitable for emergent strategy and not sufficient for intended strategy.
- A strategic control programme should contain a more diverse number of variables rather than limited, financial targets in order to represent the complex and dynamic nature of strategy adequately.
- An effective strategic control programme should include the attributes that represent a firm's competitive advantage, the capabilities that underpin the competitive advantage, and industry key success factors as well as strategic goals and performance outcomes.

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