

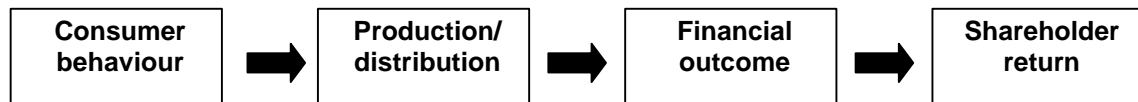
Linking consumer behaviour to shareholder value

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Introduction

Large international fast moving consumer goods companies (FMCGs) typically operate on the basis of a global matrix of product groups and market territories. Notwithstanding this organisational sophistication, the underlying block structure of their operations remains straightforward and can be depicted via the linear chain of activities in figure 1.

Figure 1: Principal FMCG business activities



It is important to recognise that associated with each of these activities is a corresponding internal department. Consumer behaviour is clearly the province of the marketing function; production and distribution are obviously the responsibility of the manufacturing and logistics departments; financial outcomes are calculated by the accountants within the finance department; and the shareholders are typically looked after by the investor relations group.

Figure 1 is hopefully uncontentious; its purpose is to make it clear that the key to improving shareholder value within FMCGs is to understand consumer behaviour, since everything else flows from this process of demand creation. However, the departmental segmentation referred to above creates a major problem in this endeavour. Over the years a variety of specific techniques has been developed to support the planning and control requirements in each of the four activities of figure 1. These techniques are of considerable assistance in improving the understanding of what takes place within each activity, but unfortunately they do not communicate at all easily outside their respective activity's boundaries. In fact if anything, the individual specialist vocabularies that such techniques employ can act as a barrier to understanding the business in its totality.

A brief reference to these specialised vocabularies may be helpful in order to reinforce the point. Research into consumer behaviour is characterised by models of brand value, product switching, overall utility and related concepts. Production and distribution issues, by contrast, occupy a world of unit costs, quality standards, on-time delivery and associated terms. When we consider financial outcomes, the debate shifts to the profit and loss account, cashflow statement and balance sheet. Finally, the investor relations department is concerned with aspects such as price/earnings ratios, weighted average cost of capital, shareholder value added and supporting

concepts. The disparity between these different vocabularies is very considerable; it is almost as if we stepped across an earthquake fault line when we move from one activity to another.

In former years these functional idiosyncrasies were tolerated -- they were regarded as a necessary price to pay as a part of specialism and professionalism in the respective departments. However, the ever-accelerating pace of change in new market distribution channels (such as the Internet) and in new technologies now makes it highly desirable for some of these walls of terminology to be dismantled in favour of a common language.

The most pressing reason for this critical review is that the planning cycle, which formerly took place on an annual basis, has now generally reduced to a three-month period and in some businesses it is even shorter than that. For fast-acting planning of this nature to be effective, it is of the essence that companies are able to visualise the impact on shareholder value of a proposed change in pricing, advertising, brand positioning or other market phenomena, and this calls for a common language across each of the functional activities of figure 1. In this paper we propose a candidate technique for this common language in the form of a simple and accessible approach called *Business Driver Analysis*.

We will explore this technique by starting with the shareholder end of the diagram in figure 1 and working backwards towards consumer behaviour. This is primarily because the logical rules associated with the subsequent or "downstream" activities in figure 1 are generally more standardised and less open to individual interpretation than those which apply to the "upstream" activities, and consequently the reader may find it easier to verify the applicability of Business Driver Analysis in these cases.

However, it is important to emphasise that Business Driver Analysis is simply a framework for the consistent presentation and interpretation of cause and effect relationships; it is not in itself a statement about what these cause and effect relationships should be in any particular case. In other words, although a particular model of consumer behaviour when expressed as a business driver analysis may be contentious, this does not invalidate the technique, in much the same sense that questioning a particular sales forecast does not invalidate the rules of double entry.

Shareholder return

There are clearly many different possible models of wealth creation as seen from the viewpoint of a company's shareholders. In figure 2 we use Business Driver Analysis to depict a simple model of an approach called Shareholder Value Added (SVA), sometimes referred to as Economic Value Added (EVA), which has become popular over the last decade. Although it has been suggested that SVA calculations are so inherently complex that army of consultants is needed on permanent standby, the underlying notion is extremely straightforward. Shareholders could choose to invest their funds in other business opportunities of comparable risk in order to receive the

market rate of return. Economists will rapidly recognise the robust concept of opportunity cost in this formulation and this of course is precisely what is meant by the label "weighted average cost of capital" (WACC). In other words, for a given level of risk we could choose to invest our funds in some other offering which would provide us with a return of (say) 12%. If we are instead to invest in this company, then we expect to receive a premium over this market rate in the form of additional value added.

Figure 2
Basic Shareholder
value model

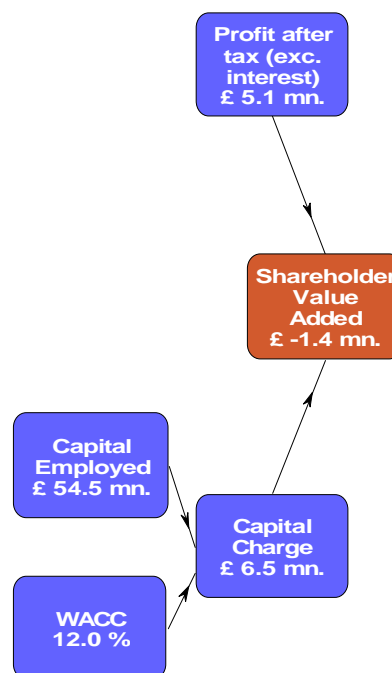


Figure 2 sets out the simple logic involved. By multiplying the WACC by the capital that is invested and employed in this business, we arrived at something called the Capital Charge. This is simply the amount of money that the investors expect as a minimum return from this business -- in other words, a return that exactly matches the opportunity cost of their capital, the WACC. If the return is less than this then the business is destroying value compared to the market rate; conversely if the return is greater than this, then the business is adding shareholder value. In order to calculate this final number, we simply subtract the capital charge from the profit of the business; if the result is positive then we are adding value and if it is negative then we are destroying value.

Purists reading this description may take issue with its simplicity. For example, this present calculation applies only to a single year and does not take account of a stream of losses followed by profits over a project's life cycle. Furthermore, if capital employed includes bank loans as well as shareholders' funds, then we must omit interest charges from our profit figure, otherwise we will be comparing apples with oranges.

However, the point that we wish to make in this paper is that the notation of figure 2 represents a simple and effective way of communicating these issues to the non-technical audience. This may sound like a modest ambition but it is really of major importance when one considers that the whole area of shareholder value analysis has been shrouded in a certain amount of mystery for non-financially qualified line managers ever since the concepts were first published. Exhortations to maximise shareholder value are likely to fall upon stony ground if those listening do not understand what it means.

In passing we note that figure 2 contains three *business drivers* (profit, WACC and capital employed), one *intermediate outcome* (capital charge) and one *final outcome* (shareholder value added). Within the limits of this particular model, it is obvious that the only way in which we can influence shareholder value added is by manipulating one or more of the business drivers. This self-evident observation will become more significant as we explore more detailed models later in this paper.

Financial Outcome

The company's profit and loss account already contains a de facto model of the business drivers which determine profit. An indicative schedule might appear as follows:

	£m
Net Sales Value	141.8
Gross Profit	53.5
(Total Expenses)	(46.5)

Operating Profit	7.1
(Tax Paid)	(2.0)

Profit after Tax & before interest	5.1 =====

Figure 3 translates this into a Business Driver Analysis. This is no more than a pictorial representation of financial arithmetic, but it has the benefit of keeping all of the cause and effect logic on a single diagram.

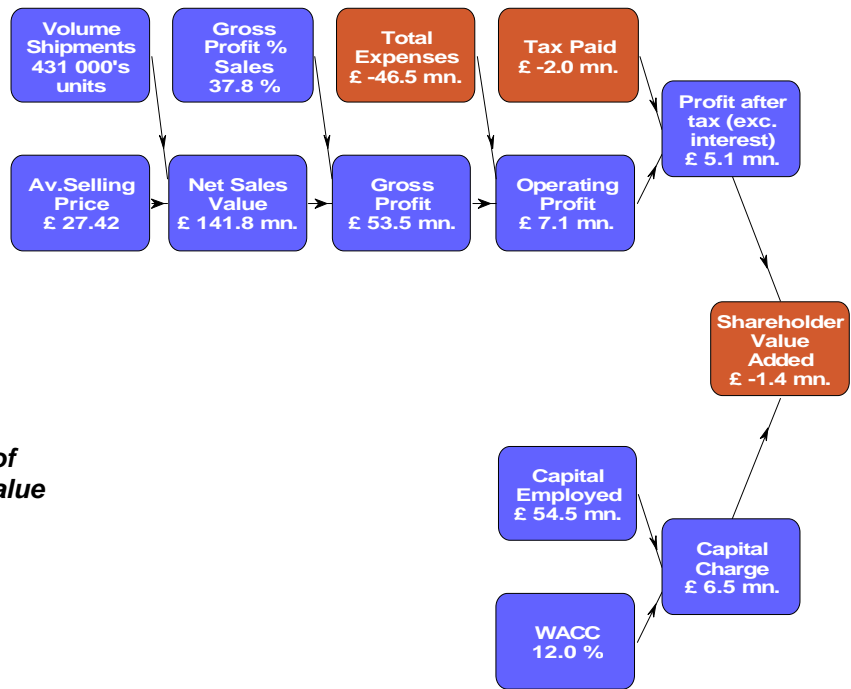


Figure 3
Profit drivers of shareholder value

In a FMCG business the Sales Revenue line can readily be analysed in turn into its constituent drivers of Volume & Average Selling Price (provided the product range is homogenous). The remainder of the top half of figure 3 is therefore equivalent to the standard P&L model, with the aforesaid interest treatment and allowing for some tax simplification.

Turning to the Capital Employed, the classic Balance Sheet layout of working capital and fixed assets would typically appear as follows:

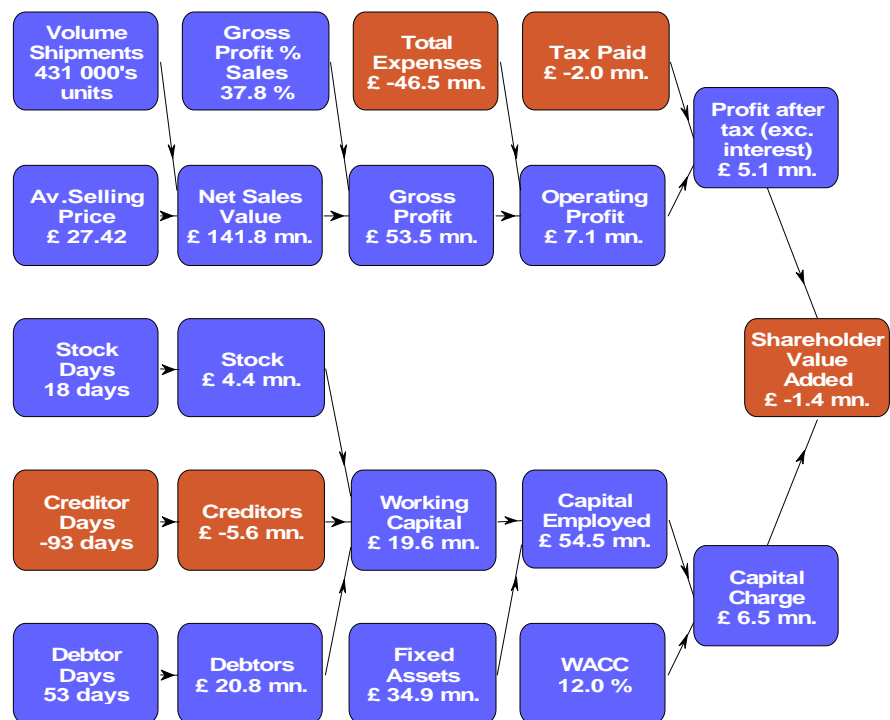
	£m
Stocks	4.4
Debtors	20.8
(Creditors)	(5.6)

Working Capital	19.6
Fixed Assets	34.9

Capital Employed	54.5
	=====

It is interesting to note that, because of accountants' relentless dedication to proving at every opportunity that Working Capital is indeed the total of its constituents, this conventional layout does not easily lend itself to the incorporation of crucial working capital drivers such as Debtor Days. However, a simple extension to the Business Driver Analysis enables us to depict this linkage and thereby complete the financial outcome aspect of the model as follows (figure 4).

Figure 4
Financial
outcomes &
shareholder
value model



In the interests of simplicity in this example, Fixed Assets are treated as a business driver in their own right, although clearly in a more comprehensive model the profile of Capital Expenditure would be analysed in more detail. This enables us to focus on the three drivers of working capital, Stock, Debtors and Creditors (in US financial parlance these are Inventories, Accounts Receivable and Accounts Payable).

The working capital drivers are reported in days because they measure how long it takes for the relevant activity to be performed (how long customers take to pay our invoices etc.). These are then multiplied by the appropriate level of financial activity, such as sales per day, so as to convert the delay into the appropriate outstanding financial balance. Strictly speaking we should therefore have included an arrow of causation from sales to debtors to identify the level of activity as an additional driver, but it is sometimes necessary to compromise between model fidelity and visual clarity.

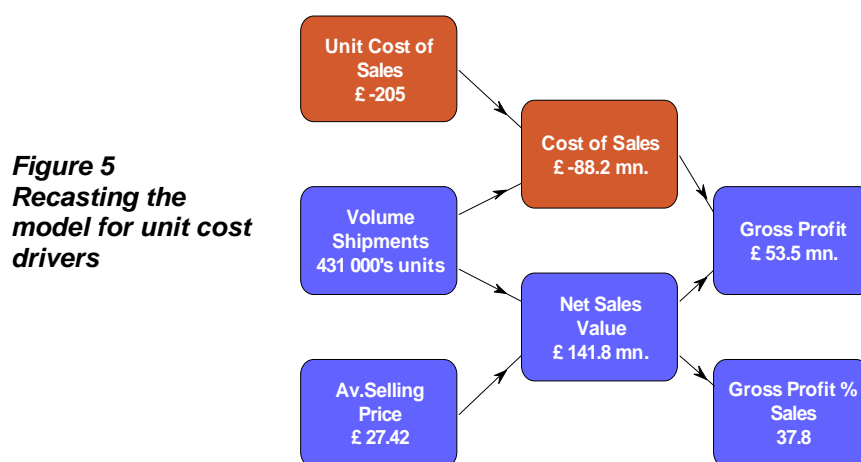
By this stage our Business Driver Analysis represents a surprisingly versatile and flexible model of the financial and shareholder aspects of a FMCG business. Despite its apparent simplicity, the explicit depiction of cause and effect linkage provides a reliable guide for the non-financially trained manager in identifying the business variables that needs to be controlled if a satisfactory final outcome is to be achieved.

Production/Distribution

Conventional presentations of information about these crucial business areas have long been somewhat inadequate in comparison with the plethora of accounting detail that frequently surrounds other areas such as the balance sheet. In order to extend

figure 4 to accommodate these aspects, we need to bear in mind that the production chain is essentially trying to drive down the unit cost of sales, while an effective distribution system attempts to reduce days of finished goods stock and unit cost of delivery for a given level of distribution expenditure. Both the production and the distribution infrastructure obviously rely upon appropriate capital expenditure to create and maintain an effective fixed asset base.

In the interests of brevity we will not attempt to do justice to these two areas in this present paper. However, figure 5 below recasts some of the financial representations of figure 4 to provide a more realistic account of the impact of unit cost reductions on gross profit. Clearly the same notation can be used to develop a more extensive linkage which takes into account other salient production and distribution factors.



Consumer Behaviour

There are many different hypotheses about what causes consumers to buy companies' products. In this paper our interests are not so much in attempting to demonstrate that any one model of consumer behaviour is necessarily better than another, since clearly this will be a function of specific research in relation to particular consumer lines. What we seek to do instead is to demonstrate that the simple Business Driver Analysis framework developed to date can be readily extended to this fundamentally important area of business activity.

In support of this point we evaluate two quite different models of consumer behaviour. The first is centred around a market share model in which the business logic runs as follows. The orders we receive for our products can be regarded as being driven by two factors: first, the total market volume demand for ours and all comparable products, including those of our competitors, and second, our own percentage market share. This enables us to distinguish between the drop in demand for the sector as a whole (e.g. a nation-wide switch from analogue to digital technology in consumer video products) as opposed to the drop in demand for our own brand (perhaps because of uncompetitive price or functionality).

Total market volume itself may be driven by long term technical trends and national demographics, so if our model has a relatively short planning horizon such as 2-3

years, we may not need to incorporate these factors explicitly. However, our own market share may well vary quite dramatically over the period and consequently we need to formulate a clear view of what affects it. Although several sophisticated mathematical techniques are available for this purpose, such as multivariate analysis or Bayesian statistics, a reasonable starting point is to assemble the appropriate management team for an executive workshop whose specific objective is the formulation of this cause and effect sequence.

In such a workshop a typical set of candidates for the business drivers of market share might be price, marketing expenditure, customer satisfaction and competitor strength. Customer satisfaction is then in turn perhaps driven by service quality and product quality, and at this point the Human Relations director makes a case for employee motivation to be taken explicitly into account. The resulting Business Driver Analysis is drawn up in the form of figure 6.

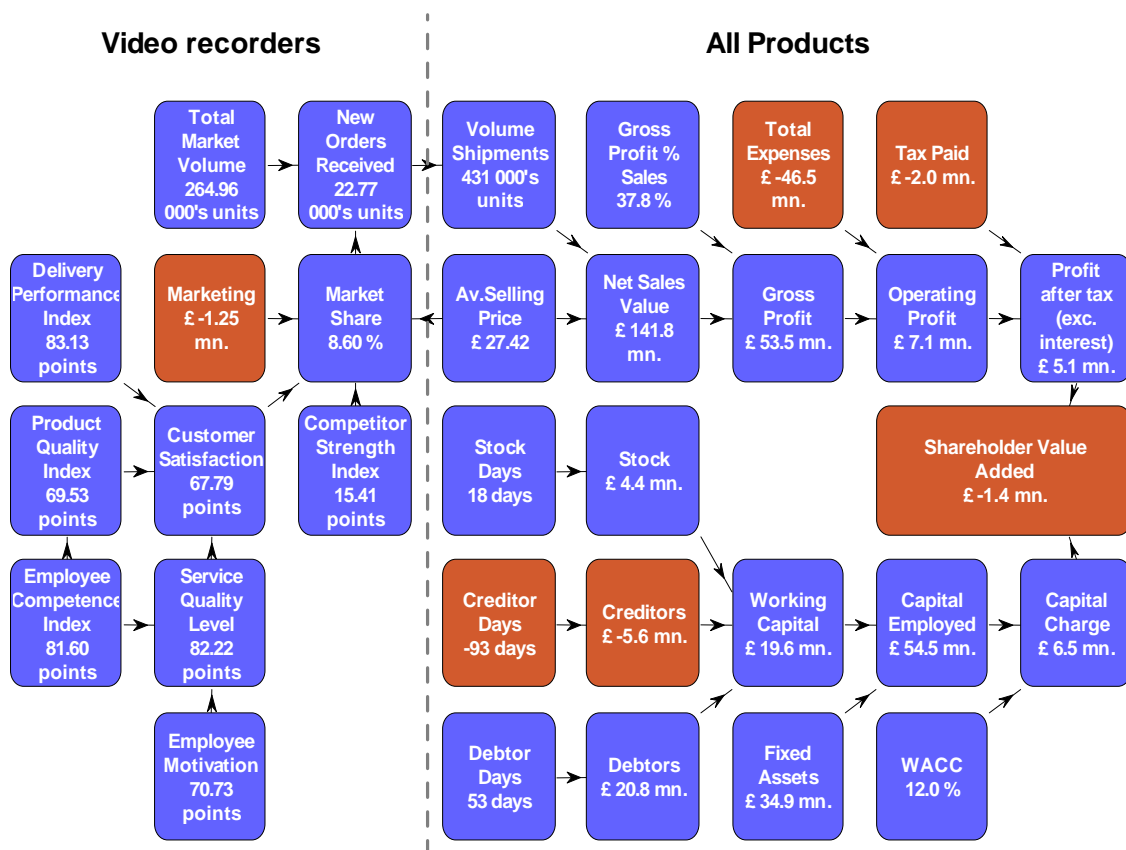


Figure 6: Linking consumer behaviour to shareholder value

The second model of consumer behaviour that we consider is a much more sophisticated candidate which has the benefit of considerable empirical verification. In his paper "A consumer-orientated framework of brand equity and loyalty" (International Journal of Market Research Vol 42 Issue 1 [2000]), Rory Morgan, Research Director of the WPP/Kantar subsidiary Research International, sets out an extensively tested model of brand equity and consumer loyalty. It is worth pointing out here that Research International is one of the largest market research companies in the world and was itself originally spun off from Unilever.

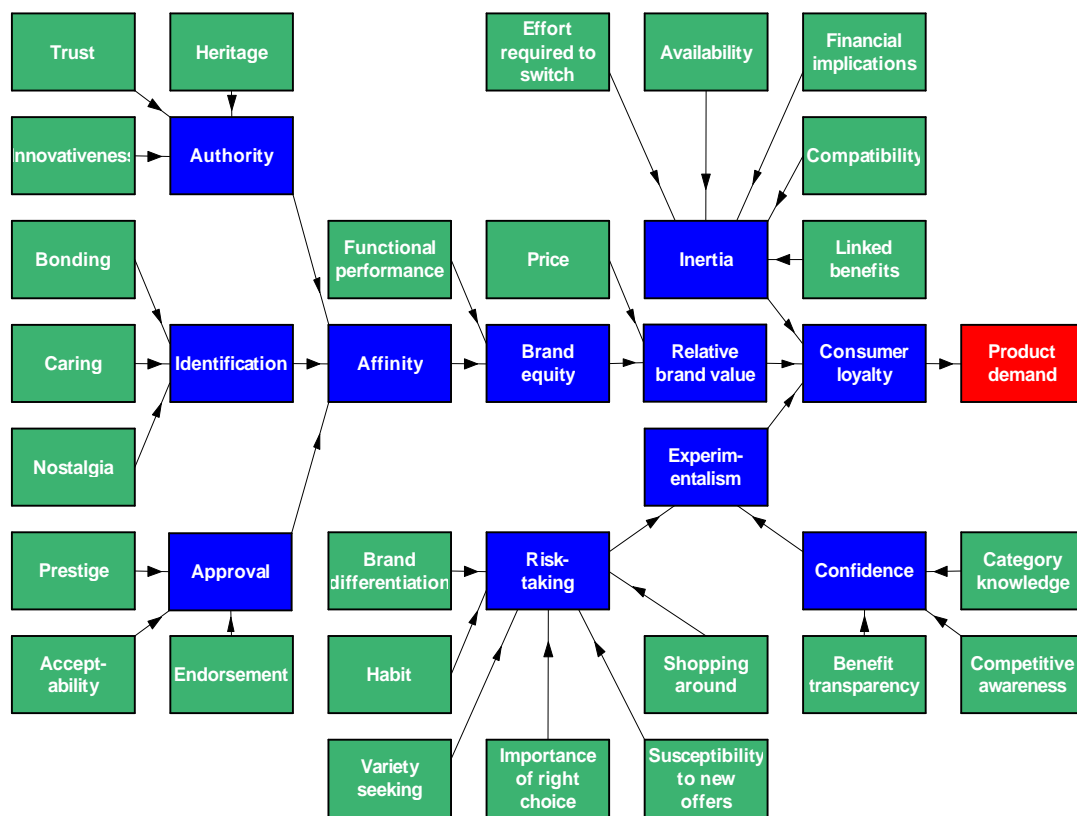


Figure 7: The Research International Equity Engine and Loyalty Driver models, expressed as a Business Driver Analysis.

Research International and other market research companies in the field have developed sophisticated proprietary sampling and correlation techniques to enable these models to be calibrated, so that advertising and brand positioning activities can be carried out effectively. But what is interesting here is that this form of Consumer Behaviour model could clearly be aligned to our production activity model, financial outcome activity model and shareholder value activity model in such a way as to provide an overall "soup-to-nuts" planning capability. This aspiration has been described as the search for a "holistic" view of the corporation and it clearly has the potential to make a major contribution to both the visualisation and the optimisation of company performance.

Concluding remarks

Is the Business Driver Analysis technique simply a notational convention that facilitates a consistent graphic style and rendition of cause-and-effect relationships, or is it something deeper? In this concluding paragraph we look at the implications of the Business Driver Analysis approach for the implementation of "live" management information capabilities.

Several years of practical experience in the implementation of Business Driver Analysis methodology indicates that there are five distinct benefits that can arise from its application:

- ?? Educational
- ?? Presentational
- ?? Diagnostic
- ?? Menus
- ?? Scenario Evaluation

The educational benefits are self-evident. Corporate specialisation almost guarantees that few managers or staff support personnel have widespread experience in all the areas of figure 1. Furthermore, employee recruitment and replacement activity these days takes place at a sufficiently rapid rate as to justify the formalisation of the Business Driver Analysis approach for the purposes of staff training alone.

The presentational opportunity involves using the labels within the Business Driver Analysis to depict actual values, as we have done in most of the previous diagrams. This enables the reader to comprehend the arithmetical logic that lies behind the relationships which are depicted schematically by the arrows. It also permits the reader to assess the level of performance and to form a preliminary view about any problem areas.

The diagnostic opportunity involves the use of colour-coded labels within the Business Driver Analysis to convey information about the appropriate business performance itself. The preceding examples simply used blue to refer to positive numbers and red to refer to negatives, but other conventions are also possible. These generally involve a mapping of performance onto label colour and in practice various different schemes are possible. The perimeter of the label can be distinguished from its interior and a gradation of hues can also be used to depict percentages of deviation from target. In this way it becomes possible to trace back visually the colour-coded labels which calibrate those causes that gave rise to an unacceptable outcome.

For example, if shareholder value is in red while the capital charge is blue and profit is red, it is obvious that the problem lies in the profit area not in the capital charge area. The problem with profit might in turn be traced back to a red label marked "price". This technique greatly simplifies the steps involved in operational or financial diagnosis and has even led one irreverent colleague to refer to the process as the "Fisher-Price" approach to multinational performance management.

The fourth benefit that has been encountered in the practical application of Business Driver Analysis is the use of the individual labels as "menus" which can be clicked on when the diagrams are presented on-screen in order to call up some appropriate action. An obvious candidate here is to summon a graph of the underlying trend and current forecast of this data item.

Finally, the Business Driver Analysis technique realises its full potential when it is embodied as the energising model of a scenario evaluation capability. Provided adequate data values are available to calibrate the model appropriately, it becomes possible to apply "what-if" questions to the business drivers and to explore immediately their effect on intermediate and final outcomes. This facilitates a mature management dialogue about questions such as:

"What would be the effect on profit of a 10% increase in our advertising expenditure?"

or more interestingly:

"If we could transform 20% of our high inertia customers from low relative brand value ("unhappy prisoners") to high value ("secure brand fans"), what would be the effect on shareholder value?"

Acknowledgements

The Business Driver Dialogue technique has benefited from numerous discussions with many executives in a wide variety of large corporations. I am particularly indebted to Jim Alles of ICI (National Starch Corporation) in New Jersey, who has had the confidence to pioneer the approach on a "live" basis with his management team on a number of occasions, and also to Andrew Pople, Managing Director of Abbey National UK Retail, whose management team deployed the technique with great flair during a two-day workshop entitled "What drives our business success?"

The development of the approach was also influenced by the methodology called "Systems Dynamics" that was originally devised by J. W. Forrester of M. I. T., although the present notational conventions are different and perhaps less demanding on the reader.

Figures 2-7 are screen shots taken directly from a computer program called Empower 2000 which links Business Driver Analyses to their underlying data to provide the five capabilities described in the "Concluding Remarks" paragraph above. I would like to express my admiration for the programming ingenuity of Tony Kirke and the other members of the Metapraxis Technology Solutions Division who have created this software, which is described in more detail at the www.metapraxis.com web site.

Finally I would like to pay tribute to a remarkable computer program called "Dragon NaturallySpeaking". It arrived in the post yesterday for the princely sum of £40 and after half an hour of training I found myself able to dictate the entirety of this article into a microphone for automatic computerised transcription. Its recognition accuracy was in the region of 99% and certainly better than that of the first secretary who worked for me in those halcyon days before we all had to type our articles by ourselves. It is an uncanny feeling to realise that the computer keyboard is now destined to emulate the dodo.