AN INVESTIGATION OF THE CORPORATE PLANNING CONCEPT IN A SOUTH AFRICAN MOTOR MANUFACTURING UNDERTAKING

Thesis

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SECTION ONE TERMS OF REFERENCE AND INTRODUCTION

1.1 Terms Of Reference

The intention of this dissertation is to attempt to project the theoretical concept of Corporate (or Long-Range) Planning into the reality of one of South Africa's major motor vehicle manufacturing company's task environment.

It is a sad fact that there are no universally - applicable practical planning "laws" (as are present within the discipline of, say, Physics) amidst the ever-changing hurly-burly world of modern commerce and industry. Accordingly, there are very real distinctions between distilled Corporate Planning theory, as it is propounded in the many available books and articles, and Corporate Planning practice as actually implemented. This is true largely by virtue of the fact that in the same way as persons differ in their physical and mental make-up, so too do individual companies; even to the extent of acquiring a distinct corporate "personality" of their own.

In this light, therefore, we shall attempt to illustrate, against the background of the "ideal" Corporate Planning process, some of the motives, constraints and opportunities surrounding the planning efforts of one of this country's most exciting, troubled, complex, inhibited, controlled and potentially prosperous industries.

This work will, firstly, seek to establish, in broad terms, what is meant by "Corporate Planning." We will indicate both its purpose and some of its more salient features. A deliberate effort will be made to avoid

moving away from the overall strategic planning issues down towards intensely detailed tactical planning considerations. The rationale behind this intention is that tactical issues are, by their very nature, highly individualistic. This means that at a tactical level even companies within the same industry may be vastly different from one another in the manner in which they operate on a daily basis. As a consequence no broad picture of generally applicable planning yardsticks may be readily extracted.

By devoting our attention at a higher plane focus is automatically directed upon the two planning concerns which are universally applicable in both the theoretical and practical worlds. In essence, the statement that a commercial enterprise should make a profit holds good for both the text-book and for the managing director of Unilever whilst the means by which that profit is generated are common to, and do not differ markedly between, Anglo-American, General Motors and the corner café.

To recapitulate, our first step will be to present the overall theory of Corporate Planning with emphasis upon the joint roles of profit and strategy development.

That done, the second element of this work will be introduced, namely to take a local motor manufacturer and to present, in fair detail, an overview of its Corporate Planning activities whilst indicating the opportunities and constraints which surround its operations.

In overall terms, it is hoped to inculcate a sense of "building-up" to this latter concern. The first stage, by which Corporate Planning essentials are filled in, merely serves to set-the-scene for the second, practically - orientated analysis.

1.2 Introduction

The importance of the motor industry rests in its being a major economic and social force within the past, present and future South African societies. In economic terms, it is the direct employer of upwards of 36 000 persons within the purely assembly/manufacturing field. Employment levels expand to roughly 180 000 persons if all dealer sales and service networks are included. Moreover, the manufacturer featured as the subject of this paper alone placed into the economy of the country a sum well in excess of R70 000 000 during 1977 in respect of materials purchased.

Although, as an industry, motor manufacture is of no mean size, it is the composition and structure of the industry which gives cause for concern. The total motor industry is characterized by a marked degree of de-concentration, duplication of investment and over-competition relative to the total size of the South African new vehicle market. In overseas markets having sales volumes many times greater than that of South Africa, industry competition is concentrated in the hands of a relatively limited number of major manufacturers. For example, the United Kingdom 1977 new car market totalled 1 323 524 units * sold by 42 manufacturer/importers (of whom only Ford, Leyland and Vauxhall (GM) attained the lion's share). By way of contrast, the total South African 1977 new car market was but 166 764 units** marketed by 12 manufacturers.

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* Society of Motor Manufacturers and Traders - January 1978.

** NAAMSA - January 1978.

Hence the raw average sales for each British company equals 31 441 units whilst that for South Africa is but 13 897.+

Structurally, the South African car market may be divided into the following classes:

	Percent 1977 Market Penetration	
High Volume Popular		
Ford	16.6	
Volkswagen	15.0	
Datsun	11.5	
Sigma	11.1	
General Motors	10.7	64.9
Medium Volume Popular		
Peugeot/Citroen	7.3	
Toyota/Renault	8.5	15.8
Low Volume Popular		
Leyland	4.6	
Fiat	4.1	
Alfa-Romeo	2.3	11.0
High Volume Specialty		
Mercedes-Benz	4.6	
BMW	3.7	8.3
		100.0

+ At the time of writing the merger of Sigma with Peugeot/Citroen and Leyland has just been announced which effectively reduces the number of local companies to 8. The impact this will have upon the industry structure is currently unknown largely by virtue of the fact that Sigma has yet to announce what its future product lines will be.

Accordingly, five companies: Ford, Volkswagen, Datsun, Sigma and General Motors compete within the top - volume end of the market accounting, as they did, for no less than 64.9% of the 1977 industry sales. To a lesser degree Peugeot/Citroen and Toyota/Renault compete within the medium volume segment whilst at the lowest popular - car volume end of the market Leyland, Fiat and Alfa - Romeo lead a twilight existence. In passing, two points are worth noticing. Firstly, there is a strong pull for the medium-volume producers to move into the upper end of the market whilst, simultaneously, they are conscious of the fact that it is an easy slip downwards into the lowest volume class. Moreover, both medium-sized producers have been brought about as a result of mergers whilst Sigma was also the result of Chrysler and Mazda merging. In addition, the future of the lower-volume sellers appears gloomy, in particular Leyland, a company whose plant capacity is such as to place it, potentially, within the high volume end of the market. A second point of note is that an outright withdrawal from the car market has only come from Volvo (during 1976). A common argument is that there are too many manufacturers within the local market. Viewing the above figures in an objective light it appears likely that any withdrawal is only likely to come from the likes of Leyland, Fiat and Alfa-Romeo - who, in total comprised but 10.9% of the market during 1977. Thus even if all three were to withdraw the resultant gain in industry effectiveness and reduction in industry costs cannot be expected to be great.

Even so, in terms of pure economics it may well be true to say that the local motor industry is a giant but a rather inefficient one in the sense that a markedly high degree of duplicated effort and investment exists. This is at no time more obvious than during periods of slack retail sales

and swollen inventories when resultant production cut-backs give rise to an under-utilization of industry plant and, in a broader context, a less-than-optional application of the nation's economic resources. As one industry spokesman expressed it:

"It is difficult to see how anyone in the market today is really making any money. Certainly on our cars side we're aiming to break-even across the range, even making a loss on the lower-price lines. Where we do score is on our high-markup truck and spare parts operations. These last two at least keep our heads above water." *

(Appendix I details, for 1977, the sales volume performance and market penetration of each South African motor manufacturer within the passenger car, light commercial and heavy commercial vehicle markets - in addition to further industry background statistics.)

As a social force, the industry and its product's impact may be viewed not so much in terms of the very fact of its and their existence or economic composition but, instead, in terms of that unique sociological and psychological niche occupied by the motor vehicle within a modern, developing society.

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*Conversation with industry spokesman, Port Elizabeth 1977.

LICENCED MOTOR VEHICLES BY POPULATION GROUP - AS AT JUNE 30, 1977

	CARS		MINI BUSES		BUSES		COM. VEHICLES		TOTAL	
GROUP	UNITS	%	UNITS	%	UNITS	%	UNITS	%	UNITS	%
White	1622262	54.3	32964	1.1	5222	0.2	447469	14.8	2107917	70.4
Coloured	96264	3.2	2400	0.1	644	0.0*	26828	0.9	126136	4.3
Asian	78694	2.6	2159	0.1	983	0.0*	22795	0.8	104631	3.6
Black	160725	5.4	10372	0.3	1994	0.1	105441	3.5	278532	9.3
N/A	190036	6.3	8545	0.3	9437	0.3	166120	5.5	374138	12.4
TOTAL	1717981	71.8	56440	1.9	18280	0.8	768653	25.5	2991354	100.0

* Less than 0.1%.

PER CAPITA MOTOR VEHICLE OWNERSHIP - 1977

GROUP	('000) (1) POPULATION	('000) (2) VEHICLE OWNERSHIP	1 ÷ 2 PER CAPITA OWNERSHIP
White	4421	2108	2.09
Coloured	2498	126	19.82
Asian	763	105	7.29
Black	19156	279	68.65
TOTAL	26838	2618	

Sources:
- Depart. of Statistics, Statistical News Release, Statistics of Motor and Other Vehicles, February 9, 1978.
- Prof. J.L. Sadie - Projection of the South African Population 1970 - 2020.

During mid-1977 there was an estimated total of slightly under 3 million registered motor vehicles (excluding tractors, motor-cycles and government vehicles). Of these, no less than 7 in every 10 were owned by Whites whilst roughly 1 in every 10 were in the hands of Blacks. Not surprisingly passenger-car ownership comprises the bulk of all classes of motor vehicles - here 71.8% of all motor vehicles were cars followed by commercial vehicles at 25.7%.

Expressed in per capita terms, again in 1977, there was approximately one motor vehicle between every 2 Europeans, a ratio followed by that of Asians where one motor vehicle is shared by 7 persons. Moreover, roughly 20 Coloureds shared each licenced vehicle whilst there was one motor vehicle to every 69 Blacks.

Accordingly, it is possible to state that the usage and ownership of motor vehicles is commonplace within South Africa. This, in turn, gives rise to the further ramifications of; firstly, the existence of a well-developed motor transport infrastructure (which would include roads, traffic management, sales and service facilities and the like). Secondly, that there exists free scope (within the limitations set by aspiration and economic status) for the individual to have a free rein to enjoy the psychological stimulation and personal satisfaction that motor vehicle ownership both implies and, indeed, engenders within this society. The freedom unleashed by vehicle ownership is amply described in the following quotation.

> "And unlike any earlier age, the common man can and does move around and is no longer rooted to the small valley of his birth. The motor vehicle has given almost everyone the power of mobility, and with physical ability to move around comes a new mental outlook and a new social mobility. The technological revolution on the American farm began in earnest when the farmer acquired wheels; he immediately became mobile, too, in his mental habits and accessible to new ideas and techniques. The beginning of the Negro drive for civil rights in the American South came with the used car. Behind the wheel of a Model T a Negro was as powerful as any white man, and his equal..... He has tasted the new power of mobility, a greater power than the mightiest kings of yesterday could imagine. It is no

accident that young people everywhere dream of a car of their own; four-wheeled mobility is a true symbol of freedom from the restraints of traditional authority." *

There can be no argument about the simple fact that motor road transport, be it of a public or private class, constitutes a necessity within any economically developed society. Moreover, it may be stated that economic development, of the type sought by South Africa cannot occur in the absence of a motor industry whilst, conversely, a motor industry cannot exist within a stagnant, retrogressive society lacking a motor transport infrastructure.

Socially, the freedom of movement engendered by motor transport creates a sense of independence and individuality amongst, particularly, private owners. This makes itself felt in terms of the type or make of cars sought, the attributes sought from particular models and the usage patterns to which the selected make and model of vehicle are put. In short, the car becomes, for many, an extension of self.

Given an understanding of the classic Marketing Concept, it is, in pure marketing terms, the individual car-buyer's personality traits, proposed usage and economic status which come together to dictate, ultimately, the type of car products which should be on offer in the market and, which in turn, determine the actual manufacturers who shall comprise the society's motor industry.

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* P.F. Drucker - Technology, Management and Society
Pan Books, London, 1972 pp 85-86

Technologically, the motor industry within South Africa is entirely imported in that, since its inception as an industry in the early years of this century, technical development has remained in the hands of overseas countries. The fact that South Africa has made no significant technical contribution to the industry evolves from its relatively small size in relation to the North American, Japanese and European markets. This small size naturally limits both available research funds and technical expertise. Even so, South Africa has an established history of successfully adopting overseas technology to local operating conditions: suspension, drive-train, and cooling systems being obvious examples. Moreover, there is no logical reason why this technology importation and modification should not continue. Of note, however, is the eventual promise of such development (as has been the case in the recent past of manufacturers in South America and Australasia) by establishing embryonic product development operations.

Finally, in terms of ownership structure there is a clear division between those manufacturers having overseas parents and those who are wholly South African. (Ownership and control notwithstanding, anomalously all remain dependent upon overseas parents or suppliers as sources of product and technology.) Only three of the eleven established local manufactures are entirely South African owned; viz, Datsun, Toyota/Renault and Sigma. The balance all form part of multi-national chains based, in the main, in Europe. Only two such manufacturers - Ford and General Motors - are American-owned. Of note is the fact that the prime utilizers of Japanese product/technology; Sigma, Datsun and Toyota are all locally-owned.

SOURCE OF PRODUCT/TECHNOLOGY BY MANUFACTURER

PASSENGER CARS

MANUFACTURER	Germany	Italy	Japan	U.K.	France	Australia
Alfa-Romeo	-	1	-	-	-	-
BMW	1	-	-	-	-	-
Datsun	-	-	1	-	-	-
Ford	1	-	-	1	-	-
Fiat	-	1	-	-	-	-
General Motors	1	-	-	1	-	-
Leyland	-	-	-	1	-	-
Mercedes-Benz	1	-	-	-	-	-
Peugeot/Citroen	-	-	-	-	1	-
Sigma *	-	-	1	-	-	1
Toyota/Renault	-	-	1	-	1	-
Total	4	2	3	3	2	1

* Pre-merger

Thus it would appear that German product/technology is, at this time, the most well established. However, in time, the above array may be expected to contract in response to the elements of the Local Content Programme. Rather than tool-up to produce unique, particularly mechanical, components there may come about a greater commonality between manufacturers. Already, for example, Peugeot is supplying a competitor with diesel engines, the same company was a large-scale shipper of engines to Chrysler for fitment in the Hillman Vogue and Avenger car-lines whilst in addition, Datsun, at its Steelmobile plant, currently produces body-pressings for Leyland, Ford, Sigma, Peugeot/Citroen and Alfa-Romeo as well as supplying its own needs.

Summarizing the above, it should be clear that, in South Africa, the motor industry possesses the following pertinent characteristics:

(1) It is a consequence of and a key factor in the nation's economic development.

(2) The exact structure of the industry will be shaped by the tempo and direction of the society's economic development and that society's particular motoring requirements.

(3) The industry is currently an economically inefficient, loss-making unit whose target markets are too small to support, in profit, the present number of manufacturers.

(4) Ownership and control of local motor companies is clearly divided into those having overseas parents and those who are wholly South African but whose products and technology remain fastened to overseas sources.

(5) The basic underlying technology and the bulk of on-going technical research has been and continues to be imported.

Accordingly, therefore, Corporate Planning, as practised by any South African motor manufacturer, must seek to come to grips with each of the five industry/market elements above.

A sixth point which should be brought to light is the relative ease and facility by which it is possible for the Government to regulate and control

the motor industry. The extreme sensitivity of the industry to such intervention and manipulation is not surprising in view of points (1) and (2) on the previous page. (This is not to say that South Africa is unique in this regard, General Motors in the United States has gone on record as stating that an average of R174 * was charged to every car and truck sold in that country during 1977 to cover the research, development and administrative expenses of meeting government pollution and safety regulations - a staggeringly high amount even allowing for natural partisan exaggeration.) In other words, depending upon Government social and economic policy, the motor industry is a useful instrument by and through which socio-economic change may be fostered. By, for example, encouraging the development of a local component industry imports may be reduced, consumer demand may be raised or dampened by amending hire-purchase minimum deposit and maximum pay-back periods whilst overseas local investment may be turned on or off by raising and lowering the volume and timing of dividend transfers.

Indirectly, the industry is influenced by other Government controls of which restricted petrol sales hours, speed restrictions, import deposits and limitations upon local borrowing are but merely a few. Later in this paper, when we come to discuss a specific manufacturer, we shall seek to illustrate how what have been termed "diplomatic" controls are used by the Government to pressurize the industry in certain directions in the absence of otherwise formal legislation.

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* Reported in Time Magazine, June 5, 1978 pp 45

The type of motor manufacturer we shall discuss is a highly complex organization having an overseas parent exercising rigid control over local actions on a wide-ranging front. More specifically, the overall question of its organization structure and control is divisible into four quite distinct sales and marketing divisions whose products share little commonality, viz; passenger cars/light trucks, heavy trucks, parts and tractors. In addition, four specialized service divisions exist, these being; a company finance/credit house, a government and fleet sales department, a dealer management/financial consultancy department and a dealer workshop service department. Each of the above may be cast in the role of being engaged in customer-orientated activities (as opposed to purely company/product focused operations such as purchasing or manufacturing) and, accordingly, may each rightly demand a quite unique long-term strategy tailored to their particular customer-class.

External to the actual manufacturing company, per se, is the fact that no local manufacturer (with one small exception) acts as both manufacturer and distributor of its products. The distribution task is undertaken by a varying number of franchised dealers who, themselves, range in size from establishments quoted upon the Stock Exchange (e.g. William Hunt, Robb's, McCarthy, Eriksens) down to financially unstable sole proprietorships operating in the rural areas of South West Africa. As may be expected, the welfare and profit-status of the manufacturer is in no small way a function of that of his dealer network. The planning and management expertise of the manufacturer and his top two or three (typically urban-based) franchise-holders tends to fall off precipitiously the moment the smaller, less sophisticated, dealers are considered. (Small,

typically rural , dealers present a major headache to local manufacturers, on the one hand they, in total, may contribute as much as fifty percent to retail volume yet, individually, display no evidence of even basic management skills. (For instance one new franchise-holder evinced no knowledge of simple book-keeping and required a week of intensive coaching to establish and maintain a set of books.)

Hence it is by no means unusual to attempt to reconcile Corporate Planning activities at a manufacturer level with these of probably a hundred or more franchise-holders. Most large dealers are either subsidiaries of parent companies quite divorced from the motor industry (and are, accordingly, subject to Corporate Strategy demands remote from those of the manufacturer) or are capable of preparing and adhering to their own Corporate Plans whose objectives and operating goals may be at distinct odds to what the manufacturer would ideally like to see. Further down the scale, of course, individual small dealers generally tend to plan no further ahead than one to six months.

If it is accepted that a company's product or service represents the major means by and through which environmental change is firstly communicated to the business and secondly through which the company seeks to create a positive impression upon its environment then it should be clear that motor manufacturers experience great difficulty in planning for both its markets viz; its dealer network and its ultimate final customer.

To conclude, although the specific company featured within this paper will remain unnamed, the Corporate Planning task for any local motor company will approximate to that of the subject manufacturer. Indeed, if the affects

of its being subject to an overseas parent are discounted then a reasonably close-focused illustration may be constructed of the Corporate Planning actions of its wholly - South African competitors such as Sigma, Toyota or Datsun.

SECTION TWO THE CORPORATE PLANNING PROCESS

2.1 Purpose

The purpose of this section is to highlight some of the salient features of Corporate Planning thereby permitting the process, as a theoretical concept, to be compared and contrasted with practical planning practice as performed by our selected manufacturer.

2.2 Definition And Composition

Corporate Planning may be regarded as pertaining to business firms having, as their overall objective, the generation of profit.

The role of profits within Corporate Planning will be given paramount importance in the following pages. This stance vis-a-vis planning does not conform with that adopted by a number of distinguished authors, who have diluted the key role enjoyed by the profit motive. Warren, * for example, considers planning as an end in itself by making the company's operations more efficient and more broadly-based in respect of time.

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*E.K. Warren - Long-Range Planning - The Executive Viewpoint
Prentice - Hall, 1966

"A process directed toward making today's decisions with tomorrow in mind and a means of preparing for future decisions so that they may be made rapidly, economically, and with as little disruption to the business as possible." *

Hussey, one of Britain's foremost Corporate Planning practitioners, describes the process in more pointed and well-rounded terms although, again, the role of profit is not given the exposure it deserves:

"Corporate long range planning ..... is not a technique. It is a complete way of running a business. Under it, the future implications of every decision are evaluated in advance of implementation. Standards of performance are set up beyond the time horizon of the annual budget. The company clearly defines what it is trying to achieve. A continued study is made of the environment in which the company operates so that the changing patterns are seen in advance and incorporated into the company's decision process ..... Corporate Planning is a way of keeping the company's eyes open." +

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* Warren, op cit, pp 18.

+ D.E. Hussey, Introducing Corporate Planning
Pergamon Press, Oxford, 1971 pp 5-6

A definition which highlights both Warren's and Hussey's views in addition to placing the part played by profit within its justified context is ventured as follows:

> Corporate or Long-Range Planning is a methodical, systematic and disciplined process whereby a company's long-term profit objective is identified, goals determined and strategies generated to attain those goals which take into account probable changes in the task environment whilst the whole is made actionable via meaningful feedback of results.

Objectively dissecting the above definition, it is possible to isolate the key components of Corporate Planning.

1. Corporate Planning is profit orientated.
2. Corporate Planning is concerned with the long-term future of the business.
3. Corporate Planning is a systematic process.
4. Corporate Planning recognizes the opportunistic and threatening nature of the corporation's environment.
5. Corporate Planning is concerned with the development of strategies.
6. Corporate Planning includes a feedback control system.

In its very essence the rationale for any corporation to plan beyond the near-term future rests in the concept of an established business having

the desire and potential ability to survive and exist for some considerable time. Assuming this desire remains steadfast, the element coming to the forefront of any concern is that of the company's fitness and ability to ride over and upon the pressures (both threatening and opportunistic) present within its environment to which it will be exposed.

The point is easily made that any business environment is in a state of continuous flux. From the businessman's point of view past change is history and is, accordingly, unalterable. (Even so, past events will have created and moulded both his present organization and its present environment.) It is the future which demands attention.

Generally, when viewing the future, what can be said of it is that it is largely unknown, different from the present and, to some extent, different from present expectations. However, the basic, most fundamental planning principle is that which states; if it is true that past and present events affect part of the future then, logically, by making and implementing decisions now (specifically designed to influence the pattern, magnitude and direction of future events) it follows that the future will, to some greater extent, be more predictable than would have been the case had such decisions not been made at all.

Environmental change is divisible into three classes, viz;

Positive Change, Negative Change and Neutral Change. Positive Change has the affect of assisting, bolstering and benefiting the business, Negative Change confines, inhibits or attacks it whilst Neutral Change leaves the organization unaffected.

Logically, the concern of Corporate Planning is to maximize Positive Change, and minimize Negative Change. Expressed another way, Corporate Planning actions seek to, firstly, allow the company to react more effectively to its environment and, secondly, to itself inject change into the self-same environment.

To plan on a limited and myopic short-term basis is inadequate. It is an unhappy fact that major environmental element shifts and movements develop only in the fullness of time. Drucker * illustrates the consequences of planning myopia with his customary brilliance:

> "But tomorrow always arrives. It is always different, and even the mightiest company is in trouble if it has not worked on the future. It will have lost distinction and leadership - all that will remain is big company overheads. It will neither control

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* P.F. Drucker, Managing for Results

Pan Books, 1967. pp 220

nor understand what is happening; not having dared to take the risk of making the new happen, it perforce took the much greater risk of being surprised by what did happen."

An illustrative example of a motor company which has tended to be so content with today for so long that when its "tomorrow" eventually arrived it took on the term 'sick old-man of the industry' is to be found in Leyland cars. Here, despite the fact that it competes within a market where its rivals make major new-model introductions every five years or so, Leyland today still markets a range of cars 18 years old (Austin Mini), 7 years old (Marina), 6 years old (Austin Apache) and 6 years old (Triumph). The ages of some of these car-lines' major competitors (as at mid-1978) are as follows; Ford Escort, 3 years; Ford Cortina 1 year; Chevrolet Chevair, 1 year; Mazda 323, 1 year; VW Passat, 4 years; Datsun 160/180U, 5 years; Sigma Galant, 1 year and Toyota Corolla, 3 years. The correlation between the poor performance of Leyland car sales and its ageing models relative to competitors offering continuously re-vitalized ranges is too close to be coincidental.

Upon the introduction of Corporate Planning it must be understood that subsequent planning activities will evolve from the foundation that is the business as it stands at that moment of time.

The current business will possess what may be termed "Momentum". Logically, a company possessing a capable management group, well-balanced product lines

and ready customer acceptance thereof cannot have found itself there overnight. Its current status will have been brought about by "correct" earlier decisions; hence its current, positive momentum. Expressed another way, earlier innovative decisions provide the company with its present-day positive momentum, the durability and strength of which is a function of the forces of Negative environmental change. The corporate momentum generated earlier provides no guarantee of perpetual success.

The concept of a Corporate Life Cycle * is a useful elaboration of the underlying status of the business vis-a-vis its momentum quotient and environment.

During the Maturity Phase of the cycle, the corporate growth rate (measured in terms of sales, income and profitability) levels off by virtue of its environment featuring saturated markets, technological decline and by a willfull relaxation of the thrusting aggressiveness it displayed during its Emergent and Growth phases. In short, the business undergoes a slow-down in the innovative momentum with which it was injected during the two earlier cycle phases.

"The company cannot maintain its existence for any period of time in the maturity phase as natural increases in costs, together with stabilized income, will eventually, erode the

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*B.G. James, The Theory of the Corporate Life Cycle
Long Range Planning - The Journel of the Society for Long Range Planning, Vol. 7, No. 2, April 1974, pp 45-55

profit margin to such an extent that equilibrium is lost and the company goes into the declining phase of its life cycle."*

A powerful argument exists, therefore, in favour of generating a continuous stream of future-effective innovation. Provision and maintenance of such a stream is an unshakeable rationale for Corporate Planning.

Having established the principle of "planning for survival" it must be admitted that the company must survive for some purpose, to attain some result. Simple survival for survival's sake is illogical.

The fundamental purpose of any commercial organization is to survive to provide a reward (or profit) for its owners. This reward constitutes a return for their having accepted the risk of investing within the business.

Hence, the company's overall objective is to survive to earn a profit. Corporate Planning is the means by which these objectives may be sought.

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* James, op. cit., pp 52

2.3 The Systematic Nature Of Corporate Planning

Implicit to the generation of profit within a hostile environment is the desire to make the most efficient and effective use of the company's available resources; an ambition hindered by the difficulty attendant upon resource-allocation towards recognised, viable opportunities.

In the absence of any unambigious, overall direction as to what exactly the business is to achieve with its resources, it is even more difficult to perceive how rational resource assignation may occur on a continuous basis. In other words, where an overall business objective does not exist (or where it exists but in a vague, undefined form) there is no way by which the relative importance of the company's individual elements and activities may be prioritised. Instead, each functional area must, of necessity, seek to assign its own priorities on the basis of its own, invariably self-centred, perception of its objectives and those of the organization as a whole. Quite naturally, such departmental objectives may run contrary to the genuinely desired direction of the business whilst the individual assertiveness or meekness of functional managers will create a departmental orientation around personal (company-divorced) objectives.

Thus, expressed as a Corporate Planning task, planning demands the continuous, urgent allocation of corporate resources in the most effective possible way thereby directing and focusing the efforts of the total organization upon long-term profitability.

"Corporate planning is a total process, it must involve the whole company ....." *

In other words, Corporate Planning must combat inherent organizational pressures to shift the application of its resources away from its true objectives, to persue independent courses of action, to evade accountability for decisions and to drop away into an embroilment in short-term concerns. To attain this, the process seeks to create a state of unified, directed action via the provision of a corporate objective capable of being broken down into logical, cohesive departmental objectives and by the creation of an organization structure staffed by personnel orientated towards the attainment of such objectives.

2.3.1. The Unsystematic Manager

In the practical world, the major source of Corporate Planning failure lies not in the concept of such planning per se; rather lack of success stems largely from the fact that the business is seeking to blend two elements which do not always work well together.

On the one hand, there is the highly systematic discipline imposed by the Corporate Plan whereby all functional efforts are directed towards relatively inflexible, pre-determined objectives. On the other hand, the implementation of the Corporate Plan's demands rests

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* Hussey, op cit, pp 19.

in the hands of the company's human components who, by definition, are basically individualistic in outlook, personality and in terms of their own ambitions or objectives. For this reason it is of crucial importance to be ever-alert to the dangers which attend any attempt to blend Corporate Planning and managers.

Expressed in the most simple of terms, people dislike being regimented and will fight clumsy attempts to do so whilst Corporate Planning can, via its poorly formulated introduction and operation, be perceived as a deliberate attempt to dragoon managers into "toeing the company line".

Forewarned of the danger, the corporate planner must take active steps to ensure that, firstly, his planning efforts include the means by which the company's organization structure is compatible with the Corporate Plan's demands and that, secondly, the personal objectives of employees are linked to those of the organization. In this last regard, the technique of Management by Objectives has proved most successful.

2.3.2. The Specialised Manager

Of special and particular concern to the corporate planner is the existence within the organization of "Specialised" personnel who, by virtue of their background, expertise and orientation work out on a limb of their own. Although it is admitted that most managers could be regarded as specialists, there will be found a small group of who cannot readily operate effectively outside the present confines

of their job - it is this group with whom we are now concerned for they represent a particular headache for the corporate planner.

Specialised personnel typically display a strong measure of loyalty to their own area of expertise even to the extent of evincing suspicion and intolerence towards other areas of the company.

In the absence of any Corporate Planning objectives (or in the event of their being rejected) the only alternative is for specialised functionaries to each emphasise their own importance. Pure chance dictates whether or not such self-imposed objectives actually work towards the maximum benefit of the business. Indeed, it is not unlikely that the most probable outcome is the specialist individual's work becomes, in his own eyes, an end unto itself. In other words, the performance criterion he applies to his work is not the contribution made to the company but rather his personal evaluation of that work's meaningfulness measured in terms of his personal habits, visions, values and ambitions.

The more complex the firm and the larger the number of employees there are, the greater is the probability that a number of "total" specialists are employed. That they present a Corporate Planning difficulty must be recognised from the very outset and particular efforts implemented to bring their activities in line with the company's true needs.

Le Breton and Henning* express the characteristics of specialist (staff) personnel as follows:

- His technical knowledge is rather peculiar to his person and not generally shared by other specialists or non-specialists.
- His function is primarily investigatory and advisory although he may exercise considerable personal influence.
- His training, experience and general attitude frequently cause him to view his activities as ends in themselves rather than means to an end.
- His formal education is usually extended beyond the level of others at the same level in the organization and significantly beyond most who will furnish data to be used in the performance of his task.
- He is most frequently assigned as an assistant to a line officer or a member of a high level staff unit.
- Usually, he is appointed to his position immediately upon graduation from college or after having served in a similar but subordinate role.
- He is more likely to have had experience in some other form of activity before joining the company than are other staff or line personnel. (For example, he may have been engaged in college teaching or government research or administration.)
- He is less likely to have had extended experience in operating departments (for example, marketing or production) than other staff or line personnel.

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* P.P. Le Breton and D.A. Henning, Planning Theory Prentice - Hall, 1961. Chap. 7, pp 231 - 232.

- Frequently, his association with the company is not viewed as a long-run association but rather as a temporary, semi-perminent association.
- His initial motivation often is to gain experience, to experiment, to use equipment and facilities not otherwise available.
- Because of his technical knowledge, his advice may be tantamount to an order since the responsible authority may not be able to pass intelligent, independent judgement.

In the above regard, it is effectively a means of highlighting the essential difference between the more generalised line manager and his, invariably, more specialised staff counterpart.

"The line executive is convinced he has a "responsibility" while the staff officer merely has a "function". One has to pay-off directly and measurably. The others' impact may only be felt only over the long pull".

Moreover it is interesting to observe the close degree of similarity between the characteristics mentioned above and the typical qualifications and outlook of the personnel actually entrusted with the Corporate Planning task in our selected motor manufacturer's overseas parent. In this instance, however, the planning "staff" are separated from the local "line" managers by approximately six thousand miles - a situation which, through sheer physical distance, greatly aggravates a recognised functional division.

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* S.T. Tooker, "The Attitude of the Line Executive"
Long Range Planning for Management D.W. Ewing ed., Harper and Row, 1964. pp 169.

"Planning and doing are separate parts of the same job; they are not separate jobs. There is no work that can be performed effectively unless it contains elements of both ... advocating the divorce of the two is like demanding that swallowing food and digesting it be carried on in separate bodies." *

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* P.F. Drucker The Practice of Management
Harper and Row, New York, 1954. pp 284.

2.4 The Corporate Profit Motive

Although a sensitive issue, the most fundamental objective of a capitalistic business enterprise is to earn a profit. Whilst a detailed discussion of the role of profit is unnecessary for the purposes of this paper it may be useful to crystallize the issue by making two informative quotations:

"The word 'profits' has many different meanings in everyday usage. From these different possible meanings, the economist, after careful analysis, ends up relating the concept of profit to dynamic innovation and uncertainty - bearing ....."*

"Profit as the paramount consideration within Corporate Planning, ... is something fundamental to the nature of a company and which distinguishes it from other types of organization: it is therefore something permanent and unalterable. It is the reason for the very existence of the company, that for which it came into being and, what it is now. It is that which, if the company fails to achieve it, the company itself fails. It is a permanent unalternable purpose, or raison d'être."+

What we shall endeavour to perform is an act whereby a simple, direct expression of profit-generating intent is placed within the context of wide-ranging implications of intense interest to the Corporate Planner regardless of the business on whose behalf he acts.

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* P.A. Samualson, Economics 8th Edition
McGraw-Hill, Tokyo, 1970, pp 593.

\+ J. Argenti, Corporate Planning, A Practical Guide
Allen and Unwin, 1968, p 28

As a starting point two issues will be examined from whence the above-mentioned implications are sourced, viz:

(1) If it is agreed that the business's objective is to earn a profit it is necessary to determine how profits are to be generated - PROFIT POLICY.

(2) Recognition must be paid to the size of profits - PROFIT SPREAD.

2.4.1. Profit Policy

An investigation of the schools of thought which concern profit policy will expose three common attitudes, as follows :

(a) Corporate Profitability.

(b) Profitability Within Environmental Constraints.

(c) Economic and Environmental Equilibrium.

2.4.1. (a) Corporate Profitability

As a bold statement of intent, this school upholds the concept of corporate profitability as being the sole corporate objective worth contemplating.

Although the broad wisdom of profit's being a key factor in a business's survival and growth cannot be faulted, flaws exist in respect of the manner in which that profit is to be earned which serve to limit the concept of Corporate Profitability's practical appeal.

Firstly, no distinction is drawn between short and long-term profitability. Inevitably openings will be perceived permitting quick and substantial gains. However, short-term harvests may work to the detriment of future, longer-term prosperity.

Secondly, the concept of Corporate Profitability is closely linked with the classical maxim of "Profit Maximization" whereby the business will seek to earn the greatest possible return under all circumstances. No concern is paid to any other concern than to profit generation. Naturally, such conduct runs contrary to the norms and ethics of society whilst the precise quantification of profits cannot be ascertained.

Corporate Profitability is, essentially, too simplistic for practical application whilst an attempt to conform to it automatically opens the door to justifiable charges of economic exploitation. Accordingly, with the notable exceptions of a corporation motivated by either ethically-tainted speculation or naked survival this concept is, practically, an unrealistic alternative.

2.4.1. (b) Profitability Within Environmental Constraints

The view taken by this orientation is that the business must generate a certain target level of profit but that it must do so within the confines of certain internal and external environmental constraints.

Such constraints serve firstly, to limit the total profitability of the business and, secondly, to inhibit the attainment of a given target profit although that target may have been drawn up paying close heed to environmental constraints.

Including environmental constraints within the planning equation directs attention towards the impact the company's environment may have upon its operations, the setting of its profit target and the attainment of that target. Recognition of environmental barriers leads to the avoidance of a profit maximization policy over the long-term whilst exposing the need to plot a course for the company between environmental barriers towards a profit target all the time paying assiduous attention to the exact character, diversity and magnitude of such environmental limitations.

In this way, Profitability Within Environmental Constraints must be regarded as being immeasurably more realistic, valuable and practical than simple Corporate Profitability.

Environmental constraints may be classified into two broad types. Firstly, there are constraints within the company's market and, secondly, social constraints within the non-business sphere.

Market-based constraints are recognised by the presence of, for example: rules and customs within the market, the size and quality of competiton and the number, value, location and attitudes of target consumers. As a general rule such limitations bear most heavily upon small, ineffective businesses in heavily competitive, well regulated markets. Even so, companies which,

although small, seek to compete within a competitive market dominated by larger rivals are only able to survive and prosper via their seeking and establishing enduring market niches. An example of such a small motor company is Alfa-Romeo whose market niche within South Africa was the supply of sporting, "exciting" cars to reasonably well-to-do car enthusiasts. Regrettably this company's stand is currently somewhat slippery by virtue of a combination of price increases placing most of its mid and upper range cars out of reach of the earlier low range buyer group, product quality deterioration and the steady erosion of Alfa-Romeo's core of make-loyal customers by larger rivals offering lower priced, better built, better serviced cars having superior engine performance than the sole remaining low range Alfa Sud derivatives.

Non-business social constraints possess almost limitless variety - often overlapping with the above market limitations.

Essentially, two classes of social constraints may be identified; firstly, these comprise Formal Constraints and, secondly, Informal Constraints. The former take the guise of legislation whilst the latter has its foundation in the norms, customs, standards and attitudes of society. They share a considerable degree of common ground; laws, afterall, represent the simple edification of theretofore social customs and standards. Both have the power to channel behaviour in certain, defined directions with resistance or evasion of channelling pressure rewarded by punishment. Moreover, within a society of creeping governmental control, the informal constraints of today will, to some extent, be numbered amongst the formal constraints of tomorrow.

Corporate Profitability Within Environmental Constraints is not an ideal profit-policy guide. In its purest form it must adopt an essentially negative stance towards environmental constraints by regarding them as threats to be either reluctantly complied with, as would be the case versus formal limitations, or evaded and ignored vis-a-vis informal constraints.

2.4.1. (c) Economic And Environmental Equilibrium

At first sight, the concept of Economic and Environmental Equilibrium bears a close resemblence to that immediately outlined above.

A marked distinction, however, must be noted in the manner and attitude displayed towards the environment between the two approaches. The premise is that a business is likely to be influenced more readily and profoundly by its environment than it is to influence the environment itself. Moreover, by viewing environmental constraints within a positive light it should be possible to guide the course of the business via a planned sequential compromise between profitability on the one hand and social and formal constraints on the other.

Expressed another way, this concept of profit-policy represents a genuine attempt to create a state of equilibrium between the methods employed to derive a reasonable level of corporate profitability and inhibiting environmental limitations.

If constraints are viewed positively, the business will be not only be better able to define the actions or implications of constraints but its most potentially attainable, realistic profit target too. Translated into actionable terms, a state of equilibrium may only be attained following an exhaustive search and measurement of all environmental constraints acting upon the profit creation process.

Logically, therefore, environmental constraints (and opportunities) exist for each area of the business. In turn, the business may be considered as a unified collection of areas or entities. Moving a step further; just as environmental constraints and opportunities exist for each element of the business, so too must there be an objective for each organizational element.

The picture now created is one of a cluster of objectives which have evolved from the single corporate objective (profit), attainable only after environmental constraints pertinent to both the whole and the parts have been accepted, qualified and planned for. In other words there is Equilibrium between the economic demands of the firm and its environment, the structural components' sub-objectives (or departmental goals) and the particular constraints directly pertinent to both the total business and its departmental functions.

It should now be clear that a business firm's profit policy requirements are not wholly met by the earlier discussed approaches. They ignored the idea of the business having to operate within

its environment and that profit is merely the end result of the co-ordinated activities of all the various elements of the organization structure, each operating within their own environments.

Before considering the question of corporate profitability it may be pertinent to pay brief attention to some of the more salient formal and informal constraints against which the typical motor company is likely to come into contact with in South Africa.

Formal Constraints

. Local Content Programme

The main objective of government policy vis-a-vis the motor industry is to foster the growth of local component industries - (for strategic, social and economic reasons). In essence, as a manufacturer raises his local content of passenger cars produced, within established guidelines excise rebate incentives are granted. Constraints are present in those instances where locally manufactured components are, by virtue of tariff protection, more costly to buy locally than to import from overseas suppliers whose production runs, being longer, have lower unit costs. A further issue is that, in some instances, component supplier's technological skills and experience are not equal to the task, resulting in quality shortcomings. Finally, as the Local Content Programme is composed of three phases (at the end of each the manufacturer's product must contain a certain specified minimum local content by weight to qualify for a rebate) the time is reached when

to meet the requirements of the programme high-mass components (such as engine and drivetrain) must be produced locally. Naturally the investment costs, for each manufacturer, of equipping to produce such assemblies are astronomical which are no way negated by the relatively low sales volumes acting to raise unit costs to intolerable levels. Moreover, the diversity of product in the market makes rationalisation difficult once drivetrains are considered. That is to say Peugeot engines, transmissions and differentials only fit Peugeots, not Fords, Rovers, Passats, Chevairs and Valiants. This precludes Peugeot establishing itself as an engine supplier to the industry, Ford a gearbox supplier, VW an axle supplier and so forth. Massive duplication of investment and insupportable investment overheads are both industry and manufacturer headaches of no mean size.

. ImportDeposits

At this time (mid-1978), in addition to any normal import duties, manufacturers importing components must lodge a deposit on the value of the assemblies brought into the country. This measure was introduced in the 1977 budget and was described as a temporary measure designed to dampen the flow of imports. Naturally, the funds tied up in this provision must be financed and are, accordingly, passed on to the vehicle buyer in higher prices.

. Fuel Conservation Measures

Introduced following the 1973 Middle East crisis, initially as a means of saving a strategic commodity and quickly adopted as a device whereby rising import prices of fuel may be financed

and reduced, these measures govern both the availability of fuel and the rate at which it may be consumed. Although greeted with mixed feelings amongst consumers, manufacturers are worried for a number of reasons. Firstly, there is evidence that slower speed limits and restrictions on weekend motoring have, to some extent, slowed the motor vehicle replacement cycle (especially passenger cars) resulting in lower retail volumes. Secondly, the ease and rapidity with which such measures may be tightened or released has lead to a tardiness of response, based upon caution, on the part of manufacturers. Questions such as fuel tank size, engine size availability, power output, transmission gearing, interior comfort and trim levels all relate back to slower maximum speeds and restricted fuel sales and all concern investment decisions.

. Labour Legislation/Manufacturing Legislation

In addition to the above constraints, the average motor company is a business of no small complexity. Accordingly, the extent to which it must recognise, interpret and conform to all manner of legislation governing its day-to-day manufacturing, financing and trading operations is similarly complex. Multi-national manufacturers have a particularly unenviable position in that they must be "good citizens" of two societies. Often this results in their having to operate within the bounds of social and legal requirements locally which, within the eyes of the society of their overseas parent company, are regarded as both obnoxious and an insult to human rights. Indeed, there is every reason to believe that such companies' "balancing act" between local and overseas requirements is likely to become increasingly difficult.

. Cost Pressures

Again, by virtue of the complexity and diversity of a motor company's operations it is subject to more cost pressures than is the case in many other more simple businesses. Given a growing market of a substantial size, component price increases are diluted over long production runs. Locally, the market is both small relative to the level of industry investment and has contracted painfully. Costs cannot be easily absorbed by a business under such conditions and must, in consequence, be passed on to the consumer via higher prices at a retail level - all of which serve to limit even further the ability of another slice of marginal buyers to acquire a new vehicle. The rising cost/declining revenue squeeze thereby becomes progressively worrying.

. Competitive Pressures

Given the existence of an over-traded local new vehicle market not surprising that market competition becomes increasingly intense. Moreover, this competition is not based wholly upon the ideal "marketing concept" stance of superior product features relative to rivals. Instead, price becomes the paramount trading platform via dealer-offered "discounts" to prospective buyers. Continuous price-wars are fought at a retail dealer level. A point of note is that dealers themselves lack the required funds to offer such discounts. Instead, manufacturers provide dealers with "playing money" simply to close deals and keep their plant volumes up to cover overheads - the revenue squeeze deteriorates further. A manufacturer unable to rebate dealer sales cannot get into the game and suffers accordingly. However, any rebate

policy is equally certain to depress his ultimate revenue flow. Moreover, it is not unheard of for a dealer to divert rebate funds into alternative directions, away from the showroom bargaining centre, thereby enriching himself at the expense of his supplier.

Market Stagnation

The market growth prospects held out during the 1960s and early 1970s have given way in the post 1973/4 period to what is, in effect, market stagnation characterised by minor rises and sudden declines in retail volumes. Vehicle markets are easily segmented into two broad classes; viz. a Growth Segment and a Replacement Segment. The Growth Segment comprises first-time and additional vehicle buyers whilst the latter is made up of buyers replacing an earlier vehicle. The market will, of course, either expand or contract at the rate at which first-time buyers enter it, existing buyers buy second, third or fourth vehicles and at the speed at which they replace their current vehicle. Under current conditions every class of buyer has been subjected to depressionary influences. First-time buyers, who traditionally comprise young earners, have been turning to second-hand vehicles or new motor cycles in response to the price of new vehicles rising out of their grasp. Additional vehicles are essentially luxuries within the private sector and are acquired by businesses to augment and expand operations - economic conditions have cut these back. Finally, as has been mentioned, replacement buyers have tended to keep their present vehicles longer - thereby slowing down the replacement cycle whilst others, faced with the realisation that their chosen vehicle is now out of their reach if bought new, have moved out of the new vehicle market altogether by acquiring their chosen vehicle used at a lower price.

Informal Constraints

Essentially two key informal constraints are present within the industry at this time. The point to recognise is their extreme closeness and inter-relationship with one another.

. Social Consciousness/Overseas Political Pressure Avoidance

This constraint relates exclusively to those motor manufacturers having overseas parent companies. As was mentioned earlier a finely held balance must be maintained between the legal requirements of both host and parent societies. Given the unpalatability of much of South Africa's social organisation to overseas public opinion, parent company management is open to image - damaging publicity of the worst kind. Overseas directives to local management therefore give rise to a number of actions ranging from the genuinely beneficial at one extreme to questionable corporate window-dressing at the other. Each must be considered upon its merits but examples of both types include, provision of low-cost Black/Coloured housing, subsidised canteens, donations to the Urban Foundation, sports sponsorship, scholarships and the promotion of Blacks to supervisory positions. This latter is a controversial issue even when measured in terms of simple economics. In many instances even Black graduates lack the essential background and breadth of worldly experience found in comparably educated Europeans. As a consequence, on-the-job creativity and initiative is, in many instances, lacking relative to a comparable European, whilst training time until competence is acquired may be prolonged. Even so there is the real danger that an indifferent Black may be promoted into a

managerial function thereby fulfilling the window-dressing requirement but bringing in his wake problems of sub-standard performance and subordinates resistance. Finally, corporate philanthropy on the part of local members of multi-nationals is expensive, doubly so when the depressed conditions of today prevail. In essence, such operations are burdened by additional overheads which are entirely absent from wholly local rivals thereby providing the latter with an operating advantage. (An example of typical corporate Black employee benefits of the types discussed with useful guages of the costs incurred is given for General Motors in Appendix II.) Finally, if the true objective of such actions is to appease the indignation of vocal protest groups overseas (and such corporate concern for employees is suspiciously high when voices are raised most stridently in protest) there is no evidence that such actions are genuinely able to sway the opinion of foreign pressure groups. South Africa, rightly or wrongly, is cast in the role of the world's White over Black bogeyman and it will take more than golf courses amongst the Port Elizabeth municipal dump and night clubs to change that status.

Political Uncertainty/Economic Threats

Finally there is the very real issue that the local motor manufacturing industry has invested many millions of rands in a society which the events of the last three years have shown to be deeply divided on racial grounds and increasingly isolated from the benevolence and tolerance of traditional allies and trading partners. The time is not far distant when South Africa will remain as the sole White-ruled nation in Africa - a highly exposed position indeed. Accordingly, a motor manufacturer

faced with Phase III of the Local Content Programme to invest R10m in an engine block plant with an economic life of 20 years faces a very real dilemma yet one in which the exact form and magnitude of the known threat continues to evade full perception. There are few industries within South Africa more susceptable than the motor industry to the implementation of a United Nations trade embargo, chiefly via components and oil imports. Although some form of hybrid vehicle could continue to be built from the output of established plant, the austere petrol rationing which would, of necessity, be introduced would effectively dismember the industry as it is known today - quite literally within a few short weeks. Even in the event of such sanctions not being forthcoming there is still the real prospect (admittedly long-term) of a smouldering situation across five main borders and fierce flashes of urban terrorism, all of which viewed through the telescope of an overseas investor do not make for a comfortable sensation.

In overall summary of this passing review of motor industry constraints to Corporate Planning it may be stated that the major limitations over time will be as stated below.

Formal	Informal
Local Content Programme	Political Uncertainty/Economic Threats
Competitive Pressures	
Market Stagnation	

2.4.2. Profit/Risk Spread

Having outlined various profit policies and environmental constraints with reference to the motor industry it is now possible to direct attention towards the remaining open question; viz. the size of the company's profits - in other words its Profit/Risk Spread.

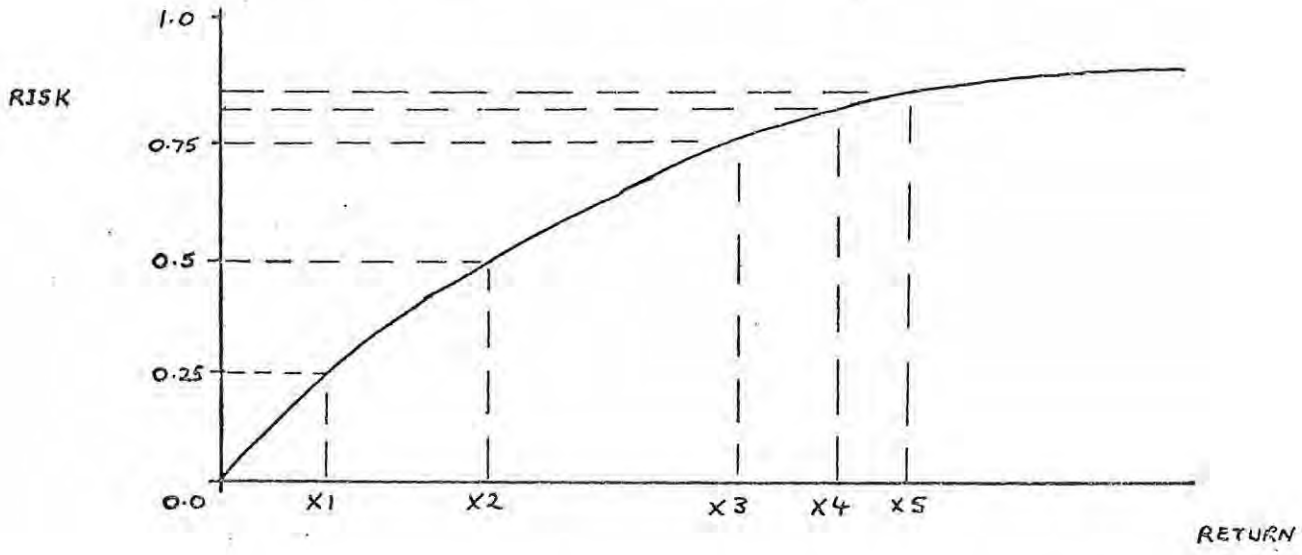
In posing this question, the most ready answer may be sought amongst only one group of persons, namely, the owners of the business. However, when determining the specific level of profit the business should earn, the most senior management group (assuming that ownership and management vests in two distinct bodies) possess the power to manipulate the form corporate profits may take.

Corporate investors, in effect, purchase or require an expectation of a future stream of returns. Accordingly, it must not be considered amiss if an attempt is made to quantify these expectations. Expressed as a conjunction between the profit motive and the corporate objective the issue may take the form of the statement appearing immediately below.

> The amount of profit which must be generated by a business concern must be of such a magnitude that the reasonable profit expectations of the concern's owners are fulfilled. Hence any profit target will be a direct consequence of that body's ambitions.

Any investment alternative creates a trade-off situation whereby measures of return are traded-off against measures of risk. At one extreme, low risk may be sought at the expense of low returns whilst at the other, high returns at the cost of high risk are courted. The attitude adopted by any single investor will, quite naturally, be a direct function of; his ability to perceive alternative investment opportunities, his "gambling instincts" development and reward needs.

In graphical form the attitude towards Risk and Return for a typical investor group may be couched in terms of the diagram appearing below.



The horizontal axis expresses units of Return attached to an investment alternative. Vertically, a subjective measurement of Risk is stated whereby such risk is expressed in terms of the probability of that risk occurring.

At level 0.25 on the Risk axis, investors would be prepared to accept a 25% chance of not receiving a return of X1. Stated another way, a return of X1 must be offered to induce these particular investors to take up an investment bearing a risk burden of 25%. Similarly, at point 0.5 (the chance of gain or loss is 50 - 50) the return-inducement lies at X2.

Of note is the fact that as the risk-loading is raised to or in excess of 0.5, an over-proportionate increase in return-expectation will be demanded.

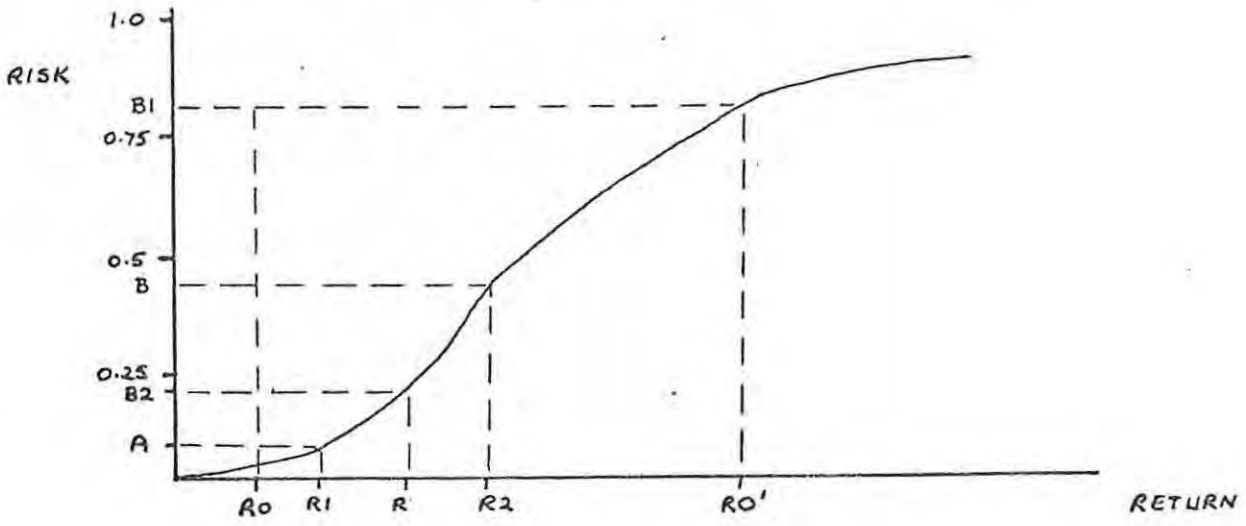
Beyond a certain level of Risk it is possible to hypothesize that no increase in Return will cause an investor to accept the investment. The curve will, as a consequence, approach but never touch the level of 100% Risk which, by definition, offers no chance of any Return - as would be the case in respect of pre-1917 Imperial Russian railway stocks.

Having now established the broad constraints of an investment model it is possible to introduce the idea of there being a range of investment alternatives open to investors and that the investment attitudes held by multi-national corporate investors differ, to some degree, from those of the general class of investors discussed up to this point.

An available range of investment may comprise "Safe" (e.g. gilt-edged securities), "Moderately Safe" (e.g. major and continuing plant investment within the existing sphere of operations) and "Risk Bearing" (e.g. the investment in and creation of a new branch of operations within a heretofore untapped and largely unquantified market) alternatives. The issue is of some importance

by virtue of the fact that the motor industry is, by nature, capital-intensive involving the continuous weighing and sifting of investment-profit opportunities. (Few areas of the world have labour-intensive automotive assembly operations - two of the most well-known are Malasia and the Phillipines where labour costs are low and market volumes too low to warrent a high degree of automation.

Modifying the diagram appearing on page 48, the three-fold array of investments may be depicted thus :



The relationship between A and R1 illustrates that of Safe investments where the Risk (A) is known to be present at exceedingly low levels whilst (B, R2) portrays the positioning of Moderately Safe investments.

Once the level of Risk present is perceived to lie in excess of B the opportunity becomes increasingly regarded as a speculative venture where high and quick returns are prized. A new company will, inevitably, find itself within the risk range in excess of B and its risk-loading will only decline once that company has successfully proved itself. The new-company investment body will, accordingly, be forced to accept two classes of Risk.

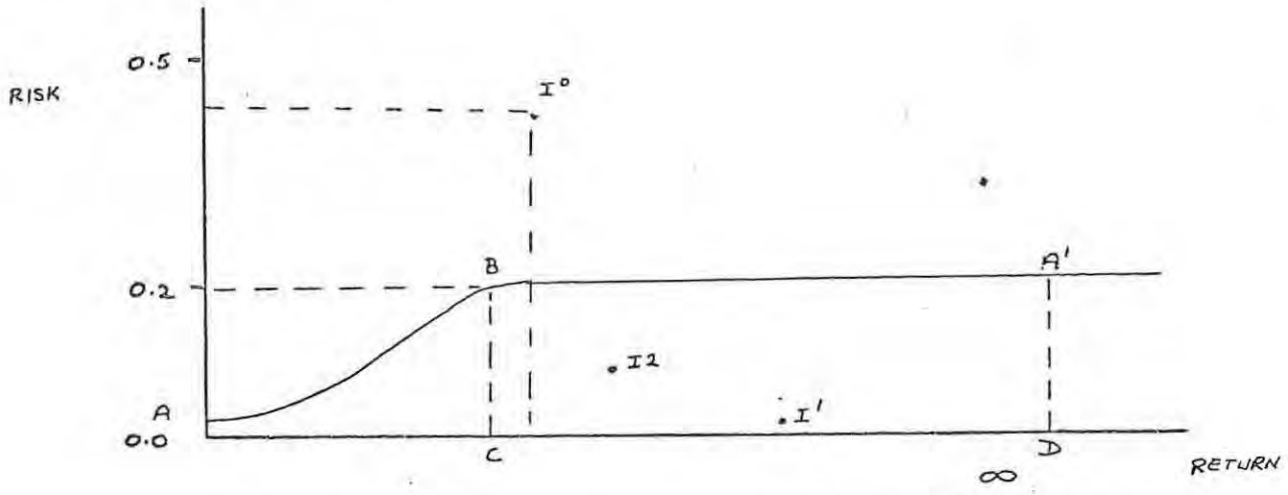
Firstly, there is the Risk of business failure without the saving grace of a high Return expectancy. Risk will be of the order of B1 which should be compensated for by Return expectancy RO^1; in fact, Return expectancy may only be RO.

Secondly, the new-business investment body accepts the Risk that if the business does establish itself, its risk-loading will actually decline to an acceptable level. Such an acceptable level rests at B2, R implying that investor's target return is R which, if desired, must be weighed against a perceived level of Risk equivalent to B2.

The above discussion of new-business investment is offered as a broad guide to the issues and concerns facing any business enterprise in its early days. Its inclusion is intended to relate not so much to new motor manufacturers' entry to the industry but, rather, to those circumstances which may be expected to prevail when a "new" company is created by the merger between or acquisition of two or more existing manufacturers in response to the earlier-discussed pressures towards rationalisation within the industry. (The creation of Sigma out of Chrysler and Mazda is a case in point and will, in time, make an interesting study in its own right.)

In the case of an established manufacturer its current investor-body will formulate a broad policy to come to terms with the question of its prospective Return/Risk relationship. Assume, for example, the company is extremely cautious and conservative. For major investment opportunities (for example, totalling in excess of Rlm)

its Return/Risk curve may adopt the form depicted below.



Any chance of failure in excess of 20% will be rejected irrespective of attendant Returns. Investment I^0 is, for example, too risky whereas any investment at or under AA^1 would be considered. Naturally, most favourable consideration would be given to opportunities within the bounds of A^1BCD (with a hypothetical ideal at D).

When choosing between alternatives, that opportunity lying closest to D will, all things being equal, be selected e.g. I^1 over I^2.

Translated into a Corporate Planning mode as it applies to our selected motor company the emphasis and criterion involved in investment selection is predominantly one of risk avoidance. That is to say the curve A B A' does not envelop high levels of risk. Extreme caution characterises its attitude towards investment projects - even to the extent of placing risk-evasion before return-expectation. For example, any investment project which is likely to have a pay-back period in excess of three years is automatically eliminated from further consideration.

Rationale for such a policy is as follows:

. Investment projects of the type under discussion are enormously costly and whose economic life may not be very lengthy. To tool-up to produce a car-line, at 1978 prices, may run to anything up to R10m to be recovered within as little a space of time as 5 to 6 years. Yet the investment decision may be a crucial one. By not investing the company may, in effect, be opting out of an entire segment of the market.

. Under current economic conditions sources of loan funds adopt a highly cautious stance when dealing with motor companies. Accordingly, there is a continuous effort on the part of the latter to appear prudent, stable borrowers, a posture reflected in the type of projects undertaken.

. A major source of local motor industry finance, to those manufacturers having overseas parents, is their parents themselves. Again, stringent evaluation criteria are applied to all requests for finance from such subsidiaries towards which senior local management react by adopting only the most careful and level-headed of attitudes in an effort to ensure that their request for funds will be readily granted.

The motor manufacturer forming the subject of this paper, when setting corporate profit objectives, seeks to find and maintain a fine balance between Risk and Return which reflects its particular desire to minimise the levels of Risk which it perceives to be

present within the investment alternatives it entertains. Expressed another way, the solution to the problem of "What profit must be generated?" lies in a more precise problem definition - "What is the maximum return and maximum risk corporate investors are prepared to accept?" In this way not only is an exact profit objective derived but an indication is given of the lenghts to which it is necessary to go to secure that objective.

2.4.3. The Corporate Profit Motive - Summary

The concept of profit generation forms the very foundation of capitalistic business enterprise. For this reason it becomes the prime, unalterable objective towards which the Corporate Planning process is directed.

Moreover, the fact that profit is the incentive motivating investors means that the two key practical concerns of How and How Much profit is to be generated demand investor's risk and reward expectations be considered.

Profit Policy, provides corporate guidelines as to what are and what are not acceptable methods by which the company's profits are to be earned. Such policy depends upon the economic, social, legal and moral constraints of society. A policy attempting to create a positive balance between environmental limitations and constraints on the one hand and its profit objective on the other is not only optimal in a moral sense but also in a workable sense too.

Profit/Risk Spread seeks to determine the size of investor's profit expectations. Two issues are of importance. Firstly, the level of Return (for a given body of investors) is largely a function of the degree of Risk investors perceive to be attached to the business. As the level of perceived Risk climbs, so too must Return - often to an over-proportionate degree. Secondly, the business must take steps to entirely uncover investor expectations as they exist amongst the bodies of current and potential investors and then adopt a suitable stance.

2.5 Corporate Strategy

2.5.1 The Concept of Strategy

A corporate profit objective constructed on the basis of a sound Profit Policy and in accordance with an investor - derived Profit/ Risk Spread represents a major Corporate Planning step.

The simple description of a task or objective, however, does not systematically indicate what actions must be completed or what efforts expended in order to attain it.

If it is accepted that to fulfil its profit objective the business must act and interact with its market then what is required is a set of guiding principles, drawn up in line with corporate Profit Policy, which serve to direct the particular stand to be adopted vis-a-vis the market.

Profit objectives will be sought and fulfilled within a highly complex market environment through effective product positioning within viable, defined markets.

An accurate expression which denotes the broad, overall Corporate Planning action for both the location and quantification of viable markets and the positioning of suitable product lines therein is "Corporate Strategy."

> " In the absence of strategy, there are no rules to guide the search for new opportunities, both inside and outside the firm. Internally, the research and development department

has no guidelines for its contribution to diversification. The external acquisition department similarly lacks focus. Thus the firm as a whole either passively waits for opportunities, or pursues a 'buckshot' search technique." *

Corporate Strategy attempts to answer the twin questions facing the business, namely; What product? and What market? Together these issues become what may be called the Strategic Question which flows from the fact that corporate profit potential is present within an infinite array of product/market opportunities. The effective utilization and exploitation of each opportunity is, naturally, limited to the company's ability to apply adequate resources to each.

Expressed another way, the answer to the company's Strategic Question will lie in its adoption of a discriminatory stand whereby scarce corporate resources are concentrated upon a relatively small field of opportunities which, at one extreme, are gambles merely holding out the promise of adequate profit, and at the other, represent genuine, rational ventures allowing the fullest use of the company's best strengths.

Whatever strategy is adopted will have its roots firmly embedded within the past and current structure and status of the business.

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* H.I. Ansoff Corporate Strategy
Pelican Books, 1971. pp 102.

In other words, there will always be some "common thread" between the old and the new strategy. The greater the width of that thread, the more secure and less risky the strategy venture will be, assuming the old was to some extent viable.

In summary, it is possible to state that "Strategy" involves:

(1) The acceptance that a corporate profit objective merely indicates the results to be obtained; no direction is provided as to how this task is to be accomplished.

(2) Profit results may only be forthcoming from the application of a company's resources to market opportunities.

(3) The linking-factor between a company and its market is its product line. Accordingly, the key strategic concern centres upon Product and Market considerations.

(4) The range of product/market opportunities is so broad as to deny any firm the chance to follow each. Selectively is required. Strategy provides the parameters of the selction process.

(5) Every strategy will share a viable common thread with the company's past and current make-up. Absence of any such common factor creates a speculative situation with steep odds against success.

2.5.2. Strategic Alternatives

There are four basic product/market alterations, viz:

- Existing products in existing markets
  (MARKET PENETRATION)

- Existing products in new markets
  (MARKET DEVELOPMENT)

- New products in existing markets
  (PRODUCT DEVELOPMENT)

- New products in new markets
  (DIVERSIFICATION)

All hinge upon the idea of a company's product strengths and marketing expertise forming a common thread between the present and the future.

2.5.2.
(a) Market Penetration

Such a strategy commits the business to earning its profit objective via the dint of increasing its profitability within its present market with its existing product lines. Brand share must be conquered from the shares of rivals.

Risk levels are low for no strategic change is called for whilst a very strong common thread exists.

A major drawback of such a strategy is evident where the market is a well-established one having a high degree of competition - brand share conquest is both expensive and transitory. Moreover, a common compounding hurdle to success is found when the company's product line has lost its first flush of youth or is well advanced in the growth phase of its life cycle. (The importance of this fact will become evident when Corporate Strategy vis-a-vis the motor manufacturer is discussed.)

2.5.2.

(b) Product Development

This alternative will be adopted in response to the expectation of profits derived from the introduction of new products serving to replace and/or surpass those within an existing market. As such, it is a common, successful strategic option whose attractiveness is enhanced by the reasonable levels of risk present.

Product Development represents an acknowledgement that, with the passage of time, even the most carefully marketed products begin to enter the maturity phase and decline phase of their life-cycles. A competitive market will be characterised by rivals introducing a continuous stream of revised and innovative products which force established product lines into obsolescence. Moreover, buyer attitudes and purchase preferences shift with time; facts which further serve to dampen and depress the sales growth of out-of-tune products.

Again, this strategy is pertinent to the motor industry and will be referred to later.

2.5.2.

(c) Market Development

Here an existing Product is directed towards a new market thereby expanding the physical number of prospective customers.

The definition of a "new" market varies greatly; ranging from simple geographic or regional distinctions through to and including the demographic, attitude and benefit segmentation of buyer clusters.

Risk burdens present will tend to be a function of the degree of similarity the new market has to the existing one. Naturally, the more similar a new market is to the old, the less incremental risk (and sales volume) there is likely to be. Even so, relative to Product Development, this strategic alternative may be regarded as bearing a heavier risk of failure by virtue of its reducing the strength of the corporation's common expertise between the old and the new ventures.

As before, this strategy is pertinent to our later discussion.

2.5.3.

(d) Diversification

In spite of its enduring attraction to management theorists and practitioners, the very fact that this strategy launches the business into a position where both product and market are new

demands of it the highest of risk-premiums.

Attendant risk is the single over-riding consideration in respect of a diversification opportunity. So much so that, bearing in mind the motor industry's essential prudence and caution, this strategy really has no place within our current consideration. Indeed, it is true to say that whereas businesses may diversify into the motor industry (e.g. Messina (Transvaal) Development Company and Datsun) it is rare for the motor industry to move outside the bounds of its current operations. (Ford Motor Company in the United States diversified into electronics (Philco) and mass urban transport during the 1960's but, illustratively enough, axed both ventures in the wake of the 1973/4 recession.)

By virtue of its variety, special nature and total absence from the history of the chosen local motor manufacturer this strategy will not be given any further attention.

Recognition must be paid to the fact that the distinction between strategic alternatives is by no means clear-cut. At what point does Market Penetration become Market Development? or Product Development, Market Penetration? The issue is a crucial one by virtue of the fact that their differing natures and implications demand quite a uniquely different orientation and focus. Moreover, of added importance is the question of a strategy's lifespan. That is, the expected duration of a particular strategy's appropriateness

and effectiveness before environmental shifts render its replacement mandatory.

2.5.3. The Strategic Lifespan

Any company's planning period must not be thought of as a rigid apportionment of the future without attention being directed to what might be termed "strategic decay."

From the very moment that a strategy has been adopted it will be acted upon by both favourable and adverse environmental circumstances. Additionally, the implementation of a particular strategy brings in its train sets of circumstances whose influence react upon the environment even to an extent well beyond the strategy's effective life. (As would be the case where a 5 year strategy causes the establishment of plant having an economic life of, say, 8 years.)

To elaborate, it may be said that a Corporate Plan (and, hence, Corporate Strategy) has an involvement with two time-spans. Firstly, a Primary planning period of, for example, 5 years within which time a clear set of intentions, relating to the near future, are transmuted into operating plans for all functional areas.

This, Primary, period's concerns relate to typically :

- The presentation of an action-orientated plan detailing that which is to be performed in the near future.

- Identifying annual goals.

- Establishing control, "performance to objective" yardsticks.

- Acceptance of a loss in flexibility. The business becomes locked into the actioning of earlier strategic planning decisions which it is powerless to override in the short term.

- Allocating resources to definite activities, for example, annual departmental budgets, training schedules, product development and competitor - action monitoring.

- Administration of a capital expenditure and investment programme. (A programme prepared in great detail and which is possibly the most precisely described area of the Primary planning period.)

- Product management action. Product life cyles are understood and their product-implications mapped.

- Research and development goal-setting.

. Capital and financial structuring including; dividend policy, loan financing, creditor policy, debtor policy, share issues and so forth.

Secondly, the business may pay heed to a Secondary planning period following the Primary interval.

The Secondary planning period's importance is often over-looked.

The immediate reaction, when planning, is to discount the necessity of considering the seemingly unquantifiable and uncertain future existent beyond the Primary period. Our belief is that to do so is a grave error.

Consideration of a Secondary planning period is justifiable on the grounds that, although it is not a field for the formulation of detailed planning, it does represent an unlimited expanse of time within which corporate planners are free to consider anything likely to have a bearing upon the business beyond the currently quantified planning horizon.

As has been stated, the business, as an establishment, is intended to be a long-lived institution capable of growing and adopting ceaselessly within an ever-changing series of environments. Logically, therefore, although a 5 year Primary planning consideration may be adequate for detailed operating planning, attention must be devoted to the even longer-term.

Moreover, by becoming limited to a Primary planning time boundary, there is an automatic reaction to ignore or playdown elements present within the present task environment whose potential to foster or limit the company's operations will really only be felt 6, 8 or even 10 years hence.

As a hypothesis it may be advanced that whereas companies and, in this case, the motor industry have been fairly successful in coming to grips with Primary planning, it is Secondary planning considerations which get swept under the carpet. For example, the typical motor company tends to link its operating strategy to a five year cycle which, in this country and Europe denotes the model life of a particular product line. Beyond this time-span the major concern of most manufacturers would appear to relate to those of styling. For example, vehicle stylists in 1978 may be expected to be working upon styling alternatives for the 1988 model year. Engineering development, on the other hand, is not so outward looking. Although it is true to say that the various manufacturer's engineering research operations are working out to 10 years or more ahead, their orientation when doing so is rather upon how to produce, more effectively, at lower costs the same basic product as is made today. In addition, by far the majority of such work is actually directed to immediate, short-term correction of defects present within the current product.

What is being ignored within this industry is the actual future, not of the individual separate companies, but of the industry as a whole. All visible planning efforts are of the Primary kind being based purely upon limited reactions to known future trends. Cars are being built and designed so as to be more economical, more comfortable and less costly to run and more competitive vis-a-vis rival's similar efforts. There is little evidence of any serious consideration of Secondary concerns. Theodore Levitt in his classic Innovation In Marketing exposed the need to overcome self-limiting "Management Myopia". Whereas Levitt was writing in the early 1960's in an effort to make companies plan their products with the market in mind and whereas today's corporate planner has taken this lesson to heart; what has generally been overlooked is that Levitt was not speaking of individual companies but of the future viability of entire industries. The future of an industry is not secured by the dint of its members implementing five-year Primary plans but, instead, by an an active, objective assessment of the industry's future.

"It's a simple fact that in twenty years there won't be any oil left."

"But hasn't your company sought to diversify into other interests? Didn't Shell, for example, advertise a while back its new involvement in coal?"

"We haven't and yes they did. We're trying though and I'm not sure that Shell have been too successful. The whole industry's in the same boat, we're too involved in a dead resource and we've left it too late to get out. Maybe five, ten years ago there'd have been a chance." *

The above conversation crystallizes the urgent requirement for Secondary planning within all industries and amply describes the chronic inadequacy of the motor industry to even consider the broad environmental trends affecting it. Having beautifully styled and low fuel-consuming vehicles is a laudable Primary objective but at a higher plane, in Doomsday terms, may cause the demise of an entire industry within a petrolless society. Clearly, for an industry as sensitive as the motor industry, Primary planning is little advance over the annual budget. The true requirement is for genuine "long-range" planning and planning implementation.

In concept the idea is to cast into the future as wide a net as is humanly possible to identify anything which may, firstly, be relevant to the industry's purpetuation and only secondly, to the longevity of the business. Once the types of time horizon pertinent to the business are identified it is then possible to project the strategic implications of such findings into the dimension of time.

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* Personal interview with a senior member of a leading oil company, Johannesburg, June 1978.

The all-encompassing nature of a strategic decision, whereby ground rules are established for the thousands of decisions, actions, problems, opportunities and day-to-day concerns which flow from it, renders it very much a long-term entity. Strategy cannot be changed, amended or reversed as the demands of the moment dictate.

Conceptually, a corporate strategy is capable of enduring for a very long time indeed. Witness a business having a diversification strategy; once a merger with a second company in a different industry has gone through, the acquiring business will be tightly locked into its strategic option. At the conclusion of its Primary planning period, the affects of the merger will continue to shape and mould the corporation's structure, strengths and weaknesses.

In the long-term any corporate strategy will become part of what might be termed a "Strategic Revolution" by being subjected to a process termed "strategic decay". In essence, this process serves to describe the movement of the firm's strategic direction from an initial strategy to a second strategic stance and hence switching to a third which may, conceivably, be identical to that adopted in the first place. Moreover, the strategy towards which the business is most likely to return is that of Market Penetration - to an extent that this strategy may even be described as being an "equilibrium" strategic option,

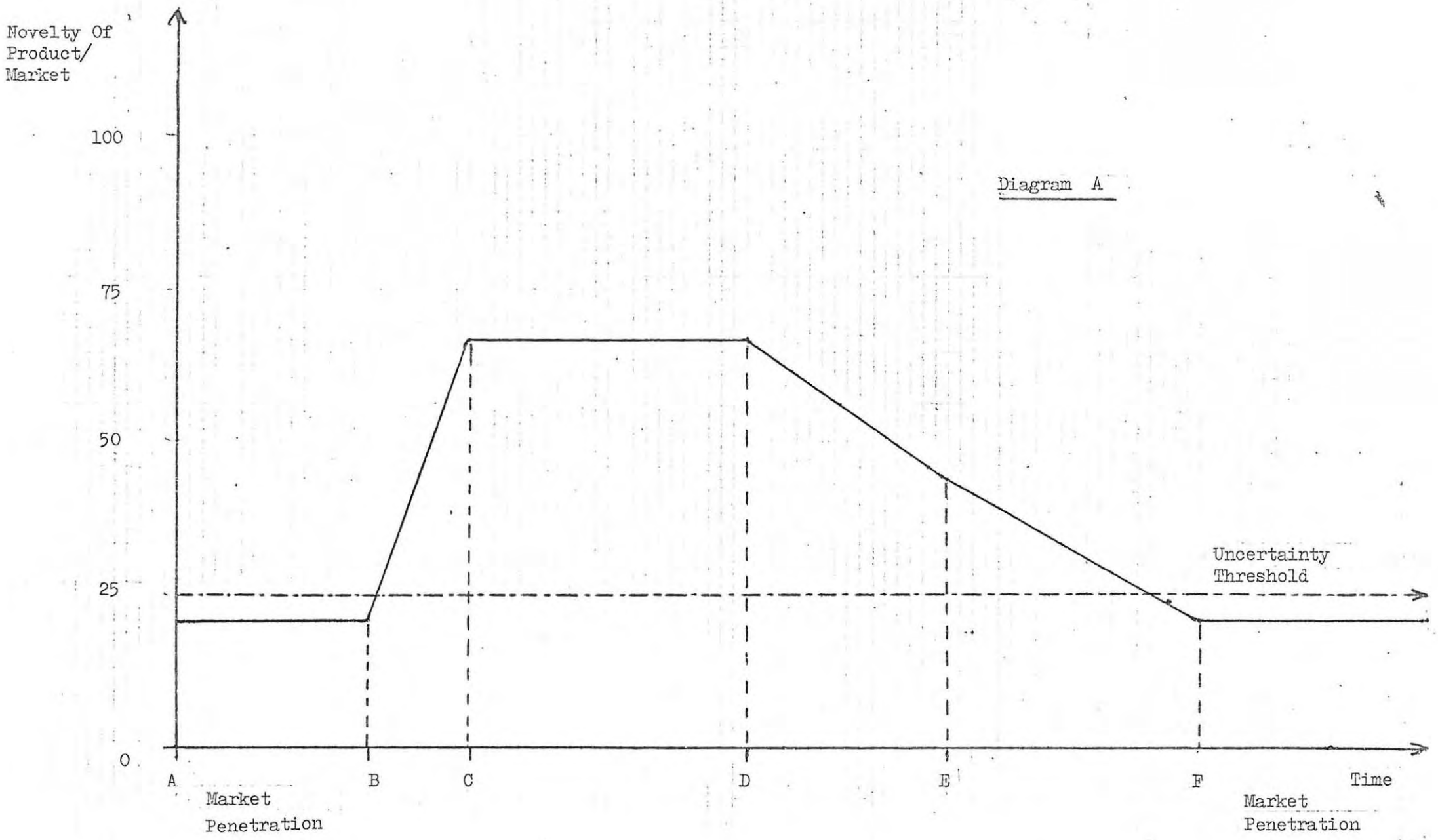

Novelty Of Product/ Market
100
75
50
25
0
Uncertainty Threshold
A
B
C
D
E
F
Time
Market Penetration
Market Penetration

Diagram A

meaning that any movement away from it is an abnormal action which is corrected by environmental pressure. By drawing upon examples from the motor industry and oil industry an attempt will be made to show both the form of the Strategic Revolution as it occurs in the practical world and that it is a flow of action-inducing guidance rather than a series of discontinuous decisions.

Firstly a natural corollary of the Strategic Revolution is the concept of the Product Life Cycle where the decay of a product's appeal is replaced by the switching between strategies.

Diagram A will be used to illustrate the process of a Strategic Revolution. On the horizontal axis is plotted Time whilst, on the vertical, is a scale of 0 - 100% which denotes the degree of familiarity, novelty, or, by implication, risk-uncertainty present within the minds of planning management when dealing with any particular product/market strategy. Step One is to ascertain, for the planning group, the company's Uncertainty Threshold. That is, the division which identifies a product/market stance wherein they feel that there is no major uncertainty present. Typically, all strategies of Market Penetration, whereby an established product is marketed more intensively to an established buyer group, will fall within the range 0 - 25% as this strategy provides a product/market stance with which the company is most familiar and is less open to major risk. Accordingly, therefore, during the period A, B a strategy of Market Penetration prevails.

In Step 2, during the period B, C a new strategy (e.g. Product Development - New Product in an Existing Market) is formulated and

and implemented, launching the company into a new set of circumstances which are rapidly perceived to be significantly different from those experienced during A, B - new ways of doing business must be learnt, new ways of communicating with consumers must be tried and a speedy appreciation of the "newness" or novelty of the implications of the revised strategy become apparent amongst members of the company at all levels. Between points C and D the novelty of developing and marketing new products is most marked. The two problems to overcome are, firstly, to ensure the product is acceptable to consumers and, secondly, to communicate to consumers that the company now makes products of this new type - effective, thrusting marketing is required. Step 3, or the period D, E is evident when the first flush of newness has worn off the strategy, the market and the company's efforts are beginning to make sense to management and the strategy has now established itself.
Step 4, period E, F sees a return to a strategy of Market Penetration and exposes the full cycle of the Strategic Revolution. During E, F the business will have steadily come to grips with the marketing of its now-established "new" products to the extent that there are no surprises left whilst natural complacency has whittled down the earlier aggressive stance. That is to say, during A, B the company sought to market more hand toothbrushes to more people, during B,C a strategy of moving into the manufacture of electric toothbrushes was introduced which brought the company into a field where both product technology and competition (household durables) was new, C, D, E; finally, during E, F the company's strategy has reverted to one of Market Penetration - the sale of more electric toothbrushes to more users.

Examples drawn from real-world conditions are present in respect of the international oil companies who, during the past fifty years, have followed strategies of market penetration and product development. There have always been new petroleum product users on tap; be they new car buyers, commercial aviation or oil-fired ships. Strategies have always been relevant; more opportunities to sell and new products to sell. In all likelihood the next fifty years will witness a change in strategy within the industry as changes in the industry substratum render traditional strategies out of step with constraints imposed by dwindling oil supplies. Eventually, a new industry market development or diversification strategy may lead the industry to an involvement in coal technology to the extent that the predominant strategy will be one of market penetration again - the sale of more coal-based products to more existing buyers. By the same token, identical strategies have been present within the motor industry except that by virtue of the limited life span of any particular vehicle line the strategic cycle for any one company will continuously move from Market Penetration to one of Product or Market Development when a new product-line is introduced or a new market is exploited back to Market Penetration once the product-line starts to become obsolescent and the market fully established. Again, major environmental constraints existent outside the Primary planning period may force a major strategic switch in future - even to the extent of a wholesale diversification action.

2.6. Feedback Of Results And Planning Control

This section will attempt to describe two elements of the Corporate Planning process. Firstly, the requirement for planning control

will be reviewed. Secondly, the feedback and control systems utilized by the motor manufacturer forming the subject of this dissertation will be critically appraised.

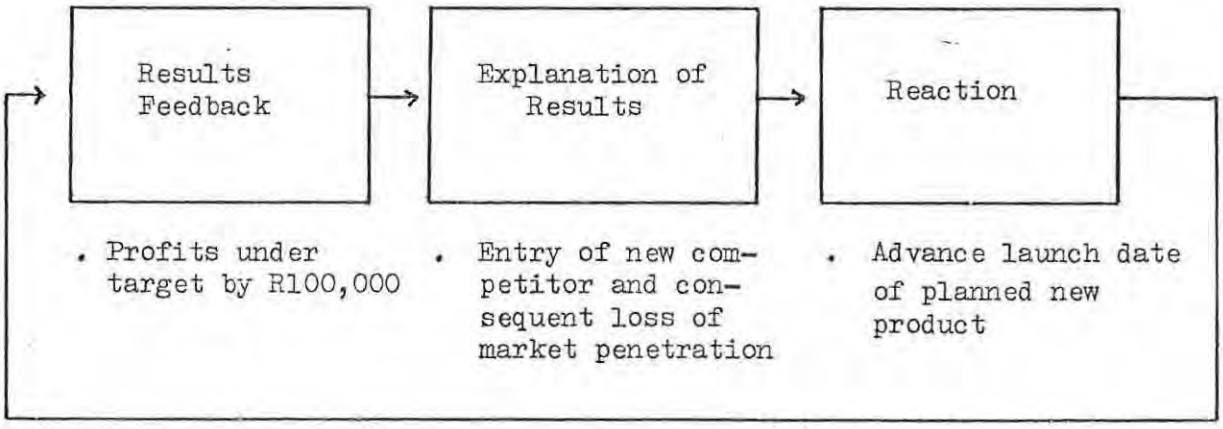
2.6.1. The Need for Planning Control

Accurate, timeous feedback of operating results created by plans which have been transmuted into action is an undoubted planning necessity. Corporate Planners must be able to assess the degree to which their efforts have been successful in meeting their company's objectives. Some yardstick must exist whereby results may be measured and expressed in some quantitative form which will clearly and unambigiously indicate whether a given objective's requirements were met, surpassed of uncompleted. On the other hand, the ever-fluid nature of the corporation's operating environment demands that the company's planners must be able to read and monitor the same. By so doing their plans and contingency plans will make it possible for their company to react quickly and appropriately to changed circumstances on an on-going basis.

In short a Corporate Planning control system is both predictive and explanatory by nature and purpose. Predictive in that environmental events are monitored and assessed as to their ability to influence the company's current planning actions and explanatory in that deeper insights are gained in respect of; environmental circumstances, such circumstances' joint and individual impact upon planned actions and the actual results plans achieve.

At first sight it may be felt that the predictive and explanatory elements of control are quite remote or independent from one another. Conceptually they are; in practice, however, they are unified via the medium of what may be termed corrective "corporate reaction". For example, if it is clear that the company is not going to meet its target profit its control system should be able to provide answers to the key questions of, "By how much will the target be missed?" and "Why were our plans inadequate, what happened to cause this planning failure?" Once these answers are forthcoming the all-important corporate reaction may be implemented; viz, "Now that it is known that profits will be down by R100 000, what must be done to ensure that our efforts in the remaining eight months of the year make up for the inadequate performance in the first quarter?"

In other words simply to learn why plans went astray and by how much is insufficient. The information provided must lead to some form of corrective action. (By the same token merely to act without information feedback is, in effect, to gamble ineffectively). The sequence always remains the same :



The system of control outlined above has been termed the "Feedback Control Loop." A loop exists by virtue of the fact that a company's Reaction in Period 1 is evaluated at the end of Period 2 i.e. the results obtained by that reaction are fed-back and deviations explained, in consequence a second reaction on the part of the company then occurs which, in turn is later assessed in Period 3.

Engineering applications of the control loop principle to machines and processes are commonplace. For clarity a simple thermostat controlling the heat output of a domestic electric heater will be briefly described as a means of illustrating the loop principle in action. The thermostat, having been set to a standard temperature, measures the temperature of its surroundings and in the event of its being less than standard (a negative variance) switches the heater on (interpretation more heat is required and reaction - switch the element on). Conversely, a greater than standard temperature (a positive variance) will cause the heater to be switched off. Thus, over time a standard temperature (profit, cost or revenue target) is attained via a series of on-off-on-off actions.

As may be deduced, the two key requirements in any control system of this type are accuracy and speed. Accuracy ensures that the best possible information is provided such that corporate reactions may stand the least chance of being misguided. Speed ensures that corporate reactions may be implemented to correct or take advantage of a variance in as short a time as possible.

In practice there are very often situations whereby a trade-off must be made between the need for control information accuracy and the need for quick reactions. In other words there will be occasions in which the maxim "It is better to do something now even if it may not be the right thing rather delay until better information is to hand" is applicable. This type of crisis reaction is undesirable but it is frequently adjudged even more undesirable to delay reaction, in the midst of a worsening situation, until more and more accurate facts become available, the rationale being that the delay between the implementation of action and the feedback of results may be such that the postponement may render the awaited information obsolete anyway.

An example of the above exists in respect of Volkswagen's actions during May - June 1978. Volkswagen had recently launched an all-new Audi 100 range of cars. Their market surveillance, however, indicated that one of their major rivals, Ford, was expected to launch an all-new Granada capable of competing with the Audi in addition to two additional market segments which the Audi, as it stood, did not cater for. In consequence, Volkswagen rushed into production two additional revised Audi 100 models. Firstly, a version to compete with Ford's cheapest Granada and secondly, a super-luxury Audi 200 to counter the Granada Ghia. In essence, Volkswagen's control process was so finely tuned that the company was able to act quickly merely on the basis of leaked information concerning a rival's intention.

Notice that the appropriateness of introducing two new Audi derivatives

was not considered in the light of buyer wants per se. Rather the prime consideration was to capitalize upon a rival's creating a stir of interest in the market before that stirring action had even been made. In other words, the control loop was short-circuited by moving directly from a Results Feedback (Ford's product plans) to a Reaction (introduce two Audi models). Notice too that the real impact or effectiveness of Ford's plans was not assessed; a gamble was taken in that because one of the largest of Volkswagen's rivals was planning to act this way the gamble would be successfully underwritten. (Naturally, when considering such defensive or opportunistic reactions there must be an awareness on the part of the company's Corporate Planners that such short-term actions may bring about such a divergence from the Corporate Plan as to actually work contrary to the best long-term interests of the company.)

To conclude, it is no exaggeration to say that, for the motor manufacturer, possibly his most important control medium is that which pertains to product actions. This is so by virtue of the fact that the product represents the interface which exists between the company and its environment. Through this interface the bulk of a company's threats, opportunities and controlling actions are communicated. Moreover, the actual control system must possess sufficient sensitivity to implement the required degree of reaction; too little will be ineffective whilst an excess will force the business from its plotted course. A further and final control difficulty exists where the business is so highly structured and centralized that the control administration machinery unduly raises corporate reaction time such that reactions are poorly tailored to operating needs.

Organizational complexity also makes the reporting of performance deviations subject to levels of abstraction sufficient to strain from the live environment many of the shades and nuances of meaning which fully define and clarify the cause and extent of result-deviations.

2.6.2. A Motor Manufacturer's Control System - A Description And Critique

Two themes will be developed within this sub-section. Firstly, there is the situation whereby the major portion of Corporate Planning control is product orientated. Secondly, a review of the overall Corporate Planning control system will be attempted.

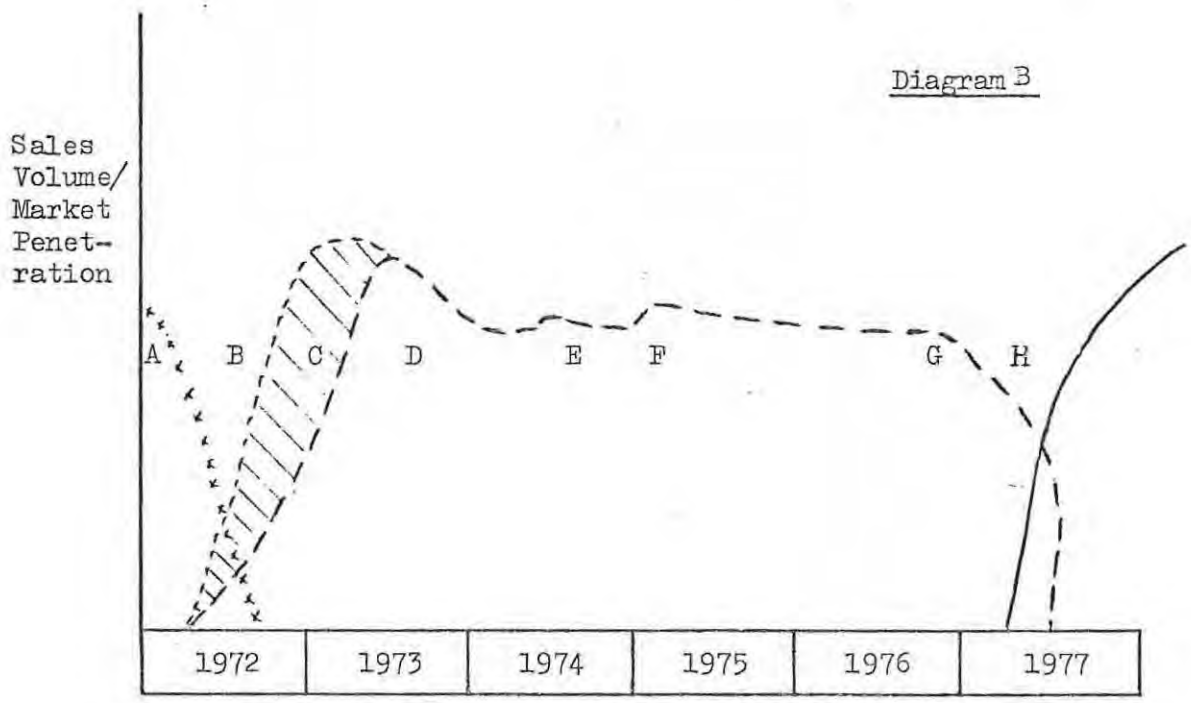
As was stated above the manufacturer's product lines assume an important communications role. A market opportunity will be exploited by a product amendment whilst a threat will be met by some form of product action to which the market will, it is hoped, react favourably. At a Corporate Planning level, the underlying concern of this manufacturer relates to the product life cycles of each and all of its vehicle models. This being so the manufacturer will attempt to design its Corporate Planning controls around the life cycles of its product lines as they may be expected to be influenced by changes in buyer preference and by competitive actions.

The small family car market may be taken as an example. Intense competitive pressure is a notable characteristic of this market segment. Wholesale profit margins are not great and no less than eight manufacturers offer comparably priced and specified products. In consequence the effective life-cycle of any product tends to be somewhat brief. Once launched to the public a model moves swiftly through the growth and maturity stages to the decline phase of its life cycle. Typically, the decline phase is relatively prolonged - the model is bolstered by retail discount-

ing, minor re-styling and promotive actions. Of note is the fact that, in the majority of cases, a model's maturity phase is exceedingly brief.

Diagram B is presented as a typical scenario which will be considered by Corporate Planning management when reviewing the performance of a small family car during its life. Eight control decision-points (A - H) are featured in the illustration, each will feature a Results Feedback, Explanation or Interpretation of Results and Reaction element. Naturally, in the diagram we shall be viewing the key control concerns of a product marketing plan with the benefit of hindsight.

Diagram B



Taking each identified decision-point briefly in turn :

A - The previous model is withdrawn from the market, its sales drop rapidly as the manufacturing plant ceases production and dealer inventories are absorbed.

Feedback - There will be no large stocks of old models.

Interpretation - Serious loss of profits will result if adequate stocks of the new model are not forthcoming.

Reaction - Manufacturing plant is put on overtime to attempt to supply dealer inventories.

B - The situation all motor manufacturers dread - a market gap, dealer stocks are totally inadequate and customers turn to rival companies.

Feedback - An estimated loss of 10% penetration has occurred.

- Dealers are extremely disgruntled.

- Two major rivals are exploiting the situation by promoting heavily.

Interpretation - Gap is caused by supply shortages of components and manufacturing problems.

Reaction - Establishment of a product "task-force" to solve manufacturing difficulties.

- Supplies of components are airfreighted in from Europe.

C - The situation begins to resolve itself. The shaded area represents the difference between what was originally planned and what actually occurred.

Feedback
- Six months profits have been lost from the profit target.
- Manufacturing difficulties are solved.
- Difficulties remain in respect of component supplies.

Interpretation
- Wholesale margins must be raised on other product lines to maintain corporate profitability.

Reaction
- Wholesale prices on alternate products are raised.

D - Product supply is now free, the product finds a ready market acceptance in line with its original forecast. Full maturity is only attained during the 1st quarter 1973. Thereafter the decline phase begins.

Feedback
- Product launch expectations are fulfilled although delayed.

Interpretation
- Pricing revision is required.

Reaction
- Wholesale margins are raised on the new model and reduced on alterantive models.

E - The post-launch plateau where the novelty of the product has worn-off but is still fresh enough to draw and hold a consistently high number of buyers throughout 1974.

Feedback
- Stable product demand and free supply.
- No major rival actions expected during 1974.

Interpretation - Product is at maximum potential profitability.

Reaction - Wholesale margins are raised.

F - Impending rival product actions towards the end of 1974 threaten to reduce the products' market penetration. In addition, month over month penetration figures reveal a distinct downward drift.

Feedback
- Loss of penetration.
- Threatening competitor actions.

Interpretation
- Product has entered the decline phase of its life cycle, its decline will from now on become more rapid and pronounced.
- In terms of sheer product attributes it is no longer as attractive as rival offerings, it is becoming uncompetitive.

Reaction
- Reduce wholesale margins.
- Raise promotion expenditure.
- Implement a merchandising programme featuring cash awards to dealers for units sold.

G - The end of the product's effective product life cyle. Its replacement is in an advanced state of development.

Feedback - Dealer stocks are adequate to last until the new model's launch.

Interpretation - A product gap must be avoided.

- All in-plant inventories must be cleared.

Reaction - Implement a merchandising program to encourage dealers to take on additional showroom inventories.

H - The launch of the new model.

Feedback - Buyer demand commenced and is being maintained at a high level.

- A member of smaller dealers are under-stocked to the extent that a slight loss of penetration occurred during the month after launch.

Interpretation - No direct action required.

Reaction - Implement a merchandising programme to reward dealers for concentrating on existing alternative models as well as the new model.

(Two points of note emerge from the above series of events viz the actions and concerns relate primarily to the company's product and the "customer" in whom the company is most interested is its dealer body rather than final, retail buyers. This is, we believe, one of the major characteristics of a motor company's planning efforts.)

In Corporate Planning control terms it should now be clear that this motor manufacturer's control system is very closely allied with the feedback control loop concept. We have chosen the key concern of planning in the field of products and markets to illustrate the applied process in this instance. By the same token, Diagram E could have been utilised in respect of a five-year sequence of capital investment, cash-flow, materials purchases, labour turnover, advertising expenditure and research expenditure. Whatever is considered, the principle remains the same. All relate to a standard or objective which may be ultimately traced back to the overall corporate profit objective and all are evaluated via the control loop.

One fact which must be understood is that the control system must be applied to a unified "cascade" of objectives. For example, the corporate profit objective provides sub-objectives in respect of marketing, production, finance, purchasing, research and development, service and personnel. Taking marketing in isolation; to attain a target profit of Rands X, Y percent market penetration must be attained by three car-lines Z^1, Z^2 and Z^3, in turn this means that Rands A must be spent on advertising, Rands B on merchandising, Rands C on sales training and Rands D on researching buyer wants. Rands A, B, C and D must all be allocated and spent in the most effective possible ways. (Naturally the same cascade occurs in respect of production, finance, purchasing, research and development, service and personnel.) Thus the managing director's objective is to earn a profit of Rands X, his marketing director's objective is to attain a market penetration of Y percent, each product division manager must gain

a market penetration for his car-line of Y/3, the advertising department must spend Rands A supporting these objectives whilst the same applies to the other supporting marketing staff functions.

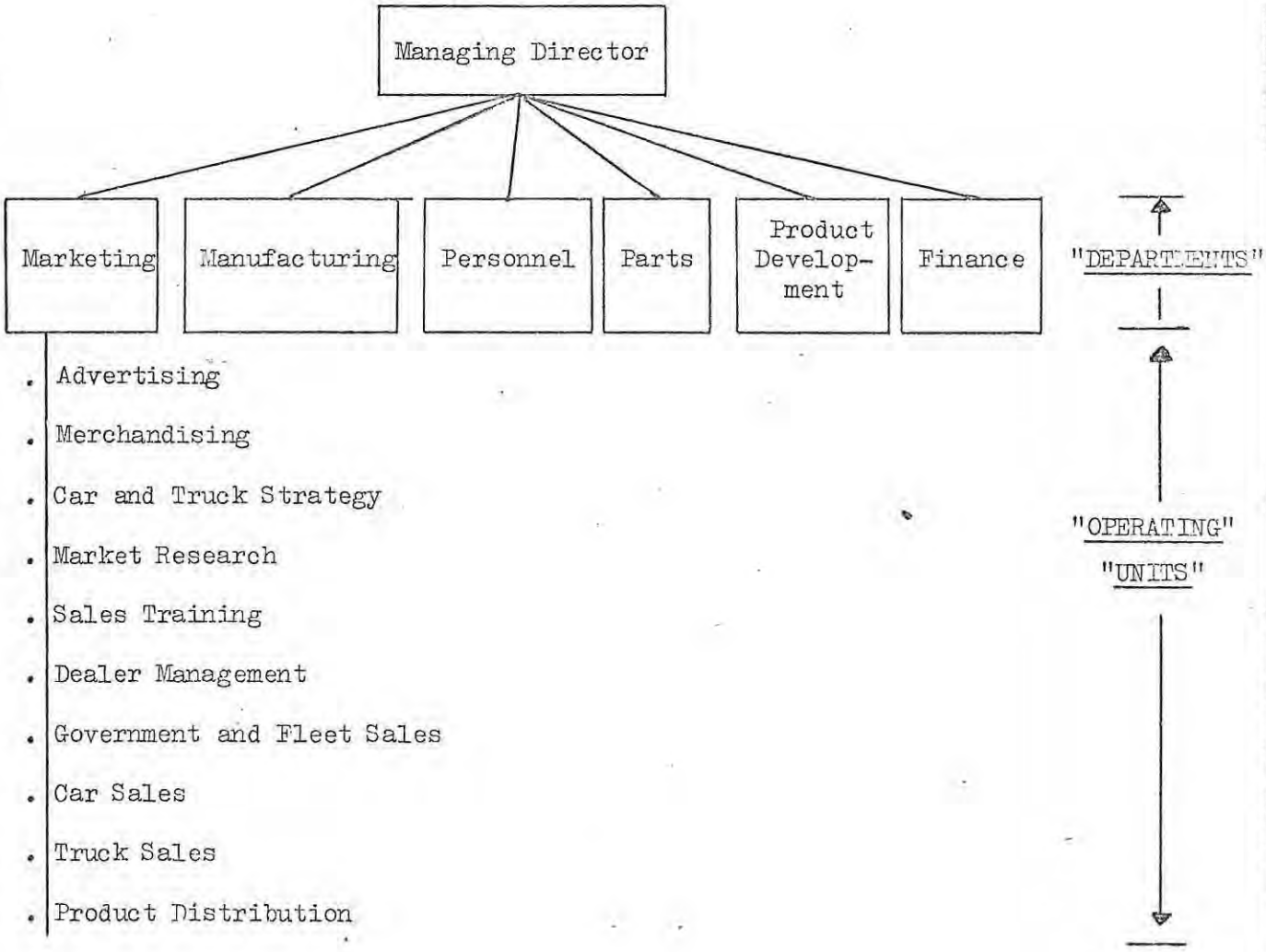
Accordingly, the control system will be applied in turn to the corporate profit target, the market penetration objective, the car-line penetration objectives, the expenditure of advertising funds, the effectiveness of merchandising actions, the impact of sales training and the value of research direction provided.

Being a relatively small subsidiary of a large multi-national corporation means that, in practice, planning controls assume a high degree of formality and rigidity. Essentially, the company is highly structured on a strongly centralized basis. The planning control implications of this fact are two-fold. Firstly, much of the control administrative machinery is in the hands of highly specialized overseas staff departments. Secondly, local operating management is limited in respect of the degree to which they may react to indicated variances in performance without referring to the overseas staff for approval.

In order to fully understand the role of planning controls, the type of planning concerns and the action overseas staff personnel have upon planning operations and control systems, it is necessary to consider the following three areas of interest within the subject company, viz:

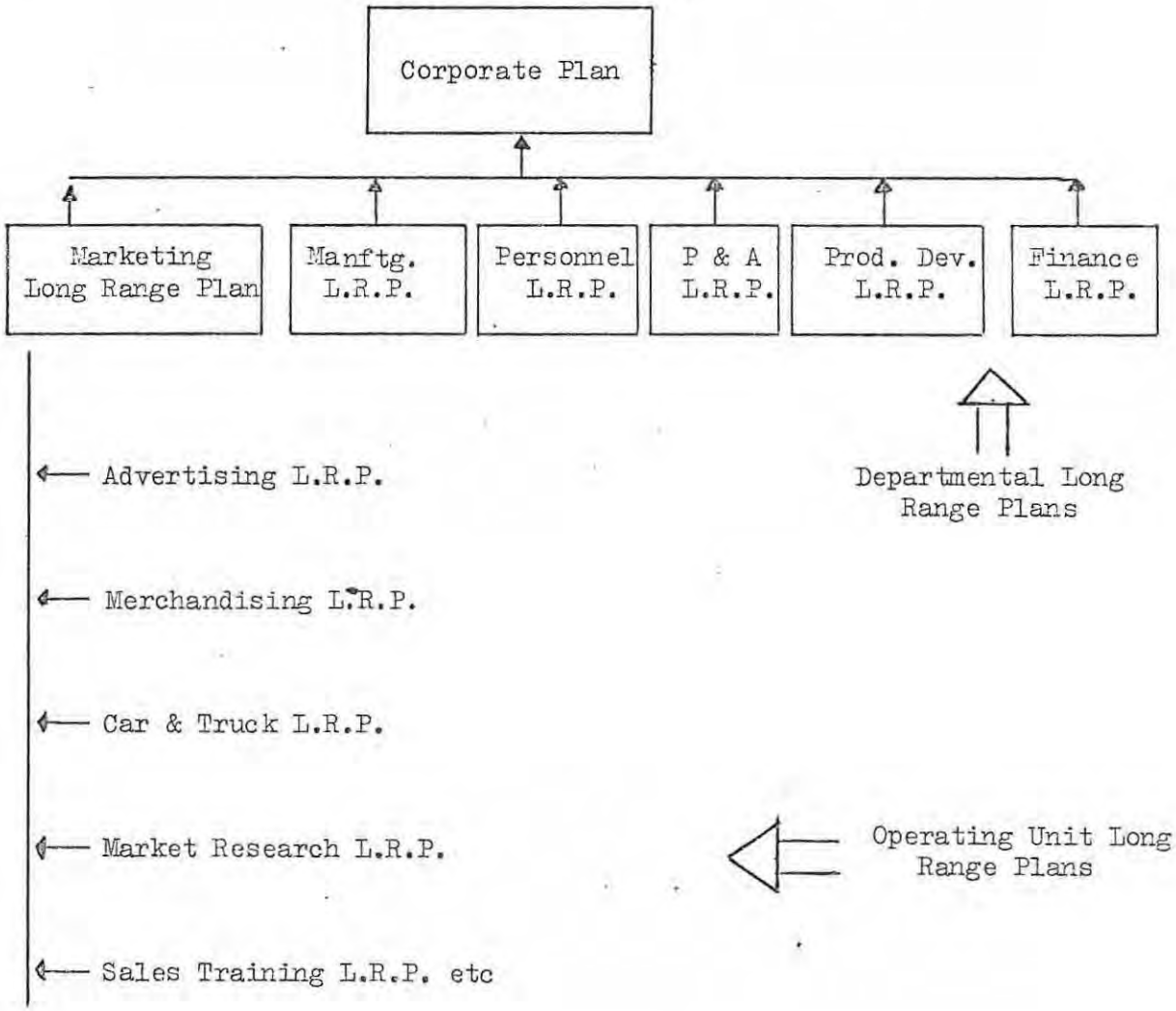
- Ten Year Departmental Plans
- Annual Departmental Plans
- Annual Operating Unit Plans

However, before specifically covering these areas a useful purpose may be served by clarifying what is meant by "departments" and "operating units." Essentially, the subject company possesses a three-tiered organization structure which is outlined in the diagram below.



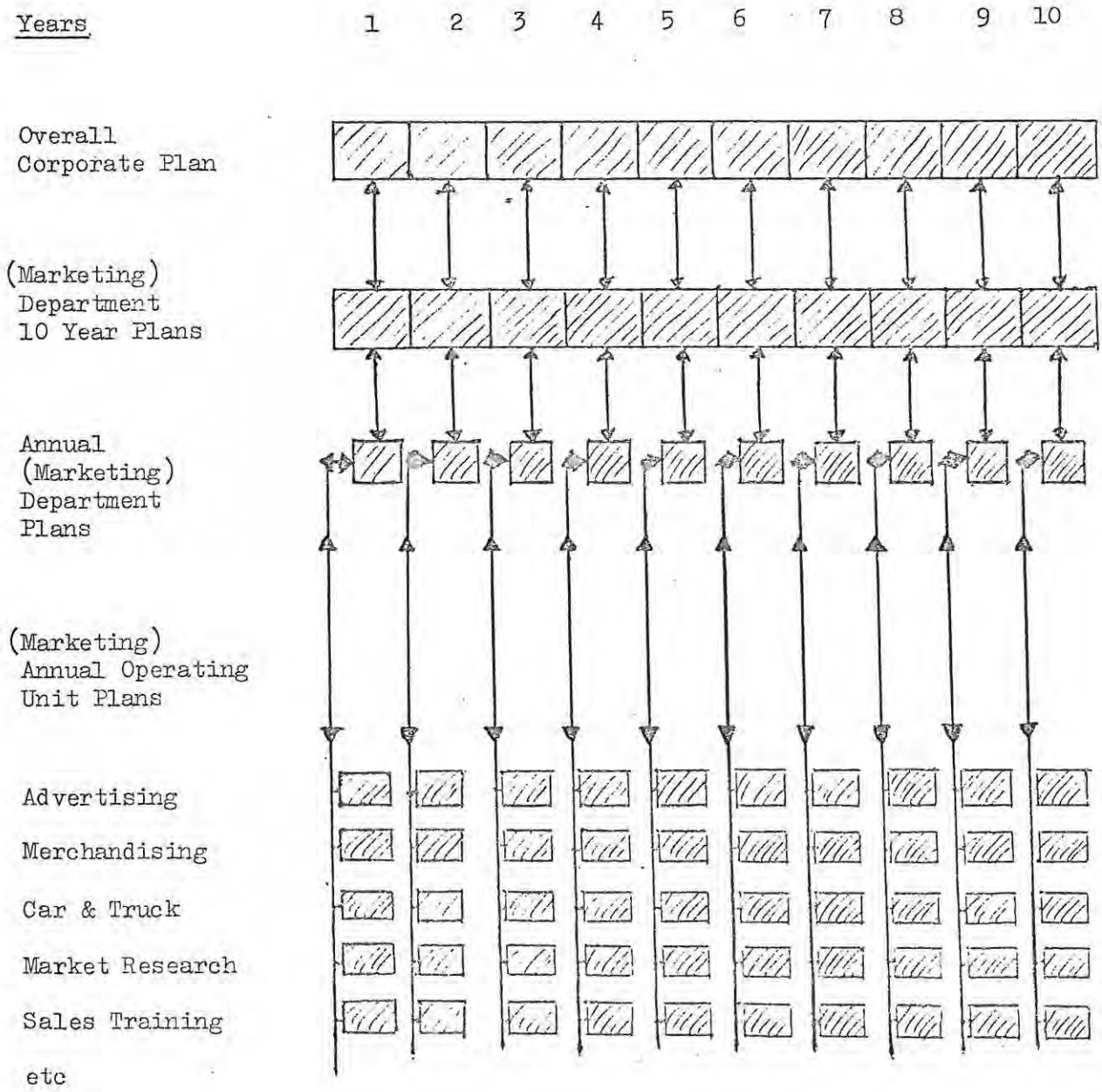
Accordingly, six main departments (each of which is composed of various operating units) are co-ordinated by the managing director.

The three types of plan mentioned above form what may be termed a "family" of plans by virtue of the fact that they interlock with one another. In addition, they are all built into the overall Corporate Plan. The diagram below attempts to illustrate this relationship for the Marketing Department.



This company's Corporate Plan works upon a ten year planning cycle.* This ten year period is composed of two distinct time sequences. Firstly, there is an annual operating planning period which consumes Year One of the cycle. Secondly, Years Two to Ten concern essentially, financial and strategic planning considerations. The diagram below endeavours to illustrate the total relationship between the Corporate Plan, Ten Year Departmental Plans, Annual Departmental Plans and Annual Operating Plans.

(* Refer page 89)



Effectively therefore true long-term planning exists at corporate and departmental levels. Here the main strategic concerns are formulated and projected. Within each year the broad task of the department is broken down into the task the department must complete during that year which is, in turn, broken down into the sub-tasks for each operating unit for each year.

Before considering departmental and operating unit planning control it is appropriate to mention the prime difficulties which attend this company's planning control efforts. They are as follows:

1. At middle and lower (operating unit) management levels there is widespread antagonism to controls and those who administer them.

2. Successful resistance to and non-compliance with planning controls exists. This occurs not in respect of a few managers, but in respect of many and at all levels.

3. Resistance and non-compliance invariably takes the form of colouring or twisting performance information whilst phrasing long-term objectives as loosely as possible.

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* Continued from 1st line on previous page.

This may appear to be arbitrary but it is, in fact, linked to the typical life span of any single product line. Five years are required to research, model, style, engineer and tool-up to produce a car which will be on the market for a sales life of five years.

4. Knowledge that this resistance exists creates a counter-reaction whereby control administration procedures become increasingly tight over time leading to a dilution of operating delegation and a corresponding rise in resentment.

5. Managerial efforts are wasted where managers must provide unnecessarily lengthy and detailed control input which relates to what is or what was rather than what should be. Their vision is forcefully directed away from long-term planning horizons.

Finally, it must be remembered that two parallel control methods are to be found; firstly, there are budgetry, financial controls and secondly, there are operating controls which relate to the degree to which actual objectives are met.

Ten Year Departmental Plans

These plans operate in close step with the overall Corporate Plan. They seek to translate the Corporate Plan into a series of sub-objectives which are pertinent to the particular department in question. The Marketing department, on being supplied with profit targets for Years Two through to Ten, will be able to calculate, for each year, what levels of market penetration must be attained to generate these levels of profits. Once the target market penetrations are understood it is then possible to determine what actions will be required from the marketing department's operating units in order to support target penetrations.

A simple example to illustrate this process is given below.

Year 2

(1) Target Profit R500,000

(2) To attain Year 2's target profit market penetration must be raised by 2 percent.

(3) To attain an incremental 2% penetration the following operating units actions will be implemented:

- Launch a new car-line (Car Marketing Unit)
- Intensive television promotion (Advertising Unit)
- Dealer sales incentives (Merchandising Unit)
- Raise calibre and skills of dealer salesmen (Sales Training Unit)

Naturally, (1) and (2) above are purely strategic concerns whilst (3) is highly tactical by nature. Thus it should be clear that the Ten Year Departmental Plans comprise both strategic and tactical elements but that the former (in the form of profit, market penetration, product strategy and investment decisions) overshadows the latter.

At this point it must be understood that although the Corporate Plan may provide an indication as to what it is to achieve during the forthcoming ten years (in the form of a profit or market penetration objective for each year) and what budget may be provided for each year, very little else is present. At a tactical level for Years Two to Ten,

for example, a wide variety of alternative courses of action may be identified. Continuing with the above illustration, what actions should the Advertising Unit plan to undertake in Year Three? In practice the statement that in Year Three a target profit of R580,000 and a market penetration increase of 1.5% do not prove to be very useful aids in the preparation of advanced plans within the Advertising Unit. Compounding this difficulty is the very real fact that amongst department heads day-to-day, immediate-term concerns consume by far the most hours of their working days. At an operating unit level personnel, such as the advertising manager, are so hard-pressed that they will freely admit that to look beyond six to nine months is exceedingly difficult; for them to logically review and decide what will be done, two, three, four or more years ahead simply cannot be done in any meaningful way.

As a general rule only two things work to induce a departmental manager to realistically plan beyond the immediate future. Firstly, he will consider Year Two in some fair detail when the time comes (between August and September) for him to prepare his budget for that year. Secondly, when he must forecast the outcome of actions which will culminate in some objective's attainment within Year Two. (Examples include the construction of some item of plant and the prediction of market share for some new products .)

It must therefore be assumed and deduced that markedly effective long-range planning does not exist at a departmental level. Instead the overall Corporate Plan merely serves to provide a broad outline

of the company's direction over the next ten years whilst the various departments and, in turn, their respective operating units plan for relatively short periods of time to the exclusion of most concerns beyond twelve to fifteen months. Major reasons for this circumstance being maintained are given below.

. The concept of long-range Corporate Planning is poorly developed amongst managers in all departments at all levels. Certainly there is little awareness of or interest in the long-term future of the business. In many personal conversations it was clear that even the terms "Corporate Planning" or "long-range planning" were inperfectly understood by managers at middle and lower levels of the organization. As a consequence little time or attention is devoted to any attempt to improve planning quality. Two quotations aptly describe how this ignorance and apathy becomes built into the practical planning task.

On one occasion a manager stated, "I don't think we really have to plan around here. This organization's so big we're successful in spite of ourselves. Any foul-up anyone makes is so relatively small that it soon gets flattened out by this corporate steam-roller."

On a second occasion the issue of the following two year's budgets was under discussion between managers A and B.

A. "What'll you need for '79 and '80?"

B. "I'll have to sit down and think about it for a while."

A. "Well C wants an estimate before lunch. What have you got for this year, R68,000?"

B. "Yes, but I'll have to speak with D and E to give you that sort of forecast, to be reasonably accurate anyway; if I don't I'll just have to guess."

A. Could you live with R68,000 plus 10% for inflation year over year? It would keep C happy this afternoon and besides if you later find its not enough we'll make a pitch to get some more money. Would that suit you for now?"

B. "Why not?"

Internally management rotation at all lower and middle levels is relatively rapid. An operating unit manager can expect to change to another area of responsibility within an average of between 17 to 24 months. Departmental managers rotate on a slower cycle but few remain within one job for more than three to three and a half years. As a consequence, few expect to be held accountable for planning efforts which will only come into

fruition outside their term of office within their current job. Instead there is evidence that plans are made which will do so whilst the manager still is within his current job for in this way he collects the credit for his ' planned ' actions. Naturally, this tends to induce managers to choose in favour of easily achievable results. Naturally, there is no guarantee that such short-term planning automatically benefits the company over the long-term.

Managerial workloads at all departmental and operating unit levels are heavy, largely as a result of sub-optimal management skills and understaffing in critical areas. Consequently, managers have little time to think through the muddle and confusion of current deadlines to the long-term future. Moreover, even if they have the will and understanding to so, they recognise that very few of their fellows will; accordingly they futher realize that their individual efforts may be, ultimately, rendered worthless.

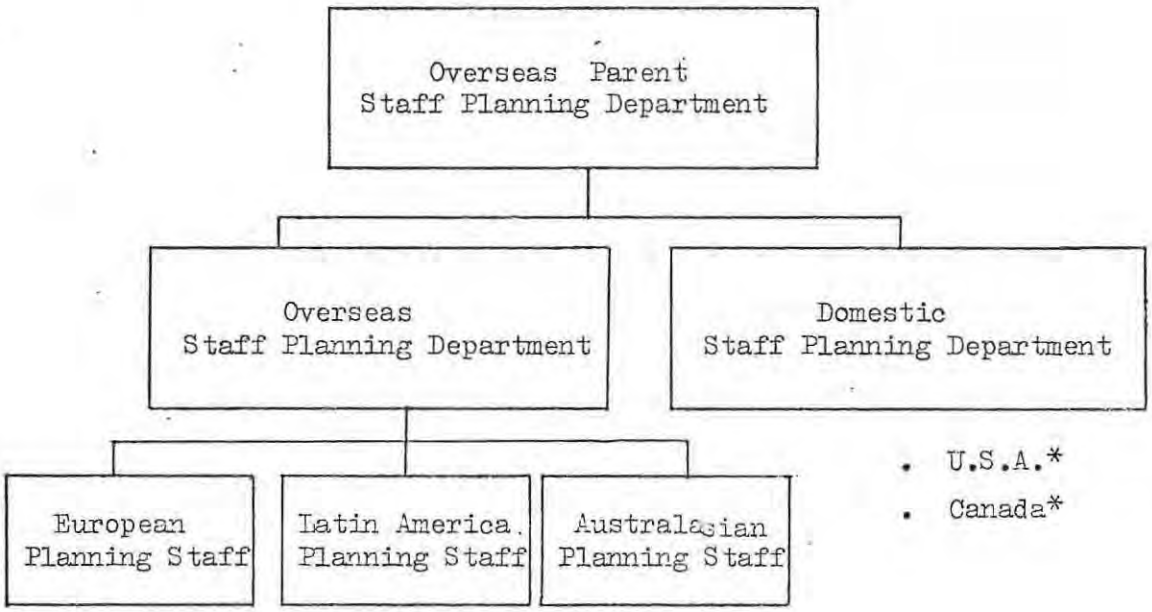
Planning decisions made at an operating unit level are continuously subject to arbitrary and unexpected counter-decisions made at more senior levels. Evidence exists that in a number of such instances the countermanding decision was not made in response to some improved overall opportunity but, in fact, flowed from some anticipated short-term gain and/or corporate-political advantage.

- At no time are any departmental or operating unit managers held accountable for long-term planning results. All, however, recognize that a very close watch and record is made of their work performance over the short-term in pursuit of limited range objectives.

In terms of planning control therefore, there is little that is genuinely effective outside the scope of one or two year planning considerations. Once tactical level focus is shifted to beyond two years little or no control exists by virtue of the fact that there is simply nothing to control. At a strategic level, however, planning controls are exerted in respect of gauging the appropriateness of intended future profit targets, product strategies and market penetration forecasts.

At this strategic level and as part of a multi-national corporation the local company's ten-year Corporate and departmental plans are subject to the controlling influence of a Corporate Planning staff department attached to the overseas parent's head office. In practice it is they who have a major share in the task of weighing and evaluating the suitability of the South African company's true long-range strategic-based plans. Their local contact is strictly confined to the local managing director and senior department heads, as a result they do not and cannot directly work to improve the degree of tactical departmental planning.

The diagram below attempts to illustrate the position and span of responsibilities of this Corporate Planning staff body in respect of its internationally spread associates. It is important to recognize that this body does not confine its attention exclusively to South African affairs. Instead its time is apportioned by the relative importance of each overseas location, the availability of local planning expertise and particular special circumstances.



CORPORATE PLANNING STAFF ORGANIZATION

* Denotes manufacturing operations

\+ Denotes limited manufacturing/assembly operations

Organizationally, South Africa's automotive operation reports to a planning staff department based in Rio de Janeiro which, in turn, is accountable to a department in the United States having overall responsibility for planning affairs in all overseas subsidiaries.

In practical terms the relationship the South African subsidiary enjoys with its Brazilian planning masters is both cordial and broadly fruitful. At the same time however it must be admitted that a degree of under-performance is tolerated which flows directly from this relationship. Firstly, separated by time and distance the Brazilian staff have proved consistantly incapable of fully appreciating the multitude of fine details which so very often shape the content, direction and structure of local planning efforts. In short, the Brazilian and South African operating environments are quite different and there is evidence that certain uniquely South African circumstances are interpreted in the light of either the staff controller's Brazilian or American experience. Such an undesirable influence may only be diluted by frequent detailed, written and telexed memoranda which are never wholly satisfactory by virtue of the inherent shortcomings of these communications devices. Telephonic exchanges of information are not only expensive but can sometimes prove unrewarding in unexpected ways; a local departmental manager telephoned a member of the Brazilian planning staff only to discover that this individual

could only speak fluent Portugese - a language the local manager did not understand. Secondly, there is the fact that there is no locally-based Corporate Planning functionary. In practice this means that Corporate Planning actions lack a local co-ordinator for both planning (per se) and control purposes. A loosely formulated committee undertakes the preparation, implementation and control of local long-range plans. Thus both local and overseas planning control at a departmental level is further weakened.

Annual Departmental Plans

Essentially, these plans seek to set out, on an annual basis, three classes of planning and control data.

(a) The key objectives for the year for the department as a whole and for each of its operating units. (As will be remembered, these objectives flow directly from the ten-year departmental plan.) - OBJECTIVE FORMULATION

(b) As a consequence of understanding the department's objectives actual activities within each operating unit may be formulated - TASK FORMULATION

(c) Once the department has determined what it is to achieve and how, its total budget for the year may be drawn up which will consist of a summation of the funds required by each of its operating units - BUDGET ALLOCATION

A point worthy of note is the fact that there is a clear distinction in practice between objective formulation and task formulation on the one hand and budget allocation on the other. (Theoretically each should lead logically from one to the next.) Instead when preparing its annual budget estimates a department will review its forthcoming objectives and determine the necessary tasks required to fulfil them and as a consequence complete its estimates. However, these estimates, on submission for financial approval, are invariably pruned or reduced to such a degree that the actual departmental budget for the year is less than that required. In turn this leads to circumstances where certain objectives (often having a key long-term impact) are either altogether eliminated or are effectively crippled. Rationale for this harsh view of budget estimates is difficult to uncover, however, this fact may, tentatively, be described as flowing from a combination of: abuses by earlier managers who asked for, received and mis-spent budget allocations; final allocations being determined by financial personnel who have little direct understanding or experience of departmental circumstances and a seemingly unquantifiable reluctance to tailor budgets to actual operating needs - the golden rule applied is expressed in the form of "This year's budget plus 10% for inflation".

Control, at a departmental annual level, exists in two forms. Firstly, there is a simple variance analysis of forecast monthly expenditure versus actual monthly expenditure. At the beginning of the year the department's planned actions for the year are set out by month. That done, the financial implications of completing these tasks are derived by month. In this way, it is possible to determine what funds will be spent monthly on which projects or tasks. A sample budget/task analysis

for the marketing department and for one of its operating units (advertising) is given below.

1978 Funds Allocated (R'000)

	J	F	M	A	M	J	J	A	S	O	N	D	Total
Marketing Department	200	800	400	500	600	800	800	300	600	500	700	100	7,300
Advertising	50	60	80	70	20	30	30	70	20	15	30	30	505
Product A	10	10	10	10	5	10	10	10	-	-	-	-	75
B	20	30	30	60	5	10	10	30	10	-	-	-	205
C	20	20	40	-	10	10	10	30	10	15	30	30	225

Reviewed on a monthly basis, a statement of year-to-date expenditure, expenditure committed* and forecast expenditure out to the end of the year is extracted which will expose for comment any positive or negative variences. (For example, an amount of R90,000 expressed against April in the above table will immediately require a satisfactory answer on the part of the advertising manager.)

Detailed, written supporting rationale are demanded for both the original budget/task analysis and in the event of there being any requirement to amend that analysis. Thus, the advertising unit will need to provide an acceptable set of reasons why Product C will be the only one promoted

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*Consisting of expenditure which the company is contractually obligated to pay but which has not yet been invoiced.

during October, November and December. Moreover, once this decision has been made, if it is then felt that Product B should also be included within the year-end advertising plan the same detailed rationale must be provided. In this way a fair degree of flexibility is possible but only if there exists sound reasons for switching from an earlier-determined course.

The second element of control exerted at a departmental level is present in those instances where the department in question fulfills essentially a staff function. For example, within a marketing department, the results of that department may not be capable of being evaluated wholly in quantitative terms. Although, the department's task may be to permit the company to attain a market penetration for the year of 12.6% if its actual performance was to reach 13.2% there is no logical way of equating this desirable result with the output and performance of the department's components. To what extent was this due to the merchandising unit launching a new product to the dealer salesmen? To what extent was this due to the advertising unit experimenting with television as opposed to press and radio commercials? To what extent was this due to the market research unit providing data on buyer characteristics? All these staff functions are controllable in respect of their task/budgets but the actual wisdom and success of their tangible actions remain unmeasurable and uncontrollable (at least in a formal sense).

In addition to the monthly task/budget variance analysis (a control element which equates closely with the earlier mentioned feedback control loop) a major review of each department's performance towards its objectives and its budget status is undertaken every three months

by the managing director and the overseas planning staff.

Organizationally it is important to note that although each department conducts its internal review every month it is, itself, reviewed each quarter by a further control device which is quite independent of any single department, its management, operating staff components and the overseas planning staff. This additional device is the company's finance division.

Local financial management, whilst bearing the responsibility for, inter alia, corporate profit and loss analysis, also act as a cross-check upon the claims, excuses and performance of other department's whose operations have some budgetry or financial implications. In the case of the marketing department, the finance department would critically appraise the intended pattern of expenditure for the year. As outsiders they may be incapable of comprehending the finer details of any department's plans but they serve to inject into the control mechanism the valued attributes of non-partisan, keenly critical independent minds which, in turn, does much to foster and enhance a spirit of care and prudence on the part non-financial operating managers. This financial control is continuous by virtue of the facts that all disbursements have to be approved by the financial department and the company's budgetry system is computerised in such a way as to provide a current budget status of each and every department and operating unit.

As may be deduced, therefore, financial controls are rigidly enforced and are highly developed. In many ways they constitute the prime component of on-going Corporate Planning control especially in respect

of staff departments and operating, line, units.

Annual Operating Unit Plans

It will be remembered that each major functional department is divisible into numbers of operating units (The marketing department comprises units in respect of advertising, merchandising, car and truck marketing strategy, government sales, fleet sales, dealer sales, truck sales and dealer planning.) Moreover, each department and each unit will possess its own budget, the latter coming together to total that of the former. To avoid needless repetition it is sufficient merely to refer to the section above (wherein the annual departmental planning control system was outlined) in order to understand both the type of controls which exist in respect of the operating units of each department and the manner in which unit annual planning controls dovetail with those of the department. Accordingly, attention will be focused upon practical planning control difficulties which manifest themselves at this level rather than to re-state the monthly and quarterly review process.

For control purposes each operating unit is expected to prepare a long-range plan for a ten year period into the future taking its cue from the ten year departmental plan which is, in turn, derived from the ten year Corporate Plan. Where the operating unit is of a line-type (such as product engineering) its long-range plans flow in a short and highly direct way from the Corporate Plan. Staff units, for the reasons mentioned above, lack this direct guidance

by virtue of their essentially intangible, unquantifiable output and contribution to overall performance. As a consequence staff units tend to express their long-range intentions in terms of loosely-worded ambitions which they perceive to be in step with corporate requirements. For example, the Corporate Plan may call for a steady flow of research data concerning car buyer habits and opinions. The market research unit may interpret this to mean the undertaking of a full-market coverage research project every two years amongst new car buyers.

The actual contribution made by any operating unit is evaluated on a monthly and quarterly basis in respect of its budgetry performance and, wherever possible, at least some assessment is made of its task-result success. In the case of staff units this last invariably takes the form of some highly qualitative measurement such as the perceived "value" or "worth" of information and assistance provided.

Although financial budgetry controls are stringent it is possible for the astute operating unit manager to substantially amend and revise his task objectives for the year on the understanding that such revisions do not incur the penalty of a budget over-run. Thus, if a manager is faced with choosing between Project A and Project B both of which cost R10,000 (which is the budget available) he may choose in favour of A and incur no budgetry censure (provided he does not over-spend) despite the fact that qualitatively B may be adjudged the more desirable from the point of view of the company as a whole. Moreover, a

manager may switch from A to B and back to B again with reasonable ease at any time until he actually commits some funds towards one project, once that step has been taken the unit is totally committed to that decision - the stringent financial controls demand that this be so. In essence, therefore, at an operating unit level, controls employed are dominated by financial standards whilst functional controls are correspondingly weak, lacking as they do, in many instances, some tangible results capable of being measured.

To conclude, at an operating level planning controls possess two deficiencies. Firstly, financial controls are established without real concern for the functional objectives sought. Secondly, financial controls are, by implication, assigned a task which they cannot always fulfil, namely to assess the degree to which operating results are truely worthwhile.

SECTION THREE CORPORATE PLANNING PARAMETERS PERTINENT TO A LOCAL MOTOR MANUFACTURER.

3.1 Introduction

Section Three of this paper will seek to position three key areas of concern of a local motor manufacturer when maintaining a Corporate Planning cycle.

No single area is wholly independent of its fellows - there is considerable interaction between them. Of note is the fact that all relate to the company's overall profitability. Moreover, they display intriging characteristics which are in many ways unique to the motor industry.

The three areas are as follows:

1. Profitability
2. Capital Investment
3. Technology

3.2.1 Profitability

Profits' role and nature as it related to the concept of Corporate Planning was discussed earlier. In considering the case of profit vis-a-vis the selected motor company however , a number of subtle shades and tones of variation emerge as a consequence of industry operating realities.

It will be recalled that the generation of a reasonable profit represents both the reason for a company's establishment and the purpose for which it clings to survival.

The selected motor manufacturer (in common with most of its rivals) is a private company and is, as a consequence, under no obligation to make public its profit performance. To all intents and purposes individual profitability of industry members prior to 1970 remains something of a closed book. Since that time there has been evidence that the industry's profitability as a whole is largely either marginal or unsatisfactory. This is not to say that individual manufacturers have consistently incurred universal financial losses. Indeed there is non-public evidence that in many respects certain companies have earned record profits in the face of severe economic difficulties. We shall return to this point later.

In all likelihood the profitability of any single major manufacturer (manufacturers whose operating potential is severely under-utilized such as Fiat and Alfa-Romeo do not qualify) may be expected to have swung from profit to loss to profit over the past five to six years.

In other words there exists a situation whereby profitability is in a state of oscillation around a profit-loss threshold.

Rationale for operating losses essentially comprise two factors; firstly, low wholesale mark up combined with low turnover and secondly, fluctuations in international exchange rates.

Manufacturers whose profitability one suspects to be particularly poor (Fiat, Leyland, Alfa-Romeo) will generally have experienced declining market shares over time. In short, their long-term profitability is in decline. Their situation becomes even more desperate once currency fluctuations are added to the equation. In the case of more soundly-based manufacturers (of which our chosen manufacturer is one) who have maintained steady high sales volumes and even enhanced market penetration performance, their profit trends may be either positive and stable or positive and rising. Even so a devaluation of the rand may, quite literally overnight, change an adequate profit into a bitterly unexpected operating loss. Our manufacturer being wholly-owned by an overseas parent is especially sensitive in this regard.

Figures quoted earlier underscore the voracious appetite a motor company has for capital investment in plant, equipment and limited-life tooling. By the same token, investment risk is enormously high relative to other, less sensitive industries.

A curious question therefore arises. Given the company's need for on-going large-scale capital investment and high-risk expectations how is it possible to equate the two and derive a workable balance? In other words if profit expectations are so unstable and investment so great what factor acts to strike the desired balance?

In seeking the answer to this problem as it exists in respect of our manufacturer it is necessary to examine two things; firstly, the role played by the overseas parent and fellow overseas subsidaries and secondly, the profit-revenue-cost components of the local operation.

Multi-National Status

When assessing the manufacturer's long-term profit expectations account must be taken of the fact that this business is but a relatively small subsidiary of a much larger organization Accordingly, the South African operation assumes the role of being one very small "profit centre" (sic) amidst many others.

Essentially the question of local profitability becomes one of geographic dispersion and economic linkages. The overseas parent views the entire world as its market having what might almost be described as "branch offices" - the local subsidiaries - in each sub-market. The parents' Corporate Planning objective is to realise, for the Total organization, a total, overall profit target year over year.

South African operating profit (or loss) in any single time period is consolidated with the results of the world-wide group to run-out, on the bottom line, a total profit or loss for the period in question. The small size of the South African operation, relative to the overseas parent and other subsidiaries, ensures that the profit or loss for any one year or time period has no material impact upon the organization's total performance.

What, in effect, this situation means is that the above-mentioned principle of profitability is not strictly applicable to the South African company. The company's survival is not placed in jeopardy as a result of incurring losses whilst its positive profitability is of no consequence.

When considering multi-national companies the most commonly encountered view is as described by Wormald: *

"The imposition of tariffs, sometimes in isolation or sometimes allied to a government decision to see a particular industry established, is a powerful factor in impelling a manufacturer with an established sales position to set up a manufacturing operation. In many cases it has been the only factor, since

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* A. Wormald - International Business
Pan Books, London, 1973. pp 31.

> the operation has been judged to be uneconomic even with tariff protection .... In these cases, if the manufacturer sets up a facility he may do so only to conserve his market position against the day when the position may change, either by the growth of the market or the elimination of the tariff, permitting a return to importing ..... the threat of loss of a valuable market is a powerful incentive, in whatever form it may present itself, and it may well be that this has been a major factor in determining businesses to establish themselves in their foreign market to manufacture , wholly or partially, products which they previously imported."

In the case of our chosen multi-national motor company the above is not strictly true. This is so by virtue of the fact that the key word "market" is viewed in two quite different ways and it is in this perception wherein lies the reasons why this manufacturer's parent is prepared to tolerate consistently low local operating profitability and high investment risk.

Firstly, there is the fact that the overseas parent <u>does not</u> view the South African market as being composed of local motor-vehicle buyers. Instead, the South African "market" is only a single buyer - namely the local subsidiary <u>itself</u>.

Secondly, there is an element of profit-expectation linked to the existence of a potentially viable mass-market amongst this country's Black and Coloured communities.

Viewed over a time-scale, the first is essentially a short-term justification whilst the second has yet to come to real maturity and thereby raise, to material levels, South Africa's contribution to global profits.

Perceiving the local market as being confined to merely the local subsidiary creates an interesting insight into the operation of this multi-national company which is by no means clear to the outsider and is certainly at variance with Wormold's statement. Why then should the parent consider the subsidiary so and from what source does it gain its profits if not from local consumers?

Essentially, this multi-national company's South African profits are gained from an internal profit generated by the sale of components and sub-assemblies to the South African subsidiary. Only two factors are necessary; a steady or increasing demand from the local consumer market (thereby permitting the subsidiary to continue to manufacture vehicles and, of necessity, purchase components from the parent or another overseas subsidiary company) and the ability to maintain a system of differential pricing

between the overseas supplier and the local buyer. In other words, provided the South African subsidiary's sales volume maintains local volumes at or even slightly above local break-even and provided components may be sold at a substantial mark-up to the South African operation, the system will work to the supplying parent or subsidiary's benefit and, in turn, to the benefit of the Total organization. The degree to which the local manufacturer and/or South Africa benefits is, of course, open to investigation and subject to question.

Diagram C illustrates the impact differential cost-plus pricing has upon individual wholesale/retail elements.

See illustrations on the following page.

DIAGRAM C — Impact of Manufacturer rebates on Manufacturer Profitability

(1) Total Cost R9.50
No. Units 37,000
Mark-Up 5%

Net Profit R17 760

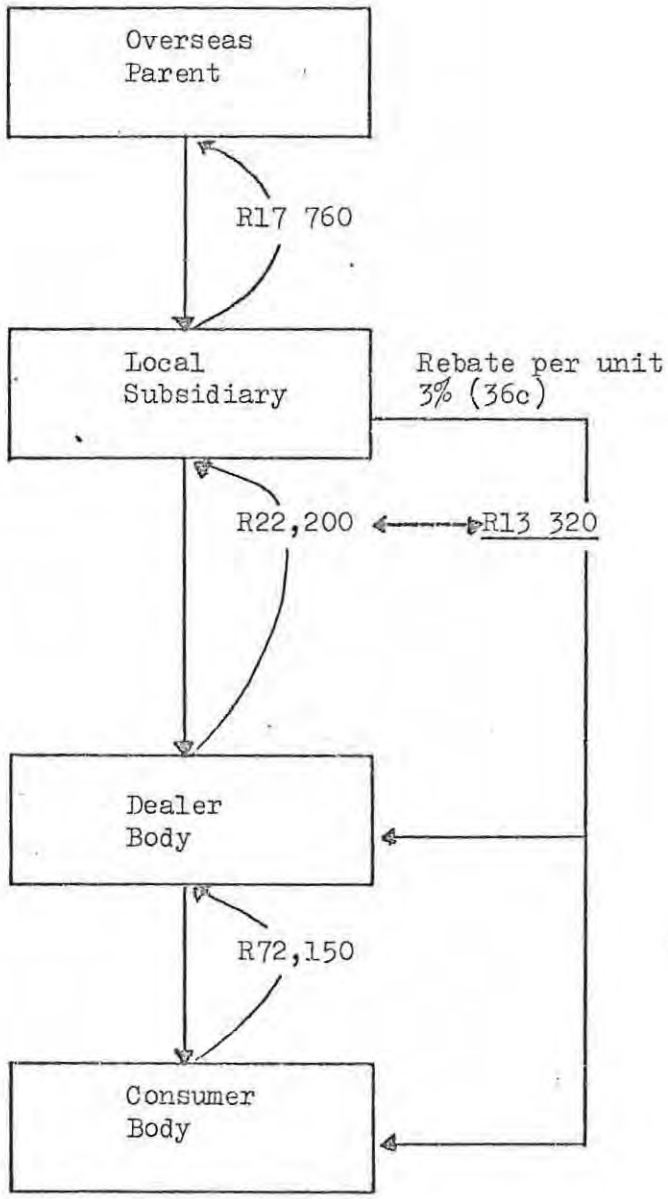
(2) Landed Unit Cost R10.00
Var. Cost (Unit) R1.15
Overhead (Unit) 0.85
W/sale Mark-Up 5%

* Net Profit (37,000 x 60c) = R22,200

True Net Profit (R22,200 - R13,320) = R8,800

(3) Wholesale Unit Price R12.60
Var. Cost (Unit) R 0.10
Overhead (Unit) R 0.30
Retail Markup 15%

Net Profit (37,000 x R1.95) = R72 150



* See page 116 for details.

Four elements are of importance, viz; the overseas parent/ supplier, the local subsidiary manufacturer, the local retailing dealer body and the local consumer market. The cost, revenue and profit flows set in motion by the sale of an imported vehicle component will be described.

For the purpose of this exercise the nature of the component is unimportant.

Stage One

The component is purchased by the overseas parent from a supplier at a unit cost of R9.00 to which is added 50c of variable cost and overhead. A mark-up of 5% (48c) is applied to derive a selling price of R9.98 to the overseas (South African) subsidiary. An annual sales volume of 37,000 units is attained.

The profit, from the supply of this component to South Africa, by the (British) parent totals R17 760 (37,000 units x 0.48c)

Stage Two

The component's landed cost at Port Elizabeth totals R10 (2c per unit shipping and insurance). In local manufacturer and assembly R1.15 is incurred by way of variable costs whilst a further 85 c is charged to each unit in respect of overhead.

Stage Two continued

In deriving a sale price to the dealer the total cost (R12) is marked up by 5% (60c) to total a R12.60 wholesale price. Subsidiary profit is R22,200 for the year (37,000 units x 60c).

Stage Three

The R12.60 dealer wholesale price is built up into a R14.95 retail price comprising - R12.60 wholesale plus dealer variable cost 10c, dealer overheads 30c and retail mark-up (15%) R1.95.

Retail profit accruing to the dealer body totals R72,150 p.a.

Up to this time the two key factors of buyer/consumer demand and competitive pressure have been omitted from consideration. They will now be introduced.

Buyer demand for automotive products is highly sensitive to shifts in the broad macro-economic considerations relating to buyer disposable income and economic confidence.*

*An exercise performed by one local motor manufacturer sought to identify some economic indicator whose reaction to macro conditions and circumstances would preceed (and be more sensitive to changes therein) that of the motor industry - thereby providing some measure of advance warning of a rise or dip in vehicle sales - none was found.

Assume, for the purpose of this illustration the local economy is in recession and buyer demand, as a consequence, is at a low ebb. The vehicle market has contracted and individual manufacturer volumes have fallen. Under such circumstances each manufacturer's prime concern is to maintain market share whilst covering costs up to and including break-even. Plant operations must, therefore, be geared to a certain minimum volume. In the absence of any wholesale orders manufacturers inventories will, naturally, accumulate. Accordingly, there is a greater incentive to "push" built-up units out of manufacturer and into dealer inventories who, in turn, will then be expected to make super-human efforts to liquidate or turn-over "sticky" inventories of new vehicles/components. Individual dealers will both seek to evade carrying such inventories and will exhort salesmen to off-load units in inventory in excess of three weeks.*

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* Dealers are charged, on average, 2% per month on each built-up unit supplied. Units are invoiced to the dealers from the moment the vehicle is shipped from the plant. A unit at wholesale R5000 will cost R100 per month to hold on the showroom floor.

(a) The longer the unit remains unsold the higher the final retail price must be before the full cost is recovered. Thus assume the list retail price is R5,500 (implying a dealer profit of roughly R400 allowing for in-dealership costs and a further R200 off list in buyer discount). This leaves a dealer profit of R200 which may fall to R100 if the unit is only sold after a month.

(b) High inventory costs cannot be passed onto buyers by raising the retail price by virtue of the intensely competitive nature of the market-place.

Thus under conditions of economic recession, the manufacturer's concern will be to balance inventories and production with demand whilst keeping an anxious eye upon the plant's breakeven volume and market share. In effect, his objective for the year is to sell 37 000 units to dealers - both as a related need to maintain breakeven and because orders of this magnitude will be irrevocably in the supply pipe-line from the overseas supplier. In an attempt to ensure that this situation is brought about there is the need to raise (or maintain) dealer (wholesale) volumes which, in turn, demands that dealer (retail) volumes are stimulated in sympathy.

The most common method by which the above are sought is via the medium of dealer and/or retail rebating.

Assume a 3% wholesale rebate is applied to the component discussed above. This discount (36c) results in the sum of R13 320 being passed by the manufacturer back down the line to the dealer and/or the retail buyer.

Thus, referring to Diagram C, instead of the manufacturer earning a R22 200 profit, his actual return will be in the region of R8880. (Pre-rebate profit R22 200 less rebate R13 320 = R8 880); compared with R17 760 in the case of the overseas supplier and R72 150 in the case of the dealer body.

Taking the example a step further, what would be the consequence of the annual market falling by 20% - from 37 000 units to 29 600 units?

(1) Overseas Parent's Profit

29 600 units x 48c = R14 208

Here no change occurs in the parent's fixed costs as the component is supplied on a sufficiently large scale as to make a drop in orders of 7 400 units of no material consequence.

(2) Local Manufacturer's Profit

29 600 units x 62c = R18 352

Manufacturer overheads rise by 30c per unit as a result of the industry volume decline.

(3) Dealer Profit

29 600 units x R1.96 = R58 016

Given such tight market conditions there will be an even greater incentive for the manufacturer to provide wholesale rebates. Assume, therefore, the manufacturer discount rate is 3% on wholesale, his true net profit will be as follows:

29 600 units x 37c = R10 952 (rebate)

∴ R18 352 (Net Wholesale Profit) - R10 952 (Rebate)

∴ True Net Wholesale Profit = R7 400

In conclusion of this example the above illustrations are summarised overleaf:

	Parent	Subsidiary	Dealer
Net profit at 37 000 unit volume	R17 760	R8 880	R72 150
Net profit after 20% decline in unit volume	R14 208	R7 400	R58 016
Rands decline	(R3 552)	(R1 480)	(R14 134)
Percent change	20%	17%	20%

The 20% decline in volume creates a proportionate decline in the profits of both the parent company and the dealer whilst manufacturer profits fall by only 17%. In real terms, however, the manufacturer's already slim profit status (R8 880) is cut to only R7 400 - a degree of profitability sufficiently low to warrent the adoption, by the manufacturer, of either one or the other of two broad alternatives in an attempt to extricate itself from this profit squeeze.

Firstly, the decision may be made to cease importing the component and, instead, manufacture it locally. To be viable the unit cost within South Africa must, naturally, be below that of the imported version for only in this way will corporate profitability be enhanced and dealer profitability maintained. (Such components as may be feasibly produced locally at lower cost will very often already be done so - much to the disappointment of the overseas parent.) However, in respect of many components, high tooling costs are necessary for their production which may only be recovered given lengthy production runs. For example, the moulds required to injection - form plastic dashboards may be paid for after a year or two's use in Europe whilst the same in South Africa would still be subject to depreciation after ten years. A second difficulty relating to local manufacture is

that very often there is simply not the technology and "know-how" available to produce the required article to the required quality standards.

Secondly, the option exists to cease importation of the component and to not seek a local substitute - in effect a total deletion. A number of specific examples of this practice exist, one of the most illustrative being that in respect of not merely a component but an entire vehicle range.

Under the provisions of the South African Local Content Programme, commercial vehicles, during the 1960's and 1970's were and would be exempt from complying with the Programme's requirements. As a consequence it was possible to import complete units from overseas sources without their bearing the punitive duties levied upon unqualifying passenger cars. The subject manufacturer imported a range of large car-based pick-up trucks from its Australian co-subsidiary. (These units were complete apart from such items as tyres and glass.) Widespread market acceptance followed to the extent that approximately 20% of all light commercial vehicle sales consisted of this class of pick-up. Naturally the Australian source company practised the abovementioned differential pricing policy to its advantage whilst the local price structure permitted the South African subsidiary to earn a reasonable profit too.

Following 1973 when inflationary pressures elevated wholesale and retail prices and fuel costs rose steeply, buyers tended to switch away from these now expensive trucks to buy and run less expensive pick-ups. Moreover, the Australian source company

maintained its export pricing and, indeed, began a series of regular, substantial price increases which worked their way through to the local consumer. Consequently, the decision was made to axe the vehicle range as being totally uneconomic to produce locally.

Profit, Revenue and Cost Components.

Having now indicated one reason why the manufacturer's parent company may decide to maintain the existence of a marginally profitable subsidiary, attention may be directed towards the second prime reason for doing so.

In this instance the focus becomes more local in nature seeking, as it does, to identify the key cost and revenue centres of the business. In other words, in the same way that the parent company takes a global view of its operations so too does the selected manufacturer's top management except that their "global" view is confined to their own total organization.

Sub-dividing the organization reveals the existence of certain highly profitable functions on the one hand and, on the other, operations whose massive losses cancel out the good created by the former. Planning-wise, therefore, the long-term aim of the business is to maximise the return of the profitable operations whilst minimising, turning around or eliminating the loss-makers.

More specifically our subject manufacturer (and very much the same applies to all other larger motor companies) is really quite a diversified business comprising, as it does, the following components:

Car/Light Truck Division
Heavy Truck Division
Parts/Accessories Division
Tractor/Industrial Division
Financing Division

A point of note is that each division caters for quite distinct and separate markets. Taking each briefly in turn:

. Car/Light Truck Division

Sale and marketing of small, medium and large car lines.

Sale and marketing of two ranges of pickups.

. Heavy Truck Division

Sale and marketing of two ranges of heavy truck.

Sale and marketing of one range of bus chassis.

. Parts and Accessories Division

Sale and marketing of brand name vehicle parts to dealers, parts wholesalers and independent parts stockists.

Sale and marketing of accessories to dealers and independent stockists (accessories being essentially product options which may be fitted to a vehicle at the time of purchase or subsequently).

. Tractor/Industrial Division

Sale and marketing of agricultural tractors to the farming markets (plus a limited industrial buyer group having need of such vehicles e.g. S.A.A. for baggage handling at airports).

Sale and marketing of industrial equipment including earthmoving plant, stationary and marine engines.

. Financing Division

Marketing of an in-house financing or credit facility to vehicle buyers in competition with other sources of hire purchase funding.

Ranking the above in descending order of general profitability :

Heavy Trucks	
Parts/Accessories	
Car/Light Truck	Marginal
Financing	
Tractor/Industrial	

Heavy Truck and Parts/Accessories represent the two most consistently profitable operating divisions. Rationale for this fact is that their products are such that high mark-ups may be maintained even in the face of intense competitive pressure. In other words the degree of profit built into the wholesale/retail price is so great that a favourable profit status is struck despite the issue of substantial discounts necessitated by tight market conditions.

Car/Light Truck and Financing divisions may be considered to display a characteristic of marginal profitability. Car and Light Truck wholesale/retail profit margins are narrower than those of Heavy Trucks. This is so by virtue largely of the wider ranges of product offerings and the extreme price sensitivity of these markets. (In this way a car buyer, for example, is better placed to find the exact vehicle he desires at the lowest possible price largely by virtue of the significant degree of substitutability between product makes and within price bands.)

Accordingly, Car/Light Truck profitability is largely a question of industry volumes and manufacturer market penetration. That is, profitability is enhanced primarily through the medium of simple turn-over rather than mark-up. Hence, a slump in car/light truck industry volumes immediately depresses the individual manufacturer's profit performance whilst the resultant intensification of competitive pressure and the concommitant need to keep plant in operation leads to a rise in discounting/rebating practice which places a further squeeze upon profits.

Financing's market is, essentially, composed of the same class of persons as buyers of cars and light trucks. Its profit contribution is, as a result, in no small way dependant upon car and light truck sales volumes. Additionally, the financing field is one which, again, displays a high degree of competition such that returns cannot be enhanced by raising financing charges upon paper issued above the common market rate.

Moreover, in the case of this particular manufacturer, the financing division is somewhat conservative in outlook - a fact which is carried over into its marketing and paper-issue policies. Thus, no dynamic and creative marketing efforts are made whilst credit screens are fairly tight, to the extent of eliminating numbers of applicants who would be acceptable risks elsewhere. (An example exists in respect of financing vehicle purchases by Blacks - identical credit screens are applied to Blacks as are applied to Whites. As a consequence the amount of Black paper on the books and profits generated thereby is minimal - despite the potential of this market.) Furthermore, the actual financing charges imposed are not wholly competitive with parallel finance sources.

A consistent loss-maker is the Tractor/Industrial division. Quite apart from any competitive pressures (and they are great) the essential difficulty present is the fact that these products are almost entirely imported. Differential pricing exploitation on the part of overseas suppliers is rampant. On the demand side, increased importation costs cannot be passed on to the buyer by virtue of the fact that tractor industry prices are artificially low. Any attempt to raise prices to economic levels will result in an immediate and substantial contraction in market share. Dampening any move to raise industry prices is the intangible presence of governmental censure. Understanding the loud voice the agricultural sector has in government circles and the government's sensitivity over agricultural matters, any increase in tractor prices may prove unwise. Agricultural sales are further frustrated by seasonal purchase patterns whereby the level of sales are clustered as to time and whose intensity is a function of crop/produce returns.

On the industrial side, the continuing recession and differential pricing acts to depress profitability.

To conclude, the Corporate Planning concerns of the Car and Light Truck division is primarily related to market (industry) size prediction and product planning. These attempt to maximise turn-over via the adoption of suitable product lines. In the case of Heavy Trucks, long-term concerns are almost entirely related to product improvement and development. Financing appears to display little long-term planning apart from reviewing car/light truck industry forecasts and movements within interest rates.

Finally, the Tractor/Industrial division's Corporate Planning concern is, essentially one of loss-minimisation. The manufacturer remains within this last market chiefly because the overseas parent demands that this be done (to reap the benefit of differential pricing) whilst the existence of substantial numbers of tractors and industrial plants provides a lucrative opportunity for Parts/Accessory profits. Parts and Accessories long-range plans concern market development actions designed to expand the appeal and volume of such products.

3.2.2. Capital Investment

As is the case with the majority of contemporary business enterprises the factor "Capital" represents the most productive resource a motor manufacturer utilises. Moreover, as an industry, motor manufacturing must certainly rank as one of the more capital-intensive. Certainly the operations undertaken within such a business lend themselves to increasing measures of sophisticated automation.

Overseas assembly plants situated, for example, in and around Detroit in the United States have, in many instances, attained a high degree of capital intensity. (Ford Motor Company for instance, operates an engine plant where the entire manufacturing process is over 80% automated.)

By way of contrast, motor assembly may also be highly labour intensive. Naturally this situation only becomes feasible where sales volumes are low, technology relatively primitive and labour cheap. (A number of manufacturers with plants situated in the Far East use labour intensive assembly methods.)

From a Corporate Planning point of view in respect of our local manufacturer, assembly operations comprise a blend of capital and labour which, from an investment and cost stance, is a workable optimum. Certain operations, such as engine manufacture, are highly automated whilst trim fitment and painting tasks are performed entirely by hand.

Delving more deeply into the role of capital investment it is possible to state that the industry as a whole within this country is noted for the degree of duplicated investment between manufacturers. As was discussed earlier the relatively large number of local manufacturers, each with their own plant investment, has resulted in a substantial degree of individual under-utilization of resources. Moreover, there is evidence that this under-utilization represents an overhead cost whose weight is felt in the retail price of vehicles produced - quite apart from the mis-direction of this country's scarce resources. Continued buoyant market development and expansion during the late 1960's must be blamed for the entrenchment of today's excessive number of local manufacturers. As a consequence, only a reduction in the physical number of manufacturers (a process which commenced with Volvo's withdrawal and which is continuing via the recent Sigma-Leyland-Peugeot/Citroen merger) and an expansion of the vehicle market (by Blacks and Coloureds purchasing more new vehicles) will equate potential supply with demand in the foreseeable future.

Looking into the actual capital structure of our (and any) local motor manufacturer it is possible to identify three quite distinct and separate classes of capital investment each of which possess differing degrees and types of interest to Corporate Planning staff. These classes of investment are as follows:

. Fixed Investment

. Product Investment

. Operating Investment

Each will be discussed in turn.

Fixed Investment

Fixed investment represents a class of expenditure possessing the greatest measure of long-term orientation. Expenditure in itself is invariably concerned with relatively large sums of capital which are sunk into plant and buildings having economic lives up to and exceeding periods of 50 to 60 years. (An example exists in respect of the manufacturer's assembly plant buildings and land, part of which it owns and part of which is held on a ninety-nine year lease.)

By its nature such investment does much to impress a seal of longevity and permanence upon the business. Moreover, by its very nature the type of plant concerned is of a specialised nature such that its adaptation to alternative production processes is not easy to accomplish - if at all.

The above twin facts, the investment's long-life and specialisation, in addition to its high cost naturally means that such investment is not to be made light-heartedly. Misdirected fixed investment programmes will form a crippling burden to the business. The innate caution with which the issue of fixed investment has and is approached by the manufacturer's planners is evident if the company's investment history is reviewed.

Historically, the subject company's fixed investment programme is divisible into three parts:

(a) Pre-World War II

Given the fact that the entire South African market was in its infancy, fixed investment was sufficient to establish the embryonic core of a manufacturing operation. Sufficient was sunk into the local business to provide plant capable of assembling imported units and components but little else.

(b) 1945 - 1968

During the immediate post-war period the company's planners were expecting a repetition of the economic slump which followed the 1914 - 1918 conflict. Naturally, attitudes towards expansionary fixed investment were hard. Once, however, motor vehicles began to exist in a situation of free-supply during the late 1940's the pent-up demand occasioned by the war years began to make itself felt. The net result was the first truly significant fixed investment programme. Land was purchased and a complete assembly plant and administration block constructed. Capacity was such that it was able to keep pace with an expanding market for more than 15 years after its opening.

(c) Post 1968

Rising demand during the mid and late 1960's exposed production bottlenecks which could not be rectified without a company-wide quantum expansion in respect of both production and administration facilities. At that time highly favourable market expansion forecasts were prepared and in accordance with the need to tailor capacity to future demand the largest fixed investment program to date was set in train.

A review of sales trend data exposes the fact that this genuine earlier optimism was greatly misplaced. Notwithstanding the fact that the car market alone expanded by an average of 6.4% per annum between 1965 and 1974, the manufacturer actually lost market share throughout the early 1970's to more technically advanced and better constructed Japanese-sourced competition. In addition, the post 1974 industry slump exposed the severe extent to which over-capacity had been built into this third and last (for many years to come) fixed investment action. Accordingly, therefore, given the benefit of hindsight only the first two fixed investment undertakings have been truly justified. In the same way that this manufacturer is likely to call a halt to further fixed investment during the foreseeable future an identical orientation is likely to exist in respect of its competition. Indeed, manufacturer's actions vis-a-vis fixed investment are most likely to take the form of the consolidation and rationalisation of actual investment usage with a view to effecting overhead cost savings.

Organizationally, fixed investment is the subject of an intense degree of study and evaluation in respect of assessing the feasibility of undertaking such investment and, if approved, determining the most suitable funding source. Naturally, all such requests must be submitted for review and approval by the overseas parent who subjects each element of the proposal to in-depth study. Moreover, as a direct consequence of the company's over-investment, the parent company has directed that all fixed investment (other than that necessary to repair and maintain existing facilities) is to be frozen until further notice.

Finally, for the same reasons that many companies are making increased use of fixed asset leasing (as opposed to out-right purchase) this practice is also highly thought of by local management. Thus it is possible to hypothesize that even in the event of a major, sustained regeneration in industry growth, to the extent that incremental fixed investment is now permissible, facilities leasing will be employed instead.

Product Investment

Long-range product investment funding and product management represents a major on-going headache for any motor manufacturer located anywhere in the world. Moreover, South African conditions are such that, at any point in time, it is no real exaggeration to state that product investment is likely to be the prime concern of all local motor companies. Rationale for this assertion will become clear from what follows.

Product investment may be likened to the company's wasting resource which must be replenished at set, regular intervals. Essentially, this category of investment comprises that which is sunk into the jigs, tooling and production planning necessary to produce a single model range. Product investment, therefore, is indivisibly part of the life cycle of any vehicle model such that at the conclusion of that cycle a new injection of investment is required to permit the replacement model's manufacture. On average, it will be found that the subject manufacturer will follow a 5 year life cycle for any given range of passenger cars and light commercial vehicles. (That for trucks and tractors is somewhat longer being roughly 10 to 12 years in duration.)

Of note are the facts that product life cycles are not timed by local market considerations at all. Instead, model deletion and introduction actions remain the perogative of overseas source countries wherefrom vehicle designs are obtained. Secondly, product investment is extremely expensive. For example, to re-tool and set up the plant to produce a new car model may incur incremental product investment of anything from R10m upwards whose residual value at the end of the cycle will be minimal. Naturally, the depreciation and pay-back charges of such vast sums must be spread over the 5 years during which the investment will be productive. In view of the low individual sales volumes (relative to overseas countries) recouping this investment, and making a profit thereon, demands highly accurate market and pricing calculations if the vehicle is not to become a loss-maker or be uncompetitively priced. In this regard it was an open secret that this question of product investment

formed the basis of months of agonised choice for Volkswagen in Uitenhage when considering whether or not to introduce the new Golf range to replace the ubiquitious Beetle and, if so, at what price to launch the vehicle.

This scenario will be set out in full because it illustrates so well the question of optimal product investment. In essence, it is no exaggeration to say that the decision facing Volkswagen was one of the key milestones in its corporate history. Introduced during the mid-1930's as a proposed low-cost "people's car" by the Nazi regime, the Beetle as it came to be called was resurrected after the war and during the three following decades established a niche in the motoring world as imperishable as that of the Model T Ford. A relatively unsophisticated engineering design its bare-bones product design remained unchanged for over thirty years. Simplicity, rugged construction, ease of repair and maintenance and low initial price kept the Beetle at or near the top of the small car sales charts in South Africa through to the mid-1970's. Within the global context the golden years of the Beetle were the 1960's and early 1970's when record numbers of Beetles were exported to the United States. However, from the commencement of the 1970's the degree of competition within traditional small car markets was rising. Japanese manufacturers in particular were offering American buyers comparably priced cars whose design and specification, right down to the traditional Beetle quality of reliability, were either competitive with or superior to the ageing Volkswagen.

In consequence, Volkswagen were forced to consider a Beetle replacement - the outcome of which was the Golf design. South African buyers, in the interim, were also tending to switch towards more attractive competitive offerings. Beetle was cast in the role of cheap, Spartan motoring - a market niche which was contracting gradually over time. Certainly its key purchase motive must have been price - a 1600cc version was the lowest priced model with that engine size on the market whilst the low range 1300cc derivative was R300 - R400 less expensive to buy than its nearest volume competitor.

Rationale for this price differential comprised, in the main, the fact that the demand for large sums of incremental product investment was minimal. The design and, hence the requirement for such tooling, had remained unchanged for years, thus the per unit depreciation charges were exceedingly low.

Given the fact that the decision to introduce the Golf would necessitate massive product investment, the two major problems facing Volkswagen of South Africa were, firstly, to fund the incremental product investment required. Secondly, that same investment must be depreciated over production which meant that unit costs (and retail prices) would take a sudden significant leap upwards. In turn, this meant that the Golf would be quickly removed, price-wise, from the grasp of the majority of penny-concious ex-Beetle owners. In a nutshell, Volkswagen's product investment commitment would incur the serious risk of a substantial loss of retail sales at just the moment when steady demand was crucial to the venture's success. The very fact that Golf was now competing at the top end (as opposed to the bottom end) of the small car market meant that it would be fully exposed to similarly

priced competition such as Datsun, Toyota, Ford and Sigma.

At the time of writing Golf is still within the growth phase of its post-launch cycle. Where its eventual plateau level will be is unknown. Moreover, equally uncertain is the extent to which Golf will be able to be cast in the role of a car as immortal as the Beetle - requiring little incremental product investment in the years to come. On the basis of the vehicle as it stands, however, it appears likely that Volkswagen's product investment requirement will rise significantly relative to its pre-Golf days. In any event, the impact product investment may have upon both the motor company's marketing mix and product actions should now be clear. (In passing a very strongly based theory has it that one of the reasons why Volvo withdrew from South Africa was that sales volumes were insufficient to support product investment necessitated by a model change in Sweden.)

Corporate Planning concern over product investment is relatively straight forward in the sense that the requirement for and implications of future product investment are largely known. Thus if in 1980 the manufacturer's source country will be introducing a totally re-styled, re-designed product line, the local company's plans leading up to and including that year must provide for the ways and means of financing that switch (always assuming the desire exists to retain that model line).

Naturally, the desire of all local manufacturers is to reduce to the lowest possible level the degree of superfluous product investment. To attain this objective three alternatives exist, one of

which is mutually exclusive whilst the remaining two are frequently, even invariably, conjoined.

(a) From a cost-saving point of view the ideal is to scrap the entire concept of a model replacement cycle. Instead the existing product (and its investment) will remain in production for an indefinite period of time featuring but minor detail amendments. (Volkswagen's Beetle is possibly the best example of such a strategy.) Product investment expenditure becomes confined to simple plant replacement as a natural consequence of wear and tear. (Brazil's Volkswagen operation produces Beetles and Fleetline Kombis using tooling and dies declared obsolete in Germany in 1964.)

Although attractive enough in a financial sense this alternative must be considered exceptional, suitable only for highly unique circumstances. Where, for example, foreign investment is discouraged, new vehicle prices are inflated by taxation, per capita incomes are low, and the degree of market competition is low this investment limitation practice will work, and work well. In other words if the market is constructed in such a way that buyers take " anything on wheels " and consider themselves fortunate, the strategy has much to recommend it. By definition, an open market featuring relatively affluent buyers having a fairly broad range of choice (most of whose producers feature product replacement cycles) is not the ideal within which to adopt an austerity product investment strategy.

(b) A workable compromise (the first of two) is a strategy of in-house product investment reduction whereby as much use as is feasible is made of existing non-obsolete investment.

On the whole the number of opportunities for doing so are somewhat limited. They exist, however, in respect of chiefly engine and powertrain components. In this way the subject manufacturer is relieved of a measure of product investment; a revised overseas body style will be adopted but the overseas engine and powertrain will be rejected. Instead such components as are manufactured locally and for which perfectly sound product investment exists will be utilised. Use of this device is widespread and it does much to explain why a locally manufactured version of a particular vehicle may be offered with a 1600cc engine whilst the very same car, in say Europe, features a quite different 1800cc engine. The reason why engine and powertrain is a favoured investment-saver is that the expense of replacing or revising such plant costs of the order of R30m or more may be involved. A point of note is the fact that even the overseas parent company is conscious of the need to minimise plant investment on engines. In this way engine designs tend to be modified gradually over time rather than featuring periodic total re-designs. (For example, some engine types in common use today date back many years in respect of their essential design: Ford Escort 1959 (its predecessor dated back to 1936), Leyland Mini/Marina 1948, VW Beetle 1935, to mention a few.) Indeed, some of the most innovative manufacturers in the field of engine and powertrain development are the Japanese

manufacturers who, today, feature some of the most well-developed and efficient engines on the market.

(c) A third and equally favoured solution to the in-house product investment question is to push part of this burden backwards onto the shoulders of the manufacturer's suppliers. In other words, the motor manufacturer stipulates what components it requires and its suppliers, assuming they wish to remain doing business with a major customer, must undertake the required investment themselves.

As may be imagined this option represents a highly favourable one from the point of view of the motor manufacturer. The bulk of the product investment load which would otherwise have to be carried by the manufacturer is removed.

Financially and in essence the option may be perceived as being a classic make-or-buy alternative from the point of view of the motor manufacturer with all the allied concerns that that entails. Issues such as the ability of suppliers to finance such investment, their technical skills, experience, costing structure, quality control, delivery lead times, reliability, financial stability, customer composition and willingness to commit themselves as suppliers - all are issues upon which the success of this venture depends. Naturally, the relationship between supplier and buyer should be a mutually profitable one and experience has shown that within the motor industry one of the major stumbling blocks to the supply of engineered components has been the

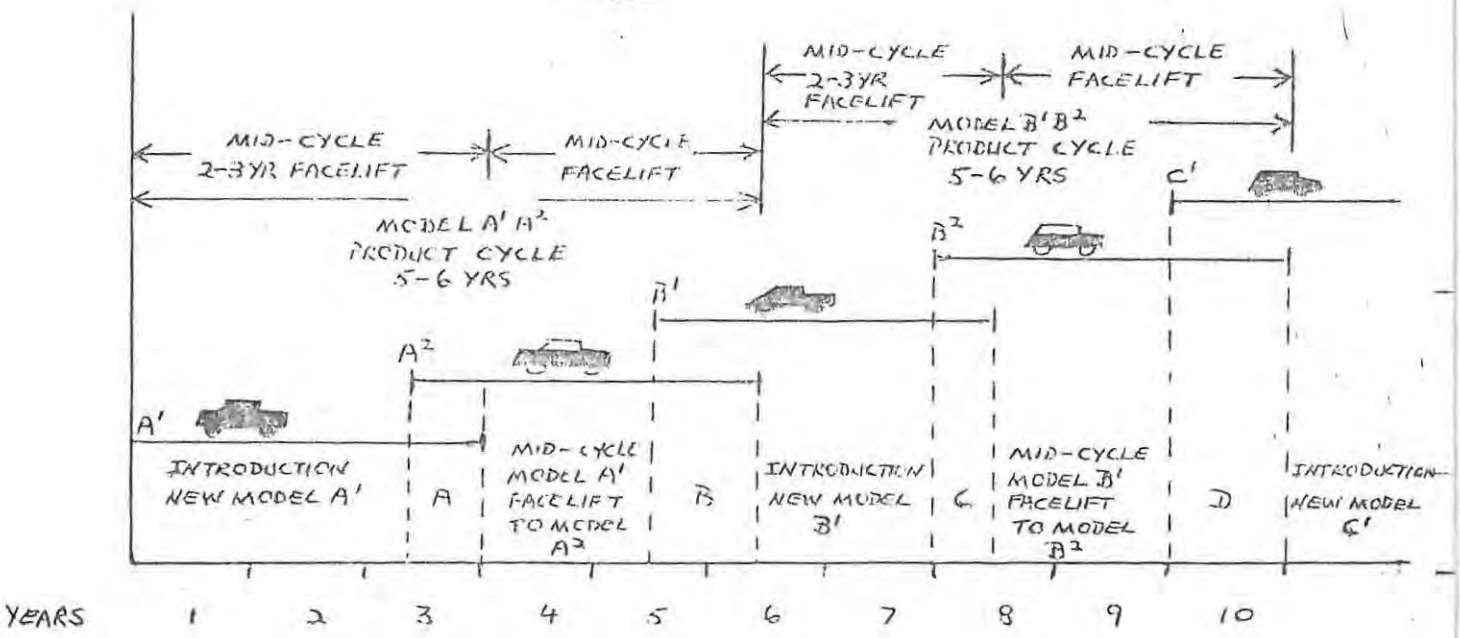
willingness of suppliers to risk funds into the plant necessary to cater for a single customer's demand.

The above notwithstanding, the subject motor manufacturer generally experiences the greatest degree of difficulty in tying up a supplier in respect of this option when the issue of body and sheetmetal work is considered. (Items such as carpeting, glass, wiring and so forth require little incremental product investment on the part of a supplier) This is so by virtue of the fact that with a restyled model one of the most (even the most) expensive investment required pertains to the dies required to stamp out the vehicle's bodyshell. Dies will be imported from the overseas parent or subsidiary, at great cost, by the motor manufacturer himself. That done, a supplier will negotiate on an investment cost-saving basis with the manufacturer to produce the body stampings at an agreed price which spreads the cost of such dies between the two of them.

As is invariably the case with make-or-buy decisions care must be taken not to over-play the idea of inducing suppliers to foot the investment bill. Regardless of the issues at stake and the circumstances surrounding the decision, if the investment burden is bourne by the supplier and if that supplier is to remain financially stable it is essential that the manufacturer eventually reimburse the supplier via the price paid for the product supplied. There have been instances wherein suppliers sought to absorb such costs in

an effort to carry favour with the motor company and although such efforts may work in the short term, over more lengthy time periods suppliers will tend to be placed in a situation of impending financial embarrassment - to the dismay of both parties. In price terms therefore, the retail price of the product will reflect the required incremental product investment costs whether they are carried by the manufacturer or by the supplier.

In terms of Corporate Planning actions, product investment will naturally tend to follow very closely in the footsteps determined by the company's product strategy. Adopting a particular vehicle range will automatically lock the company into a particular set of replacement cycles and, in consequence, a particular set of future product investment needs. The point was made earlier that this manufacturer's car products have a five year model cycle. Depicted below is such a cycle with the resultant product investment implications. A point worth noting is that the entire life of a passenger car runs out to ten years. That is to say, key major investment components are not replaced or re-designed after five years but are retained for a further five year period even by the overseas parent company. The two prime examples of such components are engine/powertrain and floorpan or chassis.



Representative Product Cycle Over 10 Years.

A - Product investment for face-lift model A^2.

B - Product investment for new model B^1 which does not include revised floor-pan, engine and powertrain.

C - Product investment for face-lift model B^2.

D - Product investment for new model C^1 which includes revised floor-pan, engine and powertrain.

Note: Mid-cycle face-lift actions are designed to refreshen the vehicle's market appeal after its having been on the market for between 2 to 3 years and thereby to halt or postpone any natural competition-induced downward slide in sales from the post-launch "plateau".

Assuming the description depicted in the above diagram is a reflection of reality and that the company plans on a revolving 10 year cycle it is clear that its product investment plans will comprise no less than four phases. Each phase requiring action-based plans which detail what funds are required, when and how they will be spent and their respective schedules. It should

come as no surprise to learn therefore that within the subject manufacturer's finance department there are no less than five skilled analysts whose responsibility it is to manage and co-ordinate product investment projects. They, in turn, work hand-in-glove with the company's product development department whose function it is to develop the actual physical product programmes.

Product investment decisions are, by their very magnitude, almost irreversable once funds have been committed. Thus if an incorrect or mis-directed investment is made that cost and its allied costs is, and are, sources of total financial loss to the company. For example, a topical decision which is facing this manufacturer and a number of its competitors is whether or not to reduce the size of its small car offering down to that characterised by the existing Mazda 323 and VW Golf "hatchback" styles. Quite apart from any hard, quantitative sales figure data there is the imponderable question of the market's taste in small cars. Buyers may well turn in increasing numbers towards the "hatchback" (five door or bootless) car style, in which case, the conventional booted small car will prove unpopular. Alternately, although the hatchback may become well established there may still remain a solid body of car buyers who favour a car with a boot. Whichever is the case the manufacturer has only sufficient investment funds to choose either a hatchback or a booted style car. If for example he is faced now with a 10 year Corporate Plan wherein this decision must be made in year 3, or 4, the financial implications concern the sum of R20m and, once committed there is no avenue

for switching to a new model style until year 13 (outside the planning period), the real nature of the situation becomes clear. In practice the decision requires careful market research to establish, as far as is possible, buyers' future purchase preferences, a close study of the financial implications of each alternative, an equally close study of competitors actions and, finally, a keen display of managerial judgement at the most senior of levels.

Operating Investment

Operating investment, as defined by the subject manufacturer, is essentially short-term funding necessary to allow annual expenditure commitments to be met. In Corporate Planning terms, therefore, operating investment closely equates to budget and cashflow management.

An earlier section discussed the role of Corporate Planning control. The point may be made that nowhere is such control exercised to such a detailed degree as over operating investment. In earlier times the company's annual operating investment plan was sought to be kept distinct and separate from the more detailed annual budget such that the investment plan merely stood as a yardstick whereby budgeting variances were gauged. Today, experience has shown that the system works the most effectively when the two are closely dovetailed.

Operating investment planning comprises the following clearly defined elements:

. A monthly review of all actual revenue and expenditure items by operating area.

- A monthly review of all work-in-progress and finished inventory values by operating area - as appropriate.
- A monthly year-to-date review of all revenue and expenditure by operating area (with a daily review if required in exceptional circumstances).
- A monthly year-to-date review of all inventory values by operating area - as appropriate.
- A monthly variance analysis of actual versus planned revenue, commitment and expenditure by operating area and for the company as a whole.
- A monthly variance analysis of actual versus planned inventory and work-in-progress values by operating area (as appropriate) and for the company as a whole.
- A monthly review by item, by operating area of future planned and committed expenditure through to the year-end with the objective of reducing, deleting, re-affirming or resetting priorities upon such expenditure.
- A monthly profit and loss analysis by operating area and for the company as a whole.
- A monthly full year profit and loss projection analysis by operating area and for the company as a whole.

In addition to the above monthly analysis, the same are repeated on a quarterly basis.

A point of note is the fact that the company's annual profit target is a fixed entity which is incapable of variation during the course of the year. There is nothing, however, to prevent the local managing director and his co-directors setting their own "task" profit objective for the year, their aim being to make

the organization "stretch" a little harder than it would do otherwise. The revised, informal target is naturally cascaded down the organization (such that target sales volumes are raised by X amount which leads to the sales force having to push that much harder, the assembly plant must build X number extra units within the same space of time and so forth). A second favoured "task" objective imposed by local senior management as part of their drive to raise annual corporate profitability is to direct that departmental budgets must be reduced by 7%. Naturally these actions have a significant impact upon operating investment requirements.

Assuming the Marketing department's budget for 1978 is R1 500 000 - which is in accordance with the agreed annual profit target. Expressed another way, the sum of R1 500 000 represents the amount of operating investment which Marketing requires to set in motion the actions and programmes designed to earn the company its total profit target during 1978. Reducing departmental budgets by 10% and raising the local, informal profit target by 5% has the effect of demanding that the Marketing department take steps to ensure that annual market penetration rises by 3.5% over that required to meet the actual profit target and, most importantly, to undertake this job with only R1 350 000.

Although a laudable practice in many ways and especially in keeping the company aggressive, innovative (making one rand do the work of two) and cost-conscious this exercise must be undertaken with care for two reasons. Firstly, there may be circumstances whereby the company wilfully misses a viable market opportunity simply through lack of funds and in any event there may be areas

wherein shortages of funds result in a continuous level of sub-optimal resource utilisation. For example, one car-line may be under severe competitive pressure which should be relieved by incremental advertising and promotion expenditure. As a consequence of the budget-cut however the advertising manager is forced to withdraw support in toto from that car line in order to, say, launch a second and quite different model. He rationalises his decision on the basis that if and when his budget is restored he would once again give the flagging product the attention it deserves and demands. Naturally, what occurs is that with support withdrawn the car line fails even faster. If and when budget is restored the then available funds must be thrown into a crisis situation which they may now be insufficient to save whereas the earlier expenditure may have maintained the status quo satisfactorily despite a short run embarassment. Secondly, funds reserved from reduced budgets are placed into a special account controlled by the managing director. In a sense they are available for use under special circumstances. Managers, therefore, very often make well-documented, impassioned pleas for the release of such funds to them. As is frequently the case, funds are invariably released from this account not so much on the basis of the real priorities of the issue but rather on the forcefulness (or lack of it) of the personalities involved.

To return to the concept of applied operating investment it should be clear that two issues are present. On the one hand are operating controls (such as the above-mentioned reviews of the past month's performance) and on the other is operating planning (such as variance correction and expenditure appraisal). In effect, operating

planning equates to a "fine-tuning" process whereby the business is maintained upon its planned course relative to its 12 month income expenditure/profit-loss objective. Operating controls provide an informative historical background to present circumstances thereby reducing the risk of implementing mis-directed planning operations.

Organizationally, operating investment planning and control has been raised to a high degree of sophistication. The above-mentioned computerised income and expense review and forecasting system exists as the cornerstone of on-going financial co-ordination. One of the reasons for the method's accuracy and effectiveness is that the systems employed were designed by staff planners within the overseas parent. Not only are these personnel some of the most skilled in the world but they bear the responsibility for designing financial reporting systems which are internationally uniform yet compatible with the particular styles and circumstances of each member of a widely-scattered multi-national business.

3.2.3. Technology

When considering the issue of technology vis-a-vis the Corporate Planning efforts of a single motor manufacturer it is essential, in the first instance, to uncover the role technology plays within the motor industry as a whole.

From the outset it should be clear that the rate of technological breakthrough within the motor industry is not proceeding at a rapid rate relative to other, younger industries. All the essential technical breakthroughs necessary to produce a viable motor vehicle

as known today had been incorporated into commercial designs by 1930. At an even deeper level, the principle of an applied internal combustion engine has remained unchanged since 1886 when Daimler built the first practical four-wheeled "horseless carriage". A mechanic of 1909, used to working upon Model T Ford engines, would, for example, not take too long to find his way round those of a current Ford Escort or Austin Mini.

However, if the industry has not been noted for its contribution to on-going technological innovation it does display the characteristic of providing a means by and through which technical innovation in other, sometimes quite separate disciplines, have been adopted and transformed into commercial successes. Examples include radial-ply tyres, automatic transmissions, solid-state circuitry, safety glass, sheet and injection-moulded plastics, fuel, lubricants and metallergy. Most were conceived independently of individual motor manufacturers but were adopted and made viable by them.

In any discussion of the industry's technology attention must be paid to the distinction which exists between technological breakthrough on the one hand and technological development on the other. The distinction is important because, as may be deduced from what was mentioned above, the most noticeable feature of the industry over the past fifty years has not been its ability to maintain its record in respect of breakthroughs but rather its consistency as a developer of technology. Technical development,

is the on-going improvement and refinement of established, earlier innovations - examples of which were mentioned above.

If it is true, therefore, that the motor industry is, today, most likely to be a technological developer then a focus-point is established upon which Corporate Planning concerns may be directed. By uncovering the motives which induce the industry to develop technology along certain lines it should, in consequence, be possible to expose the manner in which such motives are planned for over the long-term.

Technological development motives are essentially two-fold. Firstly, there are forces which induce a manufacturer to maintain his product-line's technology in competition with his chosen rivals. Secondly, there is the desire to evade government legislation or social pressure. In any event, in the final analysis both motives relate to corporate profitability and corporate survival. A manufacturer whose products are technically obsolete is in as much trouble as one whose products fall foul of local content legislation. Each of these will be discussed in turn.

Competitive Technological Development

Such development is rarely undertaken in response to a desire to exercise a measure of corporate philanthropy by introducing, for example, a new ignition system simply to provide the buyer with

a more reliable car.* On the contrary, the motive behind any spontaneous development is to be found amidst the desire to raise the vehicle's competitive appeal relative to parallel developments instituted by rivals and incorporated in competitive product offerings. This motive makes itself felt by both employing technology to raise the specification levels built into the product and by using technology to seek out ways and means of maintaining or reducing production costs without rendering the end product physically uncompetitive versus rivals.

South African speed restrictions and rising urban traffic congestion have led to car buyers seeking more comfortable "liveable" cars than previously. Accordingly, local technological development has resulted in the introduction of hard-wearing cloth upholstery and "tuned" suspensions in an effort to make cars more comfortable, more quiet and more smooth riding. Rising production and repair costs have led to the development of solid-state instrumentation electrics, body panels designed for rapid, easy assembly and repair or replacement if damaged. A third technological development area exists in respect of parts standardisation here, for example, both manufacturer and buyer benefit from the installation of one common type of starter motor to all the manufacturer's products.

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* Companies have adopted this strategy and will continue to do so. They do, however, ensure that the buyer pays the full price of such a policy. They exist in markets where price is not an important consideration or is believed not to be - Rolls-Royce is such a company.

One of the most keenly contested technological development issues exists in respect of fuel economy. For example, it has been found that small car buyers are more fuel economy conscious than their large car counterparts. In consequence, manufacturers have devoted much effort and expense towards bringing about even marginal improvements in their small cars' fuel economy. They do so secure in the knowledge that if such developmental work is successful they will possess an attractive and credible promotion platform for their vehicle.

Technological development of this type becomes of vital importance when it is suspected that a major shift in buyer and/or competitive product offerings is about to occur or is in the early stage of occuring. Two years ago Corporate Planners within the United States motor industry were faced with just such an issue.

Traditionally, the American motorist has tended to favour large eighteen foot long cars powered by six or eight cylinder engines. By 1975/6, however, it was clear that the industry's corporate planners had to decide what future the then "big car" faced during the next ten years. Underlying this decision was the fact that it was felt that a milestone had been reached in the development of such vehicles and that radical changes in vehicle design were in the offing. Firstly, the 1973 ' fuel crisis ' drove home the point that large cars were a waste of scarce natural resources and, as a consequence, government legislation aimed at improving the consumption of fuel was inevitable. Secondly, small car imports (chiefly from Japan) had captured roughly 20% of the

American domestic markets. Thirdly, there was the knowledge that in order to remain viable cars would, at some stage, have to be reduced in size to maintain pricing relationships.

Logically and rationally the issue is easy to resolve - a reduction in vehicle dimensions and the installation of smaller capacity engines. As anyone who has driven in the United States will agree, driving conditions in that country equate fairly closely with those encountered in and around Johannesburg. Functionally, eighteen feet long cars with eight cylinder engines are not only superfluous but in many ways somewhat absurd.

Emotionally, however, the industry's planners recognised that there was the definite possibility of buyers rejecting out-right the introduction of significantly smaller, less powerful models. For many months advocates of retaining the traditional large car cited research studies which indicated that, for large car buyers, "interior space" was a prime use-requirement and purchase motive - despite the fact that parallel research established that typical buyers only made use of such vehicles' full seating capacity once every six months or so. Rationally, a smaller European-type car range was an obvious true market requirement. Accordingly, therefore, beneficial technological development of smaller, more efficient, less wasteful cars was delayed at what may only be described as a "social cost" measured in terms of wasted natural resources.

Ultimately, as an emotional compromise and largely in response to Federal legislation, first General Motors (the market leader) and then Ford and Chrysler moved to re-style their cars down to what has been termed a "mid-size". In essence, no technical improvement was introduced for such vehicles remain the earlier "full-sized" sedans minus roughly one and half feet removed from the wheelbase and boot length. Cost savings flow from the consequential savings in materials whilst the car buyer receives a marginal improvement in fuel consumption via a reduction in vehicle weight.. In overall terms, however, this beneficial technical development must be viewed as having evolved from the respective manufacturer's self interest i.e. to reduce costs, maintain a competitive stand and to evade unpalatable legislation - the real needs of car buyers assume a role of secondary importance.

A balanced overview of the motor industry's application of technology to the South African market is difficult to attain as a consequence of the relatively wide variety of manufacturers present, each of whom has had a quite unique individual local history. On the whole, however, it is possible to say that all such companies fall into the same general class of manufacturers as defined by the fact that the design, engineering and technology of their products has been wholly imported from parent or supplying companies who are engaged in meeting the mass-market for motor vehicles. As a result, this mass-market orientation is reflected in the way they apply technology to the design and construction of their products. This means that the representative South African Datsun, Ford, Mazda, Fiat or Mercedes has had applied to

it the full weight of contemporary value engineering, high-speed assembly and either automated assembly or assembly by largely un- or semi-skilled labour. Applied technology therefore is geared to producing a product capable of being built at the lowest possible cost, in the fastest possible time which is compatible with a perceived market gap; technology focuses upon the supply and assembly side of the business before it considers the needs of individual buyers or buyer groups.* The entire philosophy is best summed up by the following maxim of the industry:

> "We get the engineers to design the best car for our needs then we get the accountants and cost control people in to take out enough to bring the cost down to the level necessary to price it competitively."

Moving from the general to the more specific it is possible to identify certain different interpretations of the above philosophy on the part of individual manufacturers. One of the more notable variations is the division of the industry into what may be termed technical development "leaders" and "followers". (The latter group respond to developments introduced into their product-lines by the

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* This drive to reduce costs and complexities is desirable in the broadest sense of seeking to raise the economic efficiency of the industry. It opens the door however to questionable oversights such as the failure to fit safer disc brakes (VW Beetle), the omission of heater and ventilation controls (most pick-up trucks), and the skimping of assembly and dealer service quality controls.

former in an effort to maintain their vehicle's competitiveness.) Naturally, the leaders aggressively incorporate technical developments in the expectation of gaining a marketing advantage whilst the followers adopt a passive stance only introducing such improvements or amendments once it is clear that the actions of the development leaders have led car buyers to expect to find such features in all cars within their ranges of consideration. Amongst small cars of ten years ago, for example, it was rare to find standard features such as fully reclining front seats, cloth seats, tinted windows, five-speed gearboxes, boot lights, heated rear-windows and the like. Indeed the car of that time typically sported rubber mat floor covers, cardboard door panels, rudimentry heaters and ventilators and inadequately designed seats. Since the early 1970's the role of development leader has been shared by the new market entries from Japan who were then the first to offer features, such as those above, in small cars and who still remain leaders in this regard.

The existence of technical leaders and followers has important implications with respect to Corporate Planning:

1. From the outset each manufacturer must decide what stand it is to adopt vis-a-vis the application of technological development to its products. Is it to be an active or a passive element within the market or will a compromise stand be sought?

   As may be guessed the middle-of-the-road option is the one most likely to be adopted by the majority of manufacturers - including the one forming the basis of this paper. A typical compromise is to decide to follow a path leading to passive

technical development within the field of engines whilst seeking to sustain a leadership status with respect to interior appointments and trim. The high cost of engineering technology associated with engine and powertrain development fosters conservative attitudes within their field. Conversly, the relatively low costs associated with development work in respect of reducing operating noise, vibration, and enhancing seating comfort form attractive inducements to become aggressive and innovative in these areas.

2. In addition to cost, an important influencing factor present when the local manufacturer is seeking to determine where he should stand on the technical development scale is his access to suitable and compatible technology, especially with respect to his overseas parent or supplier.

By way of example, the technology does not yet exist within South Africa to design and build a light, reliable diesel engine suitable for passenger car installation. For this reason, components (such as engines) demanding high degrees of design and manufacturing skill are frequently imported wholly or partially assembled from overseas suppliers. In other words, the local manufacturer may be either constrained or enjoy a significant advantage according to whether his overseas parent or supplier has, in turn, opted to be a technology leader or follower in certain fields. Amongst passenger cars Volkswagen and Mercedes have an enviable advantage in respect of their diesel engine technology whilst Datsun and Mazda's forte is reliable, economical petrol engines.

Two points must be raised at this juncture as follows:

(a) The direct importation of "high-technology" assemblies (e.g. engines) is no longer as easy as in earlier years. Taking engines as an example, of all the components of a vehicle it is the most heavy by mass. South Africa's local content programme (whereby increasing proportions of a vehicle's mass must be sourced locally by certain specified dates if they are to qualify for tax and duty rebate concessions) operates upon the basis of the vehicle's total mass. In this way, a vehicle having 66% of its mass composed of local components will benefit from higher rebates than one with but 50% of its mass made in South Africa.

Ultimately, it is not impossible for a manufacturer to arrive at a situation where 70% of his product is locally-sourced but the remaining 30% happens to comprise an imported engine. Accordingly, either he must continue to import his engines (at a high duty and cost/price disadvantage) if he wishes to maintain his technical lead or he must decide to adopt a locally-built engine and pass up this technology leadership.

(b) If it is accepted that the most technically advanced, most heavy and most demanding of investment funds are engine and powertrain components then a useful strategic technical opportunity presents itself. Should a number of different makes of vehicle to be fitted with common engines and power-trains it would be possible for manufacturers to adopt the most technically advanced components available by producing

them at a central point or from a common supplier. It is suggested that if such a plan were adopted the South African motor industry would do much to overcome the current inability of individual manufacturers to regularly utilise the best available overseas technology at the keenest possible investment cost.*

3. The fact that South Africa is a "technology importer" in this field has two further implications for the local motor manufacturer. These implications flow, in a sense, from, firstly, the consequential dependence upon an inflow of foreign technology leading to a measure of vulnerability in respect of that flow's adequacy and suitability. Secondly, the current ready availability of such technology and the high costs associated with its local development means that there is little incentive for local manufacturers to commit themselves to a planned programme of uniquely South African automotive research and development.

The above situations are not unique to one manufacturer but are common to all. Accordingly, it is suggested that a body, such as NAAMSA, take the initiative and call its members together for the purpose of establishing a central technical development body whose objective is to reduce the industry's heavy reliance upon imported technology. This objective goes beyond the simple co-ordination and rationalisation of existing information flows

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* The recent Sigma-Leyland-Peugeot/Citroen mergers point the direction in this issue whilst the simultaneous technical merger between Alfa-Romeo and Fiat represents a welcome reinforcement.

towards the creation of a technical research institute having staff and facilities sufficient to make a material contribution to the body of South African pure and applied automotive technology. Current examples of key fields of research open to investigation include the entire issue of petroleum-substitute energy sources, micro-electronics in respect of ignition and instrument systems and glass-fibre body components.

It is already clear that the most significant factor capable of influencing the technical development of motor vehicles in this country is present in respect of South Africa's lack of crude oil reserves. Given the fact that the entire world's supply of known petroleum deposits is finite and in steady decline, the day is not far distant when the first signs of an irrevocable, rapidly expanding international shortage will be felt. Oil-lacking nations, of whom South Africa is one, will be exposed to a fast and crippling drop in the commodity's supply. Such oil as there is will be either diverted towards those nations who are willing and able to pay for it or it will be subject to stringent export quotas imposed by its possessors with the objective of maintaining, int et, their own social and industrial fabrics.

Even in the short-term the sensitivity of this nation to a perminant disruption in its oil supplies is acute. The majority of South Africa's petroleum needs are derived from Iranian oil-fields. The overthrow of that country's government and its replacement by one hostile to South Africa (*) or the imposition of

* Written October, 1978.

economic sanctions would take but a matter of hours to accomplish. In the space of that time the South African motor industry and the entire structure of this nation's society, as it is now known, would be placed in jeopardy.

Given these circumstances it is abundantly clear that each and every local motor manufacturer must possess long-range contingency plans of a very high order designed to dilute and counterbalance any such developments.

Corporate Planning and Technology

Viewed against the background of the above discussion it is suggested that long-range planning as conducted by each and every local motor company is flawed and weak. Their technical research and development plans are not only focused upon product lines and market segments which could be splintered in a matter of hours but their technology itself is little more than a foreign element so loosely planted in South Africa that it has not taken on any true local characteristics.* The key, most fundamental strategic technical research opportunities are consistently overlooked - largely because to devote attention to such issues would lable the initiator as being "pessimistic" whilst his likelihood of obtaining funds for such research is minimal.

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* One example of this is to be found in respect of the technical research department of the motor manufacturer forming the theme of this paper, approximately 10 out of the 15 member staff are short service overseas immigrants.

In the purest sense of Corporate Planning it must, surely, be agreed that if any issue is perceived to assume a moulding role in the company's affairs it is that company's responsibility to include such an eventuality within its Corporate Plan.

Finally, in overall terms, the role, impact and growth of technology has, is and will continue to be the subject of much controversy. Alvin Toffler, in his classic review of the human side of tomorrow, Future Shock, has this to say of technology:

> "The high velocity of change can be traced to many factors. Population growth, urbanisation, the shifting proportions of young and old - all play their part. Yet technological advance is clearly a critical mode that activates the entire net."*

As a consequence it appears logical that technology should exist at or very close to the forefront of Corporate Planning endeavours. In practice it does not. Instead, technological development takes place in an unsystematic way largely because planners at all levels and within all fields are unwilling and unable to accurately foretell the exact avenues applied-technology will follow, what fields it will open and which it will render obsolete. Levitt in his discussion of Management Myopia+ was, in many ways, seeking to interpret technological

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* A. Toffler — Future Shock
Pan Books, London, 1970 pp 387

\+ T. Levitt — Innovation in Marketing
Pan Books, London, 1968 Chap. 3 pp 39 - 66

change in terms of consumer desires. The flaw in his logic, however, is that unless the flow of technology's impact upon the life and aspirations of the individual can be pre-determined it is difficult to quantify the affect such change may have upon buyers within a given product category. Certainly, monitoring the scope, magnitude and direction of technology is a task of staggering difficulty - its individual filaments are so incredibly fine yet so collectively dense and so tied and knotted together with those of its social, economic and political counterparts. The net effect is two-fold and is best described by Ralph Lapp:

> "No-one - not even the most brilliant scientist alive today - really knows where science is taking us. We are board a train which is gathering speed, racing down a track on which there are an unknown number of switches leading to unknown destinations. No single scientist is in the engine cab and there may be demons at the switch. Most of society is in the guard's van looking backwards."*

Firstly, the local motor manufacturers are part of the society mentioned and, secondly, like everyone else they spend a lot of time looking backwards or down at the track rushing by. This then is the true Management Myopia which is afflicting one of this country's key investment and employment industries. It does so despite the fact that there are, in 1978, imminent operating crises whose probability of occurrence has never been greater whilst, collectively, the industry has the resources to save itself via the

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* Quoted in Toffler. Op.cit., pp 390

innovative, systematic application of existent fuel, energy and transportation technology. Indeed, the establishment of the above-mentioned automotive research institute now may form an indispensible pre-condition for the entire local industry's survival during as short a period as the next 10 to 12 years.

SECTION FOUR CORPORATE PLANNNING AND THE MARKETING FUNCTION.

4.1 Introduction

In this section the earlier-discussed issues of Profitability, Capital Investment and Technology will be synthesized with the most visible element of the company's Corporate Planning endeavours, namely, the organization's long-range marketing efforts. The term "synthesis" is an apt one for, in the final analysis, the degree to which any business is successful in the long-term is governed by the skill devoted to the task of formulating its optimal blend of profit, investment, technology and marketing objectives. Not a single one of these four areas of concern are either means to ends in themselves or are capable of operating independently. They must be combined in such a way that the company establishes and maintains the right products in the right markets at the right time and at the right price. Any deficiency in respect of profit, investment, technology and marketing will cause the business to fall short of its true capabilities.

Much has been said of "marketing's" role in modern business - and justifiably so, however the fact that marketing efforts are only as successful as the ' behind the scenes ' endeavours of financial and research staff is often overlooked. Practical Corporate Planning should pay full justice to such efforts, for a very sound reason - any fundamental weakness present therein may be concealed or overridden in the short-term but in the long-term a failing of this type will inevitably diminish the impact

of the company's planning activities.

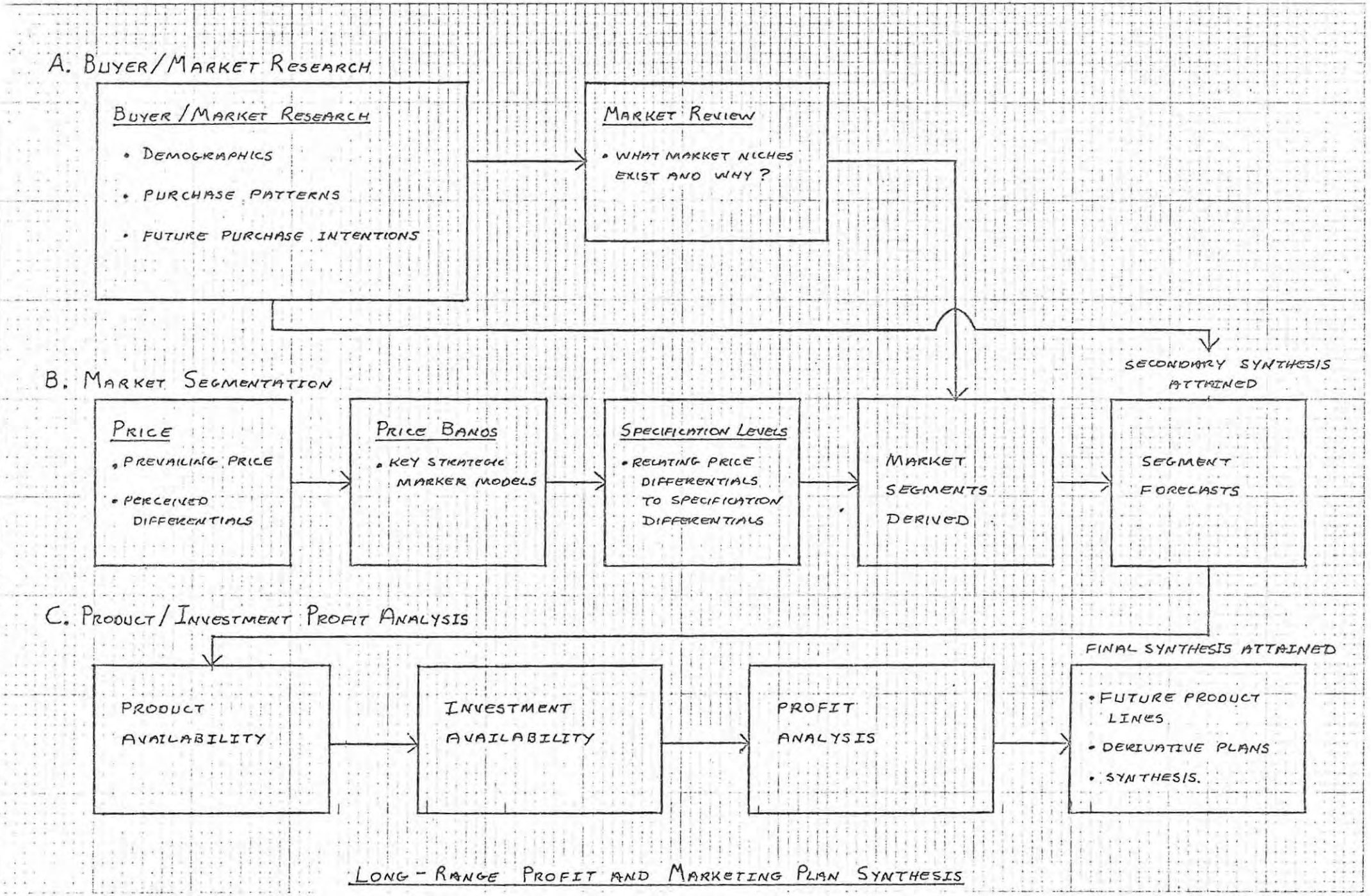
4.2 The Marketing Synthesis

By virtue of the fact that the following pages concern themselves with both practical realities and "ideal" intentions the overall synthesizing process is best introduced by means of the diagram overleaf.

It will be noticed that three clusters of activities are listed viz; Buyer/Market Research, Market Segmentation and Product/ Investment Profit Analysis. Additionally, note that all interact and ultimately come together to derive physical Product and Derivative plans and actions. Each will be considered in turn but it is vital to understand that chronologically:

- Buyer/Market Research actions may occur simultaneously with Market Segmentation but that the former cannot be incorporated in marketing plans until the latter is complete.
- Product/Investment Profit Analysis cannot be undertaken until Market Segment Forecasts are complete for such forecasts serve as input for all profit analyses.

For the purposes of this paper each cluster of concerns will be discussed in the order of mention above.


A. Buyer/Market Research
Buyer/Market Research
• Demographics
• Purchase Patterns
• Future Purchase Intentions
Market Review
• What market niches exist and why?
Secondary Synthesis Attained
B. Market Segmentation
Price
• Prevailing Price
• Perceived Differentials
Price Bands
• Key strategic marker models
Specification Levels
• Relating price differentials to specification differentials
Market Segments Derived
Segment Forecasts
C. Product/Investment Profit Analysis
Final Synthesis Attained
Product Availability
Investment Availability
Profit Analysis
• Future product lines
• Derivative plans
• Synthesis.
Long-Range Profit and Marketing Plan Synthesis

4.3 Buyer/Market Research

Functionally, Buyer/Market Research is analogous to the "sensory organs" of the company within the market. Fundamental to any marketing action is the need to know what is and what is likely to happen "out there" - every marketing text-book correctly emphasises this point. Ignorance of buyer wants is reflected in mis-directed marketing efforts which, in turn, are reflected in the company's profit status. Consequently such research must be conducted in advance of any product actions.

Sources of research data are extremely wide-ranging and vary greatly in their accuracy and representativeness. Under the umbrella heading of "research" within the definition of this section are included the following:

- Formal research studies amongst current own-make and competitive-make product buyers.
- Reports from company sales managers and representatives.
- Reports from franchised dealer personnel.
- Trade journals and industry journals.
- Financial and economic publications.
- Personal acquaintances within and without the motor industry, senior government officials and quite ordinary people encountered at all manner of social events.

Not all of the information available is pertinent to Corporate Planning, e.g. the facts that green cars are not favoured by Orange Free State dealers or that a chance aquaintance at a

cocktail party was dissatisfied with his new car's fuel economy are totally irrelevant to long-range planning notwithstanding their value to immediate-term product actions. Consequently the company's planning staff find it necessary to deal with the broad framework of the market. By figuratively "stepping back" they attempt to determine the key macro elements which do most to influence the long-term structure and direction of their industry's markets. Once such elements are identified specific information may be gathered.

Experience has shown that the key long-term macro element is that of Market Demand. Demand for any product is dependent upon (1) People With The Willingness To Buy and (2) Their Ability To Buy. Accordingly, the company's planners seek to identify information sources which are relevant to these two factors. Each will be considered in turn.

4.3.1. People With The Willingness To Buy

The broad long-term demand for motor vehicles is linked to the rate of population increase. This is so by virtue of the fact that the potential market, all things being equal, is composed of every adult aged over 18 years. Although an over-simplification (not every adult can, wants or is able to drive) the widely-spread appeal and necessity of vehicle ownership is hereby recognized.

Defining this demand component further, planning staff will seek to derive two more realistic indications, namely, the rate at which new vehicles will be acquired by adults aged over

18 years and the rate at which new vehicles will be acquired by companies operating vehicle fleets. To quantify these rates three key demand sub-components must be examined:

(1) The rate at which existing vehicles are replaced by new vehicles.

(2) The rate at which vehicles are bought in addition to existing vehicles.

(3) The rate at which persons or organizations who have never bought a new vehicle before enter the market i.e. "first-time" buyers.

Considering each in turn:

4.3.2. Replacement Buyers

It has been found that this class of buyer is the largest of the three mentioned. Stability of demand is a noteworthy characteristic of this cluster which is explained by the fact that motor vehicles, as durable goods, are subject to neither rapid deterioration nor close substitutes. Such variability in replacement buyer demand as is present arises as a consequence of the following three considerations:

1. (a) The rate at which existing vehicles are replaced by new acquisitions. If the rate of replacement rises, the manufacturer benefits from an enhanced sales volume whilst volumes decline if the rate either declines and/or the replacement time cycle expands.

As a general rule, and there is research evidence to prove it, the typical private new car buyer replaces his vehicle on a three and a half year cycle. (In the case of commercial buyers the cycle's length is more variable, being as short as eighteen months in the case of tipper trucks operating in arduous conditions or as long as eight years or more for extra-heavy, inter-city haulage vehicles .)

Sound buyer rationale exist for explaining the duration of such cycles. A simple illustration of a new car buyer's actions will serve to describe the cycle's length under typical circumstances.

From the outset the majority of car purchases are undertaken via the medium of hire-purchase - either directly through dealer credit facilities or indirectly using a bank loan (which is not only cheaper but permits the buyer to negotiate favourable discount terms with the dealer).

Assume owner A owns a used car valued at R1 000 which he decides to trade-in on his first new car. On shopping around various new-car showrooms he finds the car of his choice at a price of R3 000. The dealer agrees to trade his existing car for R800, leaving the capital sum of R2 200 to be repaid over 30 months. After 30 months A now legally owns his car. In that time he has maintained it carefully and has travelled the equivalent of 45 000 kilometers.

Given his car's age, condition and mileage A estimates its cash or trade-in value to be roughly R1 800 - his depreciation charge totals R1 200 and will increase over-proportionately in future on the vehicle should he choose to retain it. Accordingly, A now decides to trade-in on a new vehicle. He goes shopping and discovers that he will obtain his best trade-in offer if he selects a new model of his current make. This fact, plus the car's satisfactory service, leads him to decide to buy a second same-make car. In the 30 months since he first went shopping the price of the new car of his choice has risen to R3 900 whilst the trade-in offered him was R1 900 (R100 more than he expected).

By trading-in now his capital repayment on the new vehicle will total R2 000 payable over 30 months (compared with R2 200 for his first car). In other words his car's depreciation rate has worked to his advantage - he now must repay only R2 000 whose real value has diminished over the 30 months through the workings of inflation.

If, however, he decides not to trade-in at the end of 30 months a different set of circumstances will emerge.

Assume A retains the car for a further 12 months after his final hire-purchase instalment. Depreciation during that time reduces its market value from R1 900 to R1 000. In that time a suitable replacement car now sells for

R4 400 which, less the R1 000 trade-in, boosts the capital sum to be repaid over 30 months to a staggering R3 400.

Thus it is clear that the action of depreciation, when linked to the replacement cycle, is of critical importance to most buyers.

Leading from the above example it is worthwhile to consider a number of factors which influence a vehicle's depreciation rate. Planning staff pay close attention to these factors because of their not inconsiderable long-term impact upon the competitive status of their company's products. Firstly, the depreciation rate is governed by the physical condition of the vehicle at the time of resale. As a working assumption any car under four years in age or having less than 80 000 kilometers will be adjudged to be in "reasonable" condition. Secondly, and more importantly, the rate of depreciation (given the above realistic assumption) depends upon the interaction of the demand and supply circumstances of that particular make and model on the used-vehicle market. Given the above illustration it should be clear that the action of inflation on new car prices raises them to an extent where, at the margin, prospective buyers switch away from new towards used vehicles. Naturally, prolonged conditions of rising new vehicle prices act to bolster used car demand. In turn, used car prices rise in response to

demand and consequently reduce the effective depreciation rate of new cars.*

Assume, in the above example, A bought a Ford Escort which by virtue of its popularity within the second-hand market held its value to the extent indicated. Owner B, however, had bought an "odd" car e.g. a Renault 5. B's status at the end of 30 months is not as advantageous as that of A i.e.:

Owner B (Renault 5)	Purchase Price	R3 000 [a]
	Less Deposit	1 500
Capital sum repayable over 30 months		R1 500

(Renault 5 value after 30 months R1 600 [b])
(Ford Escort value after 30 months R1 900 [c])

Owner B's Depreciation Cost:

Purchase Price	R3 000 [a]
Less Resale Value	1 600 [b]
	R1 400 [d]

Thus A is better off to the extent of R500 (A's resale value (R1 900 [c]) less that of B's R1 400 [d]).

B's troubles have not ended. His Renault's actual residual value may be R1 400 but when he goes shopping for a new car dealers will be reluctant to take over his Renault which, by virtue of its poor used-market acceptability, they will have difficulty re-selling.

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* A major difference between the new and used car suppliers is that the latter's cost inflation rate is markedly below that of the former.

Consequently the popular-make dealers (such as Ford, General Motors, Volkswagen and Datsun) may only offer B R1 000 for his car. By way of contrast A will obtain R1 900 - all dealers he visits know that a well-kept, low mileage Escort will be sold within a few days whereas a Renault 5 may "stick" in their used-car department inventories for a month or more. Invariably, therefore, B is likely to be forced to return to the Renault dealer and buy a second Renault - only this dealer will be prepared to offer him a trade-in he considers reasonable.

For the Corporate Planner an understanding of this replacement process is greatly important. It explains why, since the advent of double-digit inflation in the early 1970's, the larger motor companies have tended to expand and why their smaller competitors have contracted. The B's of the market gradually switch away from the less popular manufacturers by selling their "sticky" cars privately for the best price they can realise and switching to a more popular make which is subject to lower levels of used market depreciation.*

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* Appendix II traces the decline of such once-popular makes as Chrysler, Leyland, Alfa-Romeo, Renault, Fiat and Volvo and the corresponding rise of Datsun, Toyota, Ford, Volkswagen and General Motors.

Appendix III lists some of the best and worst new cars as measured in terms of their resale value retention rates as at the time of writing - September 1978.

Amongst the total replacement buyer market segment absolute levels of make-loyalty tend to be stable in the short-term whilst over the long-term a decline may be experienced by less popular makes as a consequence of weakening owner-loyalty brought about by their poor resale values. Recovery and a reversal of such a trend is exceedingly difficult with the odds loaded heavily against success for the process feeds upon itself - the less popular a vehicle becomes in the new market the worse its resale value becomes and the less inducement there is to replace with such a make. Evidence exists that this slide is compounded by a loss of "faith" in the company on the part of its dealer and employee bodies. The best dealer salesmen and company employees "see the writing on the wall" and resign whilst dealers facing dropping profit margins terminate franchise agreements leaving the company saddled with significant reductions in both dealer and in-company competence.

1. (b) A second factor influencing the length of the replacement cycle is the overall usage patterns to which vehicles are exposed.

In recent years much publicity has been given to a purported reduction in the rate of vehicle replacement as a consequence of the savings in wear and tear occasioned by maximum speed legislation. Undoubtedly certain vehicles which would normally have been replaced

at an early date (e.g. sales representatives cars used over long distances and operated at high speed) have been affected to some extent but any overall lengthening of replacement cycles has not been found to be truly noteworthy if speed restrictions are considered. A more important factor which acted to lengthen such cycles was the general economic uncertainty which was evident from 1975 onwards. Prospective buyers tended to postpone vehicle replacement to avoid becoming committed to hire purchase contracts at a time when employment prospects dimmed. Rising new car prices did not improve the situation.

1. (c) A third factor is the rate of car price increases measured against the rate of growth in buyers disposable incomes over time. There is strong evidence to support the view that in circumstances where the rate of price increase exceeds income growth a braking effect is noticed in the frequency of vehicle replacement. Under such circumstances the question of what has been termed "pent-up demand" arises.

As vehicle prices rise and incomes lag the car replacement decision is postponed on the grounds that it is not an affordable expense. Buyers who would normally have bought during, say, the middle of the year allow their customary buying time to pass. Many will have their deposits available but feel that general economic conditions are such that they wish to avoid incurring onerous hire-purchase obligations. Very often the fact that their

chosen car's replacement price is now markedly above that prevailing two or three years earlier acts as both an explanation for and a rationalisation of their purchase delay. Experience has shown that, as a short-term market stimulator, the announced threat of impending major price increases acts to "jarr loose" the pent-up demand. Buyers throw their caution to the wind and act upon the counter-rationalisation that, "I may not be able to quite afford to buy a new car now but if I don't and prices go up I'll never be able to afford to buy at a later stage. If I buy now I'm sure I'll find some other areas of expenses that I can cut down in to meet my hire-purchase instalments." Such shock-tactics have been found to operate over the immediate-term but, unquestionably, over periods of continued economic hardship and inflation the element of pent-up demand becomes larger and increasingly impervious to such efforts to break it loose. So much so, that buyers come to accept that they cannot now purchase the vehicle of their choice.

Once a buyer finds him or herself in such circumstances the likelihood is that what has been called the "Buy-Down" factor comes into operation.

Buy-down is best illustrated and explained by example for it is a function of both quantitative economic and deep-seated qualitative psychological motives. Buy-down has its counterpart in a more satisfying "Buy-Up" process and both actions occur as patterns of replacement buyer action over time.

The typical car buyer begins by acquiring his first car second hand, for he is a young person of relatively limited means. Once in employment and his financial status improves he is subject to strong economic and social, ego/ prestige based motives to "buy-up" to a new car. This first new car is usually a small one.

Time passes and this car becomes ready for replacement. His choice is to buy a used car, a new car of the same size or a new car of a larger size. Financially, the larger car is within reach and, consequently, he again "buys-up." Assume that by his third or fourth new car the buyer has tended to stabilise his car purchase pattern. At age 45 in 1975 he finds that a Valiant is both personally affordable and in line with his needs. Financially he does not expect to be able to buy anything either larger or more luxurious. Further assume that his 1975 Valiant would normally be replaced in 1978 but that their retail prices have, in the interim, risen substantially over 1975 levels. Moreover, his personal financial status has weakened. Economically a Valiant is beyond his reach. In ego and prestige terms, however, a Valiant remains highly desirable. In effect, he is exposed to "buy-down" pressure.

Of importance is the fact that he is likely to resist the "buy-down" force and retain his existing Valiant for the above-mentioned psychological reasons. From

the manufacturer's Corporate Planning point of view this individual's replacement cycle has lengthened. Naturally, once the whole market of replacement buyers is considered, replacement cycles will increase in duration and depress retail sales volumes.

Overall, the impact of replacement purchase patterns upon the market are a source of great interest to the motor company's Corporate Planning staff, this is particularly so in respect of the following considerations:

1. The replacement buyer segment is the largest component of the new vehicle market from which is derived the bulk of the company's sales volumes and profits. Consequently, changes in both volumes and profits may be attributable to changes and events occuring therein.

   Moreover, the forecasting of future market shares must be largely based upon the replacement segment and will take into account forecasts of competitive segment shares and anticipated rival actions designed to enhance their respective shares. Underlying all such efforts and considerations is the faith and confidence the market has in each manufacturer's products.

2. Vehicle usage, industry cost pressures, retail price actions, the rate of income increases, "buy-down" and "buy-up" trends directly influence both retail sales volumes (by lengthening

or shortening replacement cycles) and future marketing actions implemented by rivals.

Combining a broadly-based and detailed understanding of the above two elements the motor manufacturer's Corporate Planner will be able to draft a 5 year plan which will take into account the following typical assumptions and input variables:

- Replacement cycles will not vary significantly from the current average $3\frac{1}{2}$ year cycle.

- Changes in current minimum hire purchase deposit and maximum pay-back periods are not anticipated.

- Recent merger-action between Sigma, Leyland and Peugeot/Citroen will exert a greater-than-present competitive pressure upon the remaining "small" manufacturers - chiefly Alfa-Romeo and Fiat - whose existing owner-bodies will, as a result, contract further. Either as a result of their contraction or as a consequence of one or both of these companies withdrawing from the market, this company may be expected to raise its own replacement market penetration by 0.5 - 0.75%.

- Vehicle usage patterns are likely to remain unchanged over the next five years relative to those now identified.

. Current industry cost pressures will continue unabated. Overall industry price increases, at a retail level, in the order of at least 15% per annum must be expected. This factor, plus expected operating cost increases, will maintain the current "buy-down" trend towards smaller, more economical motoring options. (Our product plans must take account of this fact by reviewing, every six months, our 1976 commitment to adopt Model X during 1979 with a final decision required by December 1978. In addition, the feasibility of bringing into local production Model Y must be investigated as a matter of urgency.)

The above is but a simplified version of replacement market segment considerations taken into account by this and other motor manufacturers. However, it does illustrate both the breadth and type of detail which is reviewed and the implications of such investigations.

4.3.3. Additional Buyers

This segment of the market consists of buyers acquiring a motor vehicle which is additional to one or more other vehicles owned or operated by them at the time the vehicle was bought.

The largest cluster of multi-vehicle owners is to be found among companies operating fleets of vehicles. (Private individuals are, of course, represented but are, in the main, confined to the relatively more wealthy members of the community

where two, three or more vehicle households are common.*.) Most commercial establishments find it necessary to operate more than one vehicle either directly in their operations or as an indirect requirement (such as the provision of management-staff personal transport).

The additional vehicle market segment is a key consideration in Corporate Planning for the action of acquiring additional vehicles acts to raise the overall size of the total market. In a sense there is "demand duplication" - single purchasing units buy more than once.

Industry marketers continuously strive to induce demand duplication by catering for particular demographic, use and psychographic market niches. Common market niches include recreational buyers (who buy a vehicle to tow a boat or caravan); second car (wife) buyers and youth buyers. Amongst the commercial fleet niche the aim is to simply sell more vehicles of a given type to established buyers.

Additional buyers' purchasing volumes rest upon similar foundations as were present within the earlier discussed replacement segment. Such volumes relate back to the overall incidence of such buyers within the total market, the rate at which their ownership spread expands or contracts, and the rate

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* For Corporate Planning purposes a typical two car household where one car (usually the husband's) was bought new and the other is second-hand is considered to be a one-car unit.

at which additional buyers replace existing vehicles. Consequently, sales forecasts seek to predict over time the volume implications of changes in the above variables.

When considering the issue of additional buyers, Corporate Planners are careful to distinguish between the simple vehicle usage issues present and the actual motives acting to induce and maintain buyers to become and remain members of the "additional" market segment. For example, and by way of contrast, amongst replacement buyers use and purchase motives are closely related. A replacement buyer must have a new car to travel to and from work - without one he cannot function as a member of an automobile-orientated society. For him a car is a necessity. An additional buyer, however, has already fulfilled his use - necessity requirements. Instead he must identify supportive rationale why, for him, transport over and above the single vehicle is required. Usage does not readily provide that motive. The perceived requirement for a pick-up to tow a boat over weekends does not supply a cast-iron purchase motive for a pick-up whilst the fact that a salesman's car is used for calling on customers is irrelevant as a genuine purchase motive. Instead the onus is largely upon the vehicle marketer to advance sound reasons or purchase motives. The recreational buyer must be convinced that his weekends will become more convenient and enjoyable if he buys a pick-up exclusively to tow his boat whilst the company must be led to believe that its salesmen's cars will become less costly to operate if there are more of them in the fleet.

Overall, therefore, the "additional" market is characterised by an absence of the levels of necessity and urgency present within the single-vehicle replacement segment.

As may be deduced the Corporate Planners within the subject company divide the additional vehicle segment into two broad categories viz; the commercial vehicle niche and the recreational niche.*

With the exception of the replacement cycle duration considerations voiced earlier, certain special factors govern the long-term growth trends of these two quite different niches. Each will be considered in turn.

Commercial Fleet Additional Buyer Niche

The rate at which a typical company's fleet will expand is, first and foremost, a direct function of the current and anticipated level of economic activity within that establishment.

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* In practice it has been found that the second (wife's) car niche is not large and is exceedingly difficult to quantify. Typically households wealthy enough to operate two new cars simultaneously are relatively rare. Moreover within such households there is, very often, a "model split" - one car is e.g. a Mercedes and the other e.g. a Datsun. As a Mercedes planner you recognise that you do not have a model to compete with Datsun and as a Datsun planner you recognise that you have no model to compete with Mercedes.

Vehicle acquisition and operation represent a major overhead burden which is easily pruned when a down-turn in the company's financial status is anticipated. Motor vehicles are highly liquid assets - the redundancy of six salesmen and the sale of their vehicles is no more difficult than the act of hiring six additional salesmen and buying them each a car. Alternatively, a delay in the replacement of existing vehicles is equally easy to accomplish.

Consequently, the motor manufacturer's Corporate Planners will focus their attention upon the key economic activity indicators which both plot the path and provide advance warning of the national economy which, in turn, governs the anticipated actions and reactions of client companies within individual economic sectors. Commonly consulted economic data sources for this purpose are four-fold:

1. South Africa is fortunate in having available a comprehensive range of authorative economic and business/financial data suppliers (e.g. commercial bank economic reviews). The difficulty of sifting through such information is relatively more simple in South Africa than is the case in certain overseas countries; South Africa's social/political/economic parameters are considerably more simple than those of Britain or the United States for example.

2. Government socio-economic policies are both well-entrenched and stable, factors which assist planners in their efforts to predict the impact such policies are likely to have upon their company's operations. The subject manufacturer has within its ranks of senior management personnel men who have developed and who maintain close personal relationships with senior government officials. In some instances such managers are ex-government employees having been drawn from responsible positions within key ministries. Such formal and informal contacts do much to assist the company's planners where government policies are likely to influence the company's activities via the overall economic climate.

3. As is often the case, vehicle sales to fleet-owning corporations tend to follow the dictum of the classic "80 - 20 Rule" whereby the bulk of sales are made to a minority of customers, the proportions may not be exact but the inference is clear. Amongst the manufacturer's fleet-customers there is a relatively small cluster of institutional buyers who account for a major proportion of the additional vehicle market. Examples of such buyers are the car and truck hire companies and the South African Railways.

Naturally such large purchasers are easily identifiable and the company is generally able to cultivate close and cordial relationships with the key members of such customer's management establishment. Through such relationships not only are actual sales negotiated and concluded but vital

Corporate Planning input is obtained as to likely future purchase patterns and the circumstances surrounding such intentions.

Smaller fleets are not ignored. The subject manufacturer maintains a staff of field sales managers stationed throughout South Africa. Their responsibilities include the monthly submission of a detailed Contact Report wherein is listed planning input data relating to the motives, patterns and timing of fleet sales in their regions.

4. Finally the subject company conducts and acquires market research studies for the express purpose of uncovering some of the more salient features of the fleet additional vehicle segment. A topical example of an acquired or "syndicated" research project is the much publicised investigations into the heavy truck industry undertaken during 1977 and 1978 by Marplan - a Johannesburg based market research agency. In-house research is focused upon assessing the relative actual strengths and weaknesses of the company's product offerings versus those of its competitors as viewed by current and prospective owners.

Recreational Vehicle Additional Buyer Niche

As a general rule this niche is founded upon ownership of a specialised vehicle for pleasure purposes. In a sense it is a parallel to luxury motoring in that it is both highly personal and equates to the satisfaction of an expensive whim on the part of private buyers.

The very fact that recreational vehicle purchases are luxury purchases means that their overall incidence of operation and rate of purchase is closely dependent upon overall levels of disposable income. The relationship is simple, as disposable incomes rise so too will the rate of recreational vehicle acquisition. A second factor operating within this market segment is the fact that, in South Africa, the purchase of a recreational vehicle is a means to an end in itself - there is little status attached to the type, age and condition of such vehicles. Many families will gladly buy an old, fifth-hand panel van or Kombi to drive to the beach over a weekend but will be unable to justify spending R4 000 or more for a new vehicle. Indeed, there is evidence that a definite anti-status desire exists such that to belong to a peer group the vehicle must not be a new one whilst the short distances involved generally do not make either reliability or comfort prime considerations.

For the Corporate Planner, the above two facts act to make this market segment a highly mercurial one with respect to absolute levels of vehicle sales. In any event the subject company's planning staff make close reference to disposable income and vehicle cost/price forecasts when seeking to forecast sales volumes to this buyer cluster.

4.3.4. First-Time Buyers

The first-time buyer segment of the market is small and transitory but one whose relative size is somewhat stable. It is not subject to the wide demand fluctuations noted amongst the replacement and

additional buyer clusters. As the title implies this current segment comprises individuals acquiring their first new motor vehicle. As may be imagined first-time buyers represent a key dynamic element within the market place for they are an active agent whereby both (a) the total vehicle market may be made to expand and (b) the total vehicle population size increased.

The bulk of such buyers is to be found amongst private persons in their mid to late twenties who have established themselves in employment to an extent which permits them to afford the purchase of a new car rather than a used alternative. This segment's youth orientation and composition brings in its train certain characteristics which serve to make it the most distinctive yet most difficult market niche for any manufacturer to enter effectively. Earlier it was mentioned that vehicle ownership for many represents an extension of self or an expression of individuality. As a workable generality, nowhere are those motives more well-developed than amongst "youth" buyers. A review of the owner demographic profiles of popular "sporting" cars (e.g. Datsun 1600 SSS, Escort RS 2000, Cortina 3000 S, Alfa-Sud) will make this point clear.*

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* There is evidence that a representative car buyer follows either two or three ownership "phases" during his years as a motorist. As a youth fast, sporting and unconventional vehicles are favoured. Once married with a small but growing family a switch is made towards larger more rational "family" cars. Once the children have left home two avenues are followed which are essentially a function of income. A lower income household will move towards smaller "sensible" cars offering economy of operation and reliability. A higher income household will revert to vehicles featuring either luxury with sporting appeal or luxury with prestige.

The company's Corporate Planners make, as a starting point for their market segment projections, the assumption that the majority of persons aged under thirty currently driving used vehicles have the ambition to buy a new vehicle. This assumption logically leads to the question as to why this ambition or desire is unfulfilled in many such persons.

Disposable income relative to the price of new cars provides the answer. The typical young person, having at least a matriculation education, is not in a position to afford a new car purchase until he or she is aged twenty five or more*. Suggested reasons for this fact are given below.

1. Disposable incomes are unable to contain both essential living expenses and vehicle finance costs.

2. Freed from the restrictions of home life the desire to experience the new and unusual is strong. The desire to buy a new car must compete, for example, with equally or less expensive and equally attractive desires to travel overseas or indulge in sports requiring substantial financial outlays. Consequently many down-grade new car ownership on the premise that the used car they have now is quite adequate for the present.

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* Assume A has a university degree and has worked for a year. His take home pay is in the region of R400 per month. Once living and accommodation expenses have been met he may have R100 to allocate towards personal wants. The monthly instalment payment necessitated by the acquisition of even a small car will consume all of that R100 - on these grounds such a purchase is likely to be rejected. After three or four more years his take home pay is likely to rise to R650 - R700 whilst his essential expenses will not increase proportionately - a new car now becomes a distinct possibility.

3. Many such potential buyers are wary (and justifiably so) of committing as much as 20 - 30% of their incomes to 36 months of hire purchase instalments.

4. Limited discretionary incomes restrict their ability to buy the car they really want. That is to say, what is affordable is invariably a very common small car having no peer group status appeal or little psychological justification for the heavy outlay involved. Consequently the purchase decision is postponed. "Later when I can afford it I'll buy an Alfa Romeo; right now I'll stay with my old car. I can afford a new Mini now but who wants to buy one of those?"

5. Alternative non-car transport offerings which are less expensive and more exciting exist, for example, a motorcycle.

Overall, as a class of buyer, industry research has indicated that the actual composition of this the first-time buyer segment has changed over the past four to five years. These changes have acted to switch young people away from buying new cars and exist over and above the five earlier-mentioned decision-influencing variables.

1. There is the harsh impact the economic recession has had upon youth seeking employment. Jobs for school-leavers have been difficult to find. Moreover, there has been little incentive for many employers to boost the earnings of junior employees lacking both experience and post-matriculation qualifications.

2. Inflation has raised new car prices substantially. For example, the retail prices of representative small (typical first-time) cars have risen between 1974 and 1978 to the following degrees:

Change in New Car Retail Prices* 1974 - 1978

	1974	1978	Percent Change
Ford Escort 1300	R1990	R3830	92.4%
Datsun 1200/120Y	R2195	R3990	81.7%
Leyland Mini	R1780	R3200	79.7%
VW Beetle 1300	R1998	R3545	77.4%

* Source: Car Magazine
(Excludes GST, licence fees and insurance)

3. There is some evidence that young buyers have had an anti-reaction to their future predicted circumstances (which would include extended national service and the threat of added future austerity) such that strong desires for enjoyment and to live life for the moment are expressed in their consumer behaviour. For example the stated freedom and excitement of owning a sporting motor cycle (costing as little as R2 500 relative to a new car, R5 000) represents both a substantiation of the above discussion and a reason for the relative unattractiveness (and hence rejection) of the typical small cars tabled above. A young member of a focus group research project conducted to investigate this phenomenon during July 1978 expresses this motivation lucidly:

"For R50 a month I've got a good used Honda which can blow any car off the road .... Mostly my mates ride bikes, its fun - you meet some great people as bikers especially over

weekends like on the Breakfast Run ....Getting to work's no problem from my place to work's about fifteen minutes - even in rush hour. One guy I know with a car sits every day for forty minutes on the M1 just getting to Rissik Street. Also parking and petrol are easy."

From a Corporate Planning point of view, the first-time buyer segment is relatively stable in respect of its growth over the long-term (being related, as it is, to the general overall rate of population increase) but is also noted for its sensitivity to prevailing economic circumstances. Over the long-term it is a segment having the potential to expand the size of both the new vehicle market and the physical number of vehicles in operation within the country (with obvious implications for the used vehicle and spare parts markets).

The subject manufacturer's Corporate Planners devote their efforts towards attempting to define an approximate future growth pattern based upon population and discretionary income projections on the one hand and the relative sizes of the existing market shares of each manufacturer or the other.*

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* This last assumption has a reasonable basis in reality. As a general rule first-time buyers, when selecting a vehicle make, are most likely to be influenced by the experiences of current make owners. If Make A attains and maintains a market share of between 15% - 19% for, say, 10 years it is assumed that, in the absence of any indications to the contrary, roughly 15% - 19% of first-time buyers will be drawn to Make A. The phenomenon of the son favouring the same car make as the one his father favours is thus recognized by the manufacturer's Corporate Planners.

However, within the last two years (1977 - 1978), partially in response to the stagnation of growth within the established vehicle market (vide Appendix II) and partially as a consequence of social, economic and political pressures exerted within and without South Africa, increasing attention has been paid to the long-term market potential of this country's non-European communities.

Over the long-term it is only the fruition of this market's promise which economically justifies the substantial current over-investment burden carried by the various existing manufacturers. Moreover, at a social level, the motor industry has been cast in the role of an instrument by and through which social change may be injected into those communities via the medium of advancement on merit, equal pay and shared facilities.

In essence, therefore, the point has been made that, in the absence of any mitigating factors, the Black, Coloured and Asiatic populations hold the key to the long term profitability and survival of the South African motor industry via their potential to become first-time buyers of new motor vehicles.

The vital importance of these developing market segments is reflected in the company's Corporate Planning efforts in this area. Indeed, it is possible to say that a bulk of the manufacturers' long-term planning is now concerned with ensuring both the viability of those segments and the ability of the company to respond to that viability as and when their demand for motor transport "takes off". For this reason and by virtue of the fact that the potential demand will be

in terms of first-time acquisitions the issue of the Black, Coloured and Asiatic market segments is contained within this present section of the paper.

4.3.5. Black, Coloured, Asiatic Market Segments

In structure and composition this segment is as, if not more so, complex in composition as its European counterparts. The Corporate Planner, as a consequence, is careful to distinguish between three racial groups (Blacks, Coloureds and Asiatics) for each one is sufficiently distinct from one another to warrent being viewed as separate market segments in their own right. To consider them as a total group of "non-European" buyers may be convenient but is hardly accurate. Regarding them as a conglomerate courts the danger of blurring or ignoring key demographic, psychological and cultural differences pertinent to both their type and level of consumer demand. Some such key viables are given below.

. Asiatics are not only a relatively small population group (726 000 estimated, 1975), they are relatively more wealthy than the average Black and Coloured and are geographically concentrated in Natal. They possess a relatively high degree of sophistication and, notwithstanding any cultural differences, compare closely with the typical European vehicle buyer in both purchase motivation and consumer behaviour. In effect they are "closer" to Europeans - their actions as vehicle buyers can and will reflect this fact.

. The Coloured market offers the motor manufacturer the marketing advantages of being sizeable (2,4m in 1975) and geographically concentrated (estimated 86% reside in the Cape Province with 720 000 (30% of total) located in the Cape Peninsula). As a group they are comparatively wealthy relative to Blacks. Their rate of real income growth 1970 - 1975 was the highest for all non-European groups at 5,6% per annum (versus 5,1% for Blacks and 4,2% for Asiatics over the same period). During 1975 an estimated 55% of Coloured households earned in excess of R2 500 per annum. As at 1976 Coloureds owned over 92 000 cars (4,8% of all cars owned). Additionally, their 1976 mini-bus and commercial vehicle ownership comprised 4,3% and 3,5% respectively of the total South African bus and commercial vehicle populations. Overall 4,7% (or 125 000 vehicles) of all South African vehicles were in the hands of Coloureds during 1976.

. Numerically the Black population is by far the largest comprising 18,2 million persons (71% of total) in 1975. A quarter (4,8m) reside in urban areas (chiefly Johannesburg - Pretoria - Reef, where 2,4m or 50% of all Black urban dwellers are to be found). Rural dwellers are, in the main, domiciled in the various Black homelands. Traditionally South Africa's population is viewed on a tribal basis. Tribal based cultural and social distinctions are most marked in Homeland rural areas. Conversely, in an urban setting (as typified by Soweto) such distinctions have been "thrown into the melting pot" and a unique conglomerate Black urban culture has emerged containing elements of tribal and White culture plus special ingredients grown from township conditions

themselves. Demographic research indicates that roughly a third of Black households earned in excess of R2 500 per annum in 1975 and that, not surprisingly, the incidence of such households is strongly weighted in favour of the Witwatersrand. Moreover, as at 1976 Blacks owned roughly 7,6% (153 000 units) of the total number of licenced cars, 17,8% (8 600 units) of the total mini-buses and 16,1% (99 000 units) of the total commercial vehicles in South Africa.

See Appendix IV for an analysis of the sales of cars, mini-buses and commercial vehicles by racial group between 1974 and 1976.

4.4 Market Segmentation

Referring to the diagram at page 166 it should be clear that the Market Segmentation exercise can be conducted concurrently with the earlier discussed Buyer/Market Research actions.

It should also be clear that in any marketing planning effort there is a distinction between the way in which the market tends to segment itself and the actual way in which the market is segmented by the actions of marketers seeking to exploit that market. In pure marketing theory no such distinction should exist for, ideally, marketers adopt the segments exposed by the market. In practice, however, marketing efforts devoted to the effective retailing of any product (and particularly complex consumer durables such as a motor vehicle) are not perfectly aligned with market requirements. Indeed this variance between what the market wants and what the manufacturer provides exists as an established fact within the motor industry and long-range planning efforts reflect the inevitability of the situation.

In essence the variance exists by virtue of the market's complexity on the one hand and the manufacturer's lack of product flexibility (or the ability to exactly tailor his vehicles to market needs) on the other. Expressed another way the motor manufacturer's products are a compromise between what is wanted and what can be produced and sold at a profit - like all compromises it is imperfect.

The earlier sub-section discussed naturally-occuring market segments (replacement, additional and first-time buyers). This sub-section will attempt to describe the manner in which the manufacturer seeks to derive its own compromise stand working from market segments and from what it, as an organization, can afford to implement. As a compromise it is generally not as good as those maintained by the typical "marketing-orientated" concerns such as Lever Brothers, Colgate-Palmolive and South African Breweries. At times there is the distinct impression that although there is a far greater need for vehicle markets to become "consumer orientated" (by virtue of the substantial investments made), the opposite is often true; the adage "they can have any colour they like so long as it's black" still holds true in many instances. The motor industry does not have an image of "putting the customer first" and indeed may have an image of "putting the customer last".

A number of quite rational reasons exist to explain the above circumstance. These reasons are given below in a way intended to contrast them with the stand adopted by more typically marketing-orientated establishments.

1. All South African manufactured vehicles are designed with overseas markets in mind. This point has been made earlier. In a sense all vehicles currently manufactured by local companies are, at best, a successful compromise and, at worst, a failure which was unable to be adopted to and adopted by South African buyers. In essence, therefore, until such time as there is a totally South African designed vehicle a vast degree of compromise between market needs and product design will exist. Mass consumption product marketers, however, are able to adjust their product designs so as to take account of particular local requirements. For example a shampoo in Britain may feature a lavender fragrance, that scent may be rejected locally but it is an easy matter to produce the same shampoo for the South African market but with a lemon scent and thereby find total acceptance.

2. Relative to mass-consumption goods a motor vehicle represents a substantially greater financial outlay on the part of the buyer. Consequently, considerably more purchase motives are present. This means that, in relative terms, the marketing of mass-consumption goods is more simple - there are fewer variables to take into consideration. The vehicle marketer cannot pay close attention to all identified variables surrounding the demand for his product, rightly or wrongly he selects a few that are perceived to be of key importance and acts upon them.

3. Allied to point (3) above a vehicle buyer's usage requirements are exceedingly broad whereas those of representative mass-consumption products are relatively narrow. Compare, for example,

the usage elements surrounding even the smallest family car with those pertaining to a 50c bottle of shampoo.

4. Whereas buyer purchase motives for mass-consumption goods remain fairly stable and limited those of vehicle buyers are both varied and changeable as to time and place. A moments thought will underscore the truth of this statement. There are probably no more than ten reasons why people buy shampoo and more than one hundred in respect of a car.

5. All product purchases involve some personal or ego investment on the part of the purchaser. For example a man will buy a certain brand of beer for reasons based upon a desire to project a certain image of himself to others. (Marketers recognise this fact and promote their products accordingly, hence unshaven cowboys drink Carling Black Label whilst smooth-chinned globe-trotting cophisticates drink Amstel.) By the same token the motor vehicle represents one of the most notable means by which an owner may seek to project his personality to the world at large. Few possessions have such strong and deep-seated ambition and image projection capabilities as motor vehicles. Moreover such considerations are complex, varied and shift markedly in response to changes in both time and place. There is little prestige associated with toothpaste but a great deal associated with a Mercedes-Benz.

6. The willingness and ability of vehicle buyers to purchase is highly volatile in response to economic and manufacturer confidence considerations. Mention was made in the preceeding sub-section of the motor industry's sensitivity in these regards. The same

cannot be said to apply to such a great extent within the field of mass-consumption goods.

7. Unlike the mass-consumption product manufacturer the motor company is unable to make product changes without considerable delays. To change the package of a brand of toothpaste may take Lever Brothers a matter of weeks whilst for a motor company to introduce a new style of seat covering is likely to incur a delay of six to eight months.

In practical terms, therefore, the motor manufacturer tends to deal "at arms length" with its target markets. That is to say, although the broad trends of a given market are identified and incorporated into planning actions, detailed study of obscure market segments is viewed as being wasteful, inconclusive and lacking in cost-effectiveness.

Of all of the above seven reasons the first is likely to be the most important contributing factor responsible for the manufacturer's perceived aloofness from the market. The fact that all available product lines were essentially designed without South African buyers in mind is rarely more marked than in Corporate Planning efforts geared to establishing <u>future</u> product lines.

Attention was drawn earlier to the ten-year product life cycle adopted by the subject manufacturer. This cycle's duration is set and maintained

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* As may be recalled from an earlier discussion exceptions to this statement exist where the segment is readily quantifiable. The super-luxury and youth-sporting are typical examples of such exceptions.

by the overseas parent whose product development staff is, naturally, orientated to the design of products compatible with the needs of buyers within that establishment's main markets. A manufacturer who is very active within the European Economic Community will, consequently, seek to tailor its product lines as closely as possible to the perceived future motoring needs of that continent. The South African subsidiary of such a concern must, in turn, reconcile the facts that, firstly, the European market does not always mirror that of South Africa and, secondly, the local market lacks the size and importance necessary to bring into being a uniquely South African motor vehicle.

For the very reason that the local manufacturer faces product inflexibility or an inability to change and amend his physical product so as to align with local circumstances, he is forced to find other more remote and, consequently, less effective methods of both segmenting the market and differentiating his product so as to appeal to such segments. These alternative methods are, firstly, product pricing and, secondly, product specification. The following discussion will consider each in turn.

4.4.1. Market Segmentation by Product Pricing Action

Product pricing as a means of enhancing product differentiation within the field of Corporate Planning may be viewed in both a tactical and strategic light. Tactical pricing action has a relatively more distant relationship with Corporate Planning for it is essentially designed to yield short-term advantages. For example, if at the end of a car model's life cycle the company has excessive inventories of old models, a tactical price reduction designed to sell off redundant

old stock may be implemented. Tactically, such an action is both simple to accomplish and quick to yield results. In a sense, therefore, it serves as a "fine-tuning" method for boosting (or dampening) sales.

At a strategic level pricing concerns are quite different and more closely allied with those of Corporate Planning. They are focused upon the longer term and upon the more broader issues of product marketing.

The subject manufacturer's strategic pricing planning operates by model-line. Each vehicle model from the time of its inception through until its market deletion is subject to such planning. Two inflexible policies exist with which all pricing planning and price segmentation actions must conform. Firstly, the vehicle's price must reflect the presence of a profit component - no new vehicle is ever sold to a dealer by the manufacturer at a loss. Secondly, the wholesale price must reflect, on average, the amount of money target buyers are prepared to pay once the retail mark-up has been included.*

Reasons for these policies are three-fold:

(a) Stable or constant wholesale prices tend to impress upon franchised dealers the advantage of steady yet increasing profitability (as opposed to "boom and bust" cycles generated by

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* These policies would appear to be somewhat trite until it is realised that a number of manufacturers practise differential pricing whereby some models are sold at a loss and others at vastly inflated prices or whereby models are sold at a loss in order to attract spare parts business.

alternating market-skimming and market penetration tactical pricing actions.

(b) Through over sixty years of operation the policy has shown itself to be a major instrument in fostering the growth and development of the company.

(c) By seeking consistantly to operate profitably the company has gained an enviable reputation for financial management amongst financial institutions. Consequently its lines of credit are more solid and strong than those of certain of its rivals whose pricing policies have been more variable.

Specific detail as to how prices are developed for each model-line is unnecessary but the sequence adopted by the company when segmenting the market, by price, will now be reviewed. This review will appear somewhat over-simplified yet it will illustrate both the type of factors taken into consideration and the genuine simplicity of price segmentation within the automotive market.

From the outset the market is consulted in the sense that the existing market is segmented by the extraction of price "bands". As will be appreciated a motor vehicle may be offered at a price anywhere within the range of Rands Zero to Rands Infinity. The company, however, is not a charity operating to give vehicles away and infinity is an equally unworkable concept. However, between these two extremes interesting possibilities exist. Consequently, the most fundamental first step is to review the market with the objective of determining what established price bands prevail as a result of competitors'

pricing actions.

Naturally, there is an upper and lower limit to the market-wide price band. During July 1978 the following ceiling and basement retail prices were present within the market:

Model	
Lamborghini Espada	R 36 450
Leyland Mini De Luxe	R 3 200

Between these two extremes fall the balance of the market's product offerings. These are all examined in turn by make and model-line. Naturally the key determinant as to what constitutes a model worthy of additional study is its level of market acceptance as measured by its level of retail sales since its market introduction as given by NAAMSA statistics. (As may be imagined this is relatively simple amongst the lower priced vehicles competing at the bottom end of the market where differences in monthly sales volumes between models may run into the hundreds but becomes increasingly difficult as one moves up the market - where the retail sales differentiation may total as few as five or ten units.) In essence what the planner seeks is a range of existing key models with their retail prices.

Assume as a consequence of the above market review the following hypothetical table is derived:

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* National Association of Automobile Manufacturers of South Africa - an independent industry co-ordinating council to which all local manufacturers belong.

Vehicle Model	Retail Price (Rands)	Retail Sales Jan. 1977 - June 1978
A	3 200	5 000
B	3 990	14 400
C	4 385	13 800
D	4 735	10 105
E	5 210	8 742
F	5 850	7 300
G	6 147	6 862
H	7 500	5 281
I	9 100	3 002
J	11 300	2 817
K	15 475	2 513

Hence the market offerings (Models A - K) represent key "marker" or "strategy" competitors. Notice that in price they are distinct from one another. More importantly there is every reason to suppose that each appeal to different buyer types. Prospective Model D buyers are likely to be significantly different from those of Model E and substantially different from those of Models J and K. Naturally a difference in buyer "type" equates to a distinction between market segments based upon price. In essence, therefore, the manufacturer's market segmentation practice rests upon the premise that the key segmenting variable is price.

4.4.2. Market Segmentation By Product Price And Specification Action

Price, it will be readily admitted, is not the sole differentiating variable present. There is also the issue of "specification" or the type of physical tangible benefits any vehicle offers for its monetary value. In other words, if a car is priced at R5 000 what does it yield to the buyer in the way of advantages compared with another vehicle priced at R4 000? To expand purely price-based

segmentation to include this issue of specification the company's planners undertake what are termed Specification Analyses upon each key "marker" model.

Briefly a specification analysis involves an in-depth study of each marker model in isolation and in contrast with the models above and below it. The investigation relates to the levels of specification and trim built into each. For example, what justification exists for pricing Model D R350 over Model C?

An abbreviated but representative specification analysis is given below which serves to justify this R350 price premium.

Specification Analysis - Model D Over Model C

Specification	Model C	Model D	D Over C Premium
Vinyl Roof	-	X	R350
Radial Ply Tyres	X	X	
Fitted Radio	-	X	
Shaded Windscreen	X	X	
Seating for 5	-	X	
Cloth Seats	-	X	
Locking Petrol Cap	X	X	
Heater/Demister	X	X	
Tachometer	-	X	
Halogen Headlamps	X	X	

Hence it is a reasonable supposition that the Model D buyer will pay R350 more to obtain a vinyl roof, fitted radio, seating for five persons, cloth seats and a tachometer.

As a further part of the specification analysis of Models C and D these above additional specification items are applied to the stated R350 differential. That is to say the R350 is broken down into monetary values of the five additional items featured by Model D. For example, the following may be determined:

Specification Analysis - Model D Over Model C

Spec. Item	Price/Value
Vinyl Roof	R 80
Fitted Radio	R 120
Seating For Five	R 80
Cloth Seats	R 50
Tachometer	R 20
Total	R 350

Specification analyses of each market model or strategy competitor permit the extraction of a complete Market Price/Specification Profile whereby the total market is segmentable in terms of the following characteristics:

- Makes and models
- Retail prices
- Retail price differentials
- Specification levels
- Specification price/values

In practice price/specification evaluations are an on-going process by virtue of the continual introduction and deletion of vehicle models. (A point of interest is that price/value differences are based upon relative differences rather than absolutes. Hence any retail price increases may change the rand price but not the relative price between models. For example, Datsun may raise prices by 5%

and because the market is oligopolistic all others raise their prices by an equivalent amount.)

Having a complete market price/value specification profile permits the Corporate Planner to attempt four things, viz:

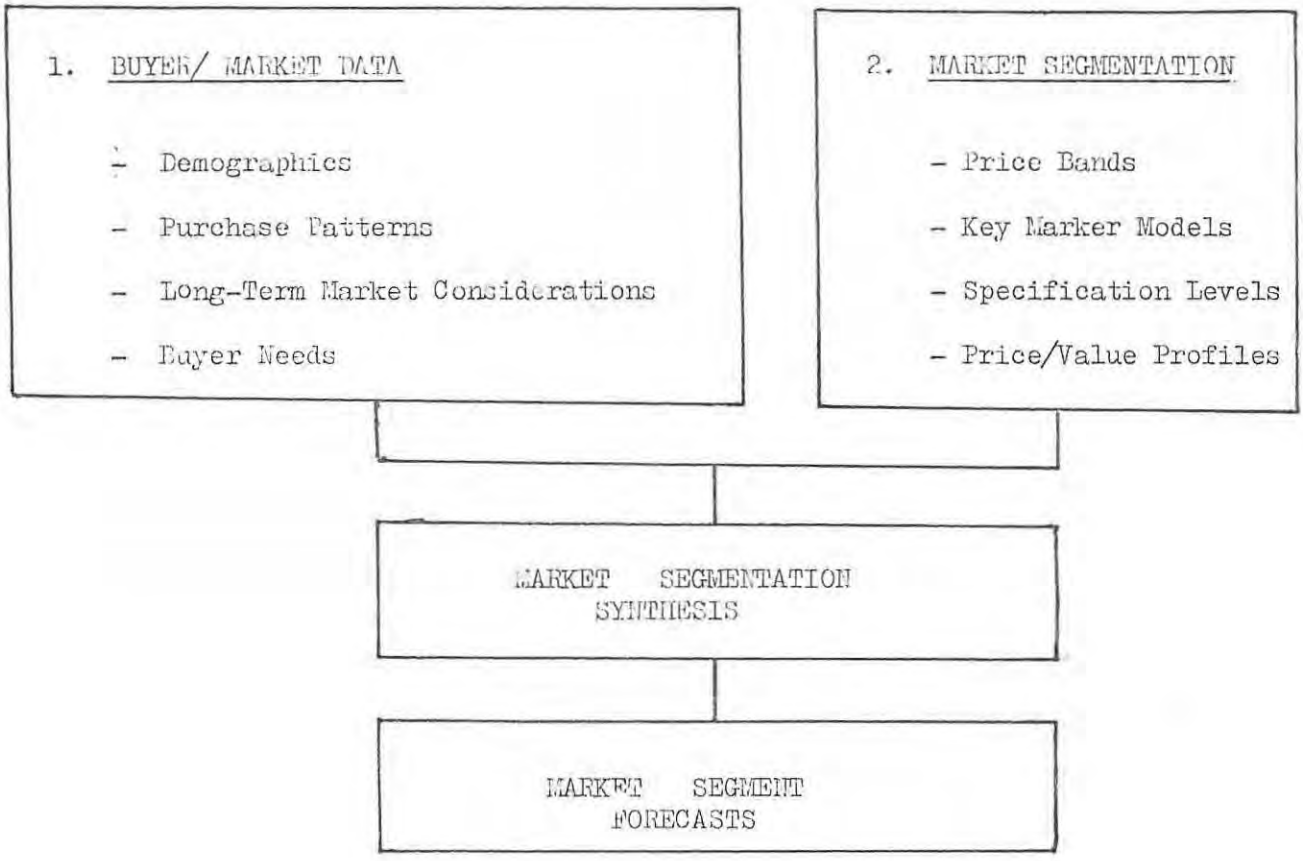
(a) to segment the market in terms of price and specification

(b) to segment the market in terms of buyer needs and profiles

(c) to determine long-range segment forecasts, and

(d) to determine long-range model and specification requirements for the company.

Thus the first synthesis occurs as per the diagram below.



For the sake of practicality and convenience specific market segments are described via the means of an alphabetic scale in the case of cars (trucks make use of weight or payload and usage segment nomenclature). This scale is illustrated below and it is easy to see how it has been derived from the price/value evaluation process.

Segment	Segment Description
A	. Small cars. Basic transport. Low specification levels. Emphasis upon operating economy. Low income buyers but additional buyers are well represented.
B	. Small family cars. Medium specification level. Emphasis upon economy. Young marrieds/retirees. Moderate income levels. No nonsense reliable transport.
C	. Family cars. Married with children. Interior space is important as is engine power and styling.
D	. Family transport but with added emphasis upon power and/or status. An important buyer is also the young above-average income professional. High specification levels.
E	. Mature, successful managerial/professional buyer. Status and specification are very important considerations.

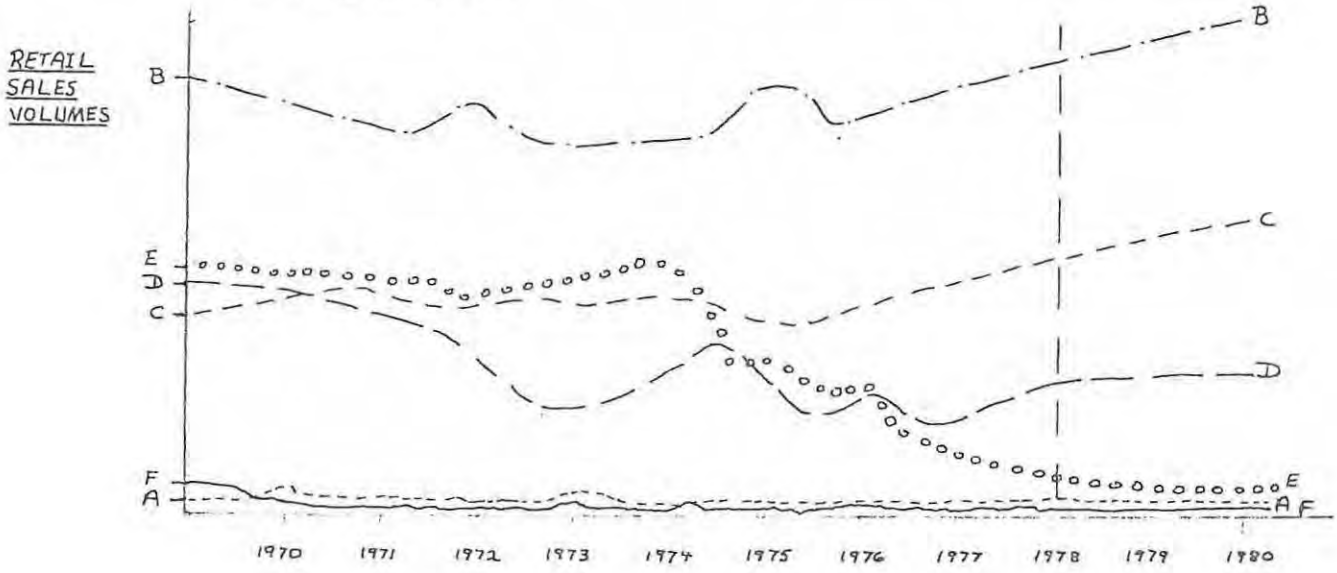
Segment	Segment Description
F	. Specification and status are of paramount importance. Money of little object.

Hence the Corporate Planner possesses six distinct market segments into which he may now assign (via specification evaluations) every model and derivative offered by his own company and its rivals. Given this facility it is now possible to conduct long-range forecasts of the performance over time of each segment and its component models.

Such segment forecasts consist of in-depth investigations of both individual segments and the interaction which takes place between segments. Results of such analyses yield vital information for long-range planning purposes, for example:

- segment growth and decline trends
- levels of competitive activity within segments
- price and specification movements within and across segment boundaries.

To illustrate this important stage in the planning cycle assume a review of the six market segments exposes the situation depicted in the diagram below:



Further assume that four model options are open to the company when considering its long-range product strategy:

- An A Segment vehicle
- A B Segment vehicle
- A C Segment vehicle
- A D Segment vehicle

In effect the task is to forecast the future market viability of the four market segments (A - D) over the next ten years and to make recommendations as to what models to adopt and which to reject.

Segment A — Segment A may appear attractive in the long-term by virtue of an anticipated enhanced desire for motoring economy. However current sales volumes are so low that there is little prospect of investment recovery within three years whilst risk levels are unacceptably high.

Segment B/C — These appear to be growth segments which have expanded at the expense of sales volumes within segments D and E.

Segment D — This segment may be expected to contract further over the long-term in response to continued cost/price pressures.

As a consequence the Corporate Planner may decide to recommend the following ten-year product plans:

1. Introduce a Segment B vehicle.

2. Introduce a Segment C vehicle.

3. Introduce a Segment D vehicle but with a wide range of individual model derivatives differentiated from each other on a price and specification basis such that the lowest specified/priced version competes within Segment D whilst a highly specified/priced version effectively competes within the stable and lucrative Segment F.

4. At the end of five years all product lines are to be re-appraised. In particular the future viability of the proposed Segment D model must be carefully evaluated and deleted if necessary. Additionally, at that time, Segment A must be investigated to determine the extent to which it has (if at all) or is likely to expand during the next 15 - 20 years at the expense of Segments B and C.

In summary, it should be clear that the issues of Price and Product Specification are closely related in the long-range marketing efforts of the subject motor manufacturer. Price is a key market segmentation device (in both theory and effect) yet it is linked to Specification by customer-based considerations in respect of buyer demographics, attitudes and competitive actions and product offerings. Moreover the twin issues of Price and Specification are synthesised and evaluated in terms of Buyer/Market Research data to derive both market segments and market segment growth forecasts.

4.5. Product/Investment Profit Analysis

Thus far we have investigated the means by which the market may be segmented in terms of Price and Specification considerations. The third stage to be reviewed is that which now seeks to determine what physical products the motor manufacturer may position within which

segments. A brief mention of this process was given in the preceding sub-section. This sub-section will now expand upon this and introduce the roles investment and profit play within the model selection process.*

Essentially the Corporate Planner now knows what market gaps or opportunities exist. He must, therefore, answer the following questions:

. What products does the company have available to fill these gaps?

. In view of the investment requirements stemming from the product-market need, which products are likely to be the most profitable to produce or what market gaps that we have products to fill are likely to be the most profitable?

Assume the manufacturer has identified three key market gaps - a small car priced at R3 500, a medium-sized car at R5 500 and a large car retailing for R6 500. Being the local subsidiary of a multi-national corporation the opportunity exists to cast around the parent and fellow subsidiary companies for car models suited to the aobve-defined local market gaps. (South Africa's market is too small to support the investment costs of designing, tooling-up for and building the three car-lines locally.) This model selection opportunity is advantageous in the sense that the local manufacturer

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* The earlier general sections which dealt with investment and profitability within this industry may helpfully be re-read at this stage.

has the ability to select from a wide range of North American, South American, European, Australian and Japanese vehicles. The breadth of choice naturally raises the likelihood of identifying and adopting an optimal vehicle range. Disadvantageously, the very fact that this choice exists means that, whatever decision is made, the product will, to some extent, be out of step with the precise requirements of the target South African market segment. Moreover, any attempt to re-design the vehicle with the objective of enhancing its local appeal will necessitate incremental investment commitments. Naturally the requirement for such investment will be weighed or traded-off by comparing the direct investment cost against the revenue lost by not making such improvements.*

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* The subject manufacturer built a range of light pick-up trucks whose design or supply source was Japan. The vehicle was closely matched to South African conditions being rugged, durable powerful and economical. It found ready market acceptance but consistently failed to meet market penetration goals in rural markets. Subsequent research evidence revealed that the typical South African farmer who rejected the vehicle was not only above average height but also favoured wearing a hat whilst driving. Consequently, he felt that the pick-up's headroom and door-height for getting in and out was inadequate. This oversight on the part of the Japanese design staff required an R800 000 investment to rectify.

Overseas product supply sources, where new products are designed "from scratch" make very close assessments of buyer preferences at all stages up to the selection of final product designs. Naturally, the buyers consulted are made up of members of the main market for the proposed vehicle. In this way a British design staff will incorporate design features catering for the anticipated purchase preferences of British buyers during the next five to ten years.

Assume, for example, British market research indicates a strong need for economy, ease of service and maintenance, seating for five persons and a cost of £4 000 at current prices. The design team will then experiment with various engine, powertrain and axle configurations until a "bare-bones" chassis is derived which meets cost/investment targets and is in line with stated buyer preferences. At this stage the styling team take the chassis and seek to provide it with a "skin" which is not only compatible with the chassis but is capable of being produced at a target cost/investment and is in step with British target buyers' perceived future styling preferences.*

Such research upon styling treatments is typically undertaken via the means of vehicle "clinics" wherein selected members of the target market are exposed to the styles and asked to give their opinions. This opinion is normally expressed via a simple rating scale using

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* Major consumer research studies will be undertaken to investigate, for example, preferences for: square, rectangular and round headlamps; two, four, three and five doors; integral and dispersed rear light clusters; headroom legroom, hip and shoulderroom; boot-size and roof pillar thickness.

numbers which express a degree of "like" or "dislike" concerning a particular feature of the vehicle. By asking buyers to rate both the prototype and competitive vehicles a relative measure of the prototype's ability to exceed, be comparable or be inferior to rival products is derived. The very fact that the research is orientated towards vehicle design and styling means that any weaknesses versus rival products may only be corrected by physically amending the prototype.

Ultimately, therefore, a product is placed into production in Britain which meets both the requirements in respect of price, size, operating cost and styling. Consequently if that same product is now introduced into South Africa it is not as compatible with local needs as it is in its true target market. Compounding the difficulty is the fact that the local manufacturer has no way of materially amending the product's overall design - the investment costs (for reasons which have been given) are too great.

In selecting a product-line therefore the local manufacturer is totally alive to the fact that he is making some form of compromise. The specific model he adopts will be the best available to him for his target market and not necessarily the best suited. To some extent his chosen model will be incompatible with local needs, he will be powerless to correct the deficiency and, naturally, any product weakness will result in lost sales to competitors whose products are relatively stronger.

Once a suitable short-list of potential models has been developed their final selection takes place on the basis of (1) their respective

requirements for investment and (2) their forecast profitability.

This selection process takes into account the following considerations:

- forecast retail sales volumes by year
- incremental investment needed
- residual value of investments made
- total, fixed and variable costs per unit
- wholesale prices per unit
- contribution per unit

Detailed coverage of this financial evaluation is unnecessary, in principle the process represents a simple break-even analysis based upon retail sales volumes. The model selected will be that which satisfies the need for the maximum profitability over the planning period with the lowest investment need. This financial recommendation is made independently of any exogenous considerations (such as the reliability of supply, chronic design faults and the like) Profitablity is the yardstick with the final decision being made by the managing director who will take into account both financial and non-financial variables.

4.6 The Final Synthesis - Extraction Of Future Product And Derivative Plans

At the commencement of this, the final stage of the Marketing Synthesis process the manufacturer has determined the following:

- what market segments exist
- what requirements exist within each segment
- what product line is most compatible with identified segment needs; and
- what product line is not only compatible with segment needs but which is the most profitable.

Only one final action remains and that is to determine the specific derivatives and specification levels which must be offered to the

target market segment in order to optimalise the appeal of the chosen model. In other words, "fine-tuning" actions are necessary in order to tailor more closely the final product assembled in the factory with segment needs. (The synthesis naturally flows from segment needs on the one hand and financial-investment/profit - factors on the other.)

The manufacturer will attempt to undertake this tailoring task by adjusting and amending his product in two ways, namely:

- by varying Specification levels; and
- by varying Derivative Offerings.

Each will be discussed in turn and related to Corporate Planning practice.

4.6.1. Specification Levels

Major mention has been made of the fact that the local manufacturer does not possess the ability to re-design, to a material degree, any current product line. However, limited design flexibility is present in respect of product specification. "Specification" in the context of this section refers to what are termed the "hang-on" features of a vehicle and they include, inter alia:

- paint colour;
- trim colour;
- trim, upholstery and carpeting;
- seating style;
- instrumentation; and
- level of standard features.

By combining different levels and types of the above six features a wide range of vehicles may be produced which, although they are in essence the same basic model, are perceived to be distinct from one another. For example, the subject manufacturer produces a range of "small" cars within which substantial differentiation exists (via the manipulation of the above six factors) as is set out below:

- a choice of three engine sizes;
- two and four door body styles;
- ten exterior paint colours;
- four vinyl roof colours;
- four interior seating and carpet colours;
- "low", "medium" and "high" level instrumentation;
- two seat types;
- three levels ("low", "medium" and "high") of standard features plus no less than 230 additional accessories (ranging from tinted glass and styled wheels through to sheepskin seat covers).*

From a Corporate Planning point of view the manufacturer will seek to balance the range of features that it would like to offer (and thereby enhance its chances of attracting buyers) with the cost and complexity difficulties attendant upon offering such diversity. (This latter issue is particularly marked with respect to specification items requiring high levels of investment such as engine ranges.) In order to resolve the problem highly specific research investigations are conducted with the objective of deriving an optimal specification "mix". Such investigations closely mirror those conducted earlier to settle upon the optimal model range except that specification items are evaluated instead of model lines.

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* In the United States the Ford Motor Company's Mustang range alone has such a wide range of features and possible options that if each option were combined it would not be possible to build two identical vehicles in a full year's production.

Retail volume enhancement projections are made on the basis of the expected demand which will flow from offering a particular feature. This forecasted demand is then translated into profit terms via a comparison with the costs which would be incurred as a consequence of the features being adopted. However, whereas overall financial profitability was the final deciding factor in respect of model choice, a greater measure of flexibility is present in respect of specification levels. Although, for example, an engine choice is likely to be made on the basis of profitability the decision between vinyl and cloth seats is less likely to hinge upon direct financial considerations. The engine question will involve major plant investment, that of upholstery will not. Moreover, one of the key considerations in determining specification levels is the extent to which specification items compliment one another to form a harmonious whole. For example, if the model is aimed at a high-class market segment the marketing planners will be careful to specify the vehicle accordingly. If the vehicle is to sell at R12 000 the fitted radio may well be a cheap, low-quality R50 unit which, financially, offers the manufacturer the most profit. However, to be in keeping with the rest of the car's specification, a high quality R350 radio/cassette player is called for, the additional cost of which must either be absorbed or built into the retail price.

Specification features may be conveniently classified into long and short term. Long-term specification relates to high investment items which will be an inseparable part of a model throughout its ten year life-span; examples include engine and body-style (two or four doors). For the balance, such as colour, trim and so forth,

specification planning occurs on a short-term, annual basis. Short-term specification items are, naturally, low investment features and may be changed easily and rapidly. They provide the manufacturer with the means of "freshening-up" his products periodically by bringing out new paint colours, seat coverings and trim levels.

4.6.2. Derivative Offerings

A "derivative" is best thought of as a sub-model within a model range distinguishable from its fellows by nomenclature and specification differences. For example, the Ford Escort model range contains two derivatives; a 1300cc "L" and a 1600cc "GL" and Mercedes-Benz seven; 240D, 300D, 280S, 280SE, 350SE, 450SL and 450SLC.

The reason for providing derivative offerings is simply to expand the appeal of a single model line to a wider target market. This practice is by no means unique to the motor industry being well established in the fields of toiletries, detergent, foodstuffs for example.

Physical differentiation between derivatives may range from the most simple to the most complex. At one extreme derivatives may only be distinguishable in respect of nomenclature whilst, at the other, major specification differences may be present. As a rule, however, derivatives are typically differentiated in terms of specification, price and nomenclature.

The importance of offering a suitable derivative range is best illustrated by example. During September 1978 Ford of South Africa produced only three car models yet the range of derivatives offered

was so great as to encompass all but the very small (Austin Mini) and the very large super-luxury (Mercedes-Benz, Jaguar) market segments.

Ford South Africa Model/Derivative Range

(As at September 1978)

Escort	1300	2 door	R 3 830
		4 door	3 960
	1600	GL	4 730
		GL Automatic	4 760
Cortina	1600	L	4 990
		L Stationwagon	5 390
	2000	GL	5 430
		GL Automatic	5 800
		GL Stationwagon	5 800
		GL S/Wagon, Automatic	6 180
	3000	S	6 150
		Ghia	6 940
		Ghia Stationwagon	7 230
Granada	3000	GL	7 660
		Ghia	11 500

Each one of the above derivatives is aimed at individual market segments whilst prospective buyers can move up and down a price and specification scale.

In Corporate Planning terms few areas of product marketing strategy are more rewarding than effective derivative decisions. Firstly, derivative changes are extremely easy to make (specification levels are changed in the factory and the price adjusted accordingly) and, secondly, there is the persistant opportunity to establish a wide-

ranging appeal to prospective buyers.

If the models' life cycle is ten years (that is, from its design inception through to its deletion from the market), the planner's concern with respect to the models' derivative offerings falls logically into two fields; namely pre-public introduction and post-introduction.

In the time that a model is under design development, great thought will be devoted towards determining its optimal derivative range at and immediately after its launch to the public. To assist, buyer research is conducted to uncover target buyer's preferences. Additionally, consideration is given to the gaps derivatives will fill relative to both the company's other offerings and those of its competitors.

During the post-public launch period, the same ground rules apply with respect to derivative selection. Firstly, the sales success of each derivative is evaluated. Secondly, a close watch is maintained upon the market for the contraction of existing opportunity gaps and the expansion of others. For instance, a model may be launched featuring a sporting derivative which, although successful in the immediate post-launch period, rapidly declines in popularity. Consequently that derivative may be eliminated entirely.

Within the subject company long-range derivative planning tends to operate upon an 18 - 24 month cycle. This cycle is closely linked to the time it takes for any single derivative to lose its "freshness"

within the market. At the end of each cycle appropriate re-vitalising derivative actions are implemented.

4.7. Summary and Conclusion

Corporate Planners will attempt to combine market data with product price and specification data for the purpose of deriving market segments. Sales within these market segments will then be forecasted to determine both growth potential and their likely segment interaction. Having identified viable future segments an effort will then be made to introduce a suitable product line into each. Criteria employed in product selection includes an assessment of the investment costs required for manufacture and the profitability of the likely product over its market life. A product compatible with local buyer needs, requiring relatively little investment and which is likely to be the most profitable will stand the best chance of being brought into production.

The South African Corporate Planning task with respect to product marketing and selection is made difficult by the markets' complexity, its current stagnation, the lack of any real ability on the part of the manufacturer to effect styling and design changes and recognition of the fact that segment differentiation is, in many instances, based upon insubstantial variations in specification levels within what are otherwise identical model ranges.

SECTION FIVE

CORPORATE PLANNING CONSTRAINTS

5.1 Introduction

A planning constraint may be viewed as an environmental factor having the potential to confine, prevent or re-direct the implementation of company plans to an extent that the plan finally executed is a compromise between what company management wish and what the environment allows.

A fundamental reason for Corporate Planning is the existence of operating constraints acting to limit and hinder a company's scope and efforts directed towards attaining its profit objectives. By implementing a Corporate Plan a company will have, in effect, impressed upon or injected into its environment an element of change. For instance by launching a new product the status quo within the market is upset; buyers switch brands, competitors react and marketing mixes are adjusted. Such change may be either positive, neutral or negative. Negative change, which is the concern of this section, equates to a constraint upon planning action.

Systematic long-range planning attempts firstly to recognize the constraints attendant upon proposed courses of action and, secondly, thereby either to minimize or evade the influence of such constraints before such plans are transformed into actions.

Two broad classes of planning constraint exist. They are displayed

below together with their respective major components.

CLASSES OF PLANNING CONSTRAINT

Formal	Informal
. Forecasting the Macro-Economy	. Internal to the Company
. Product Inflexibility	. External to the Company
. Market Structure	

Each will be reviewed.

5.2 Formal Corporate Planning Constraints

Reasons for the importance of formal constraints are two-fold. Firstly they are the most direct and tangible hurdles to planning action. Secondly, a planner may only attempt either to evade or accept their influence upon his efforts. Such constraints are, as a general rule, so well entrenched within the operating environment that the individual company is unable materially to amend or dilute them. In effect they constitute environmental "constants" around and through which Corporate Planners must work. (This is not to say that such constraints are unchangeable; they are, but rarely as a consequence of the actions of single companies.)

No attempt will be made to investigate all of the formal constraints pertinent to the motor industry. While the size and complexity of this economic sector ensures that the range of constraints is proportionately great, three of the more interesting classes of

constraint will be discussed in the following pages.

5.2.1 Forecasting the Macro-Economy

The relative prosperity of any individual motor manufacturer is, first and foremost, a function of macro-economic factors governing the effective demand for motor vehicles. Notable macro-economic considerations include unemployment levels, consumer and business confidence, real income growth, inflation rates, income distribution patterns and the nation's balance of payments status. Additionally, recognition must be paid to government socio-economic policies intended to modify these considerations.

Motor industry retail sales have been found to be remarkably sensitive to changes in the above-mentioned demand-inducing considerations. Such responsiveness is so marked that retail vehicle sales have been adopted as economic indicators in their own right. A series of studies were conducted by the subject manufacturer with the objective of identifying one or more indicators having a greater sensitivity. It was hoped that these indicators would provide the company with advanced warning of down and up-turns in aggregate consumer demand. Although the exact nature of these investigations is confidential, there is evidence to suggest that results were not promising. Such indicators as were found are generally unreliable and totally ineffective beyond all

but the very immediate future.

Although the motor industry has forecasted the progress of the macro-economy with certain success, there have recently arisen three special considerations which have greatly complicated this task for the South African Corporate Planner. They are World Economic Uncertainty, Local Socio-Political Uncertainty and Sensitivity to Economic Each will be briefly considered.

World Economic Uncertainty

As a direct consequence of nations inability to derive a workable international monetry system the global economic structure is in a state of serious disarray. Integral with this failing is instability in respect of inflation, unemployment and commodity prices - not the least of which is crude oil. South Africa is powerless to influence, materially, this undesirable situation. Instead the country is in a relatively passive role whereby it is on the receiving end of variations in world economic elements.

National wealth is largely dependent upon profitable exporting whilst productivity and inflation are linked to import levels and costs. Local economic growth is, in turn, a key determinent of the viability of South Africa's motor industry. For this

reason industry profitability during the course of the past three years has been unsatisfactory.

Allied with the motor industry's profitability and the status of world economics is the dollar/rand exchange rate. For instance, the profits of the subject manufacturer are calculated as rand values which are subsequently converted into comparable dollar amounts using the ruling exchange rate. Any downward valuation of the rand against the dollar automatically eliminates a substantial proportion of the local company's reported profits. By the same token day-to-day fluctuations of the rand's value versus the currencies of overseas suppliers materially influence the landed cost of imported components.

In essence, therefore, the local motor industry is placed in a relatively exposed position as regards the events within the global economy whilst local Corporate Planners are as powerless to predict meaningful courses of events therein as are their Detroit, Cologne, Paris, Turin or Tokyo counterparts.

Local Socio-Political Uncertainty

Prior to the Soweto unrest of June 1976 local motor industry planners focused little direct attention upon South Africa's social and political framework. (Indeed there is every reason to believe that this element was once viewed as being one of the easiest environmental considerations to forecast.) The period

commencing 1975 - 1976 must be viewed as a notable break-point in South African history for, in the interim, major internal and external change has occurred.

Urban unrest and radical shifts in the government of neighbouring countries coupled with a consequential pressure towards South African world isolation has resulted in a considerable degree of uncertainty becoming associated with this country as a potential investment opportunity. As has been established, the motor industry is greatly dependent upon investment injections. At this time it is an open question whether such investment needs may, in future, be satisfied from local sources.

Against this background Corporate Planning issues at stake are more fundamental than the specific questions of, for example, investment sources and future market structures. Instead emphasis is placed upon seeking to construct a <u>whole</u> picture of South African society in five, ten and fifteen years time into which both the motor industry and the company may be projected. The major constraint to planning over such time horizons is not that this projection is difficult. It is relatively simple but what is hard, however, is to accept the forbiddingly hostile conclusions which emerge.

<u>Sensitivity To Economic Sanctions</u>.

Mandatory economic sanctions would effectively destroy the local motor industry as it is now known. Vulnerability is present in three areas, namely; fuel, imported components and internal demand.

Fuel rationing would be so severe that private motoring would all but cease to exist as would supplies of imported components. Moreover, there is every chance that all overseas-owned manufacturers would close.

Some hybrid local motor vehicles may be produced although the market for such units is likely to be the military. Finally, local private demand for motor vehicles will be minimal as a consequence of fuel rationing and the economic disruption occasioned by a cessation of foreign trade.

The Corporate Planner within an overseas-owned local manufacturer takes account of two prime considerations. Firstly, the treat of some form of economic trade boycott is a very real one; if not in the near future then at least at some more distant time. Secondly, any restrictions placed upon motor component and/or fuel supplies will strike at the very foundations of his company. Logically, therefore, some form of diversification programme appears to be desirable.

Overall, within this framework two planning constraints exist; all long-range plans must henceforth recognize the threat of South Africa having no formal outside trade links and the overseas parent company is unlikely to approve any local diversification for investment reasons.

5.2.2. Product Inflexibility

The issue of product inflexibility has been touched upon in Section Four. Its importance as a Corporate Planning constraint demands that it be specifically assessed as such.

In the ideal world a motor manufacturer's long-range product plans will take account of the company's ability to design its products to fulfill the needs and wants of a quantified buyer cluster. South Africa's vehicle market, however, is too small and segmented to warrant investment in design, engineering and styling facilities capable of creating a unique "South African" vehicle. Consequently, every local manufacturer has no alternative but to adopt a product range consisting of vehicles designed with overseas buyers in mind. Even in the case of multi-national companies where a deliberate effort is made to design vehicles having an appeal to widely differing markets some degree of compromise is inevitable. Furthermore, South Africa is such a relatively small market that local buyer needs are likely to be passed over (and rightly so) in favour of the requirements expressed by Australian, British or Brazilian subsidiaries.

It follows, therefore, that a prime constraint to long-range product/marketing planning is the understanding that a truly effective corporate product strategy cannot be attained under these circumstances.

Allied with the above consideration is the fact that the local motor manufacturer is dependent upon overseas supplies for both

applied technology and product components. A "technology embargo" operates as a function of the inability of the local manufacturer to fund research and development expenditure of the order needed to make a material contribution to its operations and future product plans. Consequently long-range product and manufacturing plans must recognize that local capabilities within these fields may only expand at the rate determined by the development of affordable, imported engineering and design technology. High investment costs associated with such technology invariably result in the local manufacturer being out of step with the pace set by the parent company.

Dependence upon imported supplies of product components represents a planning constraint in respect of the reliability and quality of component shipment. Serious disadvantages attend upon any major variation from scheduled shipping dates. Failure to receive a single component prevents the production of the vehicle in question - vehicles cannot be built and sold, for instance, without dashboards, instruments and transmissions. Fluctuations in imported supplies can be smoothed by carrying inventory stocks. However, the cost of such holdings is high in terms of direct investment, deterioration and "shrinkage". In addition inventories become a serious burden when market demand is different from stocks held. For example, having ample stocks of two-door car components is of no assistance if the demand is for four-doors and it is four-door components which are in delay. Moreover, a truly damaging shock shortage exists in those circumstances when the supply fluctuation is so great that any normal inventory float is ineffectual. Such

variations exist in respect of typically; production strikes, harbour and rail congestion.

Imported component quality is a further planning consideration having a serious impact upon a product's acceptability to local buyers. It is very often felt that the quality of components supplied to overseas subsidiaries falls below that utilized by parent companies. Sub-quality assemblies, machining and mouldings are often encountered amidst imported components consignments. The local manufacturer is frequently placed in an inenviable position as a result. To build vehicles featuring such components is likely to reduce the product's quality - a fact which will act to erode buyer support for that make. To reject such components results in an immediate stock shortage with all the attendent difficulties. Compounding the long-term trouble are contracts with such suppliers which require lengthy notice for cancelling these relationships whilst to replace unsatisfactory suppliers results in incremental costs of locating and bringing into production alternative supply sources.

5.2.3. Market Structure

A notable planning constraint exists in respect of the stagnant, over-competitive South African vehicle market. Market stagnation means that it is difficult, even impossible, to justify expansion plans, strategies and investments. The situation is clearly a two-sided one. On the one hand the Corporate Planner is tempted to formulate long-term plans around future market expansion based upon the growth of Black, Coloured and Asiatic market segments. On the other hand, pressure exists

to "be realistic" and plan on the basis of a semi-stagnant market where the emphasis is upon a survival strategy rather than upon aggressive market growth-share conquests.

Brief mention was made earlier of the future importance of the Black, Coloured and Asiatic market segments to the future of the local motor industry. That the potential exists cannot be denied. (Indeed, there is evidence to suggest that any improvement in real incomes amongst these population groups is immediately marked by a quickening interest in vehicle buying.) Of prime concern is the persistence of any income improvement. Real income decline occasioned by inflation or unemployment may effectively place vehicle ownership further beyond the reach of aspirant owners and may cause existing ones to revert to a non-owner status. Problems associated with predicting these macro-economic factors influencing effective demand have been discussed earlier.

Aggravating the difficulty associated with the saturated market and the complexity of basing large-scale plans upon the potential within Black, Coloured and Asiatic market segments is the non-availability of other alternative options; for example, market expansion outside the Witwatersrand cannot be supported by adequate buyers and export potential to the rest of Africa cannot be exploited for political reasons.

Overall, therefore, the Corporate Planner is forced to select

either a pessimistic "market stagnation" or an optimistic "market growth" path with very little middle ground between them. The fact that there is a strong element of compulsion acting upon two equally unclear choices, each bearing considerable penalties in the event of error represents a major planning constraint.

5.3 Informal Planning Constraints

As the title suggests informal constraints exist and function in the same way as their formal counterparts - with one

powerless to divert or influence a formal constraint he is able to do so with respect to informal planning hurdles. Consequently, the Corporate Planner is in a position to determine whether, in a given situation, it is better to attempt either to overcome the constraint or evade it.

Two broad classes of informal constraint may be identified; those Internal and those External to the company. Each will be considered in turn.

5.3.1 Internal Informal Constraints

Essentially this constraint takes the form of a negative attitude adopted towards Corporate Planning on the part of company personnel charged with the responsibility for its implementation. Bitter experience has shown that

the benefits of long-range planning are not immediately obvious to management outside the company's planning staff. This constraint may be overcome in two ways. Firstly, all long-range planning efforts must receive the full and active support of the company's top management. The subject company's local Board of Directors form an executive planning committee. Each member bears the responsibility of co-ordinating and maintaining the momentum of Corporate Planning actions as they relate to his organizational unit. Moreover, all Corporate Planning concerns are subject to the scrutiny and approval of planning staff personnel within the Group Office who are, in turn, accountable to the parent company's central planning staff. Secondly, the problem may be solved by removing or diluting the pressure placed upon lower and middle level management to focus upon immediate - term activities. This mis-placed orientation stems from the fact and fear that the individual's job performance at these levels is judged in terms of how well that person meets short-range objectives.

Success has been achieved by the use of Management by Objectives - whereby every manager's objective for the year includes an element composed of personal aspirations linked to the demands of the Corporate Plan. Not only are short and long term company goals attained thereby but so too are the personal job desires of the accountable manager.

5.3.2. External Informal Constraints

This body of planning "roadblocks" is the most contentious of those discussed for it relates to the manner in which the company seeks to resolve the constraints imposed upon its long-range actions by the moral codes of the society within which it operates.

Any company is not free to act as it sees fit. In a sense the firm is a "citizen" of its society and must accept the responsibilities that this status entails. The subject motor manufacturer is an exceedingly large economic and social "citizen" and, consequently, is highly visible with respect to its public acts and omissions.

From the broad spectrum of issues relating to informal external constraints three of the most important and topical will be selected and discussed, viz:

- Safety And Pollution Responsibility
- Equitable Labour Policy
- Recognition Of Government "Diplomatic" controls

Safety And Pollution Responsibility

A difficulty local motor manufacturers do not have to face within their long-range plans is that which relates to vehicle safety and pollution control. This is in marked contrast to their North American counterparts.

South African society is not particularly conscious of motor vehicle safety or pollution. The extent to which this is so is evident from local manufacturers' emphasis upon what is called "active" safety rather than "passive" safety whilst any form of engine pollution reduction is virtually non-existent.*

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*"Active" safety relates to safety as a consequence of accident avoidance. It is typically expressed in terms of statements such as "the ability to accelerate out of danger", "powerful brakes" and "positive steering". The underlying assumption is that drivers will be sufficiently alive to what is going on around them to be able to exploit effectively their vehicle's active safety features. Naturally, this is not true. Active safety features will not assist a driver whose mind is elsewhere when the accident situation develops or whose tyre bursts at speed or whose way ahead is so congested with small children that evasive action is not possible. Similarly, the active safety school totally ignore the issue of death and injury occuring to persons outside the car e.g. pedestrians and cyclists.

Passive safety is orientated towards protecting life and limb <u>once an accident has taken place</u>. The assumption is made that accidents <u>will</u> happen but their seriousness can be reduced. Safety belts, padded dashboards, non-burst door locks and "steel-cage" passenger compartments are all examples of passive safety devices.

From a legal point of view with the notable exceptions of active safety roadworthy checks upon lights, brakes and steering and the passive safety seat-belt legislation there is no obligation placed upon any local manufacturer to maintain or improve the life-saving designs possible within his vehicles.

As a Corporate Planning concern safety and pollution are not issues although from a moral standpoint they should be. Herein lies the importance of this and other moral questions to Corporate Planning. Installing safety and pollution control devices within a motor vehicle raises that vehicle's costs which, in turn, must be recovered in the retail price. At this time no manufacturer (except at the price inelastic luxury end of the market) is prepared to raise the price of his products for this reason unless his competitors are prepared to follow suit.

The true point at issue, however, is that at some time in the near future safety and pollution <u>will</u> become major planning concerns - as they have in overseas countries. Only at that time will this constraint be of immediate interest to Corporate Planners, in the interim it is ignored - at a tragic social cost.

Equitable Labour Policy

As a consequence of South Africa's racial composition and the unique body of legislation designed to control its implications, a major conflict has arisen between certain employers and the legislators. Differing moral values are the root causes.

On the one hand motor manufacturers having overseas parent companies are pressured to apply a labour and employment policy drawn up upon the social norms of the United States, Britain, Germany or France. On the other hand the same manufacturers, as South African "citizens", (or, as they have been described, "guests") must take account of local inter-racial employment and job status practices which are, in many instances, totally at odds with "enlightened" overseas norms. Typical clashes arise over the issues of separate toilet and eating facilities, wage and salary differentials, unrecognized trade unions, inferior journeyman qualifications and job recognition.

Historically, local subsidiaries have tended to evade this conflict situation by recognizing the Government's and White trade unions' wishes whilst alleviating the affects of this discrimination via the provision of paternal fringe benefits e.g. subsidized canteens, free company transport, medical aid and low-interest personal loans. In recent years, however overseas demands (via shareholder and government pressure groups)

have risen to the extent that local subsidiary companies must take a firm stand with respect to racially-based employment discrimination. The fact that local subsidiary motor manufacturers are highly visible entities has elevated this concern to a level where it is now a priority Corporate Planning issue.

Three open questions exist with respect to removing racial discrimination at the workplace. All have potentially major impacts upon the company's operations over the long term.

Firstly, there is the need to foster the real job advancement of Blacks. This means more than creating empty jobs simply to "get Blacks into the organization". Instead the company must assume a multi-racial character with Blacks making meaningful work contributions. With rare exceptions, however, even Black graduates having management functions do not perform at a satisfactory level. Their backgrounds count too heavily against them. Sub-standard work is the outcome and, as such, is a weakness or operating constraint.

Secondly, a constraint is present in respect of those instances where, via artificially accelerated promotion, Black managers are placed in charge of White subordinates. Serious internal conflict and stress is likely to result. The danger is a real one and must be recognized as such.

Thirdly, much "liberal" employment practice runs contrary to entrenched South African racial boundaries. Inevitably, there will exist a situation where a direct confrontation becomes unavoidable. For example, a Port Elizabeth motor manufacturer has thrown open its toilet and eating facilities to all races - a direct contravention of statutory legislation.

Hence within the field of labour policy major planning constraints face the Corporate Planner as regards the Manpower and Personnel elements of the Corporate Plan. These constraints are most marked within overseas owned motor manufacturers.

Recognition of Government "Diplomatic" Controls

It is a recognized fact that large manufacturing industries are of great interest to Government; firstly, they are key economic entities and, secondly, they are large , visible and readily open to investigation.

Quite apart from the wide range of formal legislation governing the long and short term operations of such industries there are also present what have been termed "diplomatic" controls.

Diplomatic controls exist for the purpose of covering those circumstances not specifically provided for by legislation. They flow as a natural consequence of a given Government policy

and, in many ways, serve to add flesh and substance to the skeleton provided by statute. Over time there is every chance that such controls will be made law, a change that is increased in direct proportion to the lack of co-operation the Government receives from the control's victims. Conversely, they may either remain informal for many years or be replaced with others which are more or less onerous with the passage of time and changing circumstances. A noteworthy characteristic of all such controls is that their severity is also a function of their personal application on the part of the ministerial personnel involved.

Flexibility, common-sense and an understanding of Government policy as it relates to a particular circumstance are the cornerstones of diplomatic control. In their very essence they represent informal agreements to act or to refrain from acting in a certain way under given conditions. A hypothetical example is the best way of illustrating a diplomatic control at work.

Assume a motor manufacturer wishes to import a precision gear-cutting machine. On the basis of tenders submitted by overseas suppliers three potential sellers are identified.

German company	R220,000
Israeli company	R212,000
Swedish company	R185,000

Their ability to meet the desired specification and delivery dates is equal. The Swedish supplier is, therefore, the most attractive. To import the machine exchange control authorisation is necessary. When the application is submitted what reaction must be made by the company when in casual conversation the question is raised as to why the Swedish supplier is favoured when that country donates funds to terrorist organizations whilst close economic links are being forged with Israel?

Moreover, the motor manufacturer's management are quite likely to recognise the implications of such an intention before seeking exchange control permission. Consequently, they may decide to use this fact as ammunition in their case to obtain the necessary import authorisation, "We did consider buying in Sweden but we decided not to despite their lower price afterall they support terrorists and South Africa does wish to draw closer to Israel.". Over the longer term the same argument may be used to foster better relations between the company and certain key government departments, "We understand the need to reduce imports but please treat this as a special case afterall in the past we have always imported from countries which support South Africa.".

For diplomatic controls to be effective some form of threat or punishment must be associated with the issue at stake. This threat may take two forms, firstly, there is the motion to formalize the diplomatic control. This threat is the most direct of the two but will only tend to be employed

when the situation is of a truly material nature. A topical example of this threat in action as a consequence of a breach diplomatic controls is that pertaining to private diesel vehicles, "A number of local motor manufacturers wish to produce diesel engined vehicles for sale to private individuals. If this is done South Africa's consumption of diesel fuel will rise. To counter this restrictions may be placed upon both the availability of diesel oil and the manufacture of such vehicles.".*

The second type of threat is a more pointed one being directed towards a single company or small group of companies. It is suggested that the delinquent parties are likely to be instructed to conform or be subjected to certain harassment or hinderence. Opportunities certainly exist to, inter alia, refuse or delay exchange control allocations, reduce government vehicle orders and reject applications for investment allowances.

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*The reasons why an increase in diesel fuel consumption is considered to be undesirable are stated below:

- A given quantity of crude oil yields fixed percentages of, inter alia, petrol and diesel oil. Any increase in demand for diesel would necessitate a rise in crude oil imports and a forecast surplus of refined petrol which would then need to be stored or exported. (The increase in the number of filling stations worldwide during the late 1950's and 1960's may be traced to the rise in demand for jet-engine kerosene creating a glut of petrol and lubricating oils.)

- Traditionally diesel applications have been within the "economically productive" sectors of agriculture and industry. In a time of diesel fuel shortage what fuel is available must be allocated only to those two sectors and not these two plus a potentially large group of private motorists.

Overall, therefore, the need for the individual company to "keep in the Government's good books" represents a planning constraint having significant financial and operating consequences.

5.4 Conclusion - Corporate Planning Constraints

The very essence of Corporate Planning is a systematic attempt to chart a future course for a company through an environment which is simultaneously hostile and opportunistic. Hostile environmental elements act to prevent the company from adopting and implementing plans which, from its management's point of view, are the most desirable. Thus a key argument in favour of Corporate Planning and a major concern when attempting to undertake such planning is the presence of environmental constraints.

Two broad classes of constraint may be identified, viz, Formal (pertaining chiefly to the macro-economy, product lines, market structure and government legislation) and Informal (pertaining to factors within and without the company such as; management acceptance of Corporate Planning, labour policy and the relationship enjoyed with influential Government personnel).

In no small way the art of effective Corporate Planning is closely linked to the planning staff's ability to recognize and forecast existing constraints, perceive the rise of future constraints and to project both into the field occupied by each area of the company.

SECTION SIX A FINAL REVIEW OF THE CORPORATE PLANNING THE SUBJECT MOTOR MANUFACTURER.

Corporate Planning was defined as "A methodical, systematic and disciplined process whereby a company's long-term profit objective is identified, goals determined and strategies generated to attain those goals which take into account probable changes in the task environment whilst the whole is made actionable via meaningful feedback of results.".

The degree to which the requirements present within the above definition have been met by the subject company's planning activities is hopefully demonstrated by the material in the foregoing pages. It is certainly evident that many difficulties occasioned by the size and complexity of its multi-national organization structure have yet to be addressed and solved. However, given an improved understanding of unique local circumstances on the part of overseas planning staff members and the more effective application of the company's immense personnel and financial resources to identified problems a material enhancement in its local Corporate Planning practice may be expected over time.

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Passenger - Car Industry Sales

1977

Make/Manufacturer	Sales Volume	% Market
Alfa Romeo	3916	2.3
BMW	6218	3.7
Datsun	19298	11.5
Ford	27739	16.6
Fiat	6767	4.1
General Motors	17836	10.7
Leyland	7490	4.5
Mercedes Benz	7628	4.6
Peugeot	9256	5.6
Renault	2830	1.7
Sigma	18549	11.1
Toyota	11304	6.8
Volkswagen	24960	15.0
Volvo	5	-
Citroen	2819	1.7
Others	149	0.1
Total	166764	100.0

Source: NAAMSA Statistics - Full Year Report, December 1977.

Appendix 1 (b)

Light Commercial Vehicle Industry Sales 1977

Make/Manufacturer	Sales Volume	% Market
Datsun	14221	22.3
Fiat	180	0.3
Ford	7584	13.0
General Motors	4249	6.7
Leyland	3264	5.1
Peugeot	3251	5.1
Sigma	9607	15.1
Toyota	13341	20.9
Volkswagen	7294	11.5
Total	62991	100.0

Source: NAAMSA Statistics - Full Year Report, December 1977

Heavy Commercial Vehicle Industry Sales 1977

Make/Manufacturer	Sales Volume	% Market
Datsun	4586	17.4
Deutz - Magirus	134	0.5
Fiat	161	0.6
Ford	3236	12.3
General Motors	5426	20.6
International Harvester	758	2.9
Leyland	2112	8.0
M.A.N.	282	1.1
Mercedes - Benz	2710	10.3
Oshkosh	195	0.7
Sigma	605	2.3
Toyota	5602	21.3
Others	515	2.0
Total	26322	100.0

Source: NAAMSA Statistics - Full Year Report December 1977

MARKET SHARE BY PASSENGER CAR MANUFACTURER FOR THE PERIOD
JANUARY 1, 1965 - DECEMBER 31, 1977

Manufacturer \ Year	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	Trend
General Motors	26.9	24.9	22.5	18.8	18.3	16.8	14.1	11.8	14.5	13.6	12.4	11.4	10.7	D
Ford	23.9	23.8	21.2	21.2	21.8	20.2	17.8	14.9	13.7	13.4	13.6	15.2	17.0	U
Volkswagen	12.9	13.7	13.6	14.0	14.4	14.9	14.6	14.0	15.8	16.1	15.7	15.6	15.3	S
Sigma	9.8	11.9	12.9	13.6	12.5	12.2	10.7	14.0	12.1	11.2	9.5	8.6	11.3	U
Leyland	12.9	11.1	9.9	9.9	8.0	7.2	7.1	7.5	6.8	5.9	5.8	5.3	4.6	D
Mercedes-Benz	2.9	3.1	3.8	4.6	4.2	4.2	5.1	4.6	3.9	4.2	4.7	4.9	4.7	S
Peugeot/Citroen	2.7	2.7	3.6	4.1	4.5	4.7	6.0	7.2	7.4	9.2	7.8	6.8	7.4	S
Datsun	0.6	0.8	2.6	2.4	2.8	4.4	8.3	10.3	10.2	11.6	12.9	13.1	11.6	S
Toyota	0.0	1.0	2.5	3.8	3.3	4.5	6.7	6.8	7.1	7.4	8.1	9.8	6.8	D
Fiat	3.7	3.6	3.9	4.1	5.8	5.2	4.4	2.9	3.6	3.3	3.2	2.3	4.2	U
Alfa-Romeo	1.2	1.0	0.9	0.6	1.0	1.3	1.4	1.8	1.5	1.6	3.0	2.9	2.3	S
Volvo	1.5	1.6	1.7	2.5	2.6	2.6	1.8	2.9	2.5	0.8	1.0	0.3	0.0	X
BMW	0.2	0.0	0.1	0.2	0.6	1.0	1.2	1.2	0.9	1.3	2.3	3.3	3.7	S
Others	0.8	0.8	0.8	0.2	0.2	0.8	0.8	0.1	0.0	0.4	0.0	0.5	0.4	S
TOTAL PERCENT	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-

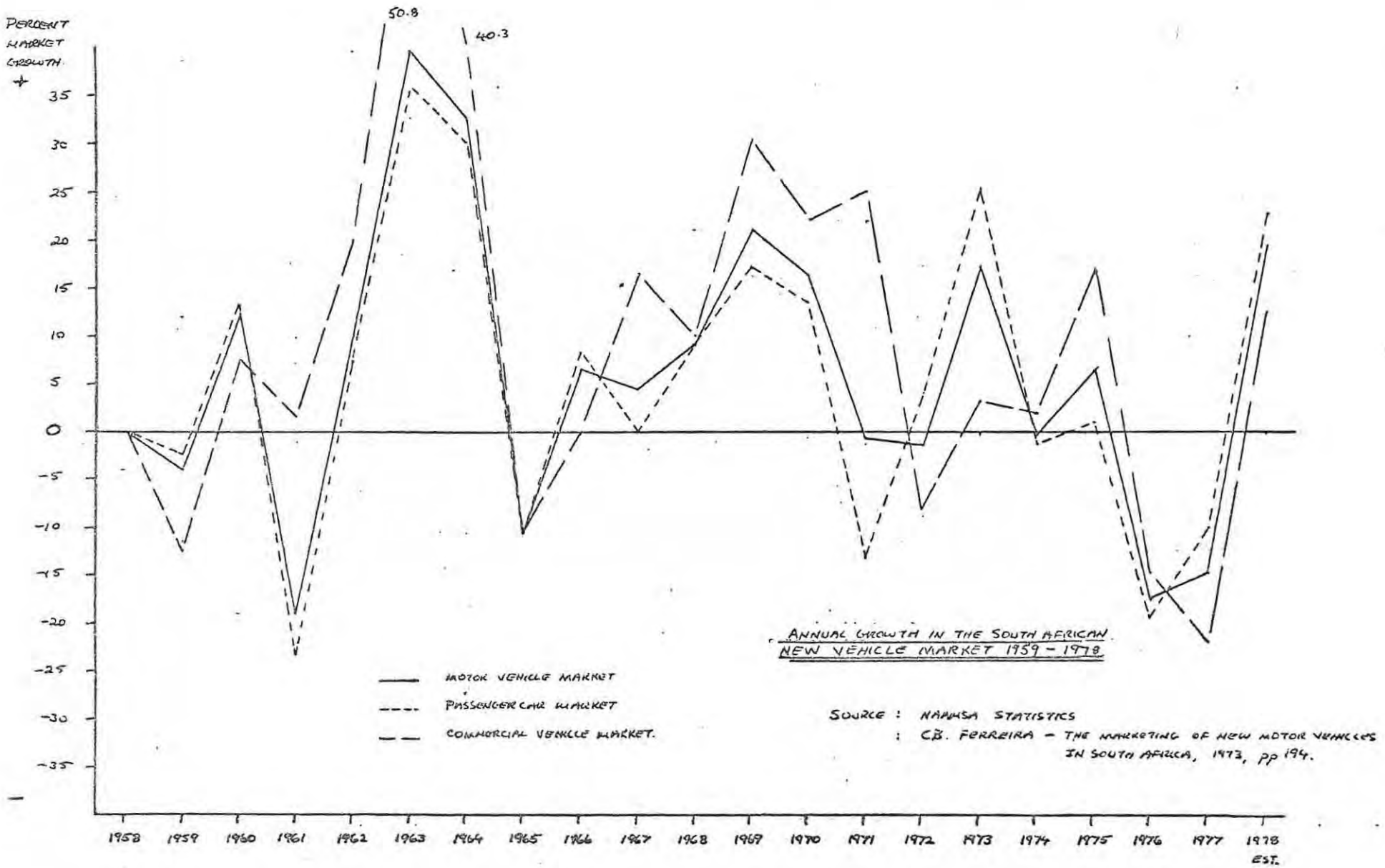
Industry Annual Sales Volume	127339	138480	138819	151245	177820	201772	175835	182961	229442	226776	229031	185132	166764
% Change Annual Industry	-	+ 8.7	+ 0.2	+ 9.0	+ 17.6	+ 13.5	(12.9)	+4.1	+25.4	(-1.2)	+ 1.0	(-19.2)	(-10.0)

Annual Growth 1959 - 1977 in New Motor Vehicle Market

Year	New Passenger Car Market		New Commercial Vehicle Market		Total New Motor Vehicle Market	
	Units	% Annual Growth	Units	% Annual Growth	Units	% Annual Growth
1958	89363	-	21606	-	110969	-
1959	87220	- 2.4	18954	- 12.3	106174	- 4.3
1960	98779	+ 13.3	20385	+ 7.5	119164	+ 12.2
1961	75938	- 23.1	20726	+ 1.7	96664	- 18.9
1962	81308	+ 7.1	24864	+ 20.0	106172	+ 9.8
1963	110468	+ 35.9	37494	+ 50.8	147962	+ 13.4
1964	143373	+ 29.8	52618	+ 40.3	195991	+ 32.5
1965	127898	- 10.8	47093	- 10.5	174991	- 10.7
1966	139076	+ 8.7	47074	- 0.1	186150	+ 6.4
1967	139223	+ 0.1	54820	+ 16.5	194043	+ 4.2
1968	151546	+ 8.9	60245	+ 9.9	211791	+ 9.1
1969	177945	+ 17.4	78351	+ 30.4	256296	+ 21.0
1970	201854	+ 13.4	95719	+ 22.2	297573	+ 16.2
1971	175884	- 12.9	119798	+ 25.2	295682	- 0.6
1972	182961	+ 4.0	109316	- 8.7	292277	- 1.2
1973	229442	+ 25.4	112941	+ 3.3	342383	+ 17.1
1974	226776	- 1.2	115151	+ 2.0	341927	- 0.1
1975	229031	+ 1.0	134575	+ 16.9	363605	+ 6.3
1976	185132	- 19.2	115116	- 14.5	300248	- 17.4
1977	166764	- 9.9	90037	- 21.8	256801	- 14.5
Est. 1978	205000	+ 22.9	101500	+ 12.7	306500	+ 19.4

Source: (1) NAAMSA Statistics

(2) C.B. Ferreira - The Marketing of New Motor Vehicles in South Africa, 1973, pp 194



ANNUAL GROWTH IN THE SOUTH AFRICAN NEW VEHICLE MARKET 1959 - 1978

SOURCE : NAAMSA STATISTICS
: C.B. FERREIRA - THE MARKETING OF NEW MOTOR VEHICLES IN SOUTH AFRICA, 1973, pp 194.

PENETRATIONS OF MOTOR MANUFACTURERS OPERATING WITHIN

SOUTH AFRICA COMPARED WITH PENETRATIONS ATTAINED IN OTHER MARKETS

(CAR MARKET SALES)

	South Africa	United Kingdom	Japan	Australia	Brazil	Venezuela	Mexico	Argentina
Volkswagen	15.0%	3.5%	0.4%	N/A%	56.0%	5.2%	28.0%	N/A%
Ford	16.6	25.7	0.3	23.5	14.5	37.3	13.1	22.5
General Motors	10.7	10.4	0.2	25.1	17.2	24.6	8.1	6.3
Datsun	11.6	6.2	31.1	11.8	N/A	N/A	12.3	N/A
Sigma - Chrysler	1.8)	6.0	N/A	4.8	2.2	22.3	20.1	8.9
- Mitsubishi	3.9) 11.1	N/A	8.2	4.5	N/A	N/A	N/A	N/A
- Mazda	5.4)	N/A	6.9	6.0	N/A	N/A	N/A	N/A
Peugeot/Citroen	7.2	3.5	N/A	N/A	N/A	N/A	N/A	19.6
Toyota	6.8	N/A	36.9	12.7	N/A	N/A	N/A	N/A
Mercedes Benz	4.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Leyland	4.5	24.3	N/A	N/A	N/A	N/A	N/A	N/A
Fiat	4.0	5.7	N/A	N/A	9.4	4.0	N/A	23.0

(COMMERCIAL VEHICLE SALES)

Toyota	21.0%	N/A%	N/A	20.8%	N/A%	10.5%	N/A%	N/A%
Datsun	20.9	N/A	N/A	8.1	N/A	7.7	6.5	N/A
Ford	12.8	31.2	N/A	18.7	18.1	36.6	27.4	28.2
G.M./Isuzu	10.7	19.1	N/A	23.7	20.9	12.6	19.1	18.0
Mazda	9.9	N/A	N/A	4.2	N/A	N/A	N/A	N/A
Volkswagen	8.1	2.5	N/A	N/A	24.1	N/A	11.4	N/A
Leyland	13.1	25.5	N/A	N/A	N/A	N/A	N/A	N/A
Mercedes Benz	10.3	N/A	N/A	N/A	27.4	N/A	N/A	11.6

An Example of Corporate Philanthropy

Being an extract from a report contained in Indaba - Friday, June 9, 1978.

"The teeing-off (at General Motor's Kwazakhele golf course) marked the culmination of the first phase of the social responsibility programme which General Motors drew up in 1972 to improve the quality of life of its black employees.

The company contributed R65,000 of the R198,000 cost and undertook to pay R7,915 a year maintenance.

From the Government Sport Fund came R50,000 and R83,000 from the Cape Midlands Administration Board.

The projects of General Motors' first phase were:

A Coloured recreation club comprising a nightclub, changerooms, tennis courts and rugby, soccer and cricket fields, costing R140,000.

African recreation facilities including the nine-hole golf course, four new tennis courts, three tennis courts renovated, three flood-lit swimming baths, restoration and establishment of an Olympic-sized cycling track all at a cost of R292,000.

A loan of R500,00 to Port Elizabeth Municipality for the building of 94 houses of modern design for ownership by Coloured people, General Motors have also made it possible for the Cape Midlands Administration Board to raise a loan of R1,060,000 on a subsidized interest basis for homes and a school in the African residential area."

RESALE VALUE OF CURRENT SOUTH AFRICAN CARS

Best Buys

- **BMW**
  All models but beware of condition.
- **Datsun***
  All models except as noted opposite.
- **Ford***
  All models.
- **Leyland**
  Mini - but beware of condition.
  Rover - new series.
  Jaguar - but beware of condition.
- **Mercedes-Benz***
  All models. Retains value so well that a resale profit may be made in some instances.
- **Peugeot**
  404 - but beware of condition.
- **Sigma**
  Mazda - all models except rotary engined version.
  Colt/Galant - all models.
- **Volkswagen**
  Beetle* - all models.
  Passat - all models but beware of condition.
  Audi* - all models.
- **Lancia/Lotus**
  Scarcity value/collectors/ specialist appeal. Beware of condition.

Poor Buys

- **Alfa-Romeo**
  All models except for limited volume exotic sports cars which have scarcity/novelty value.
- **Datsun**
  180U and 240 - 300C series.
- **Fiat**
  All models except limited volume exotic sports cars which have scarcity/novelty value. Beware of condition.
- **Ford**
  Pre-1977 Cortina 2000 series
  All pre-1973 models.
- **Leyland**
  Apache, Marina, Triumph.
- **Citroen**
  All models.
- **Renualt**
  All models.
- **Rambler**
  All models.
- **Sigma**
  Valiant/Dodge SE - all models.
  Mazda - rotary engine version.

* Denotes exceptional buy.

BLACK, COLOURED, ASIATIC NEW VEHICLE SALES

Currently available Department of Statistics data makes it possible to determine, for the years January 1974 - June 1976, the number of new cars, mini-buses and commercial vehicles sold to Whites, Blacks, Coloureds and Asiatics.

Cars	1974 - 1975	%	1975 - 1976	%
White	151 618	93,2	138 044	93,2
Black	2 694	1,7	2 471	1,7
Coloured	2 674	1,6	2 386	1,6
Asiatic	5 685	3,5	5 157	3,5
	162 671	100,0	148 058	100,0

The above underlines the prime importance of the Coloured community for although they are vastly inferiour in size to Blacks they bought only average 0,1% fewer new cars than the total Black community. Overall 5 368 new cars (3,3% of total) were sold to Blacks and Coloureds in 1974/1975 with 4 857 (3,3% of total) bought by the same in 1975/1976.

Mini-Buses	1974 - 1975	%	1975 - 1976	%
White	4 785	81,2	5 508	80,6
Black	595	10,1	751	11,0
Coloured	170	2,9	244	3,6
Asiatic	339	5,8	330	4,8
	5 889	100,0	6 833	100,0

Over the period in question Coloureds bought a total of 414 new mini-buses whilst Blacks bought 1 343.

Commercial Vehicles	1974 - 1975	%	1975 - 1976	%
White	52 007	85,2	49 211	84,3
Black	1 336	2,2	1 254	2,1
Coloured	2 412	4,0	2 487	4,3
Asiatic	5 279	8,6	5 425	9,3
	61 034	100,0	58 377	100,0

Blacks comprised the prime non-European market for commercial vehicles. Between 1974 - 1976 a total of 10 704 new commercial vehicles were sold to Blacks compared with 2 590 such units to Coloureds. In total 13 294 new commercial vehicles were bought by Blacks and Coloureds between 1974 - 1976.