Passing on a Family Business, or a Family Business Passing on? An Application of the Viable System Model.

1. INTRODUCTION

The situation I was asked to examine was of a small business with a number of operating parts whose internal boundaries were ill defined and where a careful balance of central control and autonomy was required to ensure freedom of operation at the same time as organisational cohesion.

A composite overview of the organisation was needed to provide a picture of the organisation to the directors, to enable rapid decision making in a deteriorating situation, and to ensure that changes in one area could be assessed in the light of the likely impact on others.

The Viable Systems Model (VSM) (Beer, 1979, 1981, 1985), well-known among “systems thinkers” but little known by traditionalists, provides a framework for the creation of a composite view. The VSM accounts for both the formal channels (e.g. command and legal) and is capable of dealing with the informal elements of an organisation (e.g. communication between people).

It enables the latter aspects to be explicit rather than implicit. The model of the organisation recognises that each operational element contained within it must exhibit the same features: implementation, coordination, control, intelligence and policy. It also has a common communication framework. Further appeal of the model lies in the way it can be used in conjunction with management and their impact on the process and their ownership of the results.

Beers” trilogy, The Heart of Enterprise (1979), Brain of the Firm (1981), and Diagnosing the System for Organisations (1985), provides the foundation for this application.

2. BACKGROUND TO THE APPLICATION

2.1 Introduction

This section introduces the retail motor industry and describes the initial situation at the subject company.

2.2 The Retail Motor Industry

The motor industry in general forms a significant element of the manufacturing base of most industrialised nations. Worldwide, the manufacturing capacity exceeds the market demand and competition is strong with some countries, with Japan being notably aggressive. This goes beyond exporting home-built products to the development of overseas assembly plants. Such plants are used to bypass import quotas and to take advantage of lower labour costs. This on-going study is undertaken against a background of a diminishing U.K. market (22%year on year at the time of writing) following several record years, impending European economic integration, an increasingly hostile tax situation with respect to company-owned vehicles, and rising environmental concerns.

The dealership structure, which derives the retail motor industry in the United Kingdom, has evolved over the last century. Its roots were in direct selling by manufacturers. It is now a combination of solus garages, multioutlet dealerships and multifranchise, multioutlet dealerships. Some dealerships are exclusively owned by the importers. Some manufacturers are believed to be exploring the possibility of buying in the dealer networks for their products. The dealerships vary in size from family-owned single-outlet businesses (with which this study is concerned) to public limited companies. The majority of the dealerships are operated on a franchise basis, an arrangement where the franchisor grants the franchisee the exclusive right to sell its products, in a given territory, subject to a number of conditions. These may include the establishment of operating guidelines, marketing and quality parameters, and sales/stock targets. The franchise arrangement normally includes a commitment by the franchisor to provide assistance with the management of the enterprise. It is currently the case that many dealerships are not trading profitably and that a number have gone out of business in recent months. While the particular marque with which we are concerned holds about 30% of its home market, it gives the appearance in the united Kingdom of being uncertain whether it wishes to be a participant in the volume or specialised sectors in the market. A market share of about 4% is currently held. The franchisors have been undergoing some organisational problems of their own and are currently in the course of a reorganisation. They are a wholly owned subsidiary of the manufacturer.

2.3 The Initial Situation

Carco, which was later identified as the “system in focus”, is a family-owned car dealership offering a full range of services including new and used vehicle sales, servicing, body repairs, parts sales, car hire and forecourt services. The company has been trading for over 80 years from a variety of sites, having started as a bicycle shop, and is now under the management of the third generation of the family.

Turnover for the last year was about £8 million sterling and Carco has approximately 50 employees, many of whom have been with them for a considerable time. Carco has been trading unprofitably for 10 years against an ever increasing bank overdraft secured by a valuable freehold site. My initial involvement arose from a belated recognition that they must realise the value of this asset if the business were to survive. The first request was to assist in drafting a layout for a proposed new building.

The initial intervention showed that the company was in a serious condition. Inadequate leadership, poor financial control and a lack of recognised and enforceable performance standards were found. Conflict existed among members of the senior management, although this was tacit rather than overt. Communication was poor within Carco; authority was badly defined, with managers referring queries to a superior most likely to grant hteir wishes rather than their formal line superior. This reinforced the conflicts. The accounting system of Carco was also inadequate, with incompatible computer systems leading to some tasks being undertaken twice – a parts sale must be entered into one system for stock control purposes and to another for accounting purposes. The business was operated without the benefit of budgets, and management accounting information was nearly 2 months out of date. This gave rise to a situation where the management concentrated on managing the past, as they had little information about the present and virtually none about the future – not least what they wished it to be!

Senior management seemed unaware of the activities carried out at the level of implementation. In particular, the relevance and benefit of implementation to the as yet ill-defined objectives of the organisation were not known.

No job descriptions were in use and employment contracts were either out of date or non-existent.

Carco has two principal assets which could provide its salvation: first, the previously mentioned freehold site, with sufficient value to fund a relaunched business; and secondly, a high reputation in the locality, with a loyal customer base. Intervention commenced in September 1989 and has been on-going since.

2.4 Why Use the Viable System Model?

It has already been stated that the initial interest in the VSM was inspired by a search for a rational framework within which to construct a composite view of a complex organisation. A degree of risk is inevitable when a “new” approach is used in an organisation whose management have collectively little practical experience outside their own business and a narrow theoretical knowledge base. They were not aware of the systems concept. A feature of the study has been a continuous translation between conventional terms and those required by the use of VSM for those involved at Carco.

The directors agreed at the outset that while the nature of the organisational hierarchy might alter (and indeed has), the operational elements of the business were both clearly defined and, importantly for the use of the model, theoretically capable of independent existence. These elements formed seven business units within the one legal entity. The entity had a perceived purpose of wishing to represent itself as a system for selling, maintaining, and hiring vehicles for profit. A number of underlying purposes were contained within that envelope, as was revealed during the study. These included an employment system, a family income system, and a system for generating private profit at the expense of Carco. These findings are of little surprise in a system serving human interests. Nevertheless, the systemic nature of the enterprise is evident – a number of elements, in relationship with each other and purporting to share a common purpose.

Following Flood and Jackson (1991), the choice of the VSM as an analytical tool is supported, in systems terms, by the complex and nondeterministic nature of the situation, the existence of close relationships between the elements, and the requirement, initially unfulfilled, for effective communication.

To continue, using the human metaphor employed so effectively by Stafford Beer, Carco could be described as suffering from "organisational Parkinson"s disease" (a progressive chronic disorder of the central nervous system characterised by impaired coordination and tremor) (Collins Dictionary, 1988), coupled with "corporate cataracts". Ashby"s law, that "only variety can destroy variety", was clearly "more honoured in the breach than the observance" (Hamlet, I.iv.14); the explosion of unconstrained variety tore Carco apart. The organisation lacked viability.

It is the contention of this paper that diagnosis of the ailments of Carco through use of the VSM would assist the business to survive in an increasingly turbulent and competitive environment. It would develop effective control and monitoring mechanisms, serve to absorb variety, lead to reduced oscillation, encourage structured research and planning activity, and develop a sense of common purpose among the operational elements.

Notwithstanding any improvements in the viability of Carco as a complex and supposedly adaptive system, its financial viability has been seriously in doubt. The constraints placed upon the system by the laws of financial viability may yet cause it to fail. Application of the VSM may be too late to save it from closure by its bank and the legal system that supports the closure of loss-making organisations.

2.5 Summary

This section has presented an overview of the background to the study, focusing on (a) the retail motor industry, (b) initial perceptions of Carco and (c) substantiation of the use of VSM. Now let us turn to the case study.

3. CASE STUDY

3.1 Introduction

This case study assumes a working knowledge of the VSM. Other applications are given by Espejo (1980), Espejo and Harnden (1990), Flood and Zambini (1989), and Flood and Jackson (1991). The focus of this study is Carco, a retail motor trader selling into the private and business sectors. The methodology is drawn from *Diagnosing the System for Organisations* (Beer, 1985) as crystallised by Flood and Jackson (1991).

3.2. Levels of Recursion

Carco became the "system in focus" – recursion level 1 – in a triple recursion with the franchisor at level 0 and the operational elements of Carco forming level 2 (see Fig. 1). Each of these was perceived as capable of independent existence, i.e. a viable system in its own right.

An early difficulty encountered in the diagnosis was the selection of this triple recursion. The apparent organisational problems led the study to concentrate on Carco as the system in focus and recursion 2, its operational elements. A number of possibilities presented themselves for level 0. Outline diagnoses were attempted with different nominees for this recursion, such as the local motor industry, the local economy, and the family as owners. None of these approaches seemed to be acceptable; the local motor industry and economy were too remote and not exerting a "management" influence on the business. These became environment. The family was discounted, as it was not an effective part of the control structure. It has been treated a part of the environment. The agreement was reached that Carco was attempting to be part of the dealer/marque structure. The company shares an identity with the franchisor in the eyes of the public. The franchise agreement determines Carco to be, to some considerable extent, controlled by it.

This choice has caused some problems in the course of the study as will become apparent, but as Beer so helpfully puts it, "You are not determining absolute facts: you are establishing a set of conventions". "A model is neither true nor false: it is more or less useful." The selection of the franchisor as recursion 0 has its drawbacks but has remained useful.

The system 1 divisions of recursion 0 are the dealers. Each one is legally autonomous but bound to the franchisor by a contractual arrangement. Each of these divisions promotes the sales of all the franchisors' products within an exclusive territory. This purpose has been determined with Carco but has not been agreed with the franchisor. The franchisor has its own problems and has become more concerned with these than its distributors. Other dealers required confidentiality and did not wish to be included on this question.

Figure 1

Recursion 1 is Carco. It has embedded in it, its own system 1 divisions. These divisions are new sales, used sales, parts, service, body shop, forecourt and car hire. The focus of this study is recursive levels 1 and 2.

3.2 Summary

This section has presented the recursive organisation within which Carco, the focus of this study, has been placed. The next section discusses the problems found and the solutions so far proposed.

4. REORGANISATION OF CARCO USING THE VSM

4.1 Introduction

This section describes the application of the VSM to Carco at recursive levels 1 and 2. It follows the methodological guidelines and uses diagrams of Beer (1985).
The purpose of the system in focus which is the foundation of the study was agredd on with the directors of Carco as

To provide a comprehensive sales and support system to existing users of the franchisor's marque and through effective presentation of the franchisor's products to attract new customers, these activities generating profit for the shareholders of Carco.

Carco is potentially viable, both financially and organisationally; that is, it could, in principle, be separated from the franchisor and maintain its existence. The operational elements of Carco at level 1 are described below.

4.2 System 1

Carco, by virtue of historical accident rather than design, was already divided into seven potentially viable elements. These are briefly described.
1F is the forecourt operation. Its capital, sit and, staff are provided by Carco. It is subjected to constraints from systems 3-4-5 of Carco but is attempting to achieve full autonomy, a threat to Carco. Performance standards for sales of petrol and operating standards for 1F are determined by Oilco, an oil and petrol distributor, through a franchise agreement. Accounting is conducted on a separate accounting system supplied by Oilco and is incompatible with that of Carco. The manager of 1F does not seek to communicate with the rest of Carco. Oilco is attempting to take over the system 3 role of "inside and now" management and the system 2 role of monitoring behaviour.
1H is a car hire operation. Again, it is part of Carco but is attempting to break away. Direct control is taken by Hireco, a further franchisor, representing further danger to Carco. All operating standards and expected performance levels are determined by

Hireco. The bypassing of the 3-4-5 has led to a situation whereby 1H is unprofitable. It fails to respond to changes in the local marketplace. The arrival of increased competition, albeit in a growing market, has been neglected. A decision has recently been made to close this operation in view of its lack of profitability and the inability of Carco to fund the "relaunch" that would be required to achieve a turnaround in performance.

1U, a used car sales operation, has been closed down since the commencement of the study. It was financially unsupportable in a falling market, having a large thirst for cash to fund and stock at a time when sales were slow and margins small. The operation was established to become the first local quality used car outlet. Early years were very successful, however, the almost complete autonomy that it had led to an abdication of the metasystem, which failed to exercise any adequate form of control over its operation. This led to a situation where the staff were undertaking private deals, profiting personally to the detriment of Carco. Subsequent to its closure, thefts of some items were discovered. This description shows that while system 4 initially functioned well in recognising an opportunity it subsequently failed to monitor behaviour and establish performance standards.

1N holds the key purpose of the enterprise, the sale of the franchisor's products. The management of 1N were unsure of their reporting lines and functioned according to targets and performance standards determined by the franchisor. These were, in effect, imposed directly at recursive level 2 rather than negotiated through level 1. The sales targets imposed and stock levels demanded were insufficient to ensure the financial viability of Carco. Carco has no means of recognising this, nor is it likely that higher levels could be obtained given the average market share of the franchisor (they would have to achieve double the average sales levels). In addition to the foregoing failings, no tracking is undertaken of the profitability of each transaction, management accounting information is 2 months old, and stock is subject to unpredictable constraints from the manufacturer (a higher recursive level and outside the scope of this paper). Collectively these problems represent system 3 failure to manage, system 4 failure to plan and system 2 failure to monitor and coordinate behaviour.

1P is the Parts department, selling to both internal and external customers. No budget was in force. The department aimed to achieve purchasing targets determined by the franchisor. A computerised stock control system was inadequately used – of 78 menu options; the staff knew how to use 2, 1 to enter new stock and 1 to issue sold items. This had given rise to a situation of gross overstocking, many of the items being effectively unsellable. Stock turnover achieved of 2.5 times compares unfavourably with an industry average of 4-6 times. Failure of systems 3, 4 and 2 is again indicated here.

1B is the body shop, undertaking all kinds of body repairs for both internal and external customers. Again, no budget has been in operation, although on the basis of historical information, the element appears profitable. No measurements are in place for workshop utilisation, faith being placed in the ability of the manager to maximise use. Similarly, no quality assessment is made, system 3 becoming aware of the operation only when a customer complaint is received. This again indicates failure of system 3 in its role and a lack of communication with system 4 (the quality assessment), which would enable the future development of this activity.

1S is the service department, preparing and servicing vehicles for retail and trade customers.   No performance standards are in existence, no budget is used, and workshop utilisation is dependent on the judgement of the service receptionist. Further evidence of the failure of systems 3 and 4 is drawn from the recent training of a “technical expert”, whose expensively acquired skills have been ignored rather than exploited.

Reorganisation of system 1 commenced with the clarification or reporting lines, allocation of clear lines of control being seen to absorb variety at system 1 by providing programmed answers to certain questions such as “To whom do we report? This step also involved a reduction in the number of management jobs, certain positions now being seen as unnecessary and being recognised as providing little value to the organisation. This course of action was also seen as reducing the chances of private profiteering at the expense of Carco.

1H, the car hire operation, has been closed down; it was only marginally profitable and it was absorbing time, capital and staff resources which could be better used in other parts of the organisation.

1U was loss making and had also been closed down. This element had been allowed to develop a level of autonomy so extensive that it had determined for itself a purpose different from that of Carco. It was being operated for the private profit of its staff while trading on the capital and reputation of Carco. The reputation of Carco was beginning to suffer from this, and in view of the small chance of recovering a profitable position, the element was closed down and the staff made redundant.

The remaining operational elements have been involved in the negotiation of budgets for both financial performance and activity volumes. This has again served to reduce previously uninhibited variety in the system in focus by providing targets to achieve and clarifying the objectives of the organisation. This has also assisted the metasystem in communicating to system 1 a sense of purpose and, perhaps more importantly, the realisation of the previously unstable and still critical nature of the organisation’s ailments. These budgets cover certain procedural issues which have now been put into place. Capital expenditure, albeit in on small items, must now be approved prior to being incurred. It was previously unchecked. Similarly, orders for parts stock are kept to a minimum through more effective use of the stock control system and a sell-back agreement has been negotiated with the franchisor on a significant volume of items. This represented about 30% of the stock value. The agreement required Carco to reinvest that sum in stock, but this was put into fast-moving lines, and over time the stock level is being reduced. A limit has been put on stock value to be held. This action has, again, both reduced variety at system 1 by providing clear rules and performance expectations and provided the metasystem with a facility for monitoring behaviour at system 1.

The direct control by the franchisor at system 1 has also ceased, partly through their internal changes and partly as a result of the metasystems taking a more active role

in the business. This has also helped in reducing variey and constraining the behaviour of system 1. Agreements negotiated between the metasystem and the franchisor have a greater chance of success, as there is greater awareness of the limitations affecting other parts of the system. Agreements are adjusted accordingly.
Further changes have included an overall increase in the level of communication between the metasystem and the operational element, this in itself serving to attenuate variety at system 1 and amplify the variety of the metasystem. Formally, this communication is represented by meetings between the “senior management” and the managers of the operational elements. This is supported by regular informal discussions on a daily basis, the activity of “managing by walkabout.” The greater visibility and approachability of the “senior management” through this tactic, while not directly measurable in impact, are certainly beneficial.
The negotiation of budgets has also led to a re-examination of the practice of discounting, which is prevalent in all parts of the motor industry. It is not possible to cease this practice altogether; market capacity is such that many prospective purchasers would simply go elsewhere. It is, however, possible to recognise that no profit is made on certain discounting arrangements. These have been reviewed and, wherever possible, changes made to ensure profitable trading.
An early recommendation made was that the incompatible computer systems be replaced with a single integrated system covering both accounting and stock control systems. This would have immediate benefits in reducing the numbers of people employed by enabling many tasks to be carried out once rather than twice. Further benefits would accrue through greater sharing of information, which is currently passed in paper format and frequently reproduced. Similarly a number of vehicle and customer records are maintained in differing styles and records. These could be brought together in a single data base which reduce manual labour and lead to improved prospecting of customers for servicing and repeat car sales business. The existing multiple manual records are difficult to maintain and, consequently, frequently out of date. Recent examples of the system failing are one client receiving two service reminders in the same post and a service reminder being issued to a client for a car he had traded in at Carco 6 months earlier.
This proposal has been shelved in the short term, as Carco cannot support the necessary financial investment, the problem being that the investment would have to be made some considerable time before the savings would emerge.

4.3 System 2

The function of System 2 is to provide organisational cohesion by monitoring behaviour and damping oscillation caused by the varying demands of the operational elements. To achieve this objective, monitoring must be established and standards of behaviour determined against which actual behaviour can be measured. While monitoring has been ongoing in Carco, it will be apparent from the preceding information that there were few effective rules available for system 2.

Such rules as did exist were of a qualitative nature, such as “We must strive to achieve a high quality of service.” Few standards were determined. Where standards did exist, they were established by the franchisor and did not take account of the particular circumstances of Carco. This tended to make them unachievable, usually for financial reasons.

The recent creation of budgets and subsequent monitoring thereof will enable system 2 to to perform more effectively in the future. For this to be achieved, the management accounting system will need to operate nearer to a real-time basis. It is, after all, of little benefit to know that an unacceptable disturbance occurred 2 months ago. The system should be seeking to detect perturbations in advance or, at least, at the time of happening. Apart from the absence of adequate monitoring of financial behaviour, which must be significant in the poor performance of the company, ethical standards aspired to by the metasystem were not being communicated. They were not effectively shared with system1. This was evidenced by losses through theft. While this may have been detectable through financial monitoring in some areas, much of the impact could have been achieved through other standards being utilised. Effective checking of prior employment records and references, formal employment contracts and proper communication of the needs of the company would have helped. Evidence of firm responses to theft and effective monitoring would have helped even further.

Improvements in general communications between system 1 and the metasystem will assist this situation. It should be monitored through system 2 on an informal basis. “Good behaviour” will not be enforced through “laws” but will be encouraged through use of policies. System 1 elements will be encouraged to recognise that non-viable behaviour may lead to the failure if the entire system in focus. It is therefore in their own interests to conform and encourage others to do likewise.

4.4 System 3*

This system, an extension of system 3, audits system 1 to “close the gap” (Beer, 1985). The gap occurs between the total variety arriving at system 1 and that absorbed through the other communication channels.

My intervention in the company was the first attempt to institute a 3* investigation other than those which were legally required such as accounting audits and stock checks. Normal applications of 3* intervention such as quality reviews, internal audits of financial information, and analysis of operating performance did not happen. Carco has been advised to introduce reviews of this nature using its own staff. This will enhance the effective implementation of the other procedures. After all, system 3 cannot determine what it needs or wants to investigate until it has some current and relevant information concerning the activities of system 1 and the plans of system 4.

4.5 System 3

System 3, the "here and now" management of Carco, has been ineffective. At the outset of the study few effective rules or agreements had been determined with system 1. System 1 therefore could not really be held accountable for its behaviour. System 3 management of Carco has operated an inadequate accounting system, this leading to employment of additional staff and completion of tasks in duplicate. System 3 also lacks clarity in the "command" structure. This stemmed in part from the lack of clearly defined roles among the senior management and their failure to manage. An additional particular example of the problem in this system is the inability of the participants to resolve conflicts arising from occupying multiple roles (i.e. father and son working together as co-directors and unable to separate their working and personal relationships). This was resolved through the resignation of the son from Carco. The problems of clarity of command have been resolved by reinforcing the required roles and ensuring recognition that problems were arising. One further member of the management has resigned. He was a prime cause of the previous subversion of the system. This individual, a departmental manager, worked in an autocratic manner, managing by fear. He was believed to be responsible for the embezzlement of company funds, and while this was never proven, he resigned when challenged.

The functioning of system 3 has been improving, benefitting from the implementation of budgets and targets. Resource bargains are agreed with system 1 management. This simplifies subsequent decision making through prior definition of standards and policies against which new options can be judged. Budgets have been determined following an examination of historical financial information. Resource bargaining has drawn upon this information and attention has been focused on the loss-making and low-profit activities in an attempt to boost income where possible or, alternatively reduce costs.

An example that illustrates this occurred in parts sales to other traders. Carco buys parts from the franchisors with discounts. These vary according to the nature of the part and volume sold. A significant proportion of parts sales, about 30%, goes to non-franchise traders. It is common for Carco to allow them to have a large proportion of the discount received. For example, a part discounted to Carco at 22% might be discounted to a trader at 19%, leaving Carco with a gross margin of 3%. This gross margin is reduced by overheads of Carco. Erosion through delivery costs is an example; the net apparent margin to Carco would be about 1.5%. While marginal, this is at least a transaction for profit. The analysis undertaken showed that, in addition to the discount given, many of these purchasers were being extended credit of 60 days, at current interest rates of 15% (1.25% per month); the notional profit of 1.5% is eradicated. Trade debtors represent about 14% of the borrowings of Carco, costing £30,000 per annum at present interest rates. An improvement through both a reduction in discounts and a tightening of credit has been achieved.

Improvements in the accounting and internal intelligence functions of Carco are still needed. Investment in a new computer system cannot be funded yet. Many tasks are still, therefore, being carried out in duplicate. A decision has been reached, however, to replace those functions and will be implemented when money allows. Meanwhile manual systems are being improved to reduce repetition of tasks and the support staffs have been reduced significantly.

The value of systematic gathering of information on performance has been recognised and this need is being addressed. Again, this is based on manual systems and meetings. These meetings now involve the genuine exchange of information and are seen to have benefits for both system 1 and system 3 participants. System 1 managers are now integral part of the system 3 function.

A major use of the information gathered is advice to system 4, the intelligence function, of the current states of the operations. This information was not being passed, simply because no meaningful information was being gathered and there was no obvious system 4 to which to pass it to!

4.6 System 4

System 4 is supposed to enable the system in focus to adapt. It achieves this by examining the external environment, exchanging information with system 3 and generating survival plans. This should take place on a continuing basis.

At the commencement of the study, Carco had no intelligence function. There was a vague recognition that "we cannot carry on like this," but virtually all activity was concerned with immediate matters. The company's bankers put an absolute limit on the overdraft facility. This led to the decision that all or some of the company's assets would have to be sold to reduce borrowings and to increase chances of survival.

A number of options have now been identified, each of which would lead to financial viability for Carco. These options are being subjected to full financial evaluation:

- Sale of the forecourt operation, with no relocation in the short term.
- Sale of approximately one third of the site, currently used for storage, with no relocation in the short term.
- Sale of half the site. This would require the acquisition of additional space elsewhere for part of the business.
- Longer term, a full relocation of the business to a new site. This must occur since Carco cannot become financially viable on its present site and the local authorities wish to see the site redeveloped.

Negotiations are on-going, with a number of parties interested in acquiring part or all of the site.

Other useful ideas are also being addressed. These include training and succession planning, a review of ownership of Carco and a search for additional sources of income and ways of increasing market penetration for the franchisor's products on a localised basis.

Again, because of the scale of Carco (fewer than 50 employees), system 1 managers are now involved in the intelligence function. This promotes exchange of information among systems 1, 3 and 4. System 1 managers are undertaking surveys of their areas of operation, seeking to define opportunities and threats and suggest responses.
This represents a change in activity for most individuals. They are technically well trained but have little or no experience of management or planning in a business context. Hitherto, their management function has consisted of planning the day's work and supervising the staff on the basis of those short-term plans. The involvement of many new people helps to ensure effective communication between the operational elements and the metasystem but is also a precursor to changes being proposed at system 5.

4.7 System 5

System 5 of Carco comprises the Board of Directors. There is only one other representative who is external to the company.
The function of system 5 is to set policy and to absorb the variety of the system in focus which has not already been contained by lower level processes. It sits in judgement of disputes between system 3 and system 4. At the outset of the study, Carco had no effective system 5 to deal with these matters.
Boards nominally work by majority vote. In the case of Carco, the Managing Director is also the majority shareholder; thus true power over the fate of the company rests with him. The managing director inherited the position from his father, who had been similarly placed by his father, the founder. The managing director had no significant power in the company until the time of his father's retirement and, while he would have preferred to pursue a different career, as the only son he felt obliged to continue in the business.
I have come to think of this individual as a variety mirror rather than acting as Beer's variety sponge. Problems emerging from the system are reflected back into it, generating further chaos and confusion: an organisational greenhouse effect. This has been a major factor in Carco's decline over the last 10 years. At the time of writing, this problem is being managed, at least on a short-term basis, as decisions are being forced upon Carco by external agencies.
In the longer term, a change of ownership of Carco is in prospect, with consequent impact on system 5. As part of the financial reconstruction of Carco, the business may be split into two new businesses. This proposal advocates separating the freehold land (the principal asset of Carco) from the trading element. The trading company would then be sold to the current employees of Carco. The financial complications of this are not a subject for this paper. The important point to be made is that the employees would then be formally represented at system 5 in a system

whose purposes they not only shared, through self-interest, but would be able to define and redefine. This is reminiscent of Beer and Allende's system 5 in Chile. Such an approach carries with it its own problems, both of politics and of effective management. The number of truly successful organisations owned and run by "nonprofessional" employees is limited, and they will need to recognise the need for, and be prepared "to buy in", the management expertise which they lack. That remark is not intended to denigrate their skills; it is simply a recognition that, in the same that each of us employs others to carry out tasks we cannot undertake for ourselves, so the employees of Carco should be prepared to draw in the skills they do not themselves possess. These will be mainly "management skills". A proper way forward would be to go for a "technology transfer", bringing the requisite skills to the people.

The mechanisms appropriate to manage this system will be influenced by two things: (a) the final composition of the finances of Carco and (b) the commitment of the employees as demonstrated by their personal investment in the company. The changes in the operating procedures of Carco have all been discussed and agreed with the managing director as system 5. The more serious points relating to strategic leadership and the setting of a corporate are accepted, and it is his stated desire to retire from the business as soon as it is financially, and honourably, possible.

The plan is for me to continue my involvement with Carco to assist the final owners in completing the redesign of the business.

4.8 Summary

The foregoing description dealt with the progress to date of intervention in Carco using the VSM. While the diagnosis and reorganisation have not been a "quick fix" to the problems of Carco, the study has undoubtedly been of help and will continue. Figure 2 shows the VSM representing the changes so far.

Figure 2

CONCLUSION

This paper has highlighted the need for a composite view of an organisation to be taken and suggested the VSM as a possible tool to enable this. The retail motor industry has been introduced and the original situation at Carco described. Application of the VSM and achievements to date have been outlined, showing the gradual emergence of order from chaos. The VSM has proved invaluable in a number of respects. It has enabled each part of the analysis to be undertaken with the whole organisation firmly in view. Conclusions have been reached only after rigorously taking account of the requirements of other areas. The need for information to be shared has been welcomed by the participants at all organisational levels. My experience of this application as a practising manager is that the systems and traditional approaches aim to achieve the same result, a reduction in chaos through variety engineering. More traditional approaches achieve this through concentration on making the parts effective without looking at the whole; the systems approach works on the whole and accepts suboptimal performance of some of the parts to achieve a defined objective overall. From my “cross-boundary” experience, I believe that the two can and should be seen as complimentary, not alternative. A separate paper reflecting on this case study, the VSM, and its value and uses, will be published in due course.

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