

Pricing and Investment Where Both are Semi-regulated: The Management Dilemma

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ABSTRACT

The environment of a state owned transport agency (the Western Australian Government Railways) is examined, and interest groups (clients, resource suppliers, competitors and regulatory groups) influencing internal decision making processes are identified. The environmental influences are observed to have both direct and indirect effects on pricing and investment decisions, constraining the W.A.G.R. management's ability to direct organisational effort. An absence of clear objectives is postulated as a prime reason for role ambiguity and conflicting expectations of W.A.G.R. performance. The dilemma facing management is identified as the requirement to satisfy conflicting external demands while the ability to manipulate the resources necessary to achieve objectives is tightly constrained. Quantitative approaches to decision making, though necessary, are concluded to be of limited use to management where significant uncertainties exist and judgment and political processes predominate. An alternative to the current situation, based upon an explicit formulation of objectives and the introduction of the corporate planning process, is proposed. Advantages of the alternative and difficulties in implementation are discussed.

INTRODUCTION

Managing an organisation classified as a transport operator is, in many respects, similar to managing any organisation engaged in production. In brief the role of management is to acquire, allocate and utilise material and human resources in such a way that interest groups affecting and affected by the organisation's operation are sufficiently well satisfied to allow the continued operation of the enterprise.

There is a dual emphasis in this role definition: continuity of operation (survival) and interest group satisfaction.¹ The emphasis on survival draws attention to the fact that

1. See Thompson (1967).

management, in its decision making, needs to be aware of the dynamic nature of the organisation, and of the interfaces between it and the interest groups it must satisfy. The emphasis on interest group satisfaction draws attention to the fact that, while in some aspects of operation it may be prudent, or even necessary, to optimise performance, the necessary and sufficient condition for survival is satisfaction of the relevant interest groups.

It is as well to note that expectations of interest groups may change when organisational survival is in question.

The dilemma facing management is how to manipulate the necessary resources, from acquisition through to utilisation, in such a way that sufficient continuous interest group satisfaction is obtained for organisational survival. The dimensions of the dilemma are delineated in noting that the aspirations and effectiveness of the relevant interest groups are variables; some known and some unknown, some quantifiable and some unquantifiable, some constant and some changing with time, and, above all, most in competition with one another. In practice, as management is well aware, there are multiple requirements to be met, with no prescription for their attainment within the bounds of current analytical processes. At best the decision processes of organisational management are judgmentally based on a mixture of experience, intuition and the results of analysis, quantitative and qualitative. Management is both art and science, and possibly more art than science.¹

1. See Forester [1961].

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The generality of the role of organisational management and the dilemma confronting it in no way denies the very real differences between organisations. However, it is postulated that the differences are in degree rather than in kind; that the privately owned road transporter has a similar management dilemma to the state owned rail transporter. The difference in the dilemma lies in the difference between the influence of the interest groups on the decision making process, that is, in what constitutes interest group satisfaction for the respective organisations. Accordingly, while attention in the paper is focused on the Western Australian Government Railways (W.A.G.R.) and the dilemma it faces with respect to pricing and investment, it is contended that the considerations are relevant to other transport operators, especially to other government-owned transport operators in Australia.

THE ENVIRONMENT OF THE W.A.G.R.

Organisations are in constant interaction with their environments, all aspects of which are relevant to a greater or lesser degree, to the decision making processes within the organisation. In discussing the W.A.G.R.'s environment attention is focused on those interest group interactions which are relevant to pricing and investment decisions. These interest groups can be broadly classified under four headings -

- clients (users);
- resource suppliers;
- competitors; and
- regulatory groups.

The interest groups

Clients (users). There are two major subsets of users which can be identified. The first is a diverse group, made so by the difference in types of commodities to be transported, size of traffic tasks and source/destination locations. The servicing of this group's requirements arises from policies founded on historical practices which are now not necessarily economically efficient, and the W.A.G.R.'s designation as a "common carrier" as prescribed in the Railways Act. In addition to the common carrier obligation, interpreted to be a requirement to transport all goods directed to it, the prices which the W.A.G.R. can charge for these services are regulated by the Government of Western Australia (gazetted rates). These rates are naturally set in a context in which W.A.G.R. costs are only one of several considerations and consequently prices tend to lag badly behind costs both in magnitude and frequency of revision. It is observed that user groups' interests play a major role in determining pricing and investment decisions in the W.A.G.R.

The second subset of customers can be more specifically identified as forwarding agents and organisations requiring bulk haul facilities. For these traffics the W.A.G.R. is free to negotiate special rates and, in recent years at least, these rates have been subject to the operation of a revenue escalation formula. For the period July 1974 to February 1975 the special rate traffics accounted for approximately 56 per cent of a total tonnage of 11.4 million, 27 per cent of total earnings of \$58.7 million and 42 per cent of total tonne kilometres of 2 961 million. While such traffics have considerable impact on pricing and investment decisions within the W.A.G.R., the effect of the regulations

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relating to these transport tasks is small compared with the effect of regulations directly influencing pricing. For the remainder of the paper emphasis remains with the effects of regulation on pricing.

Resource suppliers. The Government of Western Australia has authority over all capital inputs from State funds to the W.A.G.R. The capital works programmes proposed by the W.A.G.R. are reviewed by the Government, taking into account the recommendations of various advisory bodies, in particular the Treasury and the office of the Director General of Transport. In addition, the current policy in relation to the common carrier requirement ensures that large amounts of capital are consumed by replacement of assets which are not necessarily earning an adequate financial rate of return. Furthermore, the capital allocation is authorised with the constraint that the capital made available is committed to nominated investments; capital reallocation by the W.A.G.R. is highly constrained. The decision making processes of the W.A.G.R. management are thus highly constrained.

Manpower inputs are also subject to general dictates of Government industrial policy, both through specific directives on the hiring of employees and through the operation of the Railways Act (Sections 73 and 77) governing the W.A.G.R. which restricts management's hire and fire discretion. Some influence over manpower inputs is also exercised by labour unions. The influence is judged by the W.A.G.R. management to be significant.

Regulation by Government and the influence of unions constraining the ability of the W.A.G.R. to deploy its human resources have two effects on capital investment decision

making; one direct, the other indirect. The direct effect is that decisions on proposals for investment which involve benefits resulting from capital intensifying an operation are affected significantly by the constraints on re-deployment of labour. The indirect effect is that the performance of the W.A.G.R. overall is judged as though the W.A.G.R. management were not constrained by manpower regulation, that is, were performances judged to be poor (or good), no explicit consideration would be given to the fact that it may have been better with lesser manpower constraints. The perception of W.A.G.R. performance overall is the factor indirectly affecting decisions on particular capital investments. In addition union influence at the investment level is felt particularly through reactions to any divestment proposals.

Competitors. Tied to the obligations of the common carrier, transport regulations are imposed to limit competition between road and rail in certain areas. While these regulations may have impacts on the pricing of traffics which are not regulated in regard to price raising complex questions of cross subsidisation, the major influences from a survival point of view are the pressures for change generated by groups who perceive themselves as disadvantaged.

As mentioned previously the Government co-ordinates capital inputs to the various transport agencies and thus controls the competition amongst agencies for resources. Because resources are limited, measures of performance and the allocation process become major considerations.

Regulatory groups. It is evident from the above discussion that regulatory groups play important roles in governing the interaction between the W.A.G.R. and various interest groups. In addition, the performance of the co-ordination role requires

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the State's Director General of Transport to seek information from the various agencies and to constantly interact with them in developing transport objectives and policies for Western Australia. As these requirements are distinct from the major purpose of the agencies they impose resource demands, particularly on the limited supply of specialists and on providers of data and hence raise allocation problems for the agency decision makers.

THE DECISION MAKING PROCESSES IN THE W.A.G.R.

The decision making processes in the W.A.G.R. are constrained in a number of ways, both directly through involvement of external bodies in actual pricing and investment decisions and indirectly through the moulding of organisational structure, employee attitudes, etc.

Direct effects of environmental influences

Capital allocation. In addition to submitting the proposed capital works programme to the Government of Western Australia, the W.A.G.R. is required to submit it to the State's Director General of Transport for review and evaluation. Items on the programme have previously been subject to evaluation within the W.A.G.R. However, it happens that the assessment of the programmes differs between the Director General and the W.A.G.R. The differences reflect both the essential requirement for judgment in investment decisions and the differing perspectives of the W.A.G.R. and the Director General. The evaluation procedure, as objective as it appears in theory, fails to provide the complete answer when judgment intrudes, as it frequently does (this situation would appertain even if some major technical problems associated with current techniques could be overcome - an aspect addressed later in the paper). The question which then arises is one of whose judgment is

to be accepted, that of the W.A.G.R. management or of the Director General. Whatever the answer to the question it is a fact of life that it is the W.A.G.R. management who is held responsible for the organisation's performance. Equally, it is difficult for management to plan and control organisational effort in these circumstances; the problem of measuring the W.A.G.R. performance when external influences act directly on the action situation again arises.¹

Pricing. The regulation of the pricing of services removes a second major decision variable from management's control though the W.A.G.R. management can attempt to influence the decision process.

Thus, pricing and investment decisions are, to a large degree, not comprehended within the role of management. This situation reflects a belief that considerations beyond those normally taken into account by management are relevant - this is consonant with the social/political role which transport has, in the past, been required to play. However, it does raise some extremely difficult managerial problems. Some of these may be referred to as organisational problems and are discussed in the next section. A more direct effect is the feedback of the effects of pricing decisions on support by relevant interest groups. That is, deficits which are a natural outcome of pricing regulation as practised in Western Australia raise important questions to suppliers of capital about the degree of investment justified. This is so particularly in those cases where analytical techniques are of limited use - where objectivity is difficult or impossible to establish and judgment is required. Unfortunately for

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1. Thompson (1967) describes at some length the usual means by which organisations cope with such external contingencies. In the case of the W.A.G.R., however, responses to institutionalised influences of this sort are limited.

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management, the poor financial results of the social aspects of the enterprise tend to become confused through the accounting system with the more profitable commercial aspects. The result is that the whole system, rather than merely parts of it, becomes suspect in the view of some interest groups, particularly those who perceive themselves as being disadvantaged.

Indirect effects of environmental influences

The Main feature of the W.A.G.R.'s environment has been identified as the dominance of regulatory groups. Through these groups the social role of the railways is expressed, though not in an explicit fashion. At the same time the W.A.G.R. is more than a mere vehicle for the provision of socially beneficial services - a market does exist for its services and consequently commercial considerations must also be fully comprehended within the objectives of the organisation.

Through deficit financing the two aspects of the enterprise are combined and, to a large extent, confused. Since, unlike profit, a deficit cannot have an acceptable level placed on it (except perhaps that it should not be too much more than last year's) it provides no financial objective. In the current absence of an explicit statement of objectives the W.A.G.R. is faced with a vague notion of mission on both the social and commercial fronts. With this situation as a starting point the problem of formulation of operational objectives for guiding action and providing criteria for measuring performance becomes extremely difficult to solve.¹

1. See Drucker (1974) for a discussion of the importance of the translation of overall mission into concrete measures of performance.

The problem has been recognised by the Australian Minister of Transport: "One of the major problems facing State railways is that they have not been given any specific goals to achieve, either financially or socially. How can you ask organisations to do a job when they do not know what they are expected to achieve or what priority they are to attach to each objective."¹

While this situation has obviously important implications for the efficient functioning of the organisation, it also has a more direct effect on the decision maker.

There are important aspects of investment decision in the W.A.G.R. which are largely or wholly judgmental (e.g. will a bridge last for another year or should it be replaced now?). Since the expertise for making such judgments is dispersed throughout the technical departments of the organisation there is a need for the decentralisation of responsibility for the generation and justification of capital investments. Clearly, conventional theories of capital budgeting which emphasise quantitative measures and assume a unitary, all-powerful top management are of limited application in such situations. Studies by Bower² have indicated that where dispersion of specialised knowledge exists, top management can exercise only limited control over capital allocation by reviewing expenditure proposals. The implication is that, except where rigid capital constraints are in operation, the commitments to proposals that are gained in transmission from lower to upper levels in the organisation ensure that decisions are, in effect made before the proposals reach top management.

1. Jones (1975), pg 21.

2. Bower (1970), see particularly Chpts 1, 3 and 10. King (1974) has also carried out field studies in this area. See also Shapiro's discussion of public investment models (1973).

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The question of how top management can influence the allocation process arises in this situation and Bower¹ suggests that there are a set of forces shaping both the definition of projects by lower levels and the progress of projects toward approval. These forces derive from the structural context within which employees function, that is, the organisation's systems of measurement and information and of reward and punishment.

There are distinct implications for the W.A.G.R. Management's difficulty in establishing a structure of objectives for guiding and controlling action limits its ability to control the allocation process through manipulation of the structural context. The net result of this situation is a lack of financial orientation on the part of employees. Instead, in a classic example of goal displacement² attention tends to centre on the means used to achieve objectives rather than on the objectives themselves. Hence, considerations of, for example, engineering perfection become the prime concern rather than considerations of economy. Given that some line managers perceive a correlation between size of deficit and the incidence of gazetted rate increases, it is an understandable, but not desirable displacement of goals. Organisational climate and management's constrained ability to modify it are, consequently, significant inhibitors on the effectiveness of pricing and investment decisions within the W.A.G.R.

A further environmental influence having both indirect and direct aspects is the activities of pressure groups. These groups (for example, farmers, storekeepers, etc.) can influence decision making in the W.A.G.R. via appeal to their local member of Parliament. If the case put forward by

1. Bower (1970), Chpt 3.

2. Warner and Havens (1968).

the group is judged to be legitimate, direct influence on W.A.G.R. decision processes can be exercised by Government. Hence a further source of contingency, having similar implications for management as the earlier-mentioned direct influences, is identified.

Summary

A number of environmental influences acting on the W.A.G.R. have been identified. Some of these influences act directly on internal decision processes (capital allocation, regulation of pricing, direct Government intervention) while others have more indirect effects (ambiguity regarding objectives influencing organisational climate). The sum total of these influences is the debilitation of management's capacity to organise the W.A.G.R. into an effective unit which performs its economic and social functions in an efficient manner.

ASSESSMENT OF THE W.A.G.R.

Without a clear definition of objectives and an identification of the relative importance of each, there is no unambiguous way to assess the performance of the W.A.G.R. Without a precise definition of objectives and performance measures, various interest groups are virtually free to devise their own assessment tests, the legitimacy of which only political processes can establish. Again W.A.G.R. management can be seen to be at the centre of a number of frequently conflicting demands, many of which must be satisfied if the organisation is to survive.

The most widely circulated statement of W.A.G.R. operation, and hence one which is commonly adopted as a means of assessment is the profit and loss account. Poor public image and low employee morale are two important consequences

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of continually increasing deficits, but more important from a survival point of view are the pressures generated for a re-organisation of the transport system - usually taking the form of proposals to diminish the role of rail transport. Too often such proposals are based on confused notions of the strengths and weaknesses of the rail network.

It has been pointed out that W.A.G.R. management faces a number of constraints and uncertainties imposed by its environment which restrict to a large degree its ability to direct the organisation toward the satisfaction of interest group demands. This situation is exacerbated, as has just been indicated, by the multitude of overlapping and sometimes conflicting expectations of interest groups.

This, then, is the essence of the W.A.G.R. management dilemma: management is restricted in its capacity to manipulate the necessary resources, from acquisition through to utilisation, in such a way that frequently conflicting interest group demands can be sufficiently satisfied to enable long run organisation survival.

THE ROLE OF ANALYTICAL TECHNIQUES

In the course of the preceding discussion reference was made to the limited assistance which quantitative techniques could afford to management. Considerable justification for the assertion exists.

There are a number of well recognised "technical" problems associated with conventional capital budgeting techniques, for example, selection of the discount rate,¹

1. Prest and Turvey (1965) discuss the problems of determining a social rate of discount. A number of texts on capital budgeting and financial theory discuss the same problem from the private firm's point of view (see for example Bierman and Smidt 1971).

treatment of non-quantifiable elements, and ranking of projects under budget constraints.¹ In addition there are a number of analytical problem areas which are unique to situations in organisations similar to the W.A.G.R. A particular instance of the latter type, most relevant to the activities of the W.A.G.R., is that it is not always clear how the base for a project, from which incremental costs and benefits are to be calculated, should be determined. This problem is perhaps best illustrated by an example drawn from experience, but abstracted to obtain its essential features. The situation considered is one where a line is being kept open for social purposes at the direction of Government. If it is proposed that the line be used for a commercial traffic, the question arises: should incremental costs be calculated relative to the present situation (i.e. the new traffic would be considered additional to the existing traffic) or to a hypothetical no-use situation (i.e. all costs associated with keeping the line open would be charged to the new traffic)? The former would appear to conform more to the logic of the incremental approach. However, the latter would appear to be more appropriate if a purely commercial view is adopted, since the "social traffic" is not commercially justified. Further, there is no guarantee that the present situation will continue over a long period - Government may alter its opinion on the desirability of keeping the line open at some time in the future. Therefore the use of the current situation as a base does not necessarily provide a correct foundation for assessing investment worth.

Special problems also arise with the choice of a discount rate. Quite apart from the normal difficulties (for either a public or private enterprise) associated with the determination of this parameter the question of whether to use a social rate or the W.A.G.R. cost of capital becomes

1. Beenhakker (1973) states the problem and proposes an approximate solution.

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important. Because of the way in which the interest charged by the Western Australian Treasury on outstanding loans is calculated (the rate is a weighted average of the rates on all outstanding loans) there is currently a large difference between the weighted average rate determining interest payable by the W.A.G.R., and Treasury's marginal loan rate. Though the latter cannot be taken as the social rate of discount the short run insensitivity of the weighted average rate to Treasury's marginal rate indicates that substantial gaps could exist from time to time.

In both of the illustrations given, the application of the analytical techniques themselves are affected by the ambiguity surrounding W.A.G.R. objectives.

Even given the resolution of some of the technical problems, however, important constraints on the use of analytical techniques remain. Appropriate decision processes may be classified as shown in fig.1.¹

Only when certainty exists regarding objectives, and the means to achieve those objectives, are analytical techniques wholly appropriate. Where uncertainty intrudes, judgment, compromise and even pure inspiration are required. Unfortunately for the analyst uncertainty is the rule rather than the exception in the real world.

A number of authors have recognised the inadequacies of current analytical methods in real world situations.² The important point emerging from recent

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1. From Thompson (1967), Chpt. 10.
 2. See, for example, Mead (1973), Thompson (1970), Bower (1970), Bolan (1967), Forester (1961), Perrod et al (1971).

literature is the essential requirement for the recognition of the political nature of the allocation process.¹

Analytical techniques, therefore, can provide most support where there is most certainty and diminishing support as uncertainty increases. For the W.A.G.R. management, specific decisions may well be strongly based on analytical approaches, but overall a significant degree of uncertainty exists with the associated emphasis on judgment (supported where possible by analytical approaches).²

AN ALTERNATIVE

Like many organisations the W.A.G.R. has been identified as one interfacing with a significant number of interest groups. Each of the interest groups perceives the role of the W.A.G.R. in a limited way, being influenced most strongly, and understandably, by the "interests" paramount to the particular group. The interest groups lie both inside and outside the W.A.G.R., with those making pricing and investment decisions lying outside the organisation. While it is true that Government is ultimately the decision maker on investment and (gazetted) rates, it is also true that the decisions on each aspect are not explicitly integrated, being separated in time (capital allocation occurs annually, changes in gazetted

1. An example of heavily accentuated analytical processes without corresponding accent on the judgmental aspects is provided in Director General of Transport (W.A.) Report DGT 131 (1975). The report is appraised in a critique, Western Australian Government Railways (1975).
2. The failure of quantitative approaches to provide complete answers to management raises important questions regarding manager/analyst interactions. For a discussion of this situation see McKenney and Keen (1974) and Pettigrew (1974).

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rates occur irregularly) and responding to the "needs" of differing interest groups (transporters with regard to capital, and users with regard to prices). Despite the regulation of both investment and pricing, the W.A.G.R. management is accountable for the performance of the W.A.G.R., the measure of performance most widely perceived by the community being the W.A.G.R. annual report embodying the profit and loss statement and the balance sheet.

The constraints on the W.A.G.R. management's decision processes are intensified by the need to satisfy, to some uncertain extent, the expectations of interest groups who, directly or indirectly, can affect the decisions made by W.A.G.R. management. The dilemma confronting W.A.G.R. management has been identified as a situation where essentially it is held responsible, in varying ways by different interest groups, for the overall performance of the W.A.G.R. when that performance is highly constrained in investment and some aspects of pricing. The extent of the dilemma can be gauged from the fact that it is not within W.A.G.R. management's authority to make decisions which would avoid projected exponentially increasing deficits, which are used, validly or not, by the community as the measure of performance of the organisation.

Conscious of the dilemma, the W.A.G.R. management has sought to identify an alternative situation in which two basic characteristics are present -

- * a measure of performance which would reflect the effects of the decisions within the W.A.G.R. management's authority, and for which they are accountable; and that
- * the measure of performance would not be influenced by regulatory decisions made outside the W.A.G.R.

The premise underlying the identification of these characteristics is that the W.A.G.R. is an organisational module, dynamic in behaviour, and nested in the larger dynamic system - the transport sector. The transport sector itself is contained within a larger system, which in turn affects the W.A.G.R. The characteristics identified for the alternative situation do not seek to deny such systemic interaction; rather they seek to explicitly recognise the interaction, to separate those aspects of the system under W.A.G.R. control from those subject to external control, and to institute measures by which the W.A.G.R. controlled aspects can be monitored and evaluated.

The alternative based on the above premise and with the required characteristics is one in which the objectives of the W.A.G.R. are identified and made known to all interacting interest groups, that an appropriate measure of performance also be identified and made known as widely, and that the measure conform to the specifications enunciated earlier. The W.A.G.R. has initiated a programme to bring about the alternative. The W.A.G.R., as a provider of transport services, aims to operate as a viable commercial organisation. In order to do so, while recognising its interactions with the rest of the transport sector, the W.A.G.R. postulates two complementary objectives -

- 1) to obtain a break even, or better, financial result on the non social services provided;
- 2) to undertake the social services required of it at minimum cost, and to obtain a subsidy equal to the loss incurred by the W.A.G.R. on the provision of these services.

Given that the subsidy criterion is met, the published set of the W.A.G.R. accounts becomes the required measure of performance.

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There are distinct advantages to the objectives and measure of performance as stated, as well as difficulties, some not minor, in attainment. There are also considerable implications for the system of which the W.A.G.R. is a module.

The advantages

The major advantage of the alternative described is that it can align the perceptions of the W.A.G.R. role, for interest groups both internal and external to the W.A.G.R. In the first instance this removes the difficulties of assessment discussed in Section 4.

Internal to the W.A.G.R. the alternative not only avoids goal displacement, but allows the introduction of systematic corporate planning (see fig.2), a process which the W.A.G.R. has been progressively introducing over the past four years. The introduction is by no means complete, but a stage has been reached where executive commitment to the process has been achieved, planning is ongoing within a corporate framework, and a corporate financial model is used to simulate the organisation's financial response to alternative organisational and interest group strategies. Furthermore, translation of the W.A.G.R. objectives into objectives (with associated performance measures) for individual management levels has paved the way for better control of resource utilisation and consequently better efficiency in utilisation.

There are implications for resource allocation from this step. The distinction between judgmental and analytical domains becomes more pronounced, allowing negotiation to proceed with clearer terms of reference. This point refers specifically to the set of investment decisions which relate to projects with different mixes of social and financial returns, and different mixes of quantifiable and unquantifiable

elements. For a socially dominated project the quantifiable financial rate of return would in general be less than the same parameter for a dominantly "commercial" undertaking. Separating the objectives is identified as being an advantage in resolving judgmental differences on the requirements of the disparate projects. It is true that the process is designed to achieve intra-agency (and, by implications, intra-modal) efficiency. However, the objectives have been framed in such a way that the options of policy makers intending to achieve inter modal efficiency have not been confined. This aspect is seen as a distinct advantage of the W.A.G.R. approach.

External to the W.A.G.R. the benefits of explicit objectives and systematic corporate planning are anticipated to be most pronounced in efforts to formulate rational transport policy and resource allocation. It is suggested that a necessary condition for the identification of rational policy and resource allocation is knowledge of the effects of changes in policy, and levels of resources, on the W.A.G.R. In effect, the dynamic characteristics of the W.A.G.R. are required; sufficiently accurate characteristics can be supplied from the results of the corporate planning process. Accordingly, the W.A.G.R. approach is seen to be not only neutral in respect to policy makers (as was established in the preceding paragraph) but to positively contribute to policy setting, by providing a necessary condition for rational policy identification and implementation. It is relevant to note the emphasis by the British Department of Trade and Industry on corporate planning within the organisations with which it defines financial objectives, investment levels, dividends (where applicable), and the uses of reserve funds.¹

1. Tucker (1974).

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A further, and most significant, advantage of the identified alternative is that it is independent of the mix of policy measures existent, or introduced in future. Whatever is identified as the appropriate mix of investment, pricing, subsidy, regulatory and other policy measures for the operation of W.A.G.R. can be accommodated in the alternative being developed. Whether regulation be heavy, as suggested by Roberts (1973) in advocating that transport should be viewed as one element in the distribution process, the overall cost of which should be the objective function to be minimised, or whether the W.A.G.R. should be viewed as a social service entity, as recommended for New Zealand Railways in the New Zealand Transport Policy Study,¹ or whether user choice should dominate in Western Australia, as advocated by the Director General of Transport for Western Australia (1975), any set of policy measures can be accommodated within the alternative. The reason for this flexibility is the separation of the effects of decisions made inside and outside W.A.G.R., coupled with identification and accountability of the decision makers.

An advantage which is not so obvious, but which is still significant, is the simplicity of the statement of objectives. This statement is such that interest groups can readily become familiar with the objectives, and the translation of the objectives into strategic and tactical planning not hampered by the simplicity. The advantages of simply stated objectives are evidenced by the success of Bell Telephone's "Our business is service to our customers" and others.²

1. Wilbur Smith and Associates (1973).

2. Drucker (1974).

The difficulties

It cannot be denied that there are impediments to changing from the current W.A.G.R. situation to the alternative one. The W.A.G.R. strategy has been, and is, to address and remove the impediments internal to the organisation before attempting to achieve full acceptance of interest groups external to the W.A.G.R.

Some of the difficulties are readily identified. One example is the acceptability as a measure of performance of a profit and loss statement based on current accounting practices, specifically where depreciation charges are based on purchase price and not current value. Another impediment is the difficulty of unambiguously separating and reporting on, the provision of social and non-social services. Both of these questions are currently being addressed by the W.A.G.R. and progress to date indicates that there are grounds for believing that sufficient resolution is possible for the alternative situation proposed by W.A.G.R. to be viable.

A difficulty perhaps not so readily apparent is that of re-orienting an organisation of close to ten thousand people. The task is magnified by the need to undertake the process while the organisation continues to provide, without interruption or lessening, its current and projected service requirements.

The W.A.G.R. has adopted a strategy which makes use of the highly pyramidal and strongly established functional structure - a "top down" approach is being used. The W.A.G.R. recognises that the response time of the organisation to such an innovation is long, much longer, for instance, than in an organisation whose members are in tens rather than thousands.

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However, the W.A.G.R. also recognises that the very numbers which are constraining the time of implementation are also responsible for generating large benefits even from partial innovation. Within W.A.G.R. the stage has been reached where the benefits of partial innovation are generating positive feed back and consequently an acceleration of the re-orienting process.

CONCLUSION

The effect of investment and pricing decisions not being integrated, and made outside the W.A.G.R., is that the decision making processes within the W.A.G.R. are heavily constrained. Accountability of the W.A.G.R. management whose performance is widely judged by the profit and loss statement, has led to role ambiguity, goal displacement and an environment which encourages low staff morale and consequent diminution of individual productivity.

An alternative to this situation has been identified. The alternative is proposed as being one which aligns decision making authority and accountability in a way perceptible to the interest groups affecting and affected by the W.A.G.R. The options of policy makers have been preserved in the alternative, and a necessary condition for intra- and inter-modal efficiency included.

Partial implementation of the alternative, internal to the W.A.G.R., indicates that there are grounds for cautious optimism that full implementation will produce the benefits attributed to the alternative.

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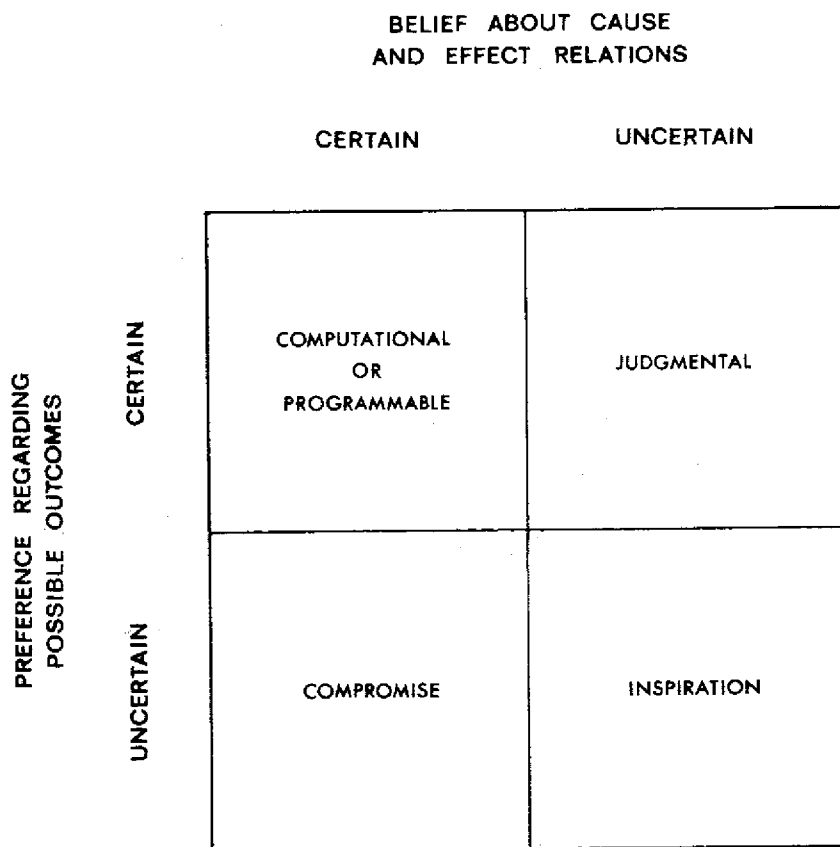
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FIGURE 1
APPROPRIATE DECISION PROCESSES

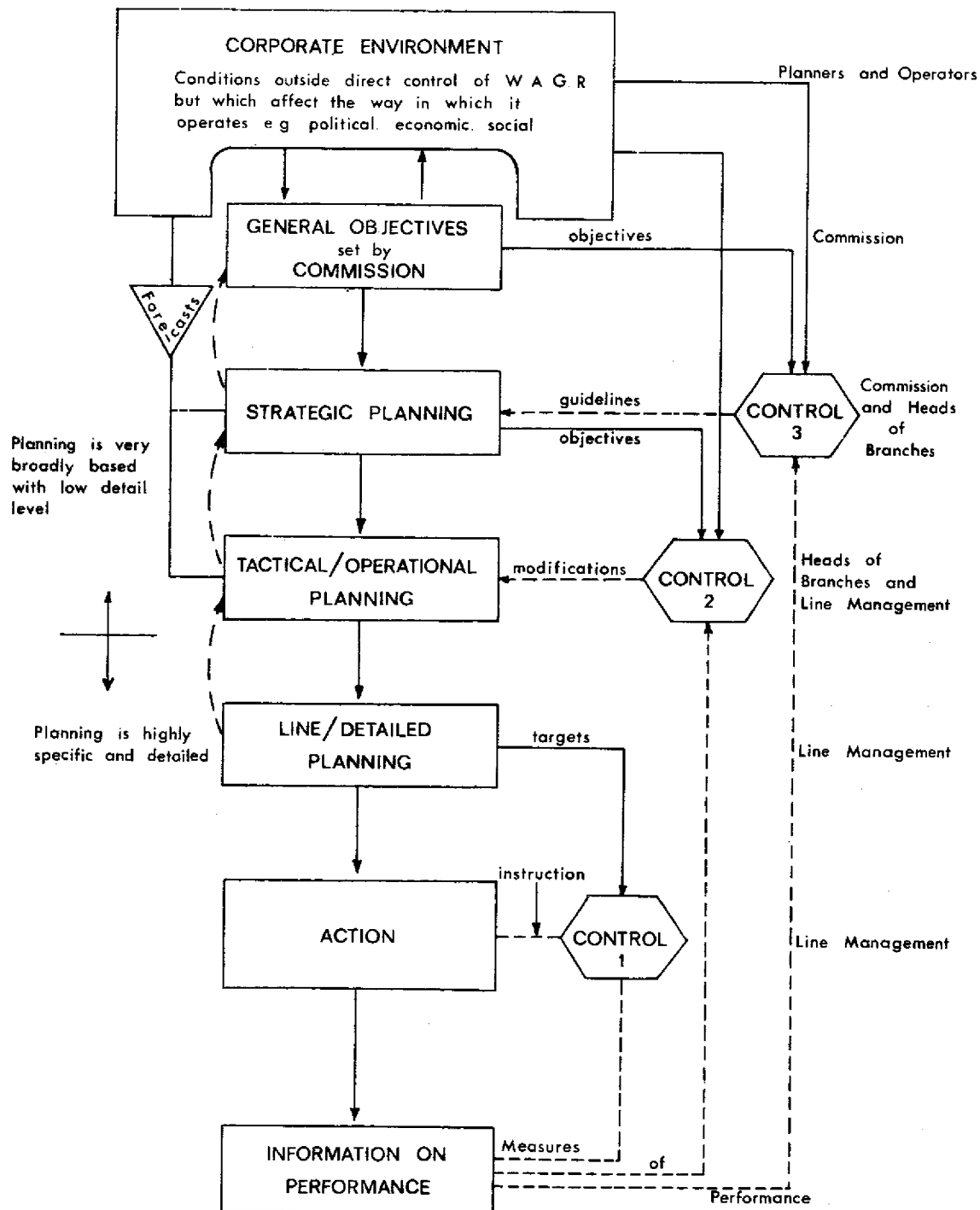


FIGURE 2
CORPORATE PLANNING & OPERATIONS
THE INTERACTION