

ORGANIZATIONS OF THE FUTURE : A
STRATEGIC ORGANIZATION PERSPECTIVE

BY

Pradip N. Khandwalla

W P No. 635

October 1986

WP635
■■■■■■■■■■
WP
1986/635

The main objective of the working paper series of the IIMA is to help faculty members to test out their research findings at the pre-publication stage

INDIAN INSTITUTE OF MANAGEMENT
AHMEDABAD-380015
INDIA

RECEIVED
EXCHANGE
NO.
OF SEANAIJA LIBRARY
M. A. G. N. S. D.

ORGANIZATIONS OF THE FUTURE : A STRATEGIC ORGANIZATION PERSPECTIVE

Introduction

There is no known universally best organization design for all organizations; nor do I suspect one will emerge even by the year 2100. There are just too many differences among organizations and their operating conditions for one design to satisfy all contextual, operating, and performance requirements. Let me, therefore, confine myself to speculating on what could be a useful design for one particularly important type of organization for developing societies, the one I like to call the strategic organization.¹

The strategic organization is one that has or takes direct and major responsibility for the growth and development of the sector it is operating in. Thus, the strategic organization is a missionary organization, and its mission is a broader developmental one that transcends its own development. Various examples of strategic organizations come to mind. Institutions set up to develop technology, new management and administrative practices, new industries, backward areas, better agricultural or industrial practices, better health and sanitation practices, and so forth, are strategic organizations. Organizations producing the means of further production are strategic organizations. Strategic organizations are important in a long term sense. They are a nation's strategic instruments for long term social growth and

ORGANISATIONS OF THE FUTURE : A STRATEGIC
ORGANIZATION PERSPECTIVE*

Pradip N. Khandwala
Larsen and Toubro Professor of Organizational Behaviour
Indian Institute of Management, Ahmedabad

Abstract

In the light of research on organizational design, the paper outlines an effective design for the strategic organizations of developing societies. Strategic organizations are defined as those organizations with the mission of further growth and development of the sectors they are serving. The data on 31 leading Indian central public sector enterprises indicate that the postulated effective organizational design for Third World strategic organizations is feasible. The data on 5 strategic Indian organizations indicates that rapid, sometimes spectacular improvement in productivity and other indicators of performance accompany management changes towards the design postulated to be effective for strategic organizations.

* Paper for the National Conference on Productivity through People in the Age of Changing Technology, New Delhi, 29th October to 31st October 1986, organised by the National Productivity Council.

development. There is no implication, however, that non-strategic organizations are unimportant. The army is obviously of very great importance, and so is the tax department, despite not being strategic, developmental organizations. Nor should it be construed that only governmental organizations are strategic organizations, although many specially set up, development-oriented governmental organizations are, of course, strategic. There can be non-governmental strategic organizations, too. The private sector corporations operating in the so-called core sector, especially the ones engaged in notable R and D activities can be regarded as strategic organizations. So are cooperative institutions like IFFCO and NDDG, and non-profit organizations like the IIMs, the IITs, various industry research institutions like ATIRA, etc. Also it is entirely possible that even when an organization is not set up to play a developmental role, it can choose to play one, just as it is possible that one set up to play a developmental role fails to play one.

My thesis is that if we are interested in speedily developing our economy and our society, we ought to improve rapidly the management of our strategic organizations. There are several good reasons why the effective management of strategic organizations is a matter of concern. First of all, strategic organizations in developing societies are, by and large owned, or controlled, or heavily financed

by government. This is because developmental missions often require commitment of large resources to uncertain return, long gestation, risky activities or projects which would not be undertaken unless backed by government resources. Dependency on the government usually translates into pressure to adopt government bureaucratic practices. But as fairly extensive research has shown, these bureaucratic practices frequently lead organizations to malfunction, manifesting as poor morale, a lot of politics, intrigues, conflicts, lack of coordination, operating rigidity, poor servicing of customers, lack of innovation, poor performance, etc.² On the other hand, strategic organizations must be innovative and enterprising because of their having to pioneer relatively unfamiliar activities. But this greatly increases the scope for making mistakes. Thus, strategic organizations often experience a bind. If they get bureaucratic under pressure from government audit, etc., they cannot show the initiative, risk taking, and creativity needed to achieve their developmental missions. If they pursue their developmental missions vigorously, not only must they frequently bend rules and regulations, their initial failures due to unfamiliarity can attract adverse comment and increase bureaucratic pressures. The management of the strategic organization must reconcile two contradictory pressures: for bureaucratic standardisation and entrepreneurial results orientation. This is a difficult task, and hence the strategic organization is particularly prone to malfunctioning.

A second good reason for focussing attention on strategic organizations is that better management of strategic organizations is a doable task, even in societies with scarce managerial talents. Strategic organizations generally form a rather small minority of a society's organizations. Concentrating efforts on improving the management of these organizations should provide disproportionately good results, in terms of innovations and ideas that transform the sectors in which they operate. The Pusa Agriculture Research Institute and ATIRA are good examples. Since strategic organizations tend to be highly visible, good practices in these organizations may also get rapidly diffused to other organizations in the sectors served by strategic organizations through the demonstration effect. The MBA course pioneered in the IIMs in the sixties has now been adopted in fifty or sixty Indian universities.

In the rest of the paper I have tried to build up a model of effective organizational design for third world, especially Indian strategic organizations. This design is not all that futuristic. It is based on research on currently effective strategic organizations and on research on strategic organizations that rapidly improved their productivity. I feel optimistic that if the principles and mechanisms of this research-based organization design are widely applied in our strategic organizations, it will serve them-and the society they operate in - well in the future.

Models of Effective Organizational Design

To appreciate the design of strategic organizations, it is useful to review briefly the major models of effective organizational design that have emerged in this century. These models help us to identify the significant elements of the design of strategic organizations. Many of these models have, of course, come from the West, where conditions are different. But we share with them political democracy and a mixed economy, so that the models that have emerged from Western research are not wholly irrelevant.

At the beginning of this century Max Weber proposed his famous bureaucratic organizational model.³ The idea was that a formal, specialization-based, hierarchical organization, possibly with a charismatic head, would nicely complement the Protestant Ethic and would serve firms as well as government departments of a capitalist society well. Weber, however, did not spell out the functions of the management of his bureaucratic form. This task was performed by Henri Fayol, a French executive, who indicated goal setting and planning, control, coordination, organizing, and leadership to be the major functions of management.⁴ Writers in the thirties, notably Mayo, Roethlisberger, Mary Parker Follett, and others, identified human relations in the organization as a most important aspect of organizational design.⁵ This school popularised participative management, employee oriented supervision, and cohesive groups as useful tools of effective management. Rensis Likert refined these ideas into his participative-group style of management, and contrasted it with the authoritarian style of management.⁶

Following Abraham Maslow's identification of the need for self-actualisation,⁷ Douglass Mc Gregor developed his famous Theory X versus Theory Y styles of management.⁸ Theory X is an authoritarian and manipulative mode of management and Theory Y is a democratic, participative, human growth oriented style of management. In England, Tom Burns and G.M. Stalker outlined two contrasting styles of management.⁹ One was labelled "mechanistic", and resembles a bureaucratic as well as a feudal mode of management; the other, "organic", is more informal, results-oriented, non-hierarchical and expertise oriented. It emphasises extensive vertical as well as lateral communications and teamwork. Unlike earlier writers, Burns and Stalker took care to specify the conditions under which each mode is appropriate: mechanistic in stable environmental conditions, and organic in unstable conditions. Steiner, Ansoff, and others popularised the management techniques oriented professional mode of management.¹⁰

There has also been strong interest in dynamic, vigorous, entrepreneurial modes of management. Henry Mintzberg described the entrepreneurial mode of strategy formulation in the early seventies; I described the risk taking mode of management a little later; Miles and Snow described the prospector strategy of trying to be the first in a new field; Peters and Waterman identified a highly dynamic, innovations oriented, flexible mode of management they claimed has been practiced by the best-run American corporations.¹¹ Also, some writers have

extolled the paternalistic but strong work and cooperation ethic oriented "Japanese" style of management and its capacity to create strong employee bonds with the organisation.¹²

In India, Maheshwari studied entrepreneurial management.¹³

I identified a mode of Indian management I called the PI mode, P standing for pioneering and I standing for innovative, which contrasts with a conservative traditional mode of management.¹⁴

There has been some interesting work on organizational structure: the notion that the organization's business strategy and its structure should be aligned,¹⁵ as well as the notion that the elements of the structure of the organization should be mutually compatible, and also aligned with the external and other contingencies faced by the organization.¹⁶

Finally, there has been some useful work on supervisory leadership. Scholars have distinguished between authoritarian and participatory leadership, task oriented and employee oriented leadership, sentimental and detached leadership, etc.¹⁷ Indian work on the subject suggests that a nurturant but task achievement emphasising leadership is effective with immature subordinates, and a participative leadership is effective with mature subordinates, while the authoritarian leadership style is generally ineffective.¹⁸

Major Choices in Organizational Design

These organizational models suggest certain important choices in organizational design:

1. Choices in structure : How bureaucratic (in Weber's sense) should the structure be; what sort of departmentalisation—functional or divisional—should the organization have; what should be the boundary spanning, uncertainty reduction, differentiation, and integrative mechanisms of the organization?
2. Choices in supervisory style, whether it should be participative, authoritarian, task oriented, or employee oriented.
3. Choices in management style, whether it should be professional or intuitive, entrepreneurial or conservative, participative or authoritarian, organic or mechanistic, paternalistic or contractual, ethical or pragmatic, etc.

Let me try and summarise the current thinking about effective organizational design. ¹⁹

1. All organizations need to have bureaucratic structures to take care of routine activities. The bigger the organization, or the more complex or restrictive its operating environment, the more bureaucratic the structure needs to be. In other words, the extent of formalization, standardization, and routinization of practices, hierarchy, specialization etc., will be more in large organizations, in organizations, using complex technologies, or in organizations with control environments (such as government-owned or financed organizations, subsidiaries of MNCs, etc.), than in smaller organizations, organizations using relatively simple technologies, or in autonomous organizations. Also, the more differentiated the structure (because of extensive functional or role specialization, division of labour, etc.), the more powerful and sophisticated will have to be mechanisms of coordination, control, and cohesion. Whenever the organization is operating in an uncertain environment, a number of uncertainty coping and boundary spanning mechanisms will have to be deployed. If the organization is diversified, especially if the diversification is of the conglomerate kind, the organization will need to be divisionalised; and if the organization's outputs are one-of-a-kind products, a project form of organization in which different cross-functional teams handle each product, contract, or project, will need to be used.

2. Even where the structure is bureaucratic, the management need not be. Structure is designed to take care of routine activities to enable managers to concentrate on important strategic and other decisions. The job of the management is to fix objectives and

targets, set up or modify the organization, control and coordinate operations, provide leadership, instill values, deal with the external environment, define the public responsibility of the organization, manage its growth, revitalize it from time to time, etc.

3. In turbulent operating environments, with unexpected changes taking place fairly frequently, the entrepreneurial and organic modes of management tend to give best results.

4. In complex operating environments, with much technological or legal or operating variety and complexity, the professional mode of management gives best results.

5. If the management chooses the entrepreneurial mode, characterised by the desire to grow rapidly, be a pioneer or innovator, take bold, risky decisions, etc., the adoption of the team work and communications oriented organic mode makes good sense.

6. If the management chooses a professional mode, with heavy emphasis on the tools and techniques of modern management, emphasis on qualifications and on training etc., then a participative decision making mode gives excellent results.

7. When employees are inexperienced or dependency prone, a nurturant-task or a benevolent but results oriented style of leadership makes good sense. As the employees mature and pick up skills and confidence, participatory leadership gives good results. The leadership style to avoid is the authoritarian style.

Appropriate Design of Strategic Organizations

Let me draw some implications for strategic organizations. Most strategic organizations are sizeable, even large, and more often than not they are owned, controlled, or funded by the government.

Therefore, they must have quite bureaucratic structures, with a reasonably clear hierarchy of authority, various functionally specialized departments, standardisation of repetitive, routine practices and procedures, etc. Strategic organizations need, however, to avoid the dysfunctional consequences of having bureaucratic structures. Humane, employee-oriented supervision, and the installation of a human resource development system,²⁰ plus indoctrination of the rank-and-file into the developmental missions of the organization should keep morale and cooperation high at operating levels. Supervisors need to be trained to practice a nurturant-task leadership style vis-a-vis new recruits, and a participative leadership style vis-a-vis old timers. Commando leadership practiced by army commanders in war time should also be helpful.

Those strategic organizations that are diversified ought to be divisionalised and decentralized, with considerable operating autonomy for division and department heads. To enable the top management to practice management by exception, a fairly sophisticated performance reporting systems needs to be installed. Those strategic organizations whose outputs are non-standardised, need to adopt a project form of organization, in which inter-functional teams are created to see each project through.

Given the developmental thrust of strategic organizations, and therefore the necessity of pioneering, innovating, responding to unique local situations, and so on, strategic organizations need to practice an entrepreneurial and organic style of management, with premium on bold moves, calculated risk taking, emphasis on innovations, search for pioneering opportunities, dynamism, administrative flexibility, lateral communications, networking, and so forth. This emphasis would have to be greater if the strategic organization also operates in a turbulent environment rife with unexpected changes.

Strategic organizations also tend to be relatively "high tech" organizations, at least within their respective domains. Being commonly subject to a control environment, they also operate in legally and politically complex environments. This implies a fairly high order of professional and participative management, that is, fairly extensive use of management tools like budgets, formal planning, market research, computerisation and formal information system, formal training for workers and Managers, human resource development system, MBO, etc., and the use of management committees for consensus-based participative decision making. The more complex the environment or technologies or tasks of the strategic organization, the greater will be the necessity of a professional and participative mode of management.

An important element of design for strategic organizations is how to institutionalise into the strategic organization the design outlined above. Obviously, if a design is imposed from outside, it will not get institutionalised. It has to evolve in an organization. Some initial choices are vital : of the chief executive and other members of the top management, the extent of their autonomy from the control environment, the choice of the form of the organization (an autonomous society or a semi-autonomous corporation or a government departmental undertaking, etc.), and the choice of the functioning model (democratic or faculty or hierarchical management type, etc.).²¹ These early choices significantly determine how the organization will "set". All is not lost, however, if the initial choices are wrong. Periodic diagnostic exercises are a powerful self-correcting mechanism which often result in a fresh course being set.²² It is vitally important for strategic organizations. Selectively, the tools of action research and organization development can be employed for help in persistent problem areas.²³

Table 1 summarises the appropriate design of strategic organizations in Third World countries.

(Table 1 about here)

Feasibility of Futurist Design for Indian Strategic Organizations

How achievable is the organizational design indicated in Table 1? Would it give results in terms of high productivity, etc.? Let me respond to both questions with research evidence on Indian strategic organizations.

The general stereotype of Indian strategic organizations, particularly in the public sector, is that they are bureaucratic, conservative, not professionally managed, etc. Table 2 shows the management style scores of about thirty Indian central government public enterprises. These include such strategic organizations as BHEL, SAIL, ONGC, IPCL, MECON, ITI, HPCL, CMC, BEML, BHPV, and several others.

(Table 2 about here)

Table 2 indicates that for these "cream of the crop" Indian public enterprises, the average scores do tend to be on the desirable side, so that the desired style of management for strategic organizations certainly seems feasible in India. The ranges are generally quite large, however. This suggests that while some have "arrived", several of even these elite public enterprises still have a long way to go. Undoubtedly, the run-of-the-mill public enterprises, especially those attached to state governments, may have even further to go before they have the right sort of management; but the fact that even a few strategic public enterprises have, management-wise, achieved the status of "organization of the future" is a highly promising development for Indian strategic organizations.

Now, the second question: does it pay the strategic organization to practice the management style indicated in Table 1? In my work on effective turnaround management, both in the public and the private sector, I found that when a sick organization got a more

dynamic, professional, participative, organic, results oriented, etc., sort of management, the performance sharply improved.²⁴

This change in management towards the style delineated in Table 1 leading to dramatic improvement in performance, including productivity, constitutes a fairly powerful support for the desirability of the Table 1 style of management. Table 3 lists several strategic public enterprises that were sick, whose top managements were changed, and whose new top managements practiced a more dynamic, professional, organic, participative, etc., management. Table 3 also shows the extent of improvement in performance.

Concluding Comments

The performance of strategic organizations, including their productivity, depends upon a host of factors, including how supportive the control environment is, how buoyant the operating environment is, the general work ethic, etc. But an extremely important determinant is the design of the strategic organization, particularly the style of management. The organizational design outlined in Table 1 for Indian strategic organizations is feasible, because it is currently in use in a number of Indian strategic organizations (see Table 2), and has yielded excellent results in a number of cases (see Table 3). The design outlined in Table 1 may well be the achievable futurist design for most of our strategic organizations. It is a design that can take care of most of the contingencies and characteristics of strategic organizations: their accountability to their control environments; their size; their developmental mission; their proneness to becoming sick; their use of increasingly sophisticated technologies; their growth and diversification.

Notes and References

1. For the concept of the strategic organization, see Pradip N. Khandwalla (1984) "Preface", special issue of International Studies of Management and Organization, Vol.14, PP.5-41.
2. For a discussion of the dysfunctions of bureaucracy, see Michel Crozier (1964), The bureaucratic phenomenon, Chicago, U. of Chicago Press.
3. See Max Weber (1947), The theory of social and economic organization (edited by Talcott Parsons and translated by T. Parsons and A.M. Henderson), New York, Oxford University Press.
4. See Henri Fayol (1949), General and industrial management (translation by Constance Storrs), London, Pitman.
5. See D.S. Pugh, D.J. Hickson, and C.R. Hinings, Writers on organizations 2nd edition, Harmondsworth, Middlesex, Penguin; also see William Foote Whyte (1969), Organisational behaviour: theory and application, Homewood, Ill., Irwin-Dorsey.
6. See Rensis Likert (1961), New patterns of management, New York, McGraw-Hill.
7. See Abraham Maslow (1954), Motivation and personality, New York, Harper and Row.
8. See Douglas McGregor (1960), The human side of enterprise, New York, McGraw-Hill.

9. See Tom Burns and G.M. Stalker (1961), The management of innovation, London, Tavistock.
10. For models of professional management, see Henry Mintzberg (1973), "Strategy making in three modes", California Management Review, vol. 16, pp.44-53, and Pradip N. Khandwalla (1977), The design of organizations, ch.11, New York, Harcourt Brace Jovanovich.
11. For models of entrepreneurial management, see Henry Mintzberg (1973), op.cit; Pradip N. Khandwalla (1977) op.cit.; R.E.Miles and C.C. Snow (1978), Organizational strategy structure, and process, New York, McGraw-Hill; Tom Peters and Robert H. Waterman (1982), In search of excellence: Lessons from America's best run companies, New York, Harper and Row; Pradip N.Khandwalla, (1983), "PI management", Vikalpa, Vol.8, pp.220-238; and Peter F. Drucker (1985), Innovation and entrepreneurship, London, Heinemann.
12. For "Japanese style" management, see William G.Ouchi (1981), Theory Z: How American business can meet the Japanese challenge, New York, Avon, and Subhash Durlabhji (1985), "What can we expect from the Japanese", Vikalpa, Vol.10,3 ,pp.255-270.
13. B.L. Maheshwari (1978), Decisional styles and organizational effectiveness, Hyderabad, Administrative Staff College of India.
14. Pradip N.Khandwalla (1983), op. cit.

15. See Alfred Chandler (1962), Strategy and structure: Chapters in the history of industrial enterprise, Cambridge, Mass., The M.I.T. Press; R.P. Rumelt (1974), Strategy, structure, and economic performance, Boston, Harvard U. Press; George Paul (1985), "Financial performance of diversified companies in India: A comparative study of diversified and non-diversified companies", *Vikalpa*, Vol.10,2, pp.179-189.
16. See Paul R. Lawrence and Jay W. Lorsch (1967), Organization and environment : Managing differentiation and integration, Boston, Harvard U. Press; Pradip N. Khandwalla (1982a), "Organizational design for change", in S. Chattopadhyay and Uday Pareek (eds.) (1982), Managing organizational change, New Delhi, Oxford & IBi.
17. See W.F. Whyte (1969) op. cit.; Likert (1961) op. cit.
18. See Jai B.P. Sinha (1984) "A model of effective leadership styles in India", *International Studies of Management and Organization*, Vol. 14, 2-3, pp.86-98.
19. See Pradip N. Khandwalla (1977), op.cit. and Pradip N. Khandwalla (1982a) op. cit.
20. For a good description of human resource development systems, see Uday Pareek and T.V. Rao (1981), Designing and managing human resource systems, New Delhi, Oxford and IBi.

21. For a useful Indian study of institution building, see S.R. Ganesh (1979), "From thin air to firm ground : Empirical guidelines for a general processual model of institution building", Human Relations, Vol.32, pp.751-779; and for a study of an outstanding Indian institution builder, see S.R. Ganesh and Padmanabh Joshi (1985), "Institution building : Lessons from Vikram Sarabhai's leadership", Vikalpa, Vol.10, 4 pp.399-413.
22. For diagnostic exercises, see HRD Unit, Department of Personnel and Administrative Reforms (1980), "Toward organization development in government : An empirical study", Management in Government, Vol. 12, pp.257-279.
23. For action research, see Nitish De (1984), Alternative designs of human organizations, New Delhi, Sage; J.P. Singh (1983) "QWL experiments in India : Trials and triumphs", Abhigyan, Autumn issue, pp.23-37.

For organization development, see A. Ahmad, N.R.De, B.M. Kapur, and M.D.G. Koreth (eds.) (1980), Developing effective organizations: Some Indian experiences, New Delhi, Sri Ram Center.
24. See Pradip N.Khandwalla (1980), "Management in our backyard", Vikalpa, Vol.5, pp.173-184; (1982b) "Some lessons for the management of public enterprises", Vikalpa, Vol.7, pp.311-326; (1981) , "Strategy for turning around complex sick organizations", Vikalpa, Vol.6, pp.143-166.

TABLE - 1THE EFFECTIVE DESIGN OF THE STRATEGIC ORGANIZATIONA. Structure and Systems

- * A fairly clear hierarchy of authority and clear reporting relationships
- * Functional specialization and departmentalization
- * Standardization of repetitive manufacturing, marketing, purchase, finance, personnel etc., activities
- * Fairly clear specification of duties, powers, and responsibilities, especially at the operating levels
- * Considerable delegation of authority to lower levels
- * Formation of autonomous divisions whenever the strategic organization is diversified
- * Formation of management coordination and decision making committees
- * A reasonably sophisticated performance reporting system to enable top management to practice management by exception
- * Installation of various tools and techniques of professional management such as budgetary control, formal planning, formal training, operations research, MBO, HRDS, etc.

B. Supervisory Leadership at Operating Levels

- * Nurturant-task (benevolent but results oriented) style of leadership for fresh recruits, and participative style vis-a-vis oldtimers, professionals, and competent staff members.

Indoctrination of supervisors into the missions of the strategic organization and their training in human relations and human resource development systems

Style of Management

Strong entrepreneurial management - dynamism, resourcefulness, calculated risk taking, boldness, emphasis on pioneering, innovation, quality products or services, sophisticated technologies, etc. Higher for strategic organizations operating in turbulent environments.

Strong organic orientation - emphasis on free lateral and vertical communications, situational expertise, results orientation, administrative flexibility, informality, teamwork, etc. Higher for strategic organizations operating in turbulent environments.

Reasonably strong professional management orientation - emphasis on qualified professionals or technocrats in decision making positions, on formal training, reliance on various decisional aids, careful prior research before taking strategic decisions, etc. Higher for strategic organizations having complex missions or technologies or operating environments.

Emphasis on participative decision making at the managerial levels, both of the informal, consultative kind, and the formal committee consensus kind.

D. Institution building

Initial choice of the right top management, the right organizational form, management model, etc. Considerable autonomy for the management

Periodic - every 5 years or so - extensive, participatory organizational diagnostic exercise to identify strengths, weaknesses, opportunities, threats, and fresh missions.

Junking of infructuous activities or activities in which missions have been achieved and other organizations are available to take them on. Junking of obsolete structures, practices, and systems, and their replacement by those more suitable for new missions

Periodic - say every 2 years or so - stakeholder satisfaction surveys to find out how satisfied clients, controllers, suppliers, workers, and managers are with the strategic organization. Wide dissemination of the data within the organization for discussion and brainstorming on how to increase stakeholder satisfaction.

Action research and OD in problem areas of the organization, as and when needed.

TABLE - 2MANAGEMENT STYLES OF INDIAN PUBLIC ENTERPRISES*

Sample : 31 Central Government Public Enterprises

	<u>Average Score</u>	<u>Range</u>
1. Entrepreneurial management (as opposed to conservative management)	63%	40%-92%
2. Professional management (as opposed to intuitive, traditional management)	64%	40%-88%
3. Organic, informal management (as opposed to tight, mechanistic management)	53%	25%-85%
4. Results oriented management (as opposed to procedural, seniority-based, hierarchical, uniformity-oriented management)	67%	24%-88%
5. Adaptation oriented, flexibility oriented management (as opposed to short term oriented, rigid management)	70%	27%-93%
6. Progressive, participative management (as opposed to carrot-and-stick, authoritarian, control oriented management)	65%	42%-80%
7. Idealistic, missionary management (as opposed to mercenary, commercial management)	53%	24%-84%
8. Improvements oriented management (as opposed to a complacent status quo oriented management)	81%	% 54%-97%
9. External, customer, community, and market oriented management (as opposed to purely internal operations oriented management)	66%	40%-96%

Based on ratings obtained from top executives during an organizational diagnostic exercise. Multiple responses from the organization have been averaged.

TABLE - 3

STRATEGIC ORGANIZATIONS CHANGING TOWARDS TABLE 1 DESIGN AND
IMPROVEMENT IN THEIR PERFORMANCE

<u>Organization</u>	<u>Nature of Design Change</u>	<u>Change in Performance</u>
1. Bharat Pumps and Compressors, a public sector unit manufacturing industrial pumps, compressors, and gas cylinders	Change in top management in November 1977. More professional, participative, idealistic, organic, and results oriented management. Greater divisionalization; more emphasis on long range planning; greater sophistication in planning and financial control; more aggressive marketing and market research; greater emphasis on managerial training, motivating through challenging tasks, direct face-to-face resolution of conflicts.	Increase in net operating profit to sales ratio from an average of 3% during 1976-77 and 1977-78 to 13% during 1978-79 and 1979-80. Increase in per person productivity (deflated value added per employee) of 58% between 1977-78 and 1979-80.
2. Bharat Heavy Plate and Vessels, a public sector unit producing pressure vessels, heat exchangers, cryogenic equipment etc.	Change in top management in August 1978. More entrepreneurial, professional, results oriented and participative, but less organic, management. Greater decentralization and divisionalization, computerisation, formal planning and control systems. Greater use of work incentives, merit based promotions for managers, direct, face-to-face resolution of conflicts. Less emphasis on training.	A unit making losses since its inception in the late sixties, broke even in 1979-80, with sales rising 70% over 1978-79, and productivity (deflated value added per employee) rising by 25%.

3. Richardson and Cruddas, a public sector unit producing structurals and assorted machineries

Change in top management in August 1978. More entrepreneurial, professional, participative, organic, and pragmatic management. Greater modernization, product mix realignment, decentralization and divisionalization. Greater emphasis on formal planning and control, aggressive marketing. Greater emphasis on motivating through challenging jobs and on direct face-to-face resolution of conflicts.

Net operating profit to sales ratio rose from -4% in 1978-79 to +8% in 1979-80, sales rose 27%, and productivity (deflated value added per employer) rose by 13%.

4. Burn and Standard, a public sector unit producing railway wagons, points and crossings, structurals, miscellaneous equipments, oil rigs, etc.

Change in top management in August 1978. More professional, participative, entrepreneurial management. More emphasis on modernization, diversification, divisionalization, planning and control, human resources development and training, work incentives, production innovations, computerisation.

Sales rose by an average of 29% per year from 1978-79 to 1984-85. Heavy losses incurring company turned profitable by 1982-83. Productivity (deflated value added per employee) increased annually by 22% between 1978-79 and 1983-84.

5. Travancore Cochin Chemicals, a Government of Kerala enterprise producing caustic soda, chlorine, sulphuric dioxide etc.

Change in top management in August 1978. More participative, professional, organic, and results oriented management. Greater emphasis on modernization and better maintenance, better product mix, process innovations, training, greater communications, better budgetary and cost control, work incentives, more customer-oriented and aggressive marketing, etc.

Net operating profit to sales ratio averaged -18% in 1976-77 and 1977-78; it rose to an average of +20% between 1979-80 and 1982-83.