THE LONG SEARCH:
A PURSUIT OF ORGANISATIONAL UNDERSTANDING
FROM THE PERSPECTIVE OF 'SYSTEMS' THINKERS

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INTRODUCTION

The continuing thrust of organisational research is grounded in an evolutionary field of many perspectives. This paper constitutes the selection of a path through the early conceptualisations of organisations as 'Systems' and the emergent derivatives known as 'Contingency Theories'.

The theme of 'organisational effectiveness' constitutes the goal of the search. The conceptualisation of organisations as systems provides the search territory. The various components of the system represent the paths which research and theory has followed.

Issues raised include:

What is organisational effectiveness?
How may an organisation be described as a system?
How are organisational components, such as structure, people and environment seen from the systems perspective?
What would one expect from a manager who employs systems thinking?

The contributions of contingency theory are represented as the leading edge of systems thinking, together with some recognition of their problems.

To conclude that much is yet to be explored is not to deny that the tools of understanding now available to managers can be of great practical value.
Are managers to be trapped forever into looking at shadows of reality, while the 'light of understanding' is always behind them?

A review of the evolution of thinking, since the advent of the 'open systems' concept, shows that much progress has been made in understanding organisations. The major task is to communicate these insights into managerial practice. The second task is to keep refining our knowledge of Australian organisational processes through research.

Towards Organisational Effectiveness

There have been numerous approaches to the management function over the years, some short lived. Fayol's precepts of Planning, Organising, Command, Co-ordination and Controlling are as valid a management consideration now as they were in 1916. Herbert (1976:26) observed that the Manager must carefully and rationally establish specific objectives and the ways in which they will be accomplished in order that the people involved in the organisation at all levels will have clear ideas of what results are intended.

The setting of goals and objectives and the establishment of a time frame for achievement provides a basis for the establishment of standards of performance. Managers with a knowledge and understanding of systems theory will know that there are a number of ways in which the organisation can perform and that at any given point of time it may be able to perform effectively in only one or a few of these areas. Robbins (1983: 22-23) for example lists 30 such criteria.

Effectiveness, however it may be measured, represents the outcome of human endeavour. It follows then that effectiveness is subject to the force of changes in the attitudes and approaches of people to the task at hand.

The most important asset of any organisation is the collective skills and wisdom of the people who form that organisation, but the 'people' component creates great complexity in organisational effort.
Organisations Defined as Systems

Just what is the 'organisation' we are talking about? There are many definitions and descriptions.

Drif (1983:8) states 'Organisations are social entities that are goal directed, deliberately structured activity systems with an identifiable boundary.'

Kast and Rosenzweig (1979:7) identify organisations as goal oriented psychosocial and technological systems with an integration of structured activities.

Raymond G Hunt (1976:343) sees every organisation as having:

1. a function in society
2. a pattern of input
3. a pattern of output
4. a set of procedures for converting inputs to outputs (throughout)
5. a pattern according to which it is put together.

Michael Beer (1980:76) has perhaps a more contemporary view when describing organisations as: 'Dynamic entities, continually interacting with their environment, changing and adapting to provide congruence between people, process, structure and external environment.' This view reflects Beer's social systems approach that organisations are formed to achieve purposes which individuals alone cannot achieve and that individuals join organisations to achieve personal goals they cannot attain on their own or which are better met through membership in organisations.

Katz and Kahn (1966:94) perceived the organisation as having an energetic input-output system akin to the open system theory propounded by Von Bertalanffy (1952). Their approach was concerned with problems of relationships, of structure and interdependence. The system not running down because it imports energy from its environment. They identified five types of formal organisational sub-systems:
Production - task accomplishment
Maintenance - maintaining stability and predictability
Boundary - procurement and disposal (environment touching)
Adaptive - planning - R & D
Managerial - co-ordination, resolution of organisational conflict, link with environments

Environmental Impact

The environment, in an open system approach then, takes on a new significance. Warren Sennis (1969: 76-7) stated that every age develops an organisational form and lifestyle most appropriate to the genius of that age. He reflected that unease about transition occurred because organisations have been built on assumptions about man and his environment, both being considered as placid, predictable and uncomplicated. He goes on to portray the modern environment as 'busy, clogged and dense with threats; it is turbulent, uncertain and dynamic'. He noted also the change in the people who work for organisations. They are more complicated than ever before.

Hunt's (1981: 199-200) viewpoint is that in the modern turbulent environment, the organisation emphasises performance. More significantly he states that: 'not only is rapid change a marked characteristic but that market forces themselves have become 'dynamic, erupting, changing, living forces external to the organisation', and for the first time for many organisation, the major determinant of what happens in terms of structure is outside the organisational boundaries.

Dexter Dunphy (1981) warns that the turbulence of today's environment calls for built-in change and reaction so that members of the organisation are continually adapting and reacting as a matter of course. In order to achieve this state of affairs, he says, members must understand the planning, implementation and evaluation of changes that affect them. He sees the central task of modern management as the planning and implementation of organisational change.
The organisational boundary often is ambiguous and the functioning personal boundaries of individuals in the organisation can often contaminate the workings of its structure, as observed by Jones (1981:143) in 'The Organisational Universe'. Hunt (1981:198) also notes 'The New Breed', the fluent, well-clothed, well-fed generation and the effects of its arrival on organisations. He postulates important differences from other generations, notably:

- differences in what is satisfying and rewarding
- the desire to be measured and rewarded on performance
- a preference to work in teams with team goals
- a desire to participate in decision-making processes.

Jones (1981:163) also noted the increasing permeability of organisations in recent times in regard to social policies of government e.g. with regard to minority groups and consumer affairs. This permeability of the organisation by forces over which the Manager has little or no control is a direct result of turbulence in the external environment.

Systems have Multiple Paths to Objectives

The systems theory approach portrays the organisation as interacting with its environment as a whole with interdependent parts or sub systems. Managers at all levels, using a systems perspective are able to see just how their particular sub system is interacting and performing. More importantly, it allows identification of what has to be done to allow the sub system to contribute to the fullest degree by analysing the range of options open. In this respect, the concept of 'equifinality' highlights that there is no 'one best way' and that the same end result can be achieved from different starting points and different processes. The emphasis being on consideration of a multi-solution strategy for goal achievement. As Huse and Bowditch (1977:29) put it 'The emphasis now on organisational problem solving should not be on the prescription but on the diagnosis'.
Environments Need to be Managed

In understanding the nature of the environment and its interaction with the organisation, the Manager is able to establish a 'domain' for the organisational purpose and boundaries to provide a measure of control and autonomy, a buffer, so to speak against the environmental influences. e.g. The market segment will be specified, and the question of 'What business are we in?' will be resolved.

The Shifting Organisation

An insight which takes account of human irrationality comes from Mintzberg (1979:292) who argues that 'Fashion favours the structure of the day . . . sometimes even when inappropriate.'

Kelly (1980:478-9) remarks that 'no firm in these complex times is an island.' He suggests that externally induced changes are going to be more significant than internally induced changes for virtually every organisation.

It is at this point that we are faced with a central management problem - how to deal with such change. Kelly (1980) proposes that the past is of little use in predicting the future, and long-term projections extrapolated from past performance are likely to be inappropriate. The answer, he suggests, is 'a pragmatic flexibility, where the emphasis is on a short-term adaptive reaction. Organisational survival, and growth he suggests, is a function of the ability of the system to adapt to changes in the environment.

A key function of a Manager then, in order to provide an informed basis for decision making, is to reduce uncertainty. In order to do this he has a need for information that is timely and relevant. This provision of information is a cornerstone of systems theory. It is no mere coincidence that Systems Theory and the era of computerisation and information technology made their inroads into organisational thinking around the same time. Management will be inclined toward 'satisficing' rather than optimising and to adopt a mix of acceptable options in regard to goal achievement. Continual review and reassessment will be needed.
The Systems Perspective brings Benefits to Managers

Thinking about an industrial organisation as an open, organic, non-technical system has several advantages: according to Douglas McGregor: (1967:40-1)

- It represents reality more fully and more adequately.
- It provides a better base for understanding what does go on rather than what ought to.

It enlarges and enriches the possibility of understanding the many complex cause-effect relationships constituting an organisation - this allows for better production and control.

Too much complexity, however, is not helpful for the practising manager. The research oriented contingency theorists emerged to meet this need for specific guidance.

Developments in Contingency Theory

The Burns and Stalker (1961: 120-22) studies related organisational structure and management to certain extrinsic factors, and distinguished between two different systems of management practice in dealing with these factors: organic and mechanistic. They suggested that the mechanistic system approach goes hand in hand with highly specialised jobs, centralisation and vertical communication, within a clearly defined hierarchy and a stable environment. The organic system approach goes with unstable conditions where employees are goal directed and work is on a more individual plane. In this environment job definition is less formal and there is more lateral communication and interaction. They recognised that both types were at opposite ends of a continuum and emphasised that one was not preferred over another but that environment would influence choice.
Emery and Trist (1965) saw the rapid changes in environment and the increasing level of complexity as a main problem and suggested that the environments of organisations are shifting from placid to turbulent.

As Tofler (1971) put it - 'Traditional functional organisational structures, created to meet predictable, non-novel conditions prove incapable of responding effectively to radical changes in the environment'. His view being that rapid environmental changes should lead to a shorter life span of organisational forms - modularism or 'throw away' organisation components. A movement from 'Bureaucracy to Ad-hocracy'.

Lawrence and Lorsch (1967) introduced sub-elements of the organisation dealing with part of the environment and established that the predictability of the sub environment for individual sub units of the organisation influences their structure. The more certainty, the more formalised the structure and management process. This differentiation requires integration to ensure the achievement of total organisational goals. They also noted that 'The behaviour of members of an organisation is also interdependent with the formal organisation, the tasks to be accomplished, the personalities of other individuals and the unwritten rules about behaviour for a member'.

Organisations as Human Systems

Rensis Likert (1961) proposed that an organisation functions best when its human resources function not so much as individuals but as members of achievement oriented work groups with high performance goals. He devised a 'principle of supportive relationship' as a theory for organisational structuring based on inter-linking groups with supervisors being the 'linking pins'. Much subsequent work has been done in this context. A major focus has been on 'team-building' (Dyer, 1977) and 'self-regulating work groups' (Cummings, 1978).
The 'systems' Manager is conscious of the activity of the informal and formal groups in the organisation and their capacity to influence, both positively and negatively, the degree to which objectives can be attained, and the amount of effort needed to be expended in that achievement. He or she is therefore able to set out to improve group performance and to guide the development of an appropriate group 'mix'.

The manager would seek to ensure that group members received appropriate training in group dynamics to optimise activity and would aim to structure the formal group type, size and composition to best serve its purpose. He would also be aware of the potent opportunity for miscommunication due to the existence of underlying tension often found between the formal and informal systems.

In summary then a systems Manager would:

- see the organisation as a whole, comprised of a number of sub units, all interacting and interrelating with each other and their environments in order to create organisational dynamism;

- be aware of the contingent effects of environmental forces on the organisation, especially in regard to structure and organisational domain, and continually review organisational responsiveness to its environments;

- develop information systems and operational strategies to reduce uncertainty;

- appreciate that there are a number of ways to achieve a particular objective, each with its own benefits and costs; (i.e. the concept of 'equifinality').

- understand that organisational objectives may be perceived differently at different levels of the organisation and be aware of the existence of informal and personal objectives;

- understand the complexity of interpersonal and intergroup activities;
Conclusions

The future refinements of managerial skills lie in the direction of guiding models based on research. These models, known as contingency theories, specify the specific elements of the complex system to be attended to - and indicate the options available and their consequences.


Problems with contingency theories include:

- Lack of clarity e.g. What is an 'appropriate' structure?
- Assumed cause-effect interactions between empirically observed variables as a basis for predicting outcomes.
- Research procedures which tend to impose linear assumptions on imprecise conceptual frameworks. (Schoonhoven, 1981)

Organisational effectiveness will always be the goal of management, and the mind-expanding model of an organisation as a 'System' seems to be the best foundation for the development of Management as a science.

Accurate analysis and prediction depend on a sound theoretical and empirical base. However the attempt by contingency theorists to bring order out of the complexity of systems may, in fact, constitute over-simplification.

The 'reality' remains complex and the 'Long Search' continues.
BIBLIOGRAPHY


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LIST OF STAFF PAPERS PUBLISHED TO DATE

No. 7 1981  'A Note on Customs Unions Theory: The Viner Controversy R.I.P.' by D.J. Thomas.

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