



HUMAN ASPECTS OF SYSTEM CHANGE

PART II

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OPSOMMING

In die vorige artikel het die skrywer die meer teoretiese elemente van menslike aspekte van sisteemverandering bespreek. Dié gedeelte het die omgewing, die organisasie, die groep en die individu in oënskou geneem.

In hierdie artikel word gedragsaspekte bespreek soos hulle die veranderingsagent, die politiek van die organisasie, weerstand teen verandering en die beplanning en implementering van 'n veranderingsprogram raak.

Daar word gepoog om insig te kry en voorstelle te maak oor menslike probleme wat baie bestuurders en sisteemontleders in hierdie omstandighede teengekom het.

In the previous article attention was drawn to the need for managers and systems engineers to pay more attention to the human aspects of system change. It was acknowledged that an effort to draw on the findings of the behavioural sciences, such as psychology, sociology and anthropology, would be a difficult task. To set the ball rolling the writer discussed the nature of change and various aspects of human behaviour in connection with the environment, the organisation, the group and the individual, all in a business context.

The discussion now continues.

THE CHANGE AGENT

The change agent may be a member of the organisation affected by the change or he may be external to it. In the latter case he will usually be a consultant. A new senior executive may provide the trigger for internal change. The role of the change agent is to initiate, guide and control the change in the organisation and, in this connection, his importance to any organisa-

tion is steadily increasing.

Besides the fact that the change agent is an individual and himself part of a group, organisation or environment, certain other special problems arise because of his role as change agent:

Conflict Resolution

Change will, per definition, produce a measure of intra-organisational conflict as new goals are negotiated or set, new coalitions and groups formed and new power or authority relationships determined. Lawrence and Lorsch (1967) have come to certain conclusions concerning effective conflict resolution as a means of reaching joint decisions. These seem relevant to the change agent.

1. The more neutral the change agent in terms of goals and orientation of the conflicting organisational units, the more effective he is likely to be at resolving conflicts.
2. Effective change agents are likely to have high influence in terms of the functional managers. This influence stems from formal position, knowledge, expertise, age and length of service.
3. Top level acknowledgement of the importance of the change agents' contribution is important.
4. All units involved in the conflict should feel that their units have an important voice in the joint decisions.
5. Influence must be centred at the organisational

level where the knowledge to make the decisions is available. This is not necessarily a high level. In a research department, for example, this could occur at a low level.

6. The confrontation, or problem-solving, method of conflict resolution has been used significantly more in high-performing organisations. This technique requires emotional and intellectual energy and interpersonal skill so other methods such as compromise and smoothing over conflicts were also used but to a lesser extent. Forcing decisions by coalition or recourse to top management were applied as well.

Value Dilemmas of the Change Agent

In the American literature a good deal of attention has been paid to the value and ethical aspects of the change agent role. The change agent embodies in his personality his own cultural, social and ethical values. Any imposition of these values on the client organisation either explicitly, or by reducing the number of choices open to it, may have deleterious effects on the success of the change programme and is also felt to impinge on the rights of the client organisation.

The change agent can take account of these value dilemmas by:

- being continually aware of his practical and ethical obligations
- attempting to leave open the widest possible range of choices for the client organisation where value judgements are involved.

Unforeseen Consequences of Change

Benne, Chin and Bennis (1967), together with Merton and others, point out that

“unforeseen consequences are always built into any social action. A change agent always encounters varying degrees of low predictability and lack of control. Therefore the despair of the change agent over the limits of his ability to act “scientifically” must be converted to an acceptance of uncomplete predictability as a condition of his work” (p. 123).

Problems of Staff Change Agents

Many changes are initiated by staff people

such as systems analysts. Lawrence (1954) has pinpointed common problems that arise in such cases:

- Staff specialists become so engrossed in the technology of the change that they are oblivious to different kinds of things that may be bothering people.
- They do not have sufficient contact with operating personnel to develop a respect for the knowledge and skill of the people on the job.
- The failure of staff men to realise that the implementation of organisational change takes time and that becoming impatient can itself generate resistance.
- The failure of staff men to realise that social considerations determine the the presence or absence of resistance to change.

In overcoming the problems sometimes caused by staff men, managers are advised to:

- broaden the interests of staff men by involving them in other projects if they show signs of becoming too identified with “their baby”
- encourage the use of understandable terms when changes are being discussed
- look at resistance as a sign that something needs attention not as something to be overcome.
- include the implementation of ideas as part of the job definition of staff men. They will then come to realise that operators can make a real contribution if they participate in the change programme.

POLITICS

Anyone who has been exposed to the behavioural interactions of an organisation is aware of the fact that an informal organisation exists. In the same way he is aware of the existence of politics in the organisation. Politics may be defined as

“a process which takes place when one or more actors, whose goals are affected by the actions of others, attempt to structure the situation in such a way that the subsequent

action promotes their individual goals” (MacMillan, 1972, p. 1).

The term “actor” in this context refers to someone taking action. Since politics exist to some degree in all social activity both within an organisation and between an organisation and its environment, it has been dealt with apart from the discussion of these units above. Most of this discussion on politics is based on the ideas of MacMillan (1972).

The general capacity of an actor to manipulate a situation is called “political capability” by MacMillan and is defined as the power (the capacity of the individual to use coercion and inducement) plus the influence or the individual (the capacity of the individual to use persuasion and obligation). Authority is the extent to which others in the situation regard the individual as having the right to exercise power and influence.

Coalitions also have political capability. In some cases coalitions are formed to increase political capability. In other cases coalition formation is of a defensive nature — a form of self-preservation for those holding minority views and values in an organisation (Thompson, 1967). To the extent that change threatens the political capabilities of a coalition, it will be opposed by the coalition.

Three major types of political action by the individual may be distinguished (MacMillan, 1972):

1. He will act firstly in his own interests.
2. He will act as the agent of his interest group provided that this does not adversely affect his own interests.
3. He will act as the agent of the organisation provided that this does not adversely affect his own interests or those of his interest groups.

Practical Implications of Political Behaviour

Some of the questions that need to be answered by the change agent concerning the politics of the organisation follow:

- Which are the individuals or coalitions with the greatest political capabilities?
- What will be the effect of the changes on the composition and political capabilities

of existing coalitions?

- What new coalitions are likely to arise and what will be their political capabilities?
- What is the behaviour of these coalitions likely to be in the face of change?

The object of the exercise is to determine which individuals or coalitions

- will be most sensitive to the change
- will be likely to support or resist change
- must be enlisted as supporters of the change, i.e. generally those with the greatest political capability.

Since the political awareness of employees at the lowest levels of the organisation is likely to be undeveloped, any analysis of political behaviour is likely to involve mainly supervisory and managerial levels.

RESISTANCE TO CHANGE

A phenomenon that occurs in a large number of organisational change situations is the resistance of employees. This manifests itself in reduced output, absenteeism, increased labour turnover, sullenness, obstructionism, withholding information and providing incorrect information, to mention but a few examples.

Although the manifestations cited refer mainly to individuals, groups, organisations, and even societies, resist change.

In any work situation a large number of technical changes to procedures and work methods take place without causing resistance, yet in some cases resistance can actually block the implementation of a change completely.

Causes of Resistance

Numerous causes of resistance have been identified by various writers (Sanders, 1970; Watson, 1967). Some causes of resistance by individuals are:

- The threat to safety need satisfaction, e.g. fear of loss of job.
- The threat to social need satisfaction, e.g. disruption of social relationships in a work group.
- The threat to esteem needs, e.g. lack of

confidence in one's ability to cope with new skills and knowledge.

- Habit: a habit once established can become satisfying to an organism.
- Primacy: earlier behaviour patterns and experiences tend to persist strongly.
- Selective perception: once an attitude has been set up an individual shows a tendency to regard new stimuli as reinforcing that attitude, even if they do not.
- Dependence: human beings learn from others and tend to retain the values and attitudes of their parents or teachers.
- Insecurity and regression: there is a tendency to seek security in the past.

Social systems in general may resist change because of:

- Conformity to norms. Norms stabilise the relationships between members of a system. Each knows what to expect to others. Change may disrupt this.
- Vested interests.
- Sacred cows.

To this far from exhaustive list of causes must be added one more — that of self-preservation. Any social system is bound to resist real threats to its survival, self-esteem or autonomy. It may also resist where it detects that the change agent does not understand or identify with the basic values of the system. In the case of self-preservation the presumption is that the resistance to change is well-based and justified whereas, in the causes mentioned earlier, it is implied that the resistance is not well-based and justified.

Reducing Resistance to Change

The use of the word "reducing" rather than the more common "overcoming" is deliberate. Resistance to change is not necessarily bad. In some cases it may be fully justified. Then it should be regarded as a signal that all is not well with the implementation programme rather than something to be overcome.

Although the degree of resistance to change depends on the entire implementation programme,

and the considerations already set out above, certain other specific suggestions have been made for reducing it (Sanders, 1970; Lawrence, 1954; Mann, 1967; Watson, 1967).

1. Participation

Studies have shown (Lawrence, 1954) that resistance to change can be minimised when the participation of formal and informal group leaders is enlisted in information gathering, problem recognition and problem solving. However, the participation must be genuine.

"Participation will never work so long as it is treated as a device to get somebody else to do what you want him to. Real participation is based on respect. And respect is not acquired by just trying; it is acquired when the staff man faces the reality that he needs the contributions of the operating people." (Lawrence, 1954). In Dalton, Lawrence and Greiner, p. 194).

For staff man read change agent or practitioner.

2. Top Executive Involvement

As in any other project of major importance to an organisation, the top executive must support and oversee the change. He can assist by facilitating understanding between the people and groups involved and by treating his managers as he wants them to deal with their subordinates — for managers resist change too.

3. Timing

The timing of the change programme should be carefully planned and controlled as the implementation of system change takes time. Attitudes and behaviour patterns cannot be changed overnight. To attempt to do so invites resistance.

4. Communications

All the people involved in the change should be kept fully informed as to the nature and progress of the change. Where necessary, training must be provided to fully equip operators with the necessary skills and knowledge to

implement the new system. Where displacement of personnel will result this also should be communicated together with the plans to equip affected personnel for the change and to facilitate the adjustment. If possible displaced employees should be given a choice and time to adjust. In those cases where firing of employees is unavoidable, every effort should be made to ease the situation for redundant staff and sometimes to inform unaffected staff that this has been done and why. A sure way to lose valuable members of staff is to maintain a tightlipped silence, when it is obvious to all that redundancy must result from a change.

5. Feedback

Since it is impossible to eliminate unforeseen events in a change situation, progress criteria should be established and an efficient feedback and control system established.

6. Management Evaluation

All involved supervisors and managers should be evaluated on their implementation of the change programme and should be aware of this criterion.

THE PLANNING AND IMPLEMENTATION OF CHANGE

Clearly the success of any change programme depends on effective execution of the entire programme. The new system must be sound, the behavioural aspects of the change must be effectively handled, and the programme must be effectively planned and controlled like any other project. Although the planning and implementation of change are of limited behavioural interest certain key aspects will be discussed briefly.

-The Planning of Change

Kolb, Rubin and McIntyre (1971) identify a seven-stage change process:

1. Scouting

The consultant identifies the best point for

him to enter the organisation he is trying to change. Initial contacts with deviant members of the organisation could be fatal.

2. Entry

Once the entry point has been established the consultant must negotiate his contract with the client organisation. This consists mainly of establishing the necessary power and influence to implement the change.

3. Diagnosis

The diagnosis phase contains problem definition and identification of the resources available for change.

4. Planning

In this phase objectives are defined, alternative solutions and strategies evaluated, and a final change strategy chosen. It may be necessary after diagnosis to revert to the entry phase if the actual location of the problem differs substantially from initial impressions.

5. Action

This involves a wide range of activities such as management training, installation of new information systems and changes in organisation structure. It is at this stage that resistance to change and unforeseen consequences must be faced and dealt with.

6. Evaluation

Progress towards objectives is evaluated and the process either reverts to the planning phase or proceeds to the termination phase.

7. Termination

At this stage the change agent's contact with the client organisation ends although the change process need not. The timing of this severance is important. To terminate too soon can cause regression while to terminate too late can result in dependence by the organisation on the change agent.

Techniques of implementation

1. People Techniques

Some of the more commonly used "people" techniques for implementing change are:

- Sensitivity training
- T group training
- Theory Y (McGregor)
- Personal counselling
- Managerial grid
- Group dynamics
- Selection procedures
- Performance appraisal

These techniques are well known and will not be discussed further in this paper.

2. Changing Behaviour Patterns in Individuals

Change in the individual implies both the motivation to change and the readiness to change. The actual process of changing the attitude of an individual is not easy as it implies some criticism of the person's image of himself and threatens the stability of his working relationships.

In order to define the stages that must be covered in inducing an individual to change his attitude Schein (1961) has developed Lewin's unfreezing/changing/re-freezing model.

- a. **Unfreezing** — stimulating the need for change. An attempt is made to either increase the pressure to change or reduce the resistance to change.
- b. **Changing**
This involves presenting the direction of change and it includes the actual process of change by identifying with some person who already holds the desired attitudes, or internalisation whereby the influence target develops his own attitudes in response to a situation he cannot avoid.
- c. **Re-freezing** — ensuring that the behaviour patterns are adopted on a more permanent basis.
Business organisations are capable of exerting considerable pressure to unfreeze but unless the influence target is allowed to select his

own direction of change by identification or internalisation, a lasting change in behaviour is unlikely.

3. Force Field Analysis

A useful technique for use in the planning stage is the force field analysis. The forces supporting the change are listed in order of estimated strength. Then the negative forces are listed, also in order of potency. This exercise obviously involves a good deal of thought and analysis but flows naturally from the sort of approach described in this paper. It is also an exercise vital to the success of the change programme.

Once the force fields have been listed the change agent develops his strategy to reinforce the positive forces and reduce the potency of the negative forces.

Methods of Applying Implementation Techniques

The manner in which the techniques described above can be applied varies from unilateral action by management to delegated authority at the other end of the continuum. The various points along the continuum are (Greiner, 1970):

- a. Unilateral action by
 - decree
 - replacement of key personnel
 - alternating the organisation structure
- b. Sharing of power by
 - group decision making
 - group problem solving
- c. Delegated authority by
 - case discussion
 - T group desessions

with little directional impetus from superiors.

Power sharing seems to be the most successful approach. In this method the client and change agent have equal influence. Once again, however, the change agent must have the situational sensitivity required to recognise when other approaches would be more effective.

Pitfalls in the Implementation of Change

Some of the mistakes made by change agents

and organisations are mentioned below:

- Persistence by the change agent when the client of his people do not want change.
- Attempting too little change too late.
- Attempting bottom-up change with insufficient guidance from the top.
- Correcting only one facet of a complex problem.
- Incorrectly diagnosing the needs and attitudes of people.
- Imposition of the change agent's values on the organisation.
- Changing the individual and not the group.
- Overtaxing the change resources of the organisation.
- Failure to communicate with the people involved in the change.
- Failure to correctly analyse and reduce resistance to change.
- Proceeding to quickly with the change.
- Implementing a system change when it is not really required. For example keeping up with the Joneses who have acquired a computer.
- Not allowing for the unforeseen consequences.

This list is far from exhaustive but should give some idea of what to avoid in system change.

Success Patterns in Implementing Change

Now that the problem of system change has been approached in a somewhat normative way from a behavioural point of view, it is appropriate to conclude by examining what actually happened in 18 organisations studied by Greiner (1970). He judged 8 of these organisations to have successfully undergone change and identified a definite pattern from their experiences. Greiner's success pattern is summarised briefly below:

1. Pressure and Arousal

Change occurred in the successful organisations in the face of severe internal and external pressure only. In other words all

change was reactive.

2. Intervention and Orientation

In spite of the severe pressure, change did not follow unless an outsider intervened in the situation. The outsider was either a consultant reporting to the chief executive or a new chief executive. Without this intervention management was inclined to rationalise the situation and lay the blame elsewhere.

3. Diagnosis and Recognition

The key factor in this phase of the pattern for successful change was the sharing of power. Employees at all levels of the organisation were involved in the diagnosis of problems.

4. Invention and Commitment

Power sharing was again prominent in the selection of solutions and the commitment to carry them out.

5. Experimentation and Research

The solutions were implemented on a small scale only, to start with. Once their effectiveness had been demonstrated the scale of implementation increased.

6. Reinforcement and Acceptance

The positive effects of the experimentation phase were reinforcing in their effect and full acceptance of the change resulted. The shared power principle remained after the implementation of the change.

SUMMARY

In an era of environmental complexity and an accelerating rate of change, change cannot be regarded as a rare, disruptive, and undesirable event. Furthermore management, or other practitioners of change, cannot afford to underestimate the human aspects of system change. In spite of obvious difficulties an attempt has been made to assist the change practitioner in facing this problem.

For purposes of examining the nature of change, the organisation may be seen as a goal-directed system with pro-active or reactive adjustment characteristics in the face of change which may be externally or internally triggered. The inter-related change variables within the organisation are actors, tasks, technology and structure.

The environment is essentially a source of change for the organisation and a constraint on the type of change the organisation can implement. As far as organisational interaction is concerned, the change agent needs to consider the nature and origin of the organisation's goals, its stability and change capabilities, and what feedback and control mechanisms can be implemented with the change.

The group is a component of the organisation. Cartwright has stressed the influence of the group on individual behaviour, attitudes and values, and set out a number of important principles concerning change and group dynamics. The change agent should recognise both the positive role the group can play in promoting the acceptance of change and its innate resistance to change.

Personality and behavioural characteristics of the individual that are especially relevant to a consideration of human aspects of system change are perception, motivation and leadership. Individual differences in behaviour exist primarily because of the uniqueness of human personality and perception. Since goal-directed behaviour results from individual needs, some consideration of Maslow's hierarchy of basic needs is advisable. In more practical terms, some views on the motivation of the individual to work and their implications in a change situation are considered. The need for situational sensitivity on the part of the change agent is stressed in the face of the choice of leadership styles available to him.

Some human aspects of change concern the change agent himself and organisational politics. The change agent needs to develop an adeptness at conflict resolution and to take into account value considerations, and unforeseen consequences of change. He must also identify those individuals and coalitions in the organisation with the greatest political capability and determine their attitude to proposed changes, with a view to enlisting their support.

As resistance to change may completely block a change programme, a fact which may be good or bad, the manifestations and causes of resistance are significant. Participation, top executive involvement, correct timing, communication and feedback are some important tools in reducing resistance to change.

Various techniques for planning and implementing change were considered and a practical orientation was provided by a brief summary of common pitfalls in implementing change together with a summary of patterns of successful change experienced in organisations investigated by Greiner.

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