EVALUATION OF THE CHANGE MANAGEMENT STRATEGY AT FORMCHEM CHEMICALS (KZN)

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By

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DECLARATION

I declare that this research report submitted in partial fulfillment of the requirements of the degree of Master of Business Management at the University of Natal, Durban has been completed entirely by myself. This dissertation has not been submitted previously for any degree or examination at any other University.

Raidos

Prenitha Naidoo Signed on the 30th of June 2001

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ABSTRACT

This study was an evaluation of the change management strategy implemented at Formchem Chemicals (KZN). A triangulation method was used where an exploratory study was conducted initially by drawing up a case study and thereafter conducting a quantitative study to evaluate the change strategy. In order to conduct a more focused design only four factors impacting on the change management process were considered. These factors were effective change planning, communication, resistance to change and job satisfaction. Information for the case study was mainly obtained from interviews and focus groups. The pattern matching technique was performed on the case study, where the strategy implemented was compared to those recommended in literature. Questionnaires were administered to the twenty employees in the department undergoing the change. Descriptive statistics were carried out on the information received from the questionnaire.

It was found that there was effective change planning and communication. Management impacted positively on the resistance to change and there was an increase in job satisfaction levels. Statistical analysis also showed positive relationships between change planning and level job satisfaction, communication and a positive impact on resistance to change and finally a positive impact on resistance to change and level of job satisfaction. The management team at Formchem Chemicals (KZN) had taken all aspects into account when designing the change strategy as recommended by information gathered from literature and certain areas in communication and planning needed to be improved.

"It is not the strongest of the species that survives nor the most intelligent but rather the most responsive to change."

Charles Darwin

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1.1. Background Information

Formchem Chemicals is a global chemical plant, which has four manufacturing sites in

South Africa. Formchem Chemicals is a fictitious name, as the name of the company has

to remain confidential. Each manufacturing site has a number of different plant

operations. The formulations department is one such operation. Here the raw materials

are added together according to a formulation recipe and various products are packaged

and sold. The research for this dissertation was conducted at Formchem Chemicals

(KZN), which is located on the north coast of Durban. The formulations department at

this manufacturing site has undergone a major strategic change. The remaining three

formulation departments in South Africa will undergo a similar change strategy later on

in the year. These changes include retrenchments, technology improvements and the

introduction of new working procedures. This study was carried out on the change

strategy implemented at the formulations department at Formchem Chemicals (KZN).

1.2. Research Problem

Change is never an easy process. Most people have feelings of uneasiness when faced

with the prospect of abandoning the familiar activities and challenge of the new. It is

therefore not surprising that one's most stressful experiences are those that involve

substantial disruption from one's former routines. When people become bored with their

current activities, most prefer their experience of change to be incremental rather than

revolutionary.

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Machiavelli commented, "Innovation has for enemies all those who have done well under the old conditions and lukewarm defenders in those who may do well under new." (Hultman, 1998) The status quo is normally fiercely defended by, both those who are profiting from the current regime and by those who are faring badly. Even when one is prospering they often have a preference for sticking with the devil they know, rather than risking running into worse problems elsewhere. This individual resistance to change can produce substantial time lag between the needs of the organization and its capacity to respond to these needs. This basically means, that organizations operating in increasingly turbulent and unpredictable environments may need to develop the capacity to change structures, systems, skills, culture, behaviour and a host of other organisational characteristics within relatively short timescales. More importantly they will need the capacity to manage such change while retaining the commitment and motivation of their workforce. This will imply the need to minimise the trauma and uncertainty associated with the change, while maximising the support and guidance given to employees so that they may cope with the new environment.

The key components of effective change management have a common underlying factor, which is the ability to ensure the best possible standard of communication between senior management (those responsible for driving and managing the changes) and all other parts of the organizations (those who will have to deliver and live with outputs of the process) throughout the process. Therefore any change program that is initiated by an organisation will have to be evaluated in order to determine the success of the process.

The research problem for this study is the evaluation of the change management strategy implemented at Formchem Chemicals (KZN).

Effectively is defined as achieving the goals laid out initially and the clear understanding of the objectives of the strategy by all employees effected. A change strategy is one that when implemented changes the existing way in which work related matters are performed. Change management strategy focuses on the human element of change.

1.3. Context

In light of the current economic trends and global competition, businesses today are concerned with increasing reliability and quality as well as decreasing costs. More and more, businesses have to eliminate the lag-time between identification and fulfillment of the need (Davis, 1993). Whereas marginal improvements (10-20 percent) can be achieved by improving efficiencies, the major reductions that many companies have to achieve in order to survive can only be achieved by fundamentally reconceptualizing businesses processes (Hammer, 1993). The impacts of change vary. At an organisational level, they include changes to technology, organization structure, controls and systems. At an individual level, they may have a profound effect on how, when and where people work.

The saying "Change is Constant" has become a cliché. This has been confirmed by a survey done by Organisation Development Resources, Inc (1996) where, 60 percent of organizations reported that they were experiencing a greater volume of change than in the

previous year; 65 percent of reported that the momentum of change was increasing and 74 percent reported that the complexity of changes they faced was on the rise. The implication of this trend is that organisations have no alternative other than to develop the ability to cope with change.

If organisations do not realise the importance of change, they soon face the road to failure. One third of firms in Fortune '500' in 1970 have disappeared by 1980 (de Geus, 1988). Royal Dutch/Shell estimated that the average longetivity of the large organization is less than 40 years (Senge, 1990). This means that those employed in the private sector have roughly a 50 percent chance of seeing the demise of their employees within their working lives (Senge, 1990).

The catalyst for this high corporate mortality rate varies from internal factors, such as resources, culture and structure to external factors such as market conditions, competitor's actions and customer factors. Regardless of the catalyst, the underlying reason for the decline is attributed to these organizations not adapting a changed set of circumstances.

Implementing change is difficult and failed changes do not only apply to the fatalities referred to earlier. Unless businesses are able to re-invent themselves, they will continue to be relevant to the past-present, rather than to the present-future (Davis, 1993). The ability to manage change must therefore become a core competence of an organization if it wishes to survive and thrive this century.

1.4. Motivation for Research

The research is based on the premise that continuous change is a given in organisation. By understanding the deficiencies in the current organisational change strategy, future change initiatives will be carried out with a much clearer understanding of the needs of the employees. The organisation can therefore eliminate barriers to effective implementation earlier on in the rollout of the strategy. As mentioned earlier in the background information, Formchem Chemicals has three other sites in South Africa, where the change strategies will be implemented later on in the year. Therefore results from the research conducted in this study will help iron out similar problems prior to implementation. The formulations change strategy implemented at Formchem Chemicals (KZN) will be assessed every 6 months for the next two years. This study will form the basis for the next evaluation, which will take place every October 2001.

There is currently a large amount of literature on change management available but each organisation is unique and there is very little that has been performed at Formchem Chemicals (KZN). Considering that the organisation has been acquired by one of the world's leading chemical industries, major change initiatives are planned for the future. Therefore management requires assistance in identifying current flaws in their existing change strategy.

1.5. Research Questions

Based on the research problem the study focussed on the following issues:

The change strategy design and implementation

Evaluation by the employees of the change initiative

The change management process analysis encompasses a large number of factors. If every possible factor has to be considered, the research becomes unfocussed, too wide and complex. In many of these studies the complexity results in a superficial level of analysis. For this study to remain focused, the following factors will be considered. They are change planning, communication, resistance to change and job satisfaction.

During the rollout of the change strategy at the formulations department at Formchem Chemicals (KZN):

- 1. How was the change planning accomplished?
- 2. What was the communication procedure?
- 3. What were the factors, which led to resistance to change?
- 4. How was the job satisfaction levels improved?

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

The literature review section is centered around the research questions highlighted in the

previous chapter. The factors highlighted in the research questions are change planning,

communication, resistance to change and job satisfaction. The following literature review

explains their impact on the change management process.

2.2. Change Planning

The first factor that will be considered is change planning. There are a number of

subsections that can be considered when dealing with change planning. For the purpose

of this study, focus will be directed towards the different types of changes and why is

there a need for change. One then has to review what the driving and restraining forces

are for change and the stages of organisational change. Finally the different

organisational change strategies are discussed. Organisations are continually faced with

incremental change or so-called step changes.

Change initiatives involve the refining of how processes are performed, questioning of

the existence of, need for and form of the processes. For example, processes can be

automated, terminated, re-engineered, or out-sourced. People performing these tasks

could be retrenched, re-deployed or re-skilled. This could result in a dramatic shift of the

size, shape and culture of the organisation.

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Organisational change can originate from a planned intervention or programme, aimed at improving organisational effectiveness. At the other end of the continuum, change can originate as a reactive, unplanned response to the environment. Any real change situation is likely to lie along the continuum between the two ends. Even in extreme environmental crisis some planning and strategic choice is possible. Even perfectly developed plans are subject to changes that are a consequence of events that are outside management's control.

2.2.1. Planned vs Unplanned Change

Organisational change can be characterised in terms of the motivation or underlying causes of change, as well as the manner in which change occurs. In terms of the motivation for change, it is typically described as planned/proactive or unplanned/reactive. (Lippit, 1982)

A) Planned change

Planned change involves a deliberate, purposeful and explicit decision to engage in a programme of change, which may involve internal or external expertise, and a strategy of collaboration between expert and client system. Levy and Merry (1986) add a further characteristic of planned change. Planned change has both intentional (explicitly planned for) and unintentional (emerging from the situation) aspects. They argue that it is not possible to plan for all eventualities in a change intervention.

Managers and change agents need to consider all organisation systems at their disposal to effect strategic change. Planned change, involves the reconstruction and redefinition of the various components of the organisation into a new working environment.

Types of Planned Change

Strategic Change

Strategic change is the reshaping of strategy, structure and culture of an organization over time, by internal design, external forces or by simple drift. This type of planned change is managed in a deliberate as opposed to an emergent or opportunistic way (Grundy, 1993). A dilemma for management is to balance the opposing forces for stability and for change. Schutte (1987) defines strategic change as any major, long-term change that has an impact on the business and its employees. Strategic change can be defined as a well-planned change process.

There are 4 prerequisites to strategic change:

- Change must be new to the organisation, undergo change with which it does not have a lot of experience, and for which the existing procedures, systems and people must be adapted.
- Change must have an impact on the business itself
- The change must have long-term impact. Strategic change must have a long planning horizon and substantial elapsed time between its conception and implementation.
- Have an impact on the people in the organisation and the way they do things.

Revolutionary Change

Revolutionary change occurs if the whole organisation and culture is redefined. One of the main problems faced by organisations is that they set too high levels for detecting problems, resulting in people going to great extents to protect their views. Changes therefore take a long time resulting in an increase in the seriousness of the problems. Often a crisis has to be reached before any action can be taken.

Another contributing factor to rapid revolutionary change is the level of dissatisfaction. Greiner's (1972) analysis of organisations described them as moving through successive periods of evolutionary development and revolutionary change. The redefinition of organisational concepts, ie basic assumptions and/or values, the organisation's structures and its processes occurs in revolutionary change.

B) Unplanned (Reactive) change

Unplanned change occurs when change is imposed on the organisation by its environment.

These include situations such as:

- Incremental evolution, where organisation continues to make minor adjustments to its configuration and external relationships in an attempt to optimise its efficiencies.
- Reflects a passive approach to change
- Some organisational learning takes place, but behavioural change only is achieved, and the collective reference is not changed.

■ Can take the form of unplanned changes from within the organisation in response to external crisis

Types of Unplanned Change

Evolutionary Change

Maenetja (1998) describes evolutionary change as an incremental adjustment of an organisation without the development of a new organisational structure. It involves the continuous, evolving interactions among members of an organisation in response to organisational and/or environmental pressures (Chorn, 1987). Evolutionary change occurs in lengthy periods between organisational revolutions and is the most common mode of organisational change (Greiner, 1972).

In evolutionary or developmental change there is a degree of movement but it is along a predictable path and there is organisational change as there are changes in response to the environment. Evolutionary change is ongoing. Evolutionary change has a number of characteristics (Greiner, 1972; Ramprasad, 1982; Chorn, 1987; Ackerman, 1986):

- Reflects organisational momentum. Relative stability and consolidation takes place between periods of momentum. There is movement during this time as the organisation adapts to the environment.
- The present organisational working environment is maintained and improvements sought within it. Efficiencies may improve but over time the organisation's effectiveness is eroded until the next revolution occurs when the dissatisfaction limits are reached.

Changes may seem to be evolutionary if it follows an incremental process but may in fact be revolutionary if it breaks the organisational working principles. Both planned and unplanned changes bring about feelings of instability and ambiguity among employees, which leads to disharmony, uncertainty and fear. Employees are required to make new adjustments and be able to cope in the changed work environment.

2.2.2. Why start a change programme?

Organisations embark on change programmes if they are faced with the following scenarios: (Reddin 1987)

- Pain The existing state is painful due to falling market share, executive turnover, decreasing profits, conflict etc. Acknowledge crisis and the old ways of thinking become obsolete.
- Image or potential Top management has a clear idea of where they see the organisation. This can be expressed in terms of profits, industry position, diversity, size, national role etc. In this case the organisation is moving towards a new (desired) state.
- Outside influence External forces e.g. new government legislation, technological innovation. The old ways of thinking become obsolete and outside influences are the driving force for the change
- Achievement desire Top management wants the organisation to become better. If
 there is potential for the organisation to move towards a more desired state then there
 is need to maximise the opportunity.

Let's do something - Employees want to appear to be doing something constructive.
 According to Redding this reason is likely to lead to more pain in the long run.

2.2.3. Driving and Restraining Forces for Organisation Change

Table 2.1: Driving and Restraining Forces for Organisation Change

Driving Forces	Restraining Forces
(Forces for change)	Forces against change)
New personnel	From individuals
Changing Markets	Fear of failure
Shorter product life cycles	Loss of status
Changing attitudes towards work	Inertial (habit)
Internationalisation	Fear of the unknown
Global Markets	Loss of friends
Social Transformations	
Increased Competition	From Organisations
New technology	Strength of culture
	Rigidity of structure
	Sunk costs
	Lack of resources
	Contractual agreements
	Strongly held beliefs and recipes for
	evaluating corporate activities

(Wilson DC. 1992. A strategy for change: concepts and controversies in the management of change. London: Routledge)

Creating an imbalance between the driving and restraining forces "unfreezes" the status quo. The optimum way according to Lewin (1951) is to identify and selectively remove

the restraining forces. Because of the imbalance that exists, the driving forces will automatically push towards change. The final stage involves "refreezing" the new situation, which means putting extra pressure on driving forces resulting in an imbalance, which would cause the restraining forces to increase in number and "freeze" the new situation.

2.2.4. Stages of Organisational Change

Five Stage Model: (Grundy, 1993)

- Diagnosis Process of understanding the rationale (that is why we are doing it) and implications of the change. Effective diagnosis involves exploring the forces, which may enable or constrain the process of achieving the change objective (that is what we want out of it). This may also involve exploring the stakeholders in the change and the impact of the change on the organisational paradigm. At the outset a critical path to change has to be developed. Any organisation aspiring to transform itself must first diagnose itself, and identify the one or two things it has to do well to succeed (the critical business success factors). It is important that the tasks that need to be accomplished are defined, rather than the kind of management desired (participative management or employee involvement, for example). An important factor in developing a critical path is a diagnostic process involving organisational members.
- Planning -Is the programming of one or more change thrusts or projects to mobilise resources, coordinate activities and to achieve desired milestones and outputs.
- Implementation Is the execution of change programmes and the management of

barriers to change

- Control Is the checking back to ensure that the change process is on track in terms
 of its benefits and costs (both expected and unexpected), and timescales.
- Learning -Is the systematic review of lessons gained from the change, both in terms
 of the change rationale and also of the effectiveness of the change process. (This does
 not mean there is no learning in earlier stages, simply a more formal, learning
 review is appropriate.)

Table 2.2: Timing of the Change Process

Stage	Time	Time
	Actually Spent	which should be Spent
Diagnosis	2%	20%
Planning	10%	20%
Implementation	80%	40%
Control	6%	10%
Learning	2%	10%

(Grundy, T.1993. Implementing Strategic Change: Kogan Page Limited: London)

There is a huge difference in time between what, in an ideal world, it is felt that managers should spend on "diagnosis" and what they actually spend. The above model is a reminder of how best to allocate effort during the change process. It helps ensure that managers can switch over from focusing primarily on efficient change management to effective change management. In many cases the diagnosis phase reveals that "the

problem" has been misidentified, enabling managers to move away from a mistaken change strategy.

2.2.5. Organisational Change Strategies

Table 2.3: Change strategies and conditions for their use

	Simple Change	Transformational Change
	(Reproduction or expansion of	(Changes incurred to existing state)
	existing state	
Collaborate	1	2
	Use when:	Use when:
	The organisation needs fine tuning	The organisation is out of fit
	Time is available	
	Key interest groups favour the	There is little time
	proposed change	Key interest groups support radical
		change
Coerce	3	4
	Use when:	Use when:
	The organisation is in fit but needs	The organisation is out of fit
	fine tuning	
	Time is available	There is little time
	Key interest groups oppose the	Key interest groups oppose the
	proposed change	change but change is central to
		survival of the organization
	1: Participative evolution	2: Charismatic transformation
	3. Forced evolution	4: Dictatorial transformation

(Wilson DC. 1992. A strategy for change: concepts and controversies in the management

of change. London: Routledge)

Critique on the above framework includes Wilson's views (1992):

It is assumed that individual managers will have perfect knowledge of different interest groups and the organisation politics. It is also assumed that individual managers will be able to predict the outcome of actions taken against the interests of these different groups.

Barnard (1991) derived a model for managing strategic change based on the research conducted. The model reflects the following key findings:

- The interaction between forces in a turbulent external environment and internal organisational environment create the need for a strategic transformational reorientation within the organisation.
- Top management drives the change program
 - Barnard (1991) suggested that it was important that leaders involved in change processes, had a commitment to a vision of how things should be, and that they provided adequate resources for the change process. These resources include money for training and consultants, staff support and effective managers who could lead the transformation. The replacement of key managers was found in this study to be the single most important change tool that top management possessed in facilitating change.
- Planning begins in the first stage but does not end there. The plan is revisited in regular iterations or evaluation and readjustment during implementation.
- The implementation of the programme is phased in realistic, manageable steps, based on time horizons. The structure of planning and implementation is underpinned by three important process management programmes or "tracks", which begin with

planning and continue through the implementation phase. These are energizing the workforce, constant communication and involvement and the holding of symbolic activities eg. if the organization reaches a milestone in the change process. By providing employees with information and thereby putting them in touch with the realities of the competitive environment and setting high standards of performance for individuals and organisational subunits helped facilitate change. Transformations that start when the threat is clear to employees, more effectively mobilise energy for change. Creating innovative models for managing people also mobilises energy for change. Without a tangible model, managers are not able to visualise what will be required of them or develop confidence that the change can be implemented. Finding a theme with which people can identify and from which they can derive meaning, is useful in mobilising support for change. For example, "quality" was found to be a theme that served most companies well, because it is one that all stakeholders, workers, management, unions and shareholders can support.

• The internal and external forces continue to impact on the change throughout the process. Simultaneous external and internal pressures are necessary to trigger change.

2.3. Communication

The second factor to be considered is communication during the change process. The transmission of communication can fall into one of three categories. Top down communication is transmitted from senior levels of the organisation to the more junior levels. This information could be co-ordinated or fragmented, consistent or contradictory, formal or informal, or deliberate or accidental. Bottom up communications

is information communicated by employees to more senior managers. It can be collective or individual, organisation-wide or workgroup or manager-specific, formal or informal, or direct or indirect. Lateral communications includes all information that passes horizontally across the organisation, between individual employees, workgroups, functions or departments. Information could be formal or relatively informal, function or process specific, or it may relate to one particular level of the organisation.

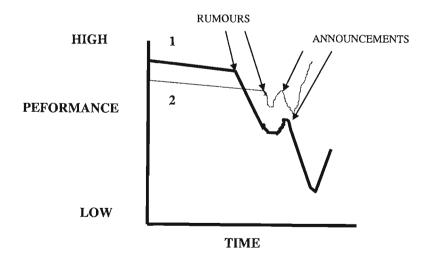
Communication of fuzzy objectives will lead to action without progress and will result in frustration for all involved. A lack of understanding results in a difficulty for employees to enhance abilities, accept, understand and appreciate differences among individuals. Both the individual and the corporation have to adjust.

It is important to communicate with employees regarding their concerns because a threat perceived and not discussed is far more destructive that if the threat has been openly acknowledged by management. (Goss et al., 1995) One of the important factors with respect to transformational change is the effective communication from the outset, through implementation and beyond. Managers underestimate the communication effort required and therefore it is essential that a variety of communication methods be used to express the importance of the transformation process and the roles and activities in which the employees will participate. Communication creates a forum for people to listen, respond, confront, dispute and assert their feelings and opinions regarding the transformation process. Communication can be used to reduce the levels of anxiety.

Pure verbal communication is limited when promoting values. Managers must "walk the talk" otherwise their endeavours will be perceived as empty promises.

Morris (1992) described some interesting research for example managers with a higher sense of controlling their organisations were less resistant to change and older managers were less resistant to change compared to younger managers. Some employees embrace change more rapidly than others do. It has been documented that only one in five change management processes succeeds. (Economist, 2000) Hence management has to clarify the need for change, keep people informed and measure and reward change thereby preventing a misalignment of emotions, understanding, effort and commitment, which could impact negatively on the performance of individuals and the organisation as a whole.

Figure 2.1: Change Dynamics – Two Scenarios



(Grundy, T.1993. Implementing Strategic Change. Kogan Page Limited: London)

Figure 2.1 above shows that all major change is accompanied by some degree of performance dip. A change curve is depicted in Scenario 1 plotting self-esteem and performance over time, which has a Carnall-like shape. This might have been generated, for instance by a hypothetical re-structuring exercise. Note the slight decline in performance before the change begins, followed by a swift fall in performance. This fall is due to the implications of pending change being muffled through inadequate communication. Also, the "change message" is left open-ended as "we need to restructure now and we may sill need to take further steps to improve our competitiveness."

By contrast Scenario 2 is a hypothetical case where managers have been more explicit to key stakeholders about the scope of change, its rationale and also in its boundaries. This was well communicated to gatherings of all personnel. Note that the change is announced at more or less the same time that "rumours" began, minimizing the degree of concern that mounted in Scenario 1. Although there is still some dip in performance, its severity is a lot less pronounced than that of Scenario 1. But perhaps more importantly, performance then reaches a level beyond its previous peak as overall capability has been enhanced.

The transformation process needs to be communicated and marketed throughout the organisation in a clear and transparent way. This communication should be a continuous process. Organisations in South Africa are constantly carrying out the transformation process in order to keep to legislation requirements or to meet global productivity and

efficiency standards. South African managers have been assessed as being high on task and low on people skills. Objectivity and creativity are key inputs to a successful transformation process.

2.3.1. Downfalls in the Communication Process

The communication process has a few downfalls. The following were typical ones identified by Bergh (1995):

Organisation vision lacking or not understood

This point refers to a dream of where the organisation wants to be. The dream is never translated into anything specific. The key to a successful vision, lies in it being a totally participative, balanced, well communicated (continuously) and translated into daily activities all the way to the shop floor.

Insufficient consensus or participation

The transformation process needs to engage all stakeholders in the company from start to finish. A representative transformation structure would need to be set up and continuous checks are required to access whether the representative structure remains representative.

• Inadequate union engagement

A number of forces or dynamics exists in the current South African context, which tend to obscure the objective of transformation. These dynamics include the following:

- A new Labour Relations Act
- Democratisation of the country which has a direct impact on democracy in the workplace

■ Poor track record of management, which has used transformation as a tool to downsize, retrench and remove "problems".

As a result, most unions view the transformation process with scepticism and unsure of what their role should be. Because the past contains "baggage", it is the responsibility of the transformation-drivers and champions to go the extra mile in ensuring that all union players are fully engaged.

Inadequate understanding

As competition grows globally, with more free trade, the need to become efficient and competitive is linked to an organisation's life or death. In order to survive transformation an organisation has to be efficient, productive and competitive. In order for South African companies to reach world-class objectives, transformation processes are either South African-originated or South African-customised.

2.4. Resistance to Change

2.4.1. Failure of Change Projects

Strebel (1996) claims that leading practitioners of major corporate change projects report that success in Fortune 1000 companies is less than 50 percent. The reason for failure is attributed to insufficient attention directed towards organisational and human resource dimensions. The key reason for change project failure is resistance, which is the third factor to be considered in this study. The key is to prepare first line management to deal with the resistance from the shop floor as he or she is the vital link in the communication.

Figure 2.2: Positive Response to Change

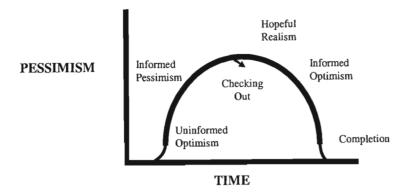
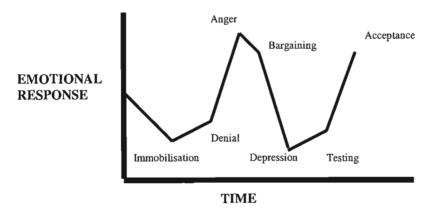


Figure 2.3: Negative Response to Change



(Figure 2.2 & 2.3: Conner D.1985.Managing at the Speed of Change. New York: Willard Books)

Reasons for failure can be attributed to poor communication, resistance to personal factors such as security, organisational factors such as threats to expertise or power and structural and group inertia. (Refer to Figure 2.2 & 2.3)

Conner (1995) believes that in order to manage change effectively, the following four dimensions regarding resistance needs to be managed:

2.4.2. Resistance from employees

Resistance occurs when people have moved the numbness of denial and begin to experience self-doubt, anger, depression, anxiety, frustration, fear or uncertainty because of the change. Some types of organisational change are similar to death experience. When companies go through retrenchments or mergers, the expectations, hopes, promises and actual work goes through something close to death for certain employees. People tend to focus on the personal impact of the change.

A) Reasons for Resistance to Change

(Coetsee, 1989)

- Loss of the known and trusted
- Loss of personal choice
- Shifts in power
- Not knowing/understanding the reasons for change
- No ownership of the change and the change process
- A fear for changing of groups or losing one's place amongst others

Lack of ability may appear to be resistance but inability and unwillingness are actually quite different.

Individuals may be:

1. Both willing and able to change

- 2. Able but unwilling to change
- 3. Willing to change but unable to change
- 4. Both unwilling and unable to change

The following table explains the reasons behind why people will be willing or unwilling to change. All benefits of changes come at some cost.

Table 2.4: Cost/Benefit Analysis of Change

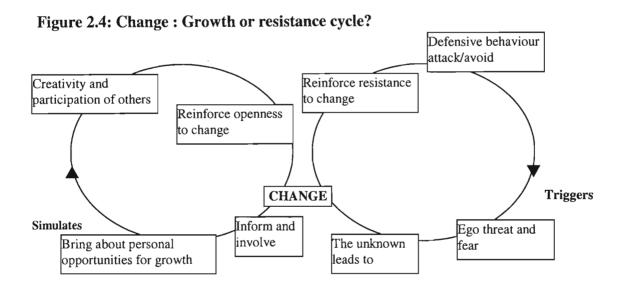
Perceived Benefit of Change

	Low	Hìgh
High	(1)	(2)
5	Low Cost,	Low Cost,
	Low Benefit	High Benefit
	Indifference	Favourable
Low	(3)	(4)
	High Cost,	High Cost,
Actual Perceived Cost of Change	Low Benefit	High Benefit
	Resistance	Conflict

(Hultman.K.1998. Making Change Irresistable.Davies Black Publishing: USA)

The above table highlights the interplay of facts, beliefs and values in a cost/benefit analysis. In scenario 1, low cost and benefit, the expected reaction would be one of indifference. To bring about change, the perceived benefit would have to be increased to generate any interest. In scenario 2, low cost and high benefit, conditons are favorable to change. In scenario 3, high cost and low benefit, resistance to change can be expected. To overcome resistance to change under these conditions, the perceived benefit would have to be increased to justify the high cost. Finally in scenario 4, high cost and high benefit, the stage is set for an approach-avoidance conflict. The decision to change would be agonising as people weigh the high costs against the high benefits. In situations such as this, having access to accurate facts and rational, empirically based beliefs really pays off.

Organisational change is about people - winning their commitment and overcoming their fears. This can be done by emphasising communication, letting people feel there is something for them in the change and allowing them to become owners of the change so that they can develop their potential and contribute to the organisation winning in its environment. Figure 2.4 shows the growth cycle and resistance cycle of change: (Bigler, 1996)



(Bigler B.1996.A Blueprint for Regenerating Firms.Long Range Planning)

Figure 2.4 above shows that fear of failure is a key cause of resistance to change and demonstration of positive outcomes is a key driver for reinforcing openness to change. Organisational change can enhance quality of worklife by bringing about personal opportunities for growth and can also diminish quality of worklife by increasing the ego threat and fear.

B) Overcoming Resistance to Change

Hultman (1998) identified eight reasons why in any given situation, people will support change;

- 1. They believe their needs are not being met currently.
- 2. They believe the change will make it easier for them to meet their needs.
- 3. They believe the benefits outweigh the risks.
- 4. They believe the change is necessary to avoid or escape a harmful situation.

- 5. They believe the change process is being handled properly.
- 6. They believe the change will work.
- 7. The change is consistent with their values.
- 8. They believe those responsible for the change can be trusted.

Management can deal with resistance to change by focussing on the following issues:

- Education and communication
- Participation
- Facilitation and Support
- Negotiation
- Co-optation
- Manipulation
- Coercion

The problem with these approaches is that they tend to seek to neutralise resistance without recognising the legitimacy of resistance as part of the human experience of change. This tends to lead to symptomatic rather than systemic approach to implementing change.

Understanding employees' feelings about the change will determine the way they will react. One of the strongest feelings during the change process is a feeling of loss together with denial to accept a new direction. The period of transition takes place when people

have to learn to let go of the old and embrace the new which when simplified means moving from the familiar to the unknown.

Scott and Jaffe (1989) identify several types of loss experienced by employees during times of change:

- Security Employees no longer feel in control or know what the future holds or where they stand in the organisation
- Competence Employees no longer feel that they know what to do or how to manage.
 There is a feeling of embarrassment as they are asked to perform new tasks, which they do not know how to perform.
- Relationships Familiar contact with people can disappear. People lose their sense of belonging in a group, team or organisation.
- Sense of direction Employees do not know where they are going and why they are going there.
- Territory Employees have uncertain feelings about the territory (physical space, psychological space) that used to belong to them.

Scott and Jaffe (1989) describe a four-phase transitional process, which people go through during change. The first phase is denial, which then proceeds to resistance, then exploration and finally commitment. Denial is viewed as a common first reaction to change. When change is announced the first response is often numbness. Employees tend to focus on the past and deny the change and continue to work as usual as though

nothing is happening. Then resistance is experienced, as employees do not want to accept the new.

During exploration, energy is released as people start focusing their attention on the future and toward the external environment once again. There is uncertainty during this phase as people try to work out their new responsibilities, search for ways to relate to each other, learn more about their future and the new company or organisation. Stress accompanies the uncertainty. This phase can be exciting and can create a powerful new bond in a work group. During the commitment employees are ready to focus on a plan. They are prepared to create a mission, build workable action plans, learn new ways to work together, take on new roles and expectations, commit to values and actions in order to reach a new phase of productivity. Employees are now willing to identify a set of goals and a plan to achieve them.

2.4.3. Management Commitment

Senior management has to be committed to their change programme. Some do not consider this as being a critical issue. Training alone cannot solve the problem but the systems have to change as well to eradicate issues that have been ingrained over the years such as male dominance and similarity of the workforce. Managers are faced with a dilemma, which stems from the diversity in the educational levels of employees. With South Africa's high illiteracy rates and brain drain syndrome in the young workforce, the business is faced with a challenge.

Some managers fear disempowerment and fear the possibility of failure. They have to change their style from one of commanding to sharing information, educating staff, empowering staff. They need to adapt a new style of management and develop a culture of willingness to change and learn. Reduction in control for senior and middle managers could result in loss of status, privileges and sometimes their jobs. Management must be willing to change and reorganise the structure they have been instrumental in creating. They should have a good understanding of the needs and aspirations for their staff as well as their capacity for change.

Managers sometimes misinterpret reality and this could lead to the failure of change initiatives. This behaviour is displayed by readily assigning blame to the most visible of all possible causes, even if it is unrealistic, disregard information that does not fit into their mental scripts, distort information presented to them, continue to persist on a losing course of action to justify initial position to themselves and peers, make wrong interpretations and don't always pay attention to triggers for change to take place.

Buhler (1997) states that one of the greatest challenges for managers for all organisations is managing uncertainty. Changes imposed from the top without the involvement of managers and employees usually fail. A top-down/bottom-up approach is more appropriate. Successful transformations involve a reciprocal learning process between the top and the bottom. For example, pilot studies that actively experiment with new models may be started in a new plant, or a troubled business unit once the new models become successful momentum is built to try them in other areas of the business. When

introducing structural change, this should not be attempted by top-down prescription. A committee or task force of those who might ultimately work together should be created. They should be given the task of examining interdependencies between their departments and to make recommendations for managing those interdependencies.

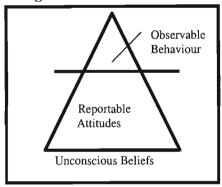
There has to be strong management commitment, involvement and participation during the transformation process. If this is absent, the process is not taken seriously and approached with high level of energies in order to make it a success. As there is never a good time for transformation, organisations generally put it off until their survival is threatened. The transformation process should happen early and urgency needs to be established in order to achieve the momentum required to carry the process to its destination. Management needs to create a sense of urgency. People who oppose the change need to ask themselves "What will happen to me if I don't change?" (Martinson 1995) Initiating a transformation process requires the commitment and dedication of many individuals who must maintain a high level of motivation in order to keep the momentum of the project going. If the change process takes too long, the sense of urgency is lost. Managers must become leaders who are committed and recognise the need for major change, but major change is impossible without the support from the head of the organisation.

2.4.4. Alignment of the change with the culture

A) Why change Corporate Culture?

The increasing global competitive market pressures requires companies to keep abreast of the latest developments in the technological, economic and political arena. This would therefore impact on organisations' attitudes, business processes and corporate culture. Often people who are directly affected by the transformation process are the ones that have a direct influence on the success.

Figure 2.5: The Cultural Iceberg



(Walters M.1994.Building the Responsive Organisation.McGraw-Hill: England)

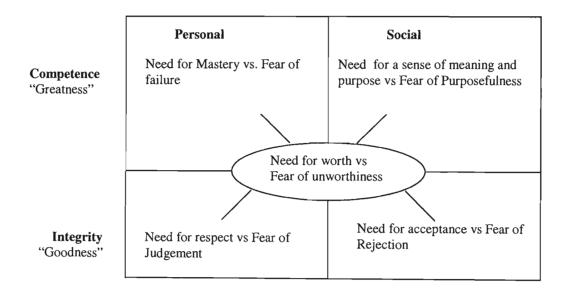
Culture operates at a number of different levels. The three broad levels are shown in Figure 2.5. The first level is the visible tip of the iceberg. This information can be gathered by observing employees for example interaction with other employees. These observations are underpinned by a range of conscious attitudes and values set within the organisation. Reportable attitudes are obtained by prompting people to talk about issues that they do not normally talk about spontaneously. The unconscious beliefs are the most mysterious level. This occurs when the drivers behind peoples' attitudes and behaviours are unexplainable. By determining the current status of the cultural orientation of one's company, one can focus on those issues relevant to the company. Because culture is

deeply engrained in the beliefs and values of employees, it is difficult to change but through perseverance management can adapt a culture to enhance organisational performance.

B) Employee Needs and Values

According to Maslow, needs exist in a hierarchy with physiological needs at the bottom, followed by safety, social, psychological and self-actualisation needs. Once people's lower needs are met they focus on the higher level needs. Hultman's (1993) formulation is different. He feels that social, psychological and self-actualisation needs serve an overall purpose of allowing people to view themselves and be viewed by others as having worth and value as a person. Everything one does reflects on ones worth in one way or another. Individuals are always motivated to validate their worth, but due to uncertainty at times they feel weakened. These needs are displayed graphically in the figure below:

Figure 2.6: Psychological Needs



(Hultman, K.1998. Making Change Irresistible.Davies Black Publishing: USA)

Mastery (Personal Competence) – People need to veiw themselves and be viewed by others as being competent and capable.

A sense of Meaning and Purpose (Social Competence) – People need to view themselves and be viewed by others as making a contribution to the team/organisation.

Respect (Personal Integrity) – People need to view themselves (self-respect) and be viewed by others as being ethical and honest.

Acceptance (Social Integrity) – People need to view themselves and be viewed by others as being worthy of acceptance.

According to Emery (1996) individuals at work essentially require adequate elbow room, that is a working environment without a supervisor or manager watching their every step, an opportunity to learn and keep on learning, an optimal level of variety in their work, support and respect from their co-workers, a sense that their work contributes to social welfare in some way and a desirable working future

According to Chapman (1994), individuals needs in the workplace are "tell me what you expect of me", "give me the authority to do the job", "give me the tools that I need - resources and training", "let me know how I am doing", "reward me according to my performance". Emery and Chapman's description of needs is based on quality of worklife and can therefore be considered as a philosophy of management aimed at enhancing the dignity of all workers, introducing changes in organisation's culture and improving the physical and emotional well being of employees.

Values are the most important structural element in an organisation because the link people's emotions and behaviours. Champy (1995) has identified the similarities in values and behaviour in a culture of willingness. They include to always strive for the highest level of competence, to take initiatives and risks, to adapt to continuous change, to make appropriate decisions, to cooperate in a team environment, to trust and be trustworthy and to be responsible for one's actions. Hofstede (1980,1994) concluded from his research that national culture explains more of the difference in work-related values than a person's organisational position, profession, age or gender. He felt that value changes do not affect the four major cultural dimensions i.e. individualism vs collectivism, power distance, uncertainty avoidance and masculinity vs femininity.

C) What kind of culture should be developed?

Management has to instil a culture of change in the organisation where employees have the freedom and encouragement to try new approaches, develop new ideas and leadership skills within the clearly defined boundaries set up initially. Hultman (1993) has identified four courses of action open to individuals to understand human behaviour and hence reduce the resistance to change. People often escape something they perceive is dangerous, avoid something they perceive is dangerous, attack something they perceive is dangerous or pursue something they believe is important. It is important to inculcate a desire to change into the culture to such an extent that it becomes the norm. One of the ways to promote the new culture is to show people how their new ideas, approaches and attitudes have a positive impact on the performance of the organisation. Motivating

factors such as the need to feel wanted, the feeling of importance and the knowledge they have, encourage employees to improve their performance.

2.4.5. Preparedness of the change agents

Organisational change does not happen on its own. A separate structure has to be set up to make it happen. This structure has to be both representative and credible. Mobilising a network of supporters, or key change agents, within the organisation, is an important factor in successful change processes. Barnard (1991) found that successful change initiatives had a network of supporting change agents, consultants, human resource executives, internal consultants and union leaders.

2.5. Job Satisfaction

For this study job satisfaction, the last factor to be discussed, refers to attitudes possessed by employees towards specific job factors such as security, steadiness of employment and conditions of work (Blum, 1989).

The initiation of change in an organisation can either have a positive or negative impact on employee's level of job satisfaction depending on their reaction to the change process. If employees feel that the change will positively impact on them, their reaction is favourable whereas if doubts exist they normally resist the change. This leads to the importance of management to consider employee's feelings towards the change, which can sometimes lead to failure of the change process.

Failure on management's side to make a concerted effort towards encouraging employee involvement can result in employees sabotaging the change plans. Organisations reach equilibrium with regards to people developing working relationships with each other, and having a sense of security so when change does occur employees are required to make new adjustments and the organisation has to reach a new equilibrium. Resistance to change normally results from uncertainty. This fear may take on many forms such as fear of the loss of status and earnings, fear of possible failure in the new circumstances, loss of self esteem and respect of others, losing friends and colleagues. The change itself may be feared because it creates a number of potential unknowns.

It is important to note that a sense of job insecurity does not drive employees to work more productively, but rather results in ineffectively carrying out their work. Theorists such as Maslow have shown that the importance of job security as a minimal condition for productive work. One should note that technical changes result in social changes during a change process. Maenetja (1998) found that by engaging people in a change management intervention program during transformational change would develop more positive feelings towards the change process and increase their level of job satisfaction.

Employees will have to be shifted from their comfort zones during the transformation process. Therefore there has to be benefits for all stakeholders. Efficiency improvements will result in greater profits to the shareholders. Coordinators and team members also have to be compensated. This compensation can be both formal, eg. bonuses, profit sharing and informal eg. promotions, improvements in workplace conditions, multi-

skilling, participation. In order for these benefits to have credibility, the respective interest groups should identify what they are and how they should be earned.

2.5.1. Learning Culture

When a company undergoes transformational change there may be a need for formal and informal training. Teams are more productive than individuals working on their own. Team learning is promoted by the conflict of ideas within the group. However, the identification of a learning gap between the known and what still has to be learnt can pose a threat to team members who respond defensively to the threat by reducing the perceived need for learning. Team learning is a team skill, which has to be practiced. Developing team skills is often more difficult than developing individual skills. In a learning organisation, leaders roles are designers and teachers who require skills to build a shared vision. Learning can be a competitive weapon. Organisations have to "unlearn" what was successful in the past in order to build the right attitudes and behaviours to ensure a lasting change. Organisations with rigid procedures and information systems will learn more slowly than those with flexible and open channels of communication.

2.5.2. Empowerment

"Put the decision point where the work is performed, and build controls into the process" (Hammer 1990)

Management has to enrich and empower the jobs' of employees thereby disempowering themselves. The people doing the work should integrate it more effectively. Management should delegate most of the integrating powers to the workers in order to

achieve greater effectiveness, speed, quality and creativity within the boundaries of the job.

A) Empowerment Considerations

• Restructuring of jobs and responsibilities

The organisation must create the infrastructure, which will permit the reskilling of employees in order to effectively carry out their new roles.

• Management roles

Management has to modify their own roles and attitudes by relinquishing some control to their subordinates.

Remuneration Structure

The remuneration structure will have to be revised to take into account the additional responsibilities assigned to employees. These new responsibilities and roles need to be communicated to avoid confusion and misunderstanding.

Role Review

Roles should be regularly reviewed and refined in order to optimise processes and to monitor the progress of the employees thereby providing guidance if required.

Talwar (1993)

2.5.3. Skills

"What counts - For power, authority, responsibility, is what you can do, you yourself, you with your own skills and personal qualities".

(Champy, 1995)

Different skill requirements and responsibilities when empowering employees can prove to be challenging and difficult for managers and employees. Employees with a drive for progress and additional knowledge will be motivated if they receive the correct training. This however could pose a threat to those who are in a comfort zone and are reluctant to step into unknown territory. Leaders need to be responsible for building a learning culture where people are continually expanding their capabilities to shape the future. The learning culture in the organisation helps rectify the skill deficiencies. The additional skills will help the organisation and enhance the individual's need for recognition and feeling of worth. The leader's role is now one of coaching, guiding and facilitating. Development of the learning culture is a gradual process. Skills need to be developed for each core process. Training must be focused and pertinent to job related activities and the time lapse between training and applying the knowledge should be minimal.

A) Tracking Skills Development

Core competence has been defined by Hamel and Prahalad (1980, p81) as "In the long run, competitiveness derives from an ability to build, at lower cost and more speedily than competitors, the core competencies that spawn unanticipated products."

Gronhaug and Nordhaug (1992) have extended on this definition by stating that strategic management is about adjusting competence to a constantly changing business environment. In addition effectiveness is an external standard related to the firms ability to meet the demands of the customers it aims to serve. These thoughts are mirrored in

Senge's (1990) concept of the "learning organisation" in which he claims that if organisations are to survive and thrive, they need to learn to adapt rapidly.

By analysing Prahlad's (1990) work on core competence and Senge's (1990) work on "learning organisations", one will come to understand that organisations need to develop transition management as a core competence. The significance of competencies are so significant that they are now regarded as productive resources and firms need to be in possession of the right competencies, as it is crucial for their future performance.

Garrick and McDonald (1992) believe that competencies are useful for insertion in job descriptions, recruitment, training and job definition and assist in assessments. They are also useful for professional development and contribute to the development of organisation-wide strategies for training.

Arguments opposing the use of competencies in assessments are based on the belief that generic standards by definition cannot be relevant to the prediction of performance on in actual contexts. Also individual candidates are unlikely to satisfy all the standards.

It is interesting to note that competencies are useful, if it is understood that they have a life cycle (Iles, 1993). Some competencies are emerging and may not seem to be important during the specific period in which they are viewed. However they may become important in the future depending on the organisation's strategy. At the same time, other competencies may be maturing and becoming less important for the future.

This is useful when one is involved in defining change management competencies. One must understand that the volume of change experienced by an organisation will vary at any time in the lifecycle.

Garrick and McDonald (1992) propose a general framework for the development of competence-based standards. The use of this framework suggests that the specific context within which that job will be performed needs to be taken into account. Using the context, the content can be developed using the four-phase methodology i.e. define roles, define competencies, set performance criteria and cluster areas of comptencies.

Iles (1993) explains that some United Kingdom organisations have rejected generic, offthe-shelf models in favour of those, which are more specific to the organisation and more expressive of its particular culture and language. Organisations thereby gain greater commitment and ownership from the employees.

There have been some arguments against the competence movement. One such argument was highlighted by Jacobs (1989) as the competence movement only identifies observable pieces of behaviour, which can be verified through objective measurement, important qualities incapable of direct observation and measurement are excluded. There are so-called "soft" skills such as assertiveness, creativity, sensitivity and intuition tend not to be included as they are difficult to measure. The British Approach is more inclusive of so-called soft skills, or attributes.

2.6. Conclusion

Manning (1997) has pointed out that while companies around the world race towards new levels of competitiveness, South African organisations are grappling with a paradox that threatens their survival as to how to become world class in their performance and local in their character.

From the literature review presented it is apparent that change planning, managing resistance to change, communication process and job satisfaction levels are critical for the success of the change process. Besides being critical to the process itself, it is evident that these factors are interrelated to some extent.

This then leads one to the hypotheses for this research study. Hypotheses were defined as follows and provided the direction of the study in subsequent chapters.

- H_1 The change planning process was effective.
- H₂ There were effective communication sessions with employees on the change process.
- H₃ Management has positively influenced the resistance to change during the change process.
- H₄ There was an increase in job satisfaction levels after the change was

implemented.

H₅ Effective change planning increases communication

H₆ Effective change planning has a positive impact on the resistance to change.

H₇ Effective change planning increases job satisfaction.

H₈ Increase in communication has a positive impact on resistance to change.

H₉ Increased communication increases job satisfaction.

 H_{10} A positive impact on resistance to change increases job satisfaction.

For the purpose of this study, positive impact resistance to change implies a reduction in the resistance to the change process.

3.1. Introduction

This chapter describes the methodology used to conduct the research for this study on

Formchem Chemicals (KZN). The research problem stated in Chapter One focused on

the evaluation of the change strategy in the formulations department at Formchem

Chemicals (KZN). Following the research problem identification, the hypotheses derived

at the end of the literature review, was based on the analysis of the following constructs:

change planning, communication, resistance to change and job satisfaction.

3.2. Research Method

For this research study both qualitative and quantitative research was carried out. Initially

a qualitative study on the change management process at Formchem Chemicals (KZN)

was carried out, followed by a quantitative study. This was done to verify the

interpretation and conclusions from the first technique. This type of design is referred to

as the triangulation method. Triangulation is the use of both qualitative and quantitative

research approaches.

3.3. Sample

The sample frame for the research was the same as the sample size. The sample

comprised of all employees from the Formulations Department at Formchem Chemicals

(KZN). This included management and employees affected by the change process. Refer

to Table 3.1.

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Table 3.1: Sample size

Level in Organisation	No of Employees
Senior Management	1
Mid Management	2
Technicians	20

The sampling method used was non-probability sampling, using the purposive sampling technique. Purposive sampling is a non-probability sample that conforms to certain criteria. The specific type of purposive sampling used in this study was judgement sampling where the researcher selects sample members to conform to some criteria. For this study the employees from the formulations department, who have undergone the change process were selected. For this study the sample was divided according to the management levels and different research methods and procedures are used for the different levels.

3.4. Qualitative Design

In order to evaluate the change management process at Formchem Chemicals (KZN) it was necessary to understand how the change was implemented, within the constructs defined and what was the before and after effects of the change. To provide this baseline an exploratory study was conducted using a case study method. The case study outlines the working environment at the formulations department before and after the change implementation. Information was gathered from different stakeholders in the change

process thereby highlighting the range of benefits and limitations introduced by the change strategy.

3.4.1. Sources of Evidence

A) Documentation

Information for the case study was obtained from past company records, presentations and meeting discussions. Information from past company records included information on the history of the company prior to the change being implemented and the history of the department. This was obtained from a company profile done a few years ago and past department performance records. The presentations were done on the roll out of the strategy from management's perspective. The company also has guidelines in place for change implementation and dealing with change, which was available on the company intranet. Finally key issues discussed in the union meetings were also gleaned from meeting minutes. This provided information on the reaction of union members to the change process.

B) Interviews

Semi structured interviews were conducted with senior and middle management and union representatives. Some questions were open ended while others required much shorter and precise answers. The questions tried to bring out respondents opinions on the change strategy revolving around the constructs defined earlier. The interview questions set up followed a focused interview style, where the respondents were interviewed for a short period of time, interviews were open ended and took on a conversational manner, but the interviewer followed a set of questions.

C) Focus Group

This session was held with the 20 technicians, in groups of 10. Once again semistructured questions were asked and the respondents were all asked for feedback. All respondents added their input and it was much easier to work with small groups of 10 employees at a time. In order to prevent intimidation by management it was decided to conduct this session with the technicians only.

3.4.2. Measuring Instruments

A) Interviews

As mentioned earlier, the interview questions dealt with the four constructs identified namely change planning, communication, resistance to change and job satisfaction. The key stakeholders interviewed were Senior Management, Middle Management and Union Representatives (UR). It is important to note that the questions asked were quite general and was appropriate for all stakeholders being interviewed. The questions posed to these individuals are as follows.

Construct One: Change Planning

The questions posed had to define the need for the change, the stakeholder involvement in developing the change strategy, the type of strategy adopted and the time spent on the planning stage.

- 1. What were key factors driving the need for the change?
- 2. Who were involved in designing the change strategy?
- 3. What type of strategy was used?
- 4. Do you think there was sufficient time spent on planning the change?

Construct Two: Communication

The following questions focused on the clarity of communication to all stakeholders, the

type of communication (top/down or two way communication) and the effectiveness of

communication sessions. In the case of the UR issues, it also included union meetings.

5. Were the objectives clearly defined to you?

6. Do you think the communication during the change process was effective? What

format was followed for the communication sessions?

Construct Three: Resistance to Change

For this construct, the effect of the change on the working culture was analysed.

Questions tried to extract the barriers to the change process these include those that were

identified during the literature review, and possibly new factors which, were unique to the

research study.

7. Was there any negative feedback (attitudes, working culture) during the change

process from the:

a) Employees

b) Unions?

8. Were there any other barriers to the implementation process?

Construct Four: Job Satisfaction

Job satisfaction was dependent on the acceptance of the new working conditions and the

remuneration for the work being carried out. Information was needed on employer

approach to these issues and union acceptance.

9. Do you think enough effort was put into the following areas:

a) Empowerment process

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- b) Skills development
- c) Remuneration?
- 10. Considering what has been achieved thus far, would you change anything if you had the opportunity to go through the process again? Would you consider the strategy as being a success?

B) Focus Group

The second measuring instrument used was the focus group approach. Here the questions were more open ended and once again revolved around the four constructs defined. Here again the technicians in the formulations department were asked for their views on the:

- 1. Do you think there is a need for the change? (construct one)
- 2. Are you happy with the communication on the change process? (construct two)
- 3. Was there any uncertainty on the change process? (construct three)
- 4. Are you satisfied with your new job descriptions? (construct four).

3.5. Quantitative Design

Quantitative research describes, explains and tests relationships. Techniques used generate numerical data. Evaluations of the change process are extremely important to Formchem Chemicals (KZN). Waiting for changes in performance in order to decide if a change was successfully implemented, is unacceptable as time is critical. The use of performance as an evaluation method has two problems. Firstly, is the length of time and therefore the possibility of identifying problems too late and secondly there are other contributing factors, which are not part of the change process, which also contribute to

the change in performance. For the evaluation process a questionnaire was administered to the 20 technicians in the formulations department at Formchem Chemicals (KZN).

3.5.1. Measuring Instrument

Groenewald (1986) identified three characteristics of questionnaires. Information is collected from different cases, a finite number of cases are registered and questionnaires are executed in a circumscribed area at a given time. This approach was chosen for the evaluation, as it was totally anonymous and employees were not intimidated when expressing their feelings.

A) Designing the Questionnaire

A questionnaire, which was used by Goodwin (1997) was adapted for the purpose of this study. The questionnaire was chosen most suitable after a review of measuring instruments used in previous studies and best matched the constructs to be evaluated. Goodwin (1997) used the Change Resistance Scale (CRS) (ODR, 1991) which was used to assess resistance to change. The CRS is a 25-item questionnaire, which sets out to identify potential sources and strengths of resistance to a specific organisational change process. In order to improve readability of the questionnaire the 10-point semantic differential scale was changed to a 5-point Likert scale. The scale ranged from strongly agree to strongly disagree. The purpose of the study was outlined on the first page. Participants had to fill in personal details concerning home language, age, educational qualifications and length of service. The questions included in the questionnaire were as follows: (Refer to Appendix1 for the final questionnaire)

Table 3.2: Questions

Change Planning

- 1. How involved have you been in the planning of the change?
- 2. Do you believe that the change was really needed in the formulations department?
- 3. Do you believe sufficient time has been spent planning the formulations change strategy?

Communication

- 4. How clear has communication been about the formulations change strategy?
- 5. Do you understand the purpose of the change?
- 6. Were your concerns raised in the communication sessions addressed?

Resistance to Change

- 7. Do you believe that management is supportive of this change?
- 8. Do you believe that the change implemented has positively impacted on the culture in the formulations department?
- 9. Are you committed to making the formulations change strategy a success?

Job Satisfaction

- 10. Do you believe that adequate rewards are being provided to accomplish the change?
- 11. Are you confident that you will receive the necessary training to provide you with the skills you require to perform all your tasks?
- 12. Do you believe the change in the department has improved your working conditions?

In order to address the four constructs, the questions in Table 3.2 were used in the questionnaire. The questions on change planning were asked to determine whether employees participated in the change process and understood the need for the change. Questions 3-6 highlighted the effectiveness of the communication process and the type of communication method adopted. The questions on resistance to change determined whether employees were themselves supportive of change and their perspective of

management. It also highlighted the impact of the change on the culture in the department. Finally the questions on job satisfaction analysed whether employees were satisfied with their jobs in terms of rewards, skills development and working conditions. This included issues such as monetary rewards, continuous training and safe working environments.

B) Administration of the Questionnaire

The questionnaire was administered during work hours at the control room. There was no management present and the anonymity of respondents was stressed. It was also stressed that this was purely for research purposes and there were no right answers. Some employees had difficulty understanding the questionnaires. The researcher tried to explain the questions to them. Some employees needed the questions to be translated and other employees helped with the translation.

3.6. Internal and External Validity

3.6.1. Case Study:

Yin (1989) has defined 4 tests, which can be used to judge the quality of case studies. They are:

- Construct validity: Establishing correct operational measures for the concepts being studied;
- Internal validity (for explanatory or causal studies only, not for descriptive or exploratory studies): Establishing a causal relationship, whereby certain

conditions are shown to lead to other conditions, as distinguished from spurious relationships;

- External validity: Establishing the domain to which a study's findings can be generalised;
- Reliability: Demonstrating that the operations of a study such as the data collection procedures can be repeated, with the same results.

In order to increase construct validity of the case study research approach, data was collected from all stakeholders focusing on the four constructs that were defined and the case study was reviewed by some of the stakeholders. Internal validity is not of significant importance for an exploratory study when compared to a causal relationship study. However internal validity of the case study was increased by comparing information obtained from different sources. One should remember not to digress and concentrate on pertinent information related to the constructs. The external validity for a case study research will involve testing theory and obtaining replication of the findings. This would be possible as the rollout of the Formulations Change Strategy takes place at other sites in South Africa.

3.6.2. Questionnaire

Prior to administering the questionnaire, two employees looked through the questions to validate the understanding of the questionnaires. Goodwin (1997) had proven the reliability of the instrument in his study that examined the management of resistance to change. The validity has also increased as the questionnaire was presented in sections

with each section dealing with one construct and hence the instrument fully addresses the objectives set out initially.

3.7. Analytical Tools

3.7.1. Qualitative Analysis

Case study analysis is not given much consideration. For the purpose of this study, the case study will follow a linear-analytic structure where the sequence of subtopics involves the issue or problem being studied, the methods used, the findings from the data collected and analysed and the conclusions and implications from the findings. There are a number of methods of analysis of case studies. For the purpose of this study the Pattern-Matching technique mode of analysis (Yin, 1989) was chosen. This merely compares the empirically based events with the conceptual one. The literature review conducted in the previous chapter outlines how the change management process should be handled. This provides the conceptual (theoretical) level. The conceptual level represents the factors in the ideal situation. The empirical level defines what has actually taken place. This is determined from the case study research. The patterns may or may not match and the reasoning behind this is evident in the outcomes of the change process.

3.7.2. Quantitative Analysis

The Likert type scale used in the questionnaire produced ordinal data. The method of descriptive statistics was used to analyse the data. With the help of the SPSS computer program the following analysis was performed on the data. A frequency table was constructed using the data from the questionnaire. The frequency table was used for

arraying the data from the lowest value to the highest value and the median and mode were calculated for the information gathered on the sample itself. The mode provided the score (value or category) of the variable, which was observed most frequently. The median showed the midpoint of the distribution. A similar table was drawn up for the answers to the twelve questions in the questionnaire. Here the mean and the standard deviation was calculated. The mean was calculated which provided a sum of the observed values divided by the number of observations. The standard deviation calculated represented the deviation from the mean for each question.

A) Hypotheses Testing

The testing of the hypotheses for this study was done using the two tailed t test for one-sample studies. The t test is normally used for small sample sizes. The probability value is calculated and based on a 95% confidence level the hypothesis is either accepted or rejected. This means that the probability is set at 5% and therefore in 95 cases out of 100 the differences observed are due to the real differences existing, but in 5 cases out of 100 they will have arisen from chance alone. The following hypotheses were tested using the t test:

- H₁ The change planning process was effective.
- H₂ There were effective communication sessions with employees on the change process.
- H₃ Management has positively influenced the resistance to change during the change process.
- H₄ There was an increase in job satisfaction levels after the change was

implemented.

B) Correlation Hypotheses Testing

Spearman's Correlation coefficient rho was used to analyse the correlation hypotheses presented below. This correlation provided a measure of linear association between the two constructs in the hypothesis. As each construct comprised of 3 different questions, the mean was found for each construct. The bounds on the coefficient are the same: $-1.0 \le r_s \le +1.0$. If r_s is fairly large and positive, then there is close positive agreement between the ranks of the two variables. If r_s is close to -1.0 then when one variable has a high rank its companion tends to have a low rank and vice versa. Also, when r_s is near zero, then the ranks of the two variables are nearly independent. The confidence level used again was 95%. The probability values were compared to this level of confidence.

Correlation Hypotheses

 H_5

 H_{9}

Effective change planning increases communication Effective change planning has a positive impact on the resistance to H_6 change. H_7 Effective change planning increases job satisfaction. H_8 Increase in communication has a positive impact on resistance to change.

 H_{10} A positive impact on resistance to change increases job satisfaction.

Increased communication increases job satisfaction.

4.1. Background Information

Formchem Chemicals (KZN) is located on the North Coast of Durban. The company was

one of the divisions of a major South African chemical company prior to 1997. A parent

company has a number of manufacturing plants, which specialise in different ranges

products. In this case Formchem Chemicals manufactured one such range of products.

At the end of 1997, the parent company was bought off by a one of the world's leading

chemical company. Formchem Chemicals was one of the two divisions retained whilst

the remaining divisions operated by the parent company where divested.

In 1998 the formulations department became the key focus for the need to change.

Moving through the post apartheid era, brought about major changes in the profitability of

companies. Besides dealing with the issues of diversity and improvement of skills, most

South African businesses were beginning to face harsh realities. Removal of market

protection policies and privatisation, exposed the business community to the challenge of

competing globally with high product quality and low costs. Following the new

ownership, there had to be a number of changes that had to take place in order to compete

on a global scale.

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4.2. Change Planning

In 1998 the new owners conducted an audit on Formchem Chemicals. A team of specialists were sent to South Africa and the shortcomings and areas of opportunity within the department were highlighted. Firstly, the capacity in the formulation department, far exceeded its present needs. Other issues included low technical integrity in terms of product quality, environmental and safety concerns, the facilities required a large manual labour complement, the plants were below standard with respect to product integrity and environmental, health and safety (EH&S) performance. EH&S issues included poor ventilation due to inadequate air extraction systems leading to worker exposure to contaminated air which increased the risk during operation. In addition, the fragmented and manual manner in which the product was packed resulted in a decrease in product quality targets. All these concerns ultimately threatened the future, long-term, reliable operations at the formulations department.

4.2.1. Objectives

Once these shortcomings were noted, it was a priority to rectify the problems. Subject matter experts on a global level where consulted as to the best strategy to implement in order to meet the objectives. The objectives were the need to meet product integrity compliance, abiding to mandatory environmental, health and safety (EH&S) issues, improvement of final product and packaging, improvement of productivity through automation and increased reliability of supply and standardisation. EH&S improvements are given the highest priority globally and it was mandatory to comply to all health and safety standards set by the company.

The following issues had to be addressed in the formulations department with respect to EH&S:

- Ergonomics improvements
- Exposure to hazardous products reduced

These objectives would finally result in the improvement of the general quality of product delivered from Formchem Chemicals (KZN).

4.2.2. Formulations Change Strategy

The strategy required:

Rationalisation of operations through the process of product groupings

This implied the relocation of some formulation and packaging operations to comply with product integrity guidelines. Due to contamination problems, certain products cannot be manufactured in the same manufacturing facility. Hence the three sites had to move towards manufacturing dedicated products, which complied with these guidelines.

• Withdrawal from manufacturing and formulating of certain products

The production of non core products had to be terminated and the organisation had to concentrate on the most profitable products. Formchem Chemicals (KZN) had to narrow their product range and limit production to those that they could produce the best.

• The need for strategic alliance with solid local formulation companies (third party) and outsourcing of non-core business to contractors

These alliances allowed Formchem Chemicals to continue to keep customers happy by producing non core products with the advantage of having the organisation's production capacity dedicated to core products.

Automation of operations

Packaged product quality suffers from the variability inherent in manual operation.

Automation normally results in the reduction of employees. Labour cost was also a significant proportion of the total cost to formulate and package product. Automation would improve product quality, EH&S issues and productivity. The new filling procedures will result in package component standardisation.

Operational risk reduction

Operators were exposed to hazardous products during the filling operations. There was potential to mix packaging components as well as contaminate products. By upgrading formulating procedures, one could assure compliance with manufacturing guidelines and an improvement in overall formulation and packaging efficiency.

4.2.3. Critical Success Factors for this Strategy

Firstly, the ability to plan optimal utilisation of the formulation lines whilst maintaining product integrity standards. Secondly, planning and scheduling of the operations is critical to reduce downtime on the plant. Downtime is the length of time when the plant is not operating. Possible reasons for downtime could be cleaning, delay in delivery of raw materials or mechanical breakdown of equipment. Thirdly, large orders to be formulated during peak season and small orders to be completed during the off peak season. Finally the most critical of all factors is the people. One has to ensure the people

remain optimistic and have the necessary skills in order to do their work effectively and efficiently.

4.2.4. Project Execution

From 1999 until 2000, technology design issues were finalised. Together with the help of key people globally, the design was finalised and the modification to operations began in November 2000 at Formchem Chemicals (KZN). The technology design covered EH&S, product integrity, operational and automation issues. The plan was to finish implementation by the end of March 2001. Due to delays in the process some of which were avoidable if detected earlier, the project has been delayed by 3 months. Retrenchments have taken place and the production is now in peak season. Some of the equipment installed have been designed specifically for this type of operation, and has not been used previously. Testing and optimising has further delayed the implementation stage.

4.3. Communication

Once the objectives were defined, communication sessions began immediately. Considering that there are 3 Formchem Chemicals sites in South Africa, communication sessions were held with all sites. This took place from the end of 1998. In 1999 there were 2 union meetings held at Formchem Chemicals (KZN). These meetings were more frequent towards the end of last year. The unions had been asked to form subcommittees and feed ideas back to the main management and union meetings. This seemed to be accepted by all parties.

From the beginning of 2001 communication sessions with all employees took place almost every second week. Management tried to make these sessions two way but this did not always happen. Some employees who knew that they were affected by retrenchments were not interested and felt the implementation stage had taken too long. It was interesting to note that the union representatives took up most of the discussion time as union members preferred them speaking on their behalf. Also even though management discussed issues with union representatives prior to having a communication session with all employees, the points discussed seemed to be more realistic to union members when management communicated these issues.

The use of a Zulu translator during communication sessions also assisted those employees who found it difficult to understand English. This was important as the future of employees lives were at stake and it was critical that their concerns be addressed. Concerns were adequately addressed during the session but a suggestion from employees was that management should have been prepared for the questions that were going to be brought up. They were unhappy about not getting answers regarding critical issues but timeously.

4.4. Resistance to Change

4.4.1. Management Commitment

Management has taken on the responsibility to drive the change. Senior management has tried to be as clear as possible by communicating as often as possible. They have realised

the importance of this change and have attempted to pass on the seriousness of the business need on to the employees. Even though management has tried to include as many parties as possible during the design phase, it seems as if middle management were only exposed to the strategy during the implementation phase. Middle management are committed to the change but would have preferred to be involved from the outset. Their involvement could have helped identify problem areas that had been overlooked during the design phase.

4.4.2. Working culture

Prior to change taking place in the department, employees were placed in teams. Each team had a team leader who had a supervisory role. He directed the team and ensured the required production took place. With the introduction of the new filling and packaging machinery, there has been a drastic shift from the way things used to be done. There is now single handling of material flow from pack material to palletised product, introduction of specialised teams to fulfil these roles, dayshift packaging facilitating supervision, capacity flexibility and optimum operation dependent on proper scheduling and planning. These changes have resulted in the rationalisation of jobs with limited possibility of relocating employees to other departments on the site. There were 25 jobs lost in the department. The team leader concept has been eliminated and all employees have equal responsibility on the team. Currently there are problems with this new working environment with some individuals refusing to take ownership of the work they have been assigned to do. These individuals tend to rely on a team leader to tell them what to do. On the contrary those who had the team leader status have now welcomed

this change, as it would mean that all team members would take more initiative. The most rewarding part to mid management is the initiative taken by those who are willing to take on the extra responsibility. Initially when the new technology was explained to employees, they refuse to believe that this could actually be done automatically, but after watching videos on the equipment, they then realised that this could be done.

Currently the project is delayed by 3 months, the retrenchments are over and the department is now left with 20 employees. Some of them still do not understand why the retrenchments are taking place, as there is a shortage of employees in the department. These are the employees who are disillusioned and hence feel the working culture was much better before the change could take place.

4.5. Job Satisfaction

The formulations department at Formchem Chemicals (KZN) is unlike any of the other departments. It was always perceived that the work done in this department was very easy and did not require high level of skills. The manual way of doing things prior to the change reinforced this perception. Employees in other departments who could not perform due to health reasons or were not meeting expectations were transferred to this department. Faced with the introduction of the new technology and the retrenchment of people, management and the unions had to reach a common understanding.

4.5.1. Challenge

The challenge facing the department was the selection and training of operators to take the organisation where they wanted to be. After putting forward the dilemma to the union officials, management asked for suggestions. Even though the unions would of liked all employees to be trained before retrenchments could take place, the length of time it would take an illiterate and non English speaking employees to learn would cause a delay in the project execution. There were basically two suggestions on the table. Either retrench all employees in the formulations department and open up the retrenchment packages to the entire site. This would mean the recruitment process for the 20 technicians would have to be opened up to the entire Formchem Chemicals (KZN) site. The second suggestion was to do an assessment on the 45 employees in the department and choose the 20 people that performed the best.

An Adult Basic Education and Training (ABET) assessment was conducted and based on this the top 20 were chosen. Of the 20, there were 2 people on the highest level, which was a matric equivalent. The remaining 18 were spread between a standard 3 to a standard 8 level of education. The remaining 25 people were retrenched at the end of April. The 20 people had the option of taking the package after 6 months, which was a probation period. Thereafter a quarterly evaluation would be done on each employee for then next two years, and based on this review it would be possible to dismiss an employee on non performance.

4.5.2. Learning Culture

In order to ensure that these employees gain the necessary skills, in order to work as a multi craft technician, the departmental training matrix together with a personal training matrix had to be completed. A multi craft technician is one who is able to operate different plants. The technician will be involved in production, maintenance, quality control, troubleshooting and planning. A departmental training matrix defines the competencies required by all employees in the department and a personal training matrix, is each employees' training record which has competencies obtained and those outstanding. Feedback from the unions led one to believe that they had expected more effort dedicated towards training prior to implementation. Union representatives felt that training procedures should have been more clearly defined. There were similar sentiments were expressed by middle management.

The definition of the competencies would help employees understand what was expected of them in the new role. Concepts such as empowerment that were used during communication sessions were not fully understood by employees. One has to realise that these employees have come from an environment where everything they have done had been dictated to them. Therefore employees need to undergo training to understand these issues and then put them into practise. All employees awaited an increase in pay as there seemed to be a lack in understanding of the remuneration terms for the new job. The training matrix would also help explain this by defining the critical competencies required before obtaining a salary increase.

Employees in the formulations department had undergone extensive training in certain areas in the process. In some instances the training has been less formal as it is more on the job training. Employees have been waiting eagerly for further training as they know they lack certain skills. Unfortunately, besides implementing the new strategy, normal production has to still take place and orders have to be met. So the completion of the training and thereafter the benefits of training would take some time to be realised.

4.6. Analysis of Case Study

Case study analysis was done using the pattern matching technique. The approach to the four factors namely change planning, communication, resistance to change and job satisfaction taken by Formchem Chemicals (KZN) is critically analysed by considering them in light of those suggested in the literature review.

4.6.1. Change Planning

The strategic planned change rolled out at Formchem Chemicals (KZN) satisfies Schutte (1987) prerequisites to strategic change. The change is new to the organization and has an impact on the business and on the people. One could also argue that the change could be revolutionary, as the culture has to be redefined due to the introduction of the new working environment. The need for the change has also been clear from the outset. Wilson (1992) defined all the concepts, which were applicable as driving forces such as market pressure and new technology and the restraining forces such as fear of the unknown and fear of failure. All these concepts were also evident in the case study.

The diagnosis and planning stage of the strategy was done in a participative way as recommended by Grundy (1993) but the shortcoming was that even though great emphasis was placed on involving the unions, not much was given to mid management or to the local subject matter experts at Formchem Chemicals (KZN). Wilson (1992) has recommended a number of organisational change strategies and the type that best fit the formulation strategy was the charismatic transformation.

As Barnard (1991) suggests, top management at Formchem Chemicals (KZN) did drive the change program. The implementation timing however was not very realistic and therefore the department is experiencing delays. Whether the contractor is at fault for not meeting deadlines or the project management is not up to standard, tracking should take place from the planning stage and follow through the implementation phase. At the moment the key to making the change strategy a success is to keep the energy levels of the employees high. This could mean informing them of the threat to the organisation if the strategy does not work.

4.6.2. Communication

Communication between management and unions were carried out quite effectively. The lateral communication between departments posed some shortcomings as it could have been improved. Objectives were clearly defined at the outset and as Grundy (1993) suggested, the effect of rumours was insignificant as communication of the proposed change was announced as soon as management had their objectives defined. Goss et al. (1995) suggests that employee concerns be addressed, and this was accomplished in the

two-way communication sessions held with all employees. Some employees felt that this could have been handled more effectively, possibly with other methods and this should be noted for future change initiatives.

Senior management has definitely attempted to counteract the downfalls in the communication process as proposed by Bergh (1995). Objectives have been clearly defined, there has been participation by employees, adequate union engagement and understanding of the process.

4.6.3. Resistance to Change

Senior management should have spent more time with middle management in assisting them on how to deal with confrontations on resistance to change by employees during the change strategy. As with any change process employees at Formchem Chemicals (KZN) have fear of the unknown. Hultman (1998) describes the cost/benefit analysis of change. This particular change strategy implemented is a high cost and high benefit change. Employees will have to make a lot of changes but the benefits are high. They will be working in an environment, which is operating at global standards.

Resistance to change is a natural reaction and cannot be avoided. By dealing with resistance to change does not prevent employees from resisting change but limits the extent of resistance. Employees at Formchem Chemicals (KZN) are going through a period of transition and there has to be movement from the comfort zone. This could lead to breaking of relationships, taking on a new sense of direction and entering new territory.

They are now moving into an area where they know they lack the competencies in order to work effectively. The employees that are in the department have gone through the four-phase transitional process explained by Scott and Jaffe (1989). Some employees are in the resistance phase, others are in the exploration phase and some are committed. Everyone has progressed through the denial stage. The progression has been assisted by the commitment received from senior management.

Employees at Formchem Chemicals (KZN) have both personal and social needs. They need acceptance, respect, and a sense of meaning and purpose (Hultman, 1998). Chapman (1994) views on needs is as depicted with the employees in the case study. They need the resources and skills to perform their job, and at the same time be rewarded. Management has to make a concerted effort to motivate employees as this leads to an improved working culture.

Formchem Chemicals (KZN) needs to ensure that the change agents driving the change i.e. the unions, motivated employees and middle management do not lose their energy levels during the difficult times.

4.6.4. Job Satisfaction

Formchem Chemicals' (KZN) approach to involving as many stakeholders as possible in the change strategy has contributed to some level of job satisfaction. Training of people has taken place and is adequate at most areas. Areas still outstanding are those that deal with working issues such as empowerment and team skills. The major task which

Formchem Chemicals (KZN) has to face is the training of employees and the sooner the training matrices are completed, the sooner all employees will be given some direction with regards to remuneration and their career development.

Another contributing factor towards job satisfaction is the assurance given to employees that they would be given various forms of training to improve their competencies. This plan of action has to be set up and management has to stress the need for employees to show initiative in order to realise the results.

4.7. Conclusion

As with any change process one always wishes that they could go back and do something differently. Senior management chose to improve the communication process, the unions wanted more attention to be paid to training prior to implementation and mid management would have preferred more involvement from people from the department during the design phase.

Overall feedback from management and employees is that the change has impacted positively on the company and the department. Working conditions have been improved, attention to health and safety has improved and product quality has increased. Constant evaluations will be necessary to keep track of the success of the implementation. It is too early to comment on whether the strategy has been a success or not but the department needed the change in order to move towards becoming a globally competitive organisation.

CHAPTER FIVE: RESULTS

5.1. Introduction

This chapter presents a summary of the results obtained from the questionnaires administered. The introductory information gathered on the sample was also analysed in order to understand the sample characteristics. Descriptive statistical analysis was performed in order to accept or reject the 10 hypotheses.

5.2. Response Rate

All 20 questionnaires sent out were returned, resulting in a 100% return rate. The introductory questions on the first page were used to describe the sample and the twenty questions in the questionnaire were statistically analysed.

5.3. Sample Characteristics

5.3.1. Home Language, Gender and Age

Figure 5.1: Home Language of Respondents

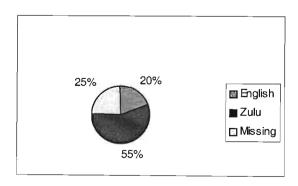


Figure 5.2: Gender of Respondents

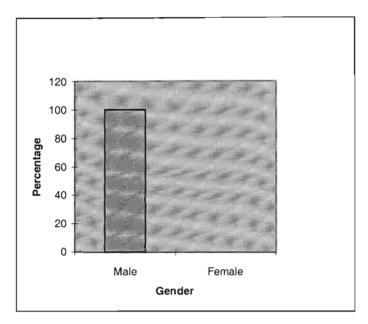
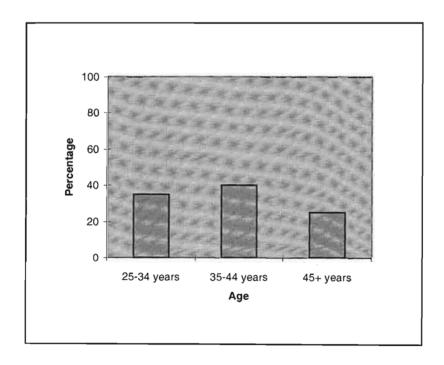


Figure 5.3: Age Distribution of Respondents



Summary of Results on Home Language, Gender and Age of Respondents

The results from Figure 5.1 shows that 5 respondents, which is approximately 25% of the sample, did not answer the question on home language and of the remaining respondents almost three quarters were zulu speaking. Information gathered also shows that all respondents were males (Refer to Figure 5.2). The workforce at the formulations department at Formchem Chemicals (KZN), has a workforce which falls mostly in the 35-44 age group, with 75% of the respondents below 44 years in age. Also the average age of the workforce is just below 35 years of age (Refer to Figure 5.3).

5.3.2. Educational Qualifications, No of years in present job and No of years in company

From Figure 5.4, one can see that most respondents have a standard eight, nine or ten level of education. No respondents have studied further than standard 10. Most employees in the department have been with the company for 7-10 years with one person working for 18 years (Refer to Figure 5.5). Finally over 60% of employees have been working in the company for 6-10 years (Refer to Figure 5.6). There are two people who have worked for over 18 years in the company.

Figure 5.4: Educational Qualification of Respondents

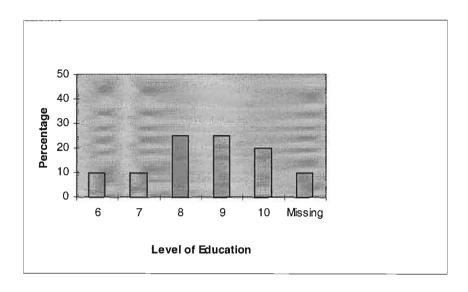
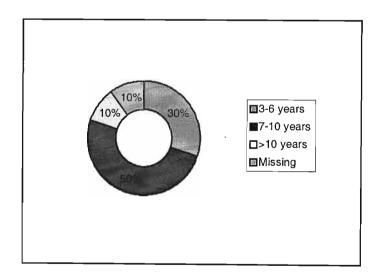
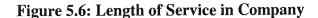
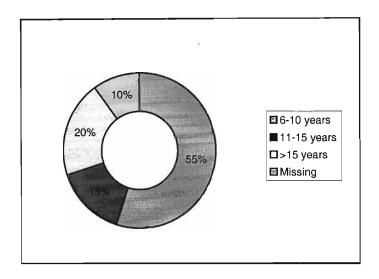


Figure 5.5: Length of Service in Formulations Department







5.4. Descriptive Statistics on Questionnaire Feedback

Information used for the following analysis was based on data obtained from the Likert type scale (Refer to Appendix 1). The coding was as follows:

1 : Strongly Agree

2 : Agree

3 : Unsure

4 : Disagree

5 : Strongly Disagree

Table 5.1: Descriptive Statistics on Feedback from Questionnaire

Questions	N	Mean	Std. Deviation
1. Involvement in Planning of change	20	2.10	1.0712
2. Need for change	20	1.65	0.5871
3. Sufficient time for change planning	20	2.35	1.1821
4. Clear Communication	20	2.05	0.9987
5. Understand Purpose of Change	20	1.75	0.7164
6. Concerns addressed	20	2.35	0.9333
7. Management supportive of change	20	2.05	0.8256
8. Positive Impact on Culture	20	2.40	0.8208
9. Commitment for success	20	1.25	0.4443
10. Adequate Rewards	20	2.75	1.0699
11. Will receive necessary training	20	2.10	0.9119
12. Improvement in working conditions	20	2.20	1.0052
Valid N (listwise)	20		

From the above table, it is evident that all twenty respondents answered all questions. The mean answers ranged between strongly agree and unsure. Agreeing with the need for change, understanding the purpose of change and commitment for success had mean scores between strongly agree and agree. Commitment for success had the lowest mean score, which fell closest to strongly agree and had the lowest standard deviation. The feedback to adequate rewards had the highest mean score which was closest to unsure and the second highest standard deviation. The response to involvement in planning of change and sufficient time for planning of change also had high standard deviations.

5.5. Testing Hypotheses

The two-tailed T test was performed on the questions relating to change management, communication, resistance to change and job satisfaction.

H_1 The change planning process was effective.

Table 5.2: H_1 - Results from T test

Question	Sig (2-tailed)
1. Involvement in planning of change	0.000
2. Need for change	0.000
3. Sufficient time for planning change	0.000

Probability (sig) value of 0.000 < 0.05 (confidence level 95%) hence the above statements are highly significant. H₁ is therefore accepted.

H_2 There were effective communication sessions with employees on the change process.

Table 5.3: H₂ - Results from T test

Question	Sig (2-tailed)
4. Clear communication	0.000
5. Understand purpose of change	0.000
6. Concerns addressed in communication sessions	0.000

Probability (sig) value of 0.000 < 0.05 (confidence level 95%) hence the above statements are highly significant. H₂ is therefore accepted.

H_3 Management has positively influenced the resistance to change during the change process.

Table 5.4: H₃ - Results from T test

Question	Sig (2-tailed)
7. Management Supportive of Change	0.000
8. Positive Impact on Culture	0.000
9. Commitment for success	0.000

Probability (sig) value of 0.000 < 0.05 (confidence level 95%) hence the above statements are highly significant. H₃ is therefore accepted.

H_4 There was an increase in job satisfaction levels after the change was implemented.

Table 5.5: H₄ - Results from T test

Question	Sig (2-tailed)
10. Adequate Rewards	0.000
11. Receive necessary training to improve skills	0.000
12. Improvement in working conditions	0.000

Probability (sig) value of 0.000 < 0.05 (confidence level 95%) hence the above statements are highly significant. H_4 is therefore accepted.

5.6. Correlation Hypotheses

The correlation hypotheses were accepted or rejected based on the level of significance

obtained from Spearman's correlation.

H₅ Effective change planning increases communication

Results from Spearman's Correlations:

 r_s

0.060

Approx Sig

0.800

r_s value indicates a weak relationship between the two variables change planning and

communication. Probability (sig) value of 0.800 > 0.05 (confidence level 95%) hence the

hypothesis is not statistically significant. H₅ is therefore rejected.

H₆ Effective change planning has a positive impact on the resistance to

change.

Results from Spearman's Correlations:

 r_s

0.318

Approx Sig

0.171

rs value indicates a strong relationship between the two variables change. Probability

(sig) value of 0.171 > 0.05 (confidence level 95%) hence the hypothesis is not statistically

significant. Therefore even though there is a strong relationship, there is a 17.1% chance

that this hypothesis will not be true. H₆ is therefore rejected.

83

H₇ Effective change planning increases job satisfaction.

Results from Spearman's Correlations:

 r_s

0.523

Approx Sig :

0.018

 r_{s} value indicates a strong relationship between the two variables. Probability (sig) value $% \left(1\right) =\left(1\right) \left(1\right$

of 0.018 < 0.05 (confidence level 95%) hence the hypothesis is highly statistically

significant. H₇ is therefore accepted.

H₈ Increase in communication has a positive impact on resistance to

change.

Results from Spearman's Correlations:

 r_s

0.485

Approx Sig :

0.030

r_s value indicates a strong relationship between the two variables. Probability (sig) value

of 0.030 < 0.05 (confidence level 95%) hence the hypothesis is highly statistically

significant. H₈ is therefore accepted.

H₉ Increased communication increases job satisfaction.

Results from Spearman's Correlations:

 r_s

: -0.009

Approx Sig :

0.971

84

 r_s value indicates that there is no relationship between the two variables change planning and communication. Probability (sig) value of 0.971 > 0.05 (confidence level 95%) hence the hypothesis is not statistically significant. H_9 is therefore rejected.

H₁₀ A positive impact on resistance to change increases job satisfaction.

Results from Spearman's Correlations:

 r_s : 0.461

:

Approx Sig

0.041

 r_s value indicates a strong relationship between the two variables. Probability (sig) value of 0.041 < 0.05 (confidence level 95%) hence the hypothesis is statistically significant. H_{10} is therefore accepted.

5.7. Summary of Results

The change planning process was effective. Accepted H_1 There were effective communication sessions with employees on the H_2 Accepted change process. Management has positively influenced the resistance to change during the H_3 Accepted change process. H_4 There was an increase in job satisfaction levels after the change was implemented. Accepted Effective change planning increases communication Rejected H_5 Effective change planning has a positive impact on the resistance to H_6 change. Rejected

H_7	Effective change planning increases job satisfaction	. Accepted
H_8	Increase in communication has a positive impact on	resistance to
	change.	Accepted
H ₉	Increased communication increases job satisfaction	. Rejected
H_{10}	A positive impact on resistance to change increases	job satisfaction
		Accepted

6.1. Introduction

This chapter is an evaluation of the results obtained from the questionnaire. The factors considered in the change management process will be discussed together with supporting information from the case study analysis.

6.2. Change Planning

The employees all agreed that the change was needed in the department. This question in the questionnaire had the lowest mean score and lowest standard deviation. This implied that all stakeholders felt there was a need for the strategic change. Employees also felt they were involved in the planning of the change but not as strongly as the need for the change. The time spent on planning the change had the worst score in this section, both mean score and standard deviation. Evidence from the case study supporting involvement in the planning of the change was the union feedback as well as management's objective to get as many stakeholders involved in the change process. Contrary to this feedback from mid management was more negative on this issue. Considering that the time spent on planning the change obtained the worst score in this section, one can attribute this response to the shortfall in issues such as training. Grundy (1993) suggests that insufficient time is spent on the planning phase and more time is assigned to implementation. This argument is supported due to the shortcomings in training and non-involvement of certain key people. Overall the hypothesis was accepted, i.e. the change planning process was effective.

6.3. Communication

The communication process was a two-way approach. As much as management would have liked more participation, it would be beneficial in future to look at alternative communication methods. Considering that majority of the workforce was Zulu speaking, it would have been more effective to have the employees recommend the most effective communication tool. There were no fuzzy objectives as these were explained clearly at the outset. Hence the mean score for understanding the purpose of change was 1.75 with a standard deviation of 0.7164. It is important to note that this communication should not stop and should constantly take place for both evaluation of change and opening the floor for discussion. Feedbacks from union representatives were also positive with regards to communication. The only shortcoming picked up in the communication process, was that the concerns were not adequately addressed. This is an important point as it may lead to uneasiness and distrust. Fortunately this was not the case. Even though employees wanted answers instantly, they did get their answers but not within the time frame they expected. Therefore H₂ was accepted as there was clear understanding of the purpose for change and there was agreement that there was clear communication.

6.4. Resistance to Change

It was also encouraging to have positive feedback to management's commitment to change as this is vital in achieving success in any strategy. As much as employees have to change to embrace the changes, management has to change as well. Buhler (1997) mentions the challenge facing management in handling uncertainty. At Formchem

Chemicals (KZN) management handled uncertainty by being honest. This was well accepted by the employees.

All employees in the department were also committed to the success of the strategy. The response that was least positive in this section was the effect on the working culture. Considering the change in working conditions, there was a great deal more to be done by an individual compared to the old system. Everyone was now accountable and as mentioned in the case study, taking ownership of the work one does is a bit problematic at the moment. Some employees still wait to be told what to do and sit back if there is no one there to lead them. Considering that most employees are more than seven years in their current job and are between 25 and 44 years old, which can be generalised as being a young workforce, it is surprising to see such low levels of initiative. This could possibly be a cultural issue where the old status of team leader, is one who will always lead and he will always have this stigma attached to him. The fear of failure as suggested by Bigler (1996) clear explains the resistance in the working culture. If this fear is overcome, there will be enhancement in the quality of worklife. Employees need to have a feeling of self worth.

In order to overcome resistance to change one has to understand employees' feelings. The type of loss experienced as explained by Scott and Jaffe (1989) has been identified by management at Formchem Chemicals (KZN). Using communication, management is trying to restore some sense of security and direction. Training will increase skills and improve relationship building among employees. Some employees have reached the

commitment phase and it is now important to keep these commitment levels. Due to the positive feedback on the level of resistance to change, H₃ was accepted.

6.5. Job Satisfaction

It was interesting to note in this feedback that the most negative mean score was obtained for the question on adequate rewards. Due to the rollout of the formulations strategy, employee expectations were raised, as they anticipated increase in pay. According to the feedback in the case study, the linkage of rewards to training and skills development was not given the urgent attention required in the planning stage. This was an area of concern as employees were keen to understand what was going to be expected of them in their new working conditions. Movement from their comfort zones has also caused a negative effect on working conditions.

Training is an issue that comes up all the time in the analysis. Training has been completed on the technical side but skills development on issues such as team building and empowerment is necessary. Career development information should be available for employees to view and discuss. Even though there has been a negative discussion on job satisfaction levels H₄ was accepted.

6.6. Relationships between Factors

The statistical analysis of the relationships between factors showed that there was a very weak positive relationship between effective change planning and communication. H_5 was rejected. H_6 was also rejected even though there was a strong positive relationship

Between effective change planning and the positive impact on resistance to change. Reason for rejection was that there was 17.1% chance that this statement was not true and considering our confidence level of 95% was set, this hypothesis could not be accepted. H_7 was accepted and analysis also showed a strong relationship between change planning and job satisfaction. H_8 was also accepted and testing indicated a strong positive relationship between increased communication and the positive impact on change resistance. H_9 was rejected and there seemed to be no relationship between communication and job satisfaction. Finally H_{10} was accepted and there was a strong positive relationship between the positive impact on resistance to change and job satisfaction.

6.7. Limitations of the study

Reviewing the above analysis, one could argue that all of these factors are related to each other and therefore all the hypotheses should be accepted. In light of this argument, which is supported by the evidence in the case study and information gleaned from literature, possible reasons for non-acceptance could be attributed to the use of an unsuitable measuring instrument or the small size of the sample. Unfortunately the sample frame was the same as the sample size and therefore could not be increased. Other possible sources of error could be the variation of each person's understanding of the questions and the tendency to provide positive answers, to show their understanding of the whole process. The questionnaire was in English and considering more than half the sample were Zulu speaking, could be an indication that the instrument was not effective.

This particular research process concentrated on the formulations change strategy only, in reality Formchem Chemicals (KZN) has to deal with a number of change strategies taking place at the same time which, may influence employees in different ways. The inability to consider all contributing variables is a limitation on the applicability of the research. Chetwin(1997) pointed out that individuals have their own definitions of terms such as change and use these definitions when approached on the topic therefore all individuals may not have the same level of understanding.

6.8. Conclusion

Regardless of the negative criticism towards the formulations change management strategy, management has tried its best to communicate, involve as many stakeholder in planning, support the change process and hence improve the working conditions. The pattern matching analysis performed on the case study also shows close correlation of the actual strategy to that recommended by literature. As with any change strategy, some pitfalls come up at unexpected times, the key is to acknowledge the shortcoming and move on after having learnt from your mistakes.

Similarly at Formchem Chemicals (KZN) each of the respondent's have their own idea as to how the change management process should be approached but it is promising to see that objectives have been clearly communicated and accepted by all employees. Everyone has realised that the change is needed in the department and is committed to making the change a success. The key to ensuring this success is to be able to keep the

energy levels high of those key people driving the change process. Employees with high energy levels will be able to assist those that need to be encouraged. Cultural changes will not take place overnight. Through extensive training and development in both technical and non technical issues the gradual change in the way things are done will be accomplished as everyone will be armed with the skills necessary to make a positive difference in their working environment.

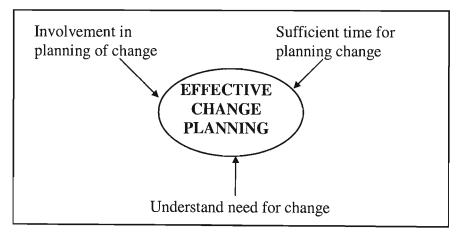
CHAPTER SEVEN: CONCLUSION

The evaluation of the change management process at Formchem Chemicals (KZN) focused on four of the many areas of change management. Change planning, communication, resistance to change and job satisfaction were dealt with in detail. It was evident that all of these factors are related to some extent. This conclusion was drawn from literature as well as the case study on the organisation.

7.1. Change Planning

Change planning is key to any change initiative. Management at Formchem Chemicals (KZN) ensured that sufficient time was spent planning this change initiative by frequent communication and involvement of all stakeholders in drawing up the strategy. From the information gathered one realises the importance of effectively carrying out the change planning process, ensuring employees understand the need for change and spending sufficient time in planning the change. By spending extra time on these issues prior to implementation, one can win over the commitment of employees as they understand the need for change and participate in the change process.

Figure 7.1: Change Planning



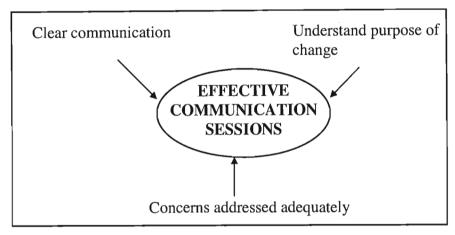
In Figure 7.1, one can see that all these factors impact on effective change planning.

7.2. Communication

Communication is the next factor considered. Effective communication depends on the communication technique used. As with the research study it was found that it was not easy to stand in front of the employees and expect a two-way discussion to take place. Besides ensuring that the employees are comfortable to participate, management must be competent enough to effectively carry out these sessions. Employees mostly relied on their union representatives to do the talking while they listened.

It is important to have clear communication sessions. People need to understand the reason for the change. Employees also expect management to be prepared to answer their questions immediately if there are concerns raised in these sessions. Some times it may seem unrealistic, but it is an expectation from the workforce. Early communication in the change process is critical in maintaining performance levels. This ensures that rumors do not affect the workforce. Early communication also ensures that management is communicating information to the employees and not delaying the process. From the research conducted, Figure 7.2 outlines the factors contributing to effective communication sessions.

Figure 7.2: Communication



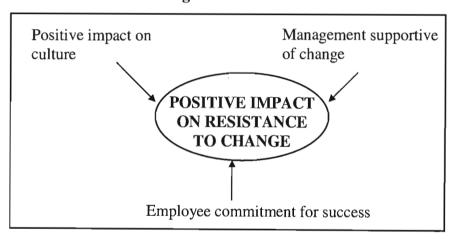
7.3. Resistance to Change

Resistance to change is a natural reaction by employees to the change process. Employees at Formchem Chemicals (KZN) experienced the same emotions. One has to remember that it is not possible to avoid these feelings of resistance but it is possible to deal with them and hence reduce the level of resistance. In dealing with resistance, one has to consider management support of the change process, the impact on the working culture and the commitment from employees. In Formchem Chemicals (KZN) management and employee support for the change process is evident. The impact on the working culture is not totally positive, but is a learning curve for those not used to teamwork and taking ownership of the work they perform.

With respect to employees some may change because they want to, others may change because they have to. It all depends on the costs and benefits. At the formulations department there are those that are totally committed to the change process while there are still a few laggards who are waiting to see what is going to happen before making a

concerted effort to change. When dealing with resistance to change one has to pay careful attention to the human side of the change process. One has to look at how the change impacts people personally. They feel a sense of insecurity, possibility of failure, loss of relationships and fear of the unknown. All of these issues have resulted in some of the employees at Formchem Chemicals (KZN) refusing to take ownership of their tasks. Unfortunately these issues can only be phased out with training. Figure 7.3 shows the factors, which were considered in the study that have positively affected the resistance of change.

Figure 7.3: Resistance to Change



7.4. Job Satisfaction

The people base in any organisation is the source of its success. Irrespective of how ingenious a strategy is, it will not work unless the people make it work. Formchem Chemicals (KZN) have undergone massive retrenchments and those that remain are on a two year training program. They do not have the skills and therefore require training for development. Linked to the training and acquiring of competencies is the remuneration

scheme. The change has improved their working conditions and removing health and safety concerns.

Training is critical in any change process. During planning, training plans and procedures should be put in place for technical and non-technical issues. Early identification of training needs will help prepare the workforce for the new working environment and hence ensure high levels of productivity. Uncertainty and dissatisfaction can lead to low levels of job satisfaction hence resulting in poor initiative and lack of performance. Refer to Figure 7.4 for the factors contributing to job satisfaction.

Figure 7.4: Job Satisfaction

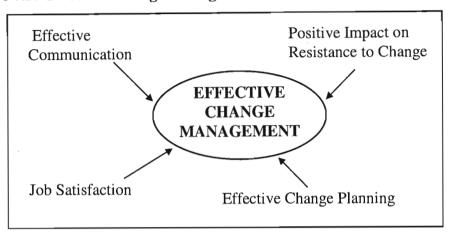


7.5. Interrelationships

As mentioned earlier in the chapter, the four main factors are related to some extent. From the research study conducted it was found that effective change planning resulted in increased job satisfaction, increase in communication led to a positive impact on resistance to change and a positive impact on resistance to change resulted in a higher level of job satisfaction. The other relationships were not statistically significant.

Possible reasons could be the small sample size or the use of an unsuitable measuring instrument. One can conclude from the research that a positive impact of the four factors leads to effective change management.

Figure 7.5: Effective Change Management



7.6. Opportunities for Further Studies

The study conducted is a longitudinal study, which forms a baseline for future evaluations during the rollout of the change management strategy over the next two years. It is recommended that future evaluations take on this format in order to make a sound comparison. The other two sites of Formchem Chemicals in South Africa will also undergo these changes in the Formulations department, it would be beneficial to compare the employee reaction to the change process in comparison to the employees at Kwazulu Natal. Also only four factors were considered in the effective change management strategy, further research should be conducted on other factors, which will help management, and employees understand the change management process.

7.7. Concluding Remarks

The study was successfully carried out as an in-depth analysis was carried out on those factors identified. The case study analysis showed closed correlation between the literature review and the actual strategy and the evaluation was positive. In conclusion to this study Dr Spenser Johnson (2000) quite aptly summed up the change process in any organisation. One has to remember that change happens when you least expect it to, so anticipate change, monitor change, adapt to change quickly, thereafter change and then enjoy change but always be ready to change quickly and enjoy it again!

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APPENDIX

APPENDIX 1

QUESTIONNAIRE

INSTRUCTIONS

The formulations department has undergone a major change recently from people being retrenched to introduction of new working procedures. The following questionnaire measures peoples' perceptions of specific change. It is composed of 4 sections, each containing 3 questions. Place an X on the number that best reflects your view of each of the following items.

As you read each item, consider how you feel about the change in your department. Please complete the section below before continuing with the questionnaire. Remember this questionnaire is totally anonymous therefore you do not need to fill in your name.

Home Language:

Gender:

Male

Female

Age:

18-24

25-34

35-44

45+

Highest Educational Qualification:

Number of years in present job:

Number of years employed by the company:

QUESTIONNAIRE

CHA	NGE PLANNING						
1.	How involved have you been in the planning of this change?						
	I have been involved in the planning of this change.						
	1	2	3	4	5		
	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree		
2.	Do you believe that the change was really needed in the formulations department?						
	I believe that the change was needed.						
	1	2	3	4	5		
	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree		
3.	Do you believe sufficient time was spent planning the formulations change strategy?						
	I believe there was sufficient time spent on the planning of the strategy.						
	1	2	3	4	5		
	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree		
<u>CON</u>	<u>AMUNICATION</u>						
1 .	How clear has communication been about the formulations change strategy?						
	Communication has been clear.						
	1	2	3	4	5		

Strongly Disagree

Disagree

Strongly Agree Agree Unsure

5.	Do you understand the purpose of the change?						
The purpose of this change was clear.							
	1	2	3	4	5		
	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree		
6.	6. Were your concerns raised in the communication sessions addressed?						
My concerns raised in the communication sessions were addressed.							
	1	2	3	4	5		
	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree		
RESIS	STANCE TO CHAI	<u>NGE</u>					
7.	Do you believe that management is supportive of this change? I believe that management is supportive of the change.						
	1	2	3	4	. 5		
	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree		
8.	Do you believe that the change implemented has positively impacted on the culture i						
	the formulations department?						
	I believe the change has positively impacted on the culture in the formulations						
	department.						
	1	2	3	4	5		
	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree		

9.	Are you committed to making the formulations change strategy a success?						
	I am committed to making the formulations change strategy a success.						
	1	2	3	4	5		
	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree		
<u>JOB</u>	SATISFACTION						
10. Do you believe that adequate rewards are being provided to accomplish							
I believe there are adequate rewards for accomplishing the change.							
	1	2	3	4	5		
	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree		
11.	Are you confident	provide you with the					
	skills you require to perform all your tasks?						
I am confident that I will receive the necessary training to improve my skills							
	1	2	3	4	5		
	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree		
12.	Do you believe the change in the department has improved your working conditions?						
	I believe the change has improved my working conditions.						
	1	2	3	4	5		
	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree		
THANK YOU!							