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USING A SYSTEMS BASED METHODOLOGY TO REDESIGN A MEDIUM SIZED FAMILY BUSINESS

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INTRODUCTION

"The only thing that is constant is change" - Heraclitus (540-480 BC)[1]

We find ourselves living in an era of accelerating rate of change which is evident from the increasingly rapid developments which surround us in our everyday lives. Increasing levels of interdependency means that almost any action we take will be accompanied by a complex ripple effect which will affect elements of our environment in ways we would never have imagined. The driving force behind all these continual rapid changes are humans, and as their numbers increase at an exponential rate, so can we expect the changes taking place around us to continue to multiply. We are currently hurtling into the information age of complex technologies, global markets and intense competition. With limited resources and increasing numbers, the market place is becoming increasingly competitive and will continue to do so. So, faced with a harsh environment such as this, we are forced to ask ourselves how we can go about designing an organisation which can not only survive, but thrive and prosper. In the words of Halal, Geranmayeh and Pourdehnad[2], what is needed in today's organisation is "a design which transcends ordinary organisational structures. A meta-structure which is designed to produce continual, rapid, structural change to manage the unusual demands of today's complex, turbulent world".

In this dissertation it is shown how use is made of a systems based methodology to re-design a medium sized family business. The **argument** put forward is that using an organisational model (which is described in Chapter 7) based on the combined[3] concepts of the Viable Systems Model[4], the Internal Markets Model[5] and the Multidimensional Organisation[6] within a systemic paradigm as a shared framework for thinking about an organisation, is very useful for a medium sized family business in a rapidly changing environment. The model, when used as the basis for the redesign of the organisation, will promote the long-term viability of the business and allow it to more efficiently and effectively reach its goals and objectives.

The dissertation is divided into two parts. Part I consists of Chapters 1 through to 3 and is concerned with building a solid grounding for the methods and techniques used in the thesis. Chapter 1 describes an epistemology which attempts to explain how we as humans conceptualise and interpret the world as well as the important role that the past has to play in understanding the present state of affairs. In Chapter 2 systems thinking is considered as one such way of conceptualising reality and the usefulness of the systems approach is discussed. Lastly, in Chapter 3 the concept of a learning cycle is discussed and used to illustrate how in completing this dissertation the author has progressed through a number of learning cycles.

Part II of the dissertation is concerned with the sequence of processes which culminate in the redesign of the organisation in question. This is guided by making use of a rigorous approach called the SCQARE[7] approach which is based on sound systems thinking principles and which has proven useful over a range of applications. SCQARE is an acronym for the words *situation, concerns, question, answer, reasoning* and *evaluation* and its ability to drive learning

[1] Sophie's World, Jostein Gaarder, Phoenix House, 1995, page 30.
[2] Internal Markets, Halal, Geranmayeh & Pourdehnad, John Wiley & Sons, 1993, page 4.
[3] The idea for the synthesis of these 3 models came from Johan Strümpfer, Operations Management Development Programme (OMDP) 1997, University of Cape Town.
[4] Heart of the Enterprise, Stafford Beer, Wiley, New York, 1979.
[5] Internal Markets, Halal, Pourdehnad & Geranmayeh, John Wiley & Sons, 1993.
[6] The Democratic Corporation, Russell L. Ackoff, Oxford University Press, 1984.
[7] Course Notes, Operations Management Development Programme (OMDP) 1996, Tom Ryan, University of Cape Town.

is discussed in Chapter 3. The process starts with the construction of a relevant mental model of the situation of interest and the concerns within that situation. The concerns are then posed as a question and some plan of action is then designed in the form of an answer to address the concerns. This answer must be rationalised i.e. firmly backed by sound reasoning in order to promote its perceived relevance and usefulness, and finally evaluated against experience (which may be real or simulated).

The situation statement in Chapter 4 is the description of a medium sized family business and its containing environment. Chapter 5 lists some of the concerns within the business and Chapter 6 encapsulates these concerns in the form of a question. These three chapters correspond to the 'situation', 'concerns' and 'question' parts of SCQARE. Chapter 7 describes the systemic based organisational model and details the methodology used to engineer the redesign of the business using the model. Chapter 7 corresponds to the 'answer' part of SCQARE. Chapter 8 is a detailed account of the results of implementing the methodology whilst Chapter 9 is a reflection upon this. These last two chapters together correspond to the 'evaluation' part of SCQARE and conclude the dissertation.

PART I

1 - EPISTEMOLOGY

"Wisest is he, who knows he does not know" - Socrates (470-399 BC)[1]

This chapter is the beginning of Part I of the dissertation and is dedicated to building the philosophical foundation upon which the approach used in this thesis rests. Epistemology is the technical term for a theory of knowledge and is derived from the Greek word 'episteme', meaning knowledge. In the words of Titus, Smith and Nolan[2], "it is primarily concerned with questioning the *sources* of knowledge, the *nature* of knowledge and the *validity* of our knowledge". The sources or origins of knowledge are questioned by asking where genuine knowledge comes from, or how we know. The nature of knowledge is a question of appearance versus reality - is there a real world outside the mind, and if so, can we know it? Lastly, in order to establish the validity of our knowledge we must be able to distinguish truth from error - we need to question how we can verify or test a truth. These are all important considerations if there is a true desire for learning and inquiry.

Over the centuries there have been many philosophers who have been concerned with the questions described above. For the purpose of this thesis, the two philosophers which have been singled out are Immanuel Kant and Georg Hegel. Kant (1724 - 1804) was born in the Baltic city of Konigsberg in the province of East Prussia, Germany. He had a solid grounding in the philosophic tradition of the past, being familiar both with the rationalism of Descartes and Spinoza as well as the empiricism of the British philosophers Locke, Berkeley and Hume (see Appendix C for a brief account of these philosophers). Both groups of philosophers were concerned with the question of what we can know about the world but had different approaches. The rationalists believed that the mind has the power to know some truths that are logically prior to experience. To put it more simply, they believed that the basis for all human knowledge lay in the mind and that we interpret the world according to our reason. The empiricists, on the other hand, held the opposing view that all knowledge of the world comes from experience or through the senses. Kant did not see these views as mutually exclusive and partly agreed with both groups. He thought that both 'sensing' and 'reason' came into play in our conception of the world. In his point of departure, Kant agrees with Hume and the empiricists in that all our knowledge comes from our sensations. He also, however, incorporates the ideas of the rationalists by concluding that in our reason there are factors which influence the way in which we perceive the world around us.

> *It is beyond a doubt that all our knowledge begins with experience. For by what should our faculties be roused to act, if not by objects that affect our senses, and thus partly of themselves produce impressions, partly, again, bring the understanding itself into movement, in order to compare these, to join or disjoin them, and in this manner work up such crude material of the intimations of sense into a cognition or recognition of objects which is named experience. So far as time is concerned, then, no cognition of ours precedes experience, and with experience all our knowledge begins. But, though all our knowledge begins with experience, it does not follow that therefore it all derives from experience. For it is just possible that experience is itself a compound. It is just possible, that is, that there is experience, besides what is due to the impression of sense, something (when merely acting because of impression); and*

[1] Sophie's World, Jostein Gaarder, Phoenix House, 1995, page 49.
[2] Living Issues in Philosophy, Titus/Smith/Nolan, 7th edition, D. Van Nostrand Company, 1979, page 161.

in that case, it would take long practice, it may be, to enable us to distinguish the latter, and separate it from the former. - Critique of Pure Reason, Immanuel Kant[1].

Kant continues by saying that such a component part of knowledge may be 'a priori' or prior to experience and thus not all of our knowledge is derived from experience. In other words, each of us has a framework, built on a set of apriori concepts or assumptions, which we use to interpret the world through our senses and generate the knowledge that we have. It follows, therefore, that we can only interpret experiences in terms of what we know.

We shall understand by cognitions a priori, not such as are independent of this or that experience, but such as are totally independent of any experience. Opposed to these are empirical cognition's, or such as are only possible a posteriori, or from experience. - Critique of Pure Reason, Immanuel Kant[2].

Kant was also concerned with the nature of our knowledge and argued that we can never know the real world. All the things which we perceive are simply phenomena of 'das Ding an sich' or the 'thing in itself'. The actual 'thing' remains forever unknown and there is no reason why it should resemble our perceptions in any way. What this tells us, is that for each of us the world is simply a series of phenomena which we experience. The things which cause these phenomena we cannot know. Instead, we have a framework in our minds which links these phenomena together so that we can interpret our experiences in a way which is meaningful to us.

The other philosopher of interest, Georg Wilhelm Friedrich Hegel (1770 - 1831) was born in Stuttgart, Germany[3]. Unlike his predecessors, Hegel did not believe in 'eternal truths' or a timeless reason but rather a basis for human cognition that changed from one generation to the next. He believed that the thoughts of past tradition as well as the prevailing current state of affairs helped determine how we think. For example, not so many years ago it wasn't considered unreasonable to burn off large areas of forest in order to cultivate the land. By contrast it is considered extremely unreasonable today as there is a completely different basis for such judgements. Furthermore, according to Hegel, human thought is in a continual process of development which is 'dialectic' in nature[4]. By this he means that as soon as a particular thought is proposed, it will be met by another which is contradictory. The contradiction between the two thoughts causes tension which can be resolved by the proposal of a third thought which accommodates parts of both viewpoints whilst removing the contradiction. This is also known as a process of proposing a thesis or affirmation, which is then met by an antithesis or denial which results in a synthesis or integration. An illustrative example is when Descartes' rationalism (the thesis) was contradicted by Hume's empiricism (the antithesis), it resulted in Kant's synthesis where he agreed with parts of empiricism as well as parts of rationalism. Kant's synthesis now becomes the starting point of the whole dialectic process again and will serve as the thesis to be met by another antithesis.

In the methodology described later in Chapter 7, use of Kant's philosophy is made to motivate why it is important to take cognisance of the frameworks that humans use to interpret the world. Use is also made of Hegel's philosophy to show that it is important to consider the past when inquiring into a problematic situation in order to understand its present state. The ideas

[1] Kant in 90 minutes, Paul Strathern, Constable and Company Limited, 1996, page 64.
[2] Kant in 90 minutes, Paul Strathern, Constable and Company Limited, 1996, page 66.
[3] Living Issues in Philosophy, Titus/Smith/Nolan, 7th edition, D. Van Nostrand Company, 1979, page 271.
[4] Living Issues in Philosophy, Titus/Smith/Nolan, 7th edition, D. Van Nostrand Company, 1979, page 257.

of Hegel and Kant mentioned above, together with the systems approach as described by C. West Churchman in Chapter 2, provide the philosophical foundation for this thesis.

2 - THE SYSTEMS APPROACH

'There is something of everything in everything' - Anaxagoras (500-428 BC)[1]

What has been labelled the 'systems approach' is in fact a very rich concept which has many connotations, and to try and describe the systems approach in full is not the purpose of this chapter. Instead, the aim is to give the reader an appreciation for the systems approach in order to show its usefulness as a framework and motivate its use to redesign a medium sized family business. In Chapter 1, key ideas from the philosophers Kant and Hegel were discussed to briefly describe a theory of reality. This chapter builds on that theory and describes the systems approach as a useful way in which we as humans can conceptualise and interpret the real world. The systems approach is central to the argument of this thesis and is described in paragraphs below.

The description begins by first defining what is meant by the term 'system'. If one had to look the word up in a dictionary, one would find synonyms like 'combination' or 'assemblage'. For the purpose of this text, a system will be considered as consisting of a number of parts which interact in an organised manner for a specific purpose. In order to provide a visual description, the boundary of a system is represented by a large dotted ellipse and the elements or parts of the system by smaller solid ellipses lying within the boundary[2]. As mentioned before, these parts are related to each other in a purposeful way, and the relationships and interactions are represented between the parts in Figure 2.1 by connecting lines.

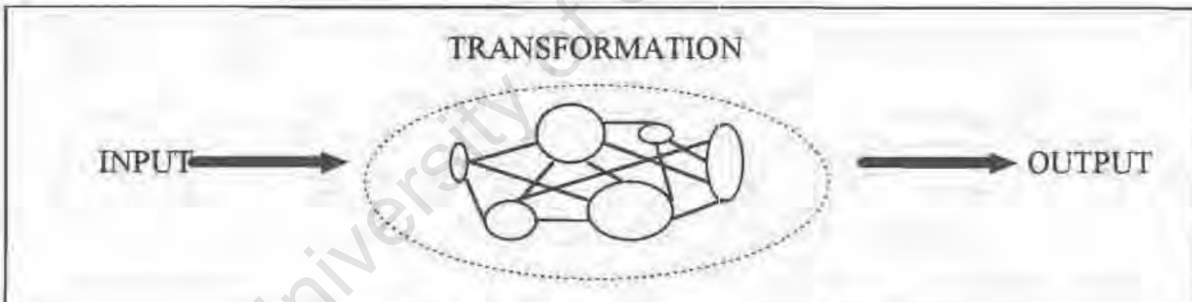

Figure 2.1: Graphical representation of a system

As can be seen from the diagram, a system makes use of its resources to transform a set of inputs into a set of outputs (these inputs and outputs may be physical or abstract). The area inside the dotted ellipse is defined as the internal environment whilst the area outside is termed the external environment. A system is embedded in its external environment which can have a profound effect on it, but by definition the system can only control its internal environment and has no control over its external environment. Now before continuing further, it is important to realise that a system is much more than just a collection of parts. Some of the properties of systems include[3]:

- *A system is teleological and therefore has one or more defining functions.*
- *The way the behaviour or properties of each part of a system affect that system depends on the behaviour or properties of other parts of the system.*

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[1] Sophie's World, Jostein Gaarder, Phoenix House, 1995, page 33.
[2] OMDP course lecture - An Introduction to Systems, Tom Ryan, University of Cape Town, 1996.
[3] The Democratic Organisation, Russell L. Ackoff, Oxford University Press, 1994, pages 18-24; The Systems Approach and its Enemies, C. West Churchman, Basic Books, 1979, pages 80-92.

- *When a part is removed from the system of which it is part of, that part loses its defining function.*
- *The performance of a system is not simply the sum of the performance of its parts taken separately, but the product of their interactions.*
- *The concept of a system is recursive.*
- *Every system has a client who is served by the system.*

Ackoff[1] illustrates the above properties by considering an automobile as a system. One of the automobile's defining functions is to transport people comfortably across land. Now the way in which the engine (a part of the system) affects the behaviour of the automobile depends on the behaviour of inter alia the gears and the clutch (also parts of the system). If, for example, the speed of the engine is increased but at the same time the gear is changed to one with a lower ratio, the automobile will not necessarily move faster. In other words the engine cannot be looked at in isolation and be used to predict how its behaviour will affect the behaviour of the automobile as a whole without considering other parts of the automobile. If any part of the automobile is removed, that part loses its defining function. An engine removed from the automobile moves nothing and a steering wheel removed from the car steers nothing. One of the implications of this is that parts can be thought of as co-producing the function or behaviour of the whole, and therefore the performance of the system is not simply the sum of the performance of its parts taken separately. Ackoff makes use of the following simple example to illustrate this. A group of automobile mechanics is consulted and asked to make a list of which automobile has the best engine, which automobile the best gearbox, and so forth until a list of all the best parts needed to make up an automobile is compiled. Now if the mechanics try and assemble the parts, the end result should be the best automobile - after all it will be made up from all the best parts available. Wrong! The fact is, they will probably not even get an automobile, never mind the best automobile, because the performance of an automobile is a direct result of how its parts interact, and not their individual performances. It is often the case that sub-optimisation of the parts is needed in order to optimise the performance of the whole.

It was also mentioned that a property of systems is their recursiveness. The word recursive is used to describe things which refer to themselves or have a repetitive nature. Every system, therefore, can be considered as part of a containing system, and similarly, each part of a system can be considered as a sub-system itself.

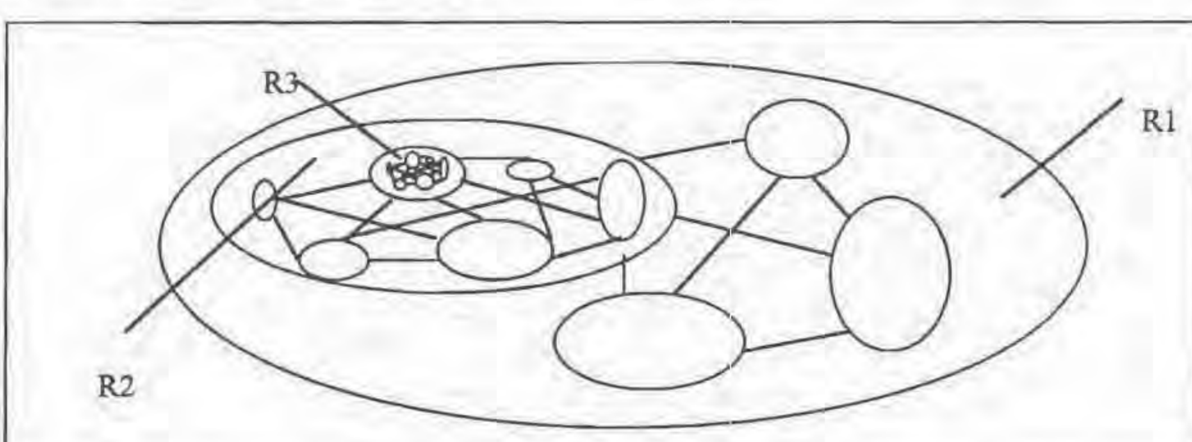

Figure 2.2: The recursive nature of systems

[1] The Democratic Organisation, Russell L. Ackoff, Oxford University Press, 1994, pages 18-24.

The beauty of this concept is that when one defines a system, one can proceed recursively to any level of detail that one wishes which is deceptively useful in dealing with complex systems. In Figure 2.2, the system in focus is at recursion level two (R2). Its containing system is at recursion level one (R1), while its sub-systems are at recursion level three (R3)[1]. For the previous example of the automobile as a system, one of its containing systems will be the larger road transport system. Closely related to the purpose of the system is the client of the system. The client can be defined as an entity whose interests are served by the system in a manner that the higher the measure of performance of the system, the better the interests are served, and more generally the client is the standard of the measure of performance. Clients have the ability to affect the purpose of the system, and furthermore, in general different clients will have different expectations of the system and will therefore require different outputs in order to satisfy their expectations[2].

Having loosely defined the concept of a system, the 'systems approach' is now considered and the philosophy of Kant, which was discussed in the previous chapter, is referred to. Kant said that each of us has a framework in our minds which allows us to interpret our experiences of the world in a way which is meaningful to us. Conceptualising the world as consisting of systems is one such framework, and is one which has integrity and has proven to be useful over many applications. The systems approach is therefore only one approach to the way in which humans should respond to reality and incorporates a whole range of methodologies which operate from within the systemic paradigm.

Most people are familiar with the terms 'information systems', 'banking systems', 'transport systems' and 'education systems'. These are systems which we humans have created to serve our needs and desires. 'Who created these systems?' one may ask. Or more to the point of this thesis, 'Were they created well or badly, and do they function well or badly *today*?'. This is a question of the design or redesign of human systems and is the central theme of this dissertation. The simplistic approach says that there is a clear and urgent necessity to do something about the system else it will fail[3]. This is typically followed by identifying what is 'bad' in the system and trying to reduce it or eliminate it. Reflection will show that simple, direct head-on attempts to solve systems problems don't work and often serve to further worsen the situation. The counterpart to this approach says that above all we must think through the consequences of any proposal for action, because otherwise the 'clear and urgent necessity' will lead us down the pathway of disaster. The broader perspective of the systems approach tells us that no problem can be solved simply on its own basis. Every problem has an environment to which it is inextricably united and which needs to be considered. This is by no means an easy task and identifying the environment of a problem forms one of the most difficult and most important parts of the approach. A flagrant example of an environmental fallacy is the failure to consider the history of a problem situation as part of its environment. Churchman[4] talks about the environmental fallacy at length and is much along the same line of thought as the philosopher Hegel who was discussed previously in the epistemology.

In making use of the systems approach, one must be aware that it is based on the fundamental principle that all aspects of the human world should be tied together in one comprehensive rational scheme[5]. This means that all our affairs should be regarded as interrelated in one form or another and should not be considered in isolation. This increases the complexity of the task we are faced with tremendously and in order to cope with this, it is essential that as users of

[1] Cybernetics: A New Management Tool, Barry Clemson, Abacus Press, 1984, pages 112-124.
[2] OMDP course lecture on Organisation, Johan Strümpfer, University of Cape Town, 1996.
[3] The Systems Approach and its Enemies, C. West Churchman, Basic Books, 1979, pages 3-6.
[4] The Systems Approach and its Enemies, C. West Churchman, Basic Books, 1979, pages 35-38.
[5] The Systems Approach and its Enemies, C. West Churchman, Basic Books, 1979, page 8.

the systems approach we explicitly bound our area of inquiry and make all our assumptions explicit. This will allow us to reflect upon and learn from any action we take making the systems approach scientific in the sense that it is a quest for knowledge - an approach to learning and inquiry. Furthermore, the systems approach is multi-disciplinary and practitioners have drawn from many of the scientific disciplines in order to develop their own special methods of inquiry and tailor their own special approach to suit the situation they are faced with. In every case, all methods of inquiry, all designs of inquiring systems are options of the inquirer; there are no a priori set of standards that dictate the preferable ones.[1]

In essence the systems approach, rather than being a specific approach, is a meta-approach for inquiry. The method of the systems approach is not to provide specific directions for action, but rather general precautions, warnings, guidelines and the like which the user then applies to his or her own framework. As a result, the systems approach requires a comprehensive set of models of reality through which to apply itself[2] and a whole range of 'problem solving' methodologies to suit the situations which present themselves[3]. Users of the approach have to in some way gather information from the situation and decide which models are appropriate as well as taking cognisance of the 'mood' of the situation in order to decide on appropriate courses of action.

The methodology of the systems approach used in this thesis rests on the philosophy of Kant, and has its foundation neither in observation alone nor in reason alone, but in a complex inquiring system built out of the connection between observation and reason[4]. As was mentioned in the previous chapter, Kant had the notion that the way in which the world appears to our observation depends very much on our basic theory about the world. As users of the systems approach, we construct a theory of reality which guides us in the observations we make, which in turn guides us in the revision of our theory of reality. This in essence can be considered as the process of learning and is expanded upon in Chapter 3.

[1] The Systems Approach and its Enemies, C. West Churchman, Basic Books, 1979, pages 13-14.
[2] The Systems Approach and its Enemies, C. West Churchman, Basic Books, 1979, page 33.
[3] Creative Problem Solving, Robert Flood & Michael Jackson, Wiley, 1991, Preface.
[4] The Systems Approach and its Enemies, C. West Churchman, Basic Books, 1979, pages 43-44.

3 - THE LEARNING CYCLE

"In a time of drastic change, it is the learners who inherit the future. The 'learned' find themselves equipped to live in a world that no longer exists." - Eric Hoffer[1]

This chapter is the last section of Part I in which the concept of a learning cycle is briefly described. The theory described in this chapter is used to explicitly describe the author's personal learning cycle at a top level throughout the dissertation. As the dissertation progresses, the author's journey around the learning cycle is tracked. The author has also gone through numerous learning cycles at lower levels, some of which are described in the final chapter, Reflection.

What is meant by the term 'learning'? The Oxford Dictionary (1990 edition) defines learning as (1) "gaining knowledge or skill by study or experience" and (2) "acquiring or developing a particular ability". Interpreting this in terms of what has been discussed thus far, 'knowledge' can be taken as the ability to describe, explain and predict phenomena accurately. Thus learning can be defined as increasing ones ability to describe, explain and predict the phenomena which abound in everyday life. As part of the epistemology it was said that one can never know the 'things' in themselves. All one can experience is a series of phenomena which are caused by these 'things', and which are interpreted in a way which is meaningful to oneself by means of a framework. When this framework evolves or changes so that ones interpretation of the world becomes *more* meaningful and useful, learning is taking place. Handy[2] conceptualises the process of learning as a circular process with four parts namely Question, Theory, Test and Reflection as shown in Figure 3.1.

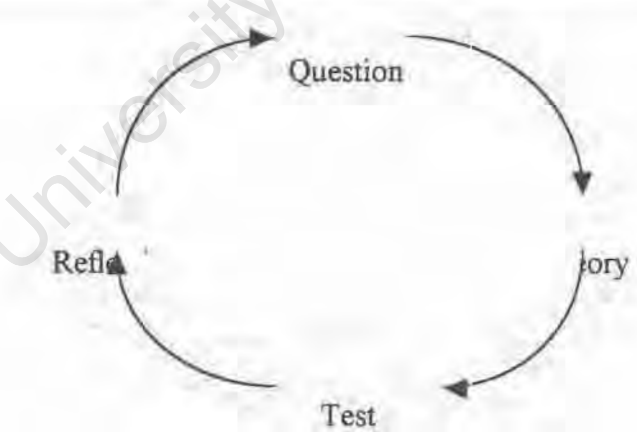

Figure 3.1: Handy's learning cycle

He conceptualises the cycle of learning as a wheel which is meant to go round and round. A set of questions, once answered, tested and reflected upon, leads on to yet another set of questions.

> *"Mankind, I am sure, is born to learn. One has only to look at little children to see that wheel turning furiously. Why, we must wonder, does it slow down for most of us as we grow older? If we knew more about that we would know more about our*

[1] Quote taken from OMDP pamphlet issued to prospective students, University of Cape Town, 1996.
[2] The Age of Unreason, Charles Handy, 2nd edition, Arrow Business Books, 1995, page 46.

reluctance to change and the consequent need for crisis and calamity to budge us into action" - Handy[1].

The process starts with a *question* - a problem to be solved or a challenge to be met. This question is viewed as a sort of reaching for, a questioning, a need to explore. It is important that the problem is owned and that it is ones *own* question that is being asked, else one will not be motivated to continue along the process and reach the reflection stage. Once the question has been asked, one needs to consider possible answers - these are labelled *theories* for want of a better term. This stage is characterised by speculation and reframing in order to find clues to a solution of the problem. These theories are then implemented in order to *test* them. The implementation may be an intervention in the real world or simply a simulation in ones head. Either way, some theories or models will prove to be appropriate while others not. Until one knows why, and this is the stage of *reflection*, learning will not have taken place. The reflection stage of Handy's cycle is where the opportunity arises to examine the frames one has chosen in the theory stage and decide to either accept them into ones framework, modify them or reject them. According to Handy[2], people who have achieved success without having a theory to explain it, or an explicit philosophy behind their actions, will have learnt nothing from their success which makes it less likely that they will be able to repeat it.

The structure of Part II of this thesis is based on a combination of the SCQARE approach and Handy's learning cycle. Figure 3.2 shows how these two concepts are compatible.

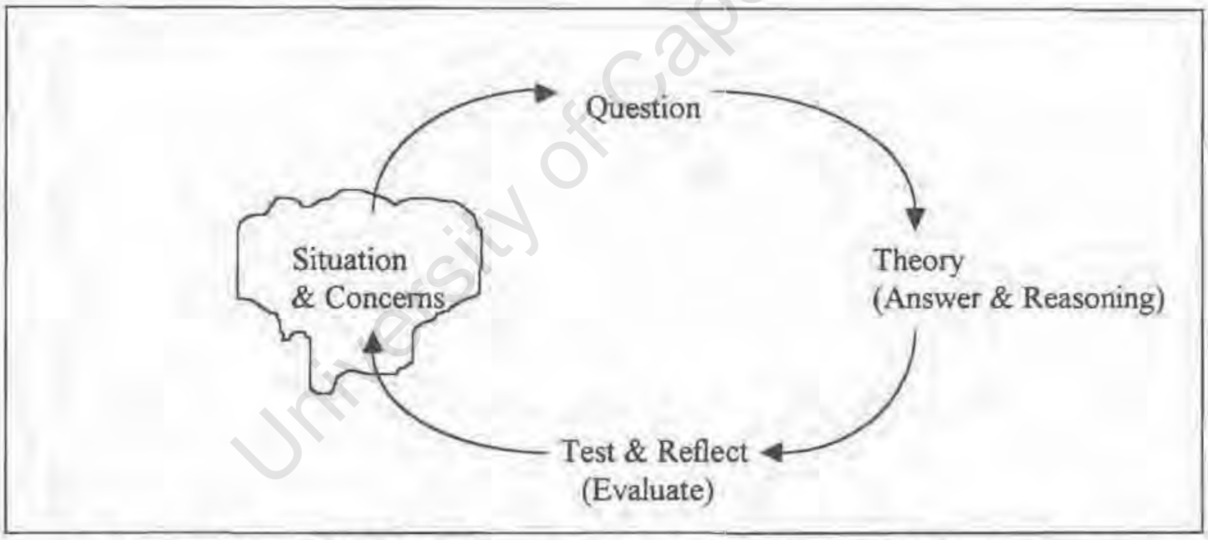

Figure 3.2: The SCQARE format guides the user through a learning cycle

The *question* stage of Handy arises from a *situation* and *concern* and takes place in the *question* part of SCQARE. Likewise, Handy's *theory* stage corresponds to the *answer* and *reasoning* parts of SCQARE, whilst Handy's *testing* and *reflecting* stages take place in the *evaluation* part of SCQARE.

This concludes Part I of the dissertation. Part II of the dissertation is used to support the argument that using an organisational model based on the combined concepts of the Viable Systems Model, the Internal Markets Model and the Multidimensional Organisation within a systemic paradigm, as a shared framework for thinking about an organisation, is very useful for a medium sized family business in a rapidly changing environment.

[1] The Age of Unreason, Charles Handy, 2nd edition, Arrow Business Books, 1995, page 47.
[2] The Age of Unreason, Charles Handy, 2nd edition, Arrow Business Books, 1995, page 47.

PART II

4 - SITUATION

This chapter is the first stage of SCQARE and provides a brief overview of the situation of interest. Before presenting the description however, two points should be considered. Firstly, during the course of 1996 and 1997 the author was enrolled in the Operations Management Development Programme (OMDP) at the University of Cape Town (UCT) during which time he made use of his new-found knowledge to effect some significant changes within the organisation of Mike's Sports. For the purpose of this dissertation, those changes in the organisation prior to the commencement of this thesis are ignored and the description of the situation is taken as at the end of September 1997. Secondly, the description below is based on the initial understanding the author had of the situation before the methodology described in Section 7.2 had been applied and excludes any insights which may have been gained as a result thereof. The scope of the thesis is such that Mike's Sports is taken as the system in focus and the South African sports goods industry and the South African soccer community are considered as two of its containing systems which provide the context.

In the paragraphs to follow, a systemic approach to describing the situation is taken[1]. This begins with an 'analysis' of the system in focus (namely Mike's Sports) which, as the Greek roots of the word imply, is a 'breaking apart' of the system into elements or parts. This method of description is useful because Mike's Sports can be understood by considering each of its parts in turn, and then assembling the explanations of the parts into an explanation of the whole. This explanation is far from complete however. An analysis cannot explain the dynamics of a system, but it can help identify and explain relatively static relationships which remain unchanged over the time period of interest[2]. As Russell Ackoff[3] points out, the performance of a system is not the sum of the performance of its parts taken separately, but the product of their interactions. In other words we cannot understand a system by simply considering the parts which make it up because the way in which the behaviour or properties of each part of a system affects that systems behaviour or properties depends on the behaviour or properties of other parts in the system. The performance of a part when considered independently of the system of which it is part is irrelevant to its performance as part of that system. For example, a part that works well when considered separately may not work well when interacting with other parts of a system. Therefore, to complement the 'analysis' of the situation, the 'synthesis' of Mike's Sports is also considered. A synthesis considers the system of interest as an element of a containing whole and explains the operation of that system given the context of the larger system. In other words, the containing systems of the South African sports goods industry and soccer community are described and then Mike's Sports is explained by considering the function(s) that it fulfils with respect to those containing wholes.

4.1 - SYSTEM ANALYSIS

Mike's Sports is a family business owned and managed by three brothers and which specialises in soccer merchandise and casual sports clothing. The business is quite diverse in that it is involved in retail, wholesale and manufacturing. The retail division consists of stores in Cape Town, Durban and Pietersburg as well as a mail order business which distributes merchandise all around South Africa and to neighbouring countries. The manufacturing division, on the other hand, is comprised of a sock factory, a clothing factory and a printing department all of

[1] The terms 'analysis' and 'synthesis' used in this paragraph are derived from the inquiry triad 'analysis-synthesis-stakeholders' sourced from OMDP course notes, Tom Ryan, University of Cape Town. 1996.
[2] OMDP Management Seminar series, Johan Strümpfer, Seminar 5, 1994, page 6.
[3] The Democratic Corporation, Russell L. Ackoff, Oxford University Press, 1984, pages 22-23.

which supply the retail and wholesale divisions with goods and services. The wholesale division makes use of the manufacturing division to produce most of its goods and the remainder of its range is imported from the East. Each of these areas as part of Mike's Sports are illustrated in Figure 4.1 below. The remainder of this section is dedicated to briefly describe the operation of each part in turn.

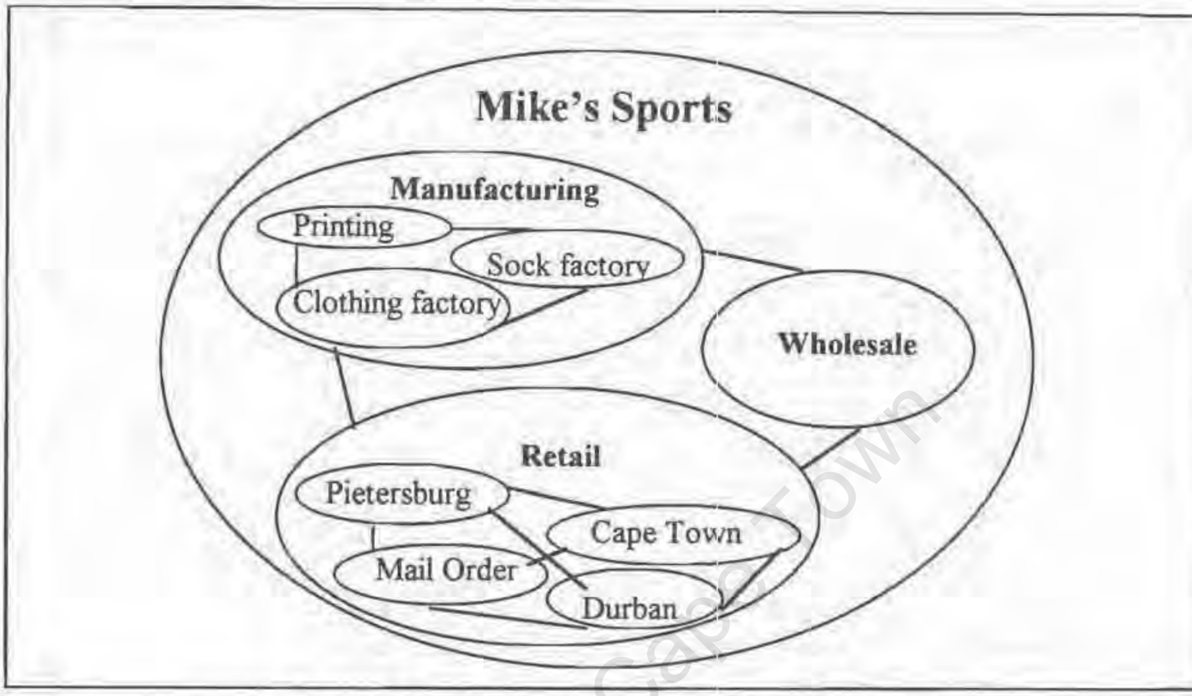

Figure 4.1: The various parts of Mike's Sports

THE RETAIL DIVISION

The description begins with the retail division of Mike's Sports which as previously mentioned consists of three retail stores and a mail order division. Each of the four outlets carries the identity of a soccer specialist concern also catering for casual clothing with a sports 'feel'. Correspondingly the outlets have the largest selection of soccer gear and accessories in the country as well as an extensive range of casual clothing and footwear. The outlets also cater for other sports such as netball, basketball, volleyball and athletics, but do not keep stock of products for these sports due to the high cost of holding inventory[1]. The target market for these sports has much the same profile as the soccer market and as a result a lot of 'spin-off' business is obtained through the sales and marketing of the soccer merchandise. Each outlet carries a large stockholding of soccer clothing, balls, boots and soccer accessories. Even though the cost of carrying stock is high, it is a big competitive advantage for two reasons:
a) customers prefer to see and feel the goods they are going to purchase as opposed to buying from a catalogue, and
b) delivery of goods from most suppliers is unreliable and not always possible and therefore the only way to guarantee the customer delivery is to keep the products in stock.

The policy of the retail division is for each outlet to carry a full range of products in all of the major brands such as Adidas, Nike and Reebok. Other smaller brands who are 'niche' specialists in a particular product type are also included. This offers the customer the widest choice of products and thus maintains a competitive advantage over the general sports retail

[1] South Africa has one of the highest interest rates in the world and most of the inventory which Mike's Sports holds is financed through their overdraft facility at the bank. This year (1998) the prime interest rate rose to 25% p.a..

outlets which cannot afford to invest in such a large range of soccer goods. The in-store merchandising and display of each of the stores is done in such a way as to portray that they have the largest range and stockholding of soccer merchandise available.

In addition to the brands, the outlets also maintain minimum stock levels of the company's own in-house brand of which the apparel side is produced in the manufacturing division and the accessories imported from the East. The products are of equivalent quality and are as cosmetically striking as the major brands. The success of the in-house brand can be attributed primarily to its price, but also because of its availability and the fact that the clothing side of the range can be customised to the colours and design that the customer wants. With the goods being sold direct from manufacture, the in-house products are 15-20% cheaper than the cheapest brand on the market and were developed in order to combat the informal trading sector[1].

An aim of the retail division is to offer a holistic service to its customers. As was previously mentioned, if a customer wants a soccer kit in a particular style or colour combination that is not available, the outlets make use of the manufacturing concern to offer customised kits to suit the customer. The design of the kits is done within minutes on a sophisticated software package which allows customers to participate in the design as well as giving them a colour printout of the kit together with a full quote to take back to their club, organisation or sponsor. Most soccer teams in South Africa are sponsored and require the printing of sponsors logos as well as numbers on their jerseys, which is provided by the outlets through the manufacturing division's printing division. In essence, each of the outlets strives to be a 'one stop shop' for members of the soccer community so that they can obtain everything they need for their sport at reasonable prices with minimum delay.

The outlets of the retail division have a 'Head Office' which performs a centralised administrative and service function. The Head Office staff handle inter alia the payment of creditor accounts, payment of expenses incurred, advertising and promotion, salaries and wages, as well as the product range selection, pre-season bulk purchases and price structures for each outlet. The purpose of the Head Office function is twofold. Firstly, it removes a lot of administrative work from the branches so that they can concentrate on maximising their sales and improving service to the customer. Secondly, it removes the need to employ highly qualified staff in the outlets and also improves financial control. Lastly, economies of scale are achieved in generating marketing drives, dealing with suppliers and performing general financial administration centrally. For a more detailed description of the operation of each of the outlets, please refer to Appendix G. The next part of the description is the manufacturing division.

THE MANUFACTURING DIVISION

The manufacturing division produces the apparel portion of the company's own in house brand, Strada, which is responsible for about 30% of the total sales of the retail division and thus forms an integral part of the business. The range of products is dominated by soccer jerseys, shorts, socks and tracksuits, although kit for other sports such as volleyball, basketball, netball and athletics is also produced. To help cope with demand during peak periods the manufacturing division contracts out some of its work to CMT (cut, make and trim) operators in order to increase its throughput.

[1] Due to the economic climate and high levels of unemployment in South Africa, many skilled clothing machinists are currently unemployed and have opted to manufacture and sell sports clothing from home. As a result, a very large informal trading sector for sports clothing exists and is a very real problem for sports retailers.

As with the retail division, all administration of the manufacturing division, such as payment of creditors and expenses, pre-season selection and bulk purchasing of fabrics, wages and salaries, invoicing out of goods, etc. is done by the Head Office staff. The division consists of three main operations, namely sock production, clothing production and printing which are each run slightly differently and are overseen by a single production manager. The operations are described separately in the following paragraphs.

The Clothing Factory

To best describe the operation of the clothing factory, the process from initial order to finished product is considered to have three phases namely, scheduling of orders, preparation of ingredients and machining.

1. Scheduling of orders

The first phase begins with the capturing of orders onto computer. Each product has its own stock code with associated ingredients, cost per ingredient and time needed to complete the garment. When all the orders are captured, a computer report is generated which gives inter alia the material and trim requirements, expected production time, due dates and total cost for each order. The production manager then checks which orders have the required raw materials in stock and plans his production schedule for the forthcoming week. In general a FIFO (first in first out) policy is adopted and where possible orders with like products are grouped together for production efficiency. The clothing factory produces a high variety of products with relatively low volumes of each product and therefore it is important to try and group like products. Where the raw materials are not available, the factory manager will place purchase orders with his suppliers and the customer's order will be placed in a queue until such time as the raw materials arrive. This process is summarised in Figure 4.2 below.

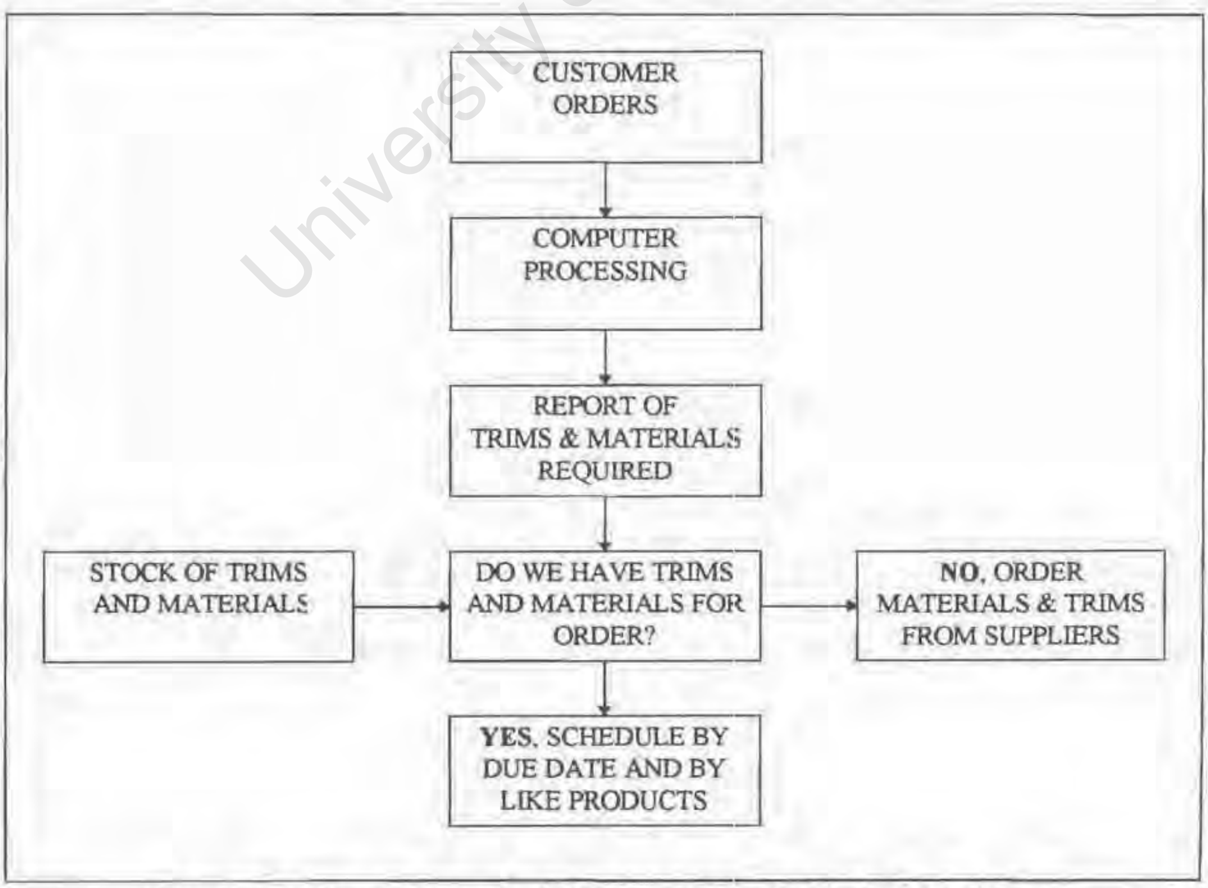

Figure 4.2: The process of scheduling orders in the clothing factory

2. *Preparation of ingredients*
Once the order has been scheduled, the next phase is to prepare the ingredients needed to produce the finished product. The first step in this phase is to lay the fabrics needed for the garments which are then cut into panels from patterns. If any printing or embroidery needs to be done on the order, the panels are then sent away to be printed. When the panels are ready, the trims (collars, zips, etc.) are then picked from stock and all the ingredients are bundled into a batch for the order. These batches are then stored in a queue on shelves as buffer work in progress (WIP) before the next phase of converting the ingredients into finished goods. The cutting and laying is the bottleneck process and thus typically the buffer WIP holds enough raw materials for 2-3 days of machining in case the cutting and laying process is held up. Two staff are responsible for the preparation of the ingredients.

3. *Machining*
The clothing factory has seventeen machines and there are seven machine operators. The machines are divided into two lines - one for tracksuits and the other for jerseys, shorts and vests. The ingredients enter the line at one end and undergo a number of operations in sequence before emerging as garments at the other end. The garments are then finished, inspected, ironed and folded before being grouped into orders and sealed in plastic packaging. The finished products are then dispatched. The factory occupies approximately 350 square metres and a diagram of its layout is attached as Appendix H.

The Sock Factory

The next operation described is the sock production which is separated by a dry-wall division from the clothing factory. The sock factory has a core staff of four and a casual who works twice a week to help with the packing of the finished socks. There are six sock machines which each have an average production capacity of about 72 pairs of socks a day (each day consisting of one eight hour shift) resulting in an overall capacity of about 432 pairs of socks a day.

The socks are produced in three sizes (small, medium and large) and four styles - each with about eight colour combinations. A sock machine, once set up can only produce socks in one particular size, style and colour combination, and is usually left to produce that one type of sock for a minimum period of a day to avoid the relatively long set-up time. The various retail outlets sell large volumes of kits in season, of which socks are an essential item. Due to the comparatively low cost of keeping stock of socks, a buffer stock is kept by the sock factory which all the outlets can draw from. The production schedule for the sock factory is determined by fill-in orders required to keep the prescribed minimum levels of this buffer stock.

The basic operation of producing socks is fairly straightforward. Once the machines have been set up and loaded with yarns, they run themselves and only need human intervention to replenish the yarn or to repair machine parts should they fail (one person monitors the machines to make sure they are operating correctly). The sock machines knit continuous lengths of cylindrical tube which are then taken and sewn closed at the toe end by a machinist on an overlocker. The socks are then placed on aluminium foot moulds and steam pressed to give them their shape before being dried. Finally the socks are inspected and have tie-ups inserted into them before being packed and sealed into packs of six pairs.

The Printing department

The last operation described is the printing department which is separated by a dry wall division from both the sock and clothing factories. The printing department has a staff of two and makes use of a computerised vinyl cutter to cut vinyl for customised numbers, badges, team names and suchlike which are made to order. Eight standard colours of vinyl are kept in stock which are chosen to match the colour combinations of the playing uniforms offered by the retail outlets. A stencil press is used to cut the large volume of standard design numbers (each number has to have a special blade made up for it) required so that the efficiency and economy of scale can be taken advantage of. Once the designs have been cut and picked out of the vinyl sheets, they are dispatched to the relevant retail outlet where they are printed onto the uniforms using a heat press (each outlet is equipped with its own heat press). Usually the retail outlets keep stock of standard design numbers to print the kits, but if a customised design is needed then the artwork is sent to the printing department to be cut and picked.

The printing department also has a digital scanning machine which is able to scan artwork into a sophisticated software design package. The artwork can then be electronically downloaded to the vinyl cutting machine for exact reproduction onto vinyl. This has proved to be an extremely useful facility because a large portion of the printing jobs are for sponsors' logos for which samples are readily available thus making the whole process very accurate and time efficient. When no samples are available, the artwork is designed manually using the software design package. The printing department thus forms an integral part of the service which each of the retail outlets offer.

The basic workflow in the vinyl printing department is as follows:

1. Customer orders are recorded in an order book and it is noted whether the customer has brought in his own goods or whether the goods are the property of Mike's and still to be paid for.
2. The orders are then scheduled according to due date and job type. Jobs which are design intensive and low volume (e.g. names and numbers on replica outfits) are grouped together to avoid vinyl wastage by arranging the prints to fit close together on the vinyl sheet. Bulk prints like numbering kits are scheduled to be cut purely by due date.
3. Once the vinyl has been cut, the next step, which is the most time consuming, is the unpicking of the designs from the vinyl sheet.
4. After the unpicking, the vinyl designs are ready to be heat pressed onto the garments and are dispatched to the relevant retail outlet.

THE WHOLESALE DIVISION

The wholesale division produces and distributes a soccer related range of products under licence for a well known international brand. The range of products offered include soccer uniforms, boots, balls, soccer accessories, as well as a range of soccer clothing. From the range of products offered, the tracksuits, soccer uniforms and socks are produced by the manufacturing division with guidance from the brand's parent company in Europe. The remaining products are imported from the East from manufacturers which have been approved by the parent company. All the products distributed by the wholesale division form part of the range of products offered by Mike's Sports' own retail outlets. As a result, Mike's Sports are in competition with the retailers that they are supplying as well as being in competition with the suppliers who supply them. For this reason, the wholesale division is run as a Close Corporation (C.C.) which is not publicly associated with Mike's Sports and has a separate office with its own communications.

The division has a good network of sales representatives around the country who operate strictly on a commission basis and service retail stores by region. As with other units in the company, the wholesale division makes use of the Head Office staff for all its administration with the net result that the division requires only a core staff of two in addition to the sales representatives. The staff are responsible for capturing orders received from the sales representatives, placing orders with the manufacturing division, packing and dispatching goods, collecting payments for accounts and liaisons with the sales representatives and their customers in general.

4.2 - SYSTEM SYNTHESIS

Having described the various components of Mike's Sports in the previous section, the greater systems of which the business is part, are now considered. Mike's Sports is concerned with the manufacture and distribution of casual sportswear and soccer related merchandise. As a result, both the South African soccer community, as well as the South African sports goods industry are considered as the two essential containing systems. This is illustrated in Figure 4.3 and the description begins with the South African soccer community.

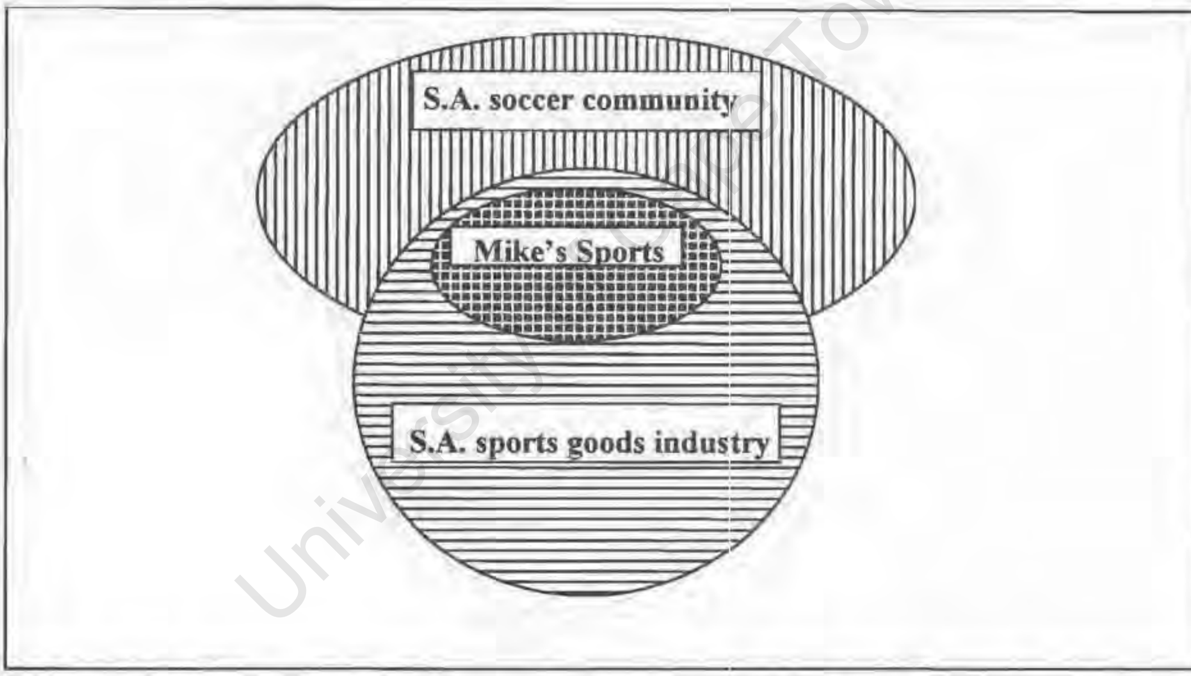

Figure 4.3: Mike's Sports and its containing systems of the South African sports goods industry and South African soccer community

THE SOUTH AFRICAN SOCCER COMMUNITY

There are approximately 2.5 million registered soccer players in South Africa[1] and if one considers corporate teams, rural leagues and suchlike, the number of active soccer players in South Africa could be as much as double that figure. Without a doubt, soccer is the most popular sport, not only in South Africa, but in the entire world with the result that the Soccer World Cup is the world's single largest sporting event and soccer has been dubbed the 'sport of the people'. Soccer's popularity in South Africa is largely due to the fact that at a grassroots level, the sport is inexpensive and can be played almost anywhere. All that is needed is a ball and some open ground. With the majority of South Africans living in Third

[1] Statistics obtained from surveys done by Kick Off magazine as well as the South African Football Association (SAFA) for 1998. This figure is only an estimate due to problems within SAFA regarding registration of clubs and teams during the restructuring of the soccer leagues this season.

World conditions and the average disposable income being very low, soccer has shown itself to be not only an affordable source of recreation, but also an opportunity for a career.

On a national basis, the sport is governed by two associations which work in close collaboration with each other. The PSL (Premier Soccer League) is responsible for running the Premier League, First Division and Second Division leagues around South Africa whilst SAFA (South African Football Association) is the arm which is responsible for the Third Division and lower. The PSL operates on a national level and is responsible for promoting the sport and procuring sponsorships. Most of the PSL matches are televised and take place at well established venues. SAFA, on the other hand, is more concerned with the development and growth of the sport at a grassroots level. At provincial level, the various district associations run their own club leagues under the guidance of SAFA. The top performers in the district leagues are promoted to provincial SAFA leagues on an annual basis and likewise the worst performers in the SAFA leagues are relegated. Teams have the opportunity to progress through the ranks at provincial level and if good enough, continue on to compete nationally in the PSL. SAFA is responsible for training and supplying referees for all matches which take place. The restructuring of the leagues and the advent of the new Premier Soccer League has resulted in soccer no longer being exclusively a winter sport, but rather a sport which is played throughout the year.

With the end of the apartheid era, soccer has entered a boom period as more money is being poured into the game through sponsorships and advertising revenues. There is more money available for teams and this is being spent on acquiring better players. These quality players are in turn raising the standard of South African soccer and attracting bigger crowds which reinforces further interest and growth. Bafana Bafana's (the South African national soccer team) historic first appearance at the World Cup finals in France 1998, has also increased the awareness of the local game with a resultant increase in media coverage of the sport. South Africa's recent acceptance into the international sporting arena has led to a surge in soccer articles in local newspapers and television as well as the emergence of South Africa's own magazines which are dedicated exclusively to soccer. These magazines are published fortnightly and cover the latest news events surrounding the game as well as giving detailed, in-depth coverage of weekly events. Soccer players and fans, who in general are fanatical about their sport, provide loyal support to their teams and spectatorship at matches of all levels is usually excellent. In fact soccer has become a way of life for many people which is corroborated by the huge boom in soccer replica clothing and increasingly more people wearing soccer playing tops casually.

The fact that there are approximately 2.5 million registered players in South Africa means that each of these players is part of a club team and is playing in a league. Each of these teams needs a soccer playing uniform consisting of a set of jerseys, shorts and socks as well as soccer boots, balls, shinguards and other accessories in order to play their matches. In addition, there is a need for tracksuits, togbags and other apparel for use by players when off the field, thus creating a demand for an accessible retail outlet selling soccer merchandise and sports apparel at competitive prices.

Thus the role that Mike's Sports is trying to fulfil within the soccer community, is to offer the supply of all soccer related merchandise to members of the community on a national level. To understand how it tries to fulfil this function, the South African sports goods industry is next described.

THE SOUTH AFRICAN SPORTS GOODS INDUSTRY

The South African sports goods industry can be considered as the group of manufacturers, distributors and retailers who supply consumers around the country with sports merchandise. The core of the industry are the major brands such as Adidas, Nike, Reebok, Umbro, Puma, Mitre, Kappa and Diadora who, in essence, drive the whole industry during this era of the brand conscious consumer. In general, these companies import all their footwear and accessories whilst manufacturing the apparel side of their ranges locally. These products are then made available to retail outlets around the country.
Supply of sports goods from all the major brands is very poor in terms of delivery. Purchase orders have to be placed six months in advance, and often delivery is late or not even fulfilled. Furthermore, with the exception of a few core lines, the suppliers do not keep stock of products with the result that if a product sells well, no more stock than what has been ordered previously is obtainable. This means that retailers are put in a position whereby they have to guess which products in the supplier's range are going to sell well and order accordingly for delivery six months later. Therefore retailers cannot order products according to demand because by the time this has been established, it is too late to procure the stock.

At present supply of products is particularly bad for two reasons. Firstly, the manufacture of the apparel by all the brands is done locally from locally sourced fabrics all of which are produced by one local knitting mill. No other company in South Africa can produce the type or volume of fabric that is needed by the suppliers at present. As a result, if fabric production is delayed, there is no other source of suitable fabric that the suppliers can turn to resulting in a ripple effect of delays all the way to the retailer. Secondly, as was mentioned previously, nearly all the footwear sourced by suppliers in South Africa is imported from the East. Legislation was passed at the end of 1997 banning imports from certain Eastern countries and imposing a quota system on goods from other countries. The motivation for the legislation is to try and promote local production of footwear which unfortunately is not feasible at present due to the lack of knowledge and equipment to produce the footwear which has become very technical. The net result is that in 1998, the major brands are only able to import approximately 25% of the volume imported in 1997 with many of the products not being available at all. This shortage of supply together with the falling Rand exchange rate will mean that footwear prices in 1998 will increase a further 30-40% over 1997's prices. The suppliers offer trade discount to those retailers who purchase large volumes of their products which gives the retail sports chains a distinct advantage over the smaller independent stores. Now, with the shortage of supply, only the suppliers' top customers i.e. those retailers purchasing the largest volume of goods, will receive stock placing the smaller independent stores at an even bigger disadvantage.

At present there are a handful of general retail sports store chains in South Africa which operate on a national basis. These are Total Sports with 105 stores, Logan's Sportsmans Warehouse with 12 stores, Sport 'n Leisure with 51 stores, Sports Scene with 27 stores, Sneakers with 50 stores, and Edgars Starting Block with 10 stores. The rest of the sports retail outlets are the smaller independent stores which have tried to secure niche markets. These sports stores, combined with the large discount stores such as Makro, Pick 'n Pay and Dion's, account for the formal sector of the industry.

With the exception of Logan's Sportsmans Warehouse, the emphasis in all the retail sports chains is on sports clothing and footwear as fashion wear, with only a small selection of sports equipment. Logan's Sportsmans Warehouse on the other hand is, as the name implies, a large 'warehouse' type store which has its emphasis on sports equipment and keeps stock for all the major sports.

There is also a large informal sector within the South African sports goods industry. Because of the high price of branded sports goods, many consumers are not willing nor able to buy their goods from sports stores. As a result there are many people who produce sports apparel from their homes on a small scale and supply their local market with goods via word of mouth. The number of people entering the 'home' industry is steadily increasing as retrenchments increase and unemployment rises. There are also others who import or manufacture branded merchandise illegally and supply the market at much reduced prices. Supply from the informal market, however, is haphazard, unreliable and of questionable quality.
As was previously mentioned, the retail sports chains are general sports stores which specialise in sports clothing and footwear as fashion wear. Soccer clothing and equipment forms a very small part of their product range with little or no accessories available. Logan's Sportsmans Warehouse, although a sports equipment specialist, also keeps very little stock of soccer clothing and equipment. As a result, the main competition that Mike's Sports has as a soccer specialist store comes from the small independent sports retailers and the informal market. Mike's Sports is attempting to combat the informal market by producing their own in-house brand which is offered at very affordable prices while still maintaining high quality. In addition, each of its retail outlets carries an extensive range of goods across all the major brands allowing the soccer player a wider choice of products. This, coupled with the high levels of stock in each outlet (so that lead times are reduced i.e. the player can purchase and leave with his goods right there and then), will combat the non-specialist retailer who has neither the width nor depth in products.

5 - CONCERNS

This chapter is the second stage of SCQARE and lists some of the concerns within the situation which were surfaced via informal talks with the partners and senior managers of Mike's Sports. The purpose of this exercise was to give the author direction and a starting point from which he could design a methodology and embark on his journey of inquiry. This methodology is described later in Chapter 7 along with the processes of research and participative inquiry which were used to more comprehensively and objectively surface issues and concerns within the business. The initial concerns surfaced were as follows:

Members of senior management do not have their finger on the pulse of the business and as a result are not able to manage it effectively. Important management information is not readily accessible and often decisions are made on 'gut feel' without any clear rational basis. Far too many assumptions are made. The explanation given for this is that the business has evolved from a small family business (one retail store in Cape Town) to a medium sized business in a short space of time and management of the business has become more complicated and demanding.

There is no regular monitoring of the vital indicators of the business and as a result it is not known on a real time basis whether the business is healthy or not. What was previously a very control orientated business has evolved into a business over which the partners have very little control. The management style of the partners, which was appropriate for a small family business, is now no longer an effective regulatory mechanism in the face of the huge increases in variety which have occurred with the growth of the business. Directives are issued by the partners, but are seldom followed up. Many good ideas are forgotten and never implemented. Management meetings are held where the same issues and concerns arise and never seem to be resolved which is resulting in increasing frustration of both the partners and the employees. Only when problems arise is effort made to analyse the state of affairs and uncover the root of the problem. In other words, very little forward planning is performed with the result that a myopic management approach of solving problems after they occur is adopted rather than planning proactively.

With the growth of the business, instead of having an increase in profits, there has been a decrease in profits. There has been an increase in the expense base of the company which has not been accompanied by a corresponding increase in income. Coupled with the recent investments to grow the business, this has resulted in a business which has serious liquidity problems. Having not had an explicit plan for growth or projected performance, and in the absence of regular monitoring of the business, the partners are at a loss to adequately explain their current predicament.

Competition within the sports goods industry is also increasing with many new retail sports outlets opening up all over the country. Saturation of the market is immanent and will lead to only the 'fittest' surviving. In other words, it is increasingly important for Mike's Sports to be aware of changes occurring in its environment and to respond quickly, efficiently and effectively. In addition, it needs to make its internal operation more efficient in order to outperform its competitors in terms of service and delivery to its customers.

6 - QUESTION

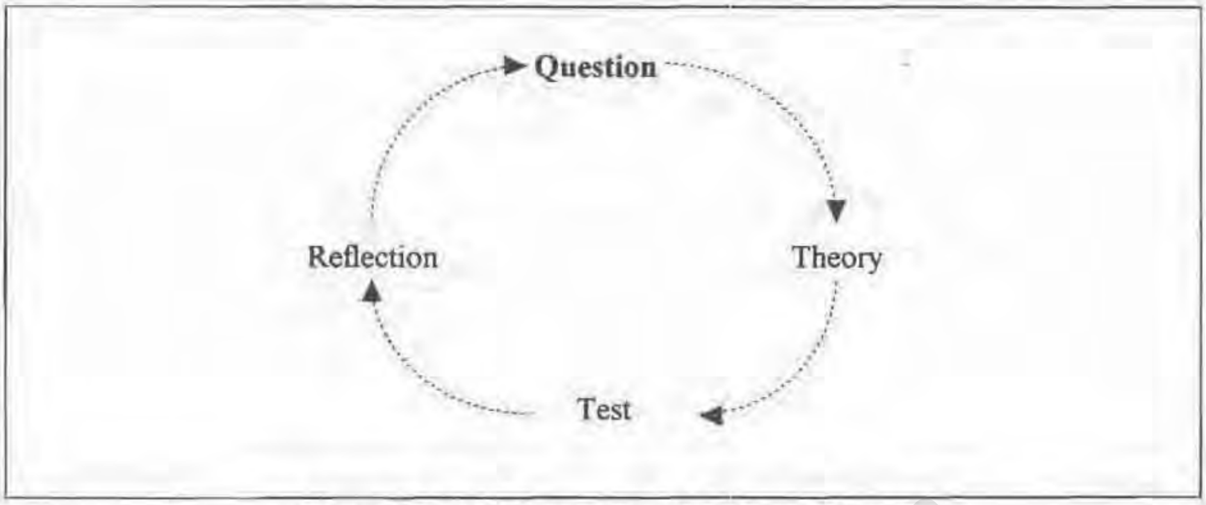

Figure 6.1: The first stage of the learning cycle

This is the third stage of SCQARE and given the concerns that have been highlighted within the situation, the question asked is:

"With Mike's Sports rapidly growing and evolving, how can it be organised in order to continually adapt and thrive within its changing environment which is becoming increasingly competitive?"

This corresponds to Handy's question stage and is the beginning of the author's learning cycle as illustrated in Figure 6.1. Throughout the dissertation the author's progress around the wheel of learning is shown and by the end of the dissertation it will be evident that the author has completed one full learning cycle at a top level.

7 - ANSWER

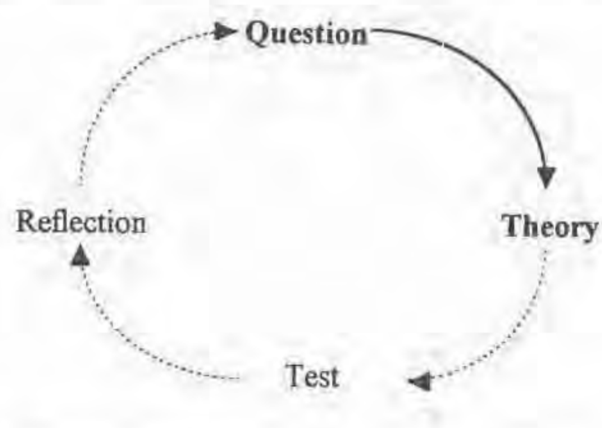

Figure 7.1: The second stage of the learning cycle

In past chapters, the situation of Mike's Sports and its containing systems of the South African sports goods industry and the South African soccer community have been described. Concerns have been listed within that situation and lastly the essence of the problem has been encapsulated in the form of a question, namely how to organise Mike's Sports appropriately. In this chapter, an answer to the question is provided in an attempt to address the concerns within the situation. This is the fourth stage of SCQARE and the beginning of the second stage of the learning cycle which is illustrated in Figure 7.1.

This chapter begins by briefly considering the usefulness of models and then moves on to describe a systemic model for effective organisation which can be applied to Mike's Sports. As was mentioned in the introduction, the model or framework for organisation is based on the synthesised concepts of the Viable Systems Model, Internal Markets Model and the Multidimensional Organisation. A methodology is then described which enables use of this model to drive a process of group learning and inquiry, and culminates in the generation of an idealised organisational design.

Based on the initial understanding of the situation, a number of assumptions are made in using this approach. One assumption is that the nature of the problems experienced within the Mike's Sports group are in fact due to inappropriate organisation and that using the organisational model will therefore be useful. Another is that the environment of Mike's Sports is not coercive where there are oppositional and contradictory interests, but rather that it is an environment where although there may be divergent group interests, the organisation is a mutual focal point and there is a common desire to solve the issues at hand[1]. These assumptions are expanded upon in the description of the methodology.

7.1 - THE ORGANISATIONAL MODEL

What is meant by the term model? For some people it may represent a mathematical equation, for others it may represent a theory or hypothesis, and yet others as a physical thing. In all of the above cases, the term model is used to describe a representation of the essential features of a real world 'thing' or situation from the perspective of the observer of that situation. This

[1] Creative Problem Solving, Robert Flood & Michael Jackson, Wiley, 1991, pages 169,187.

implies that from the situation to the model which represents it, there is a scaling down in variety or the number of variables which are considered. Furthermore, between certain aspects of the model and the situation, there is, in principle, a one-to-one correspondence also known as isomorphism[1]. This means that given certain conditions, the model will behave in the same way as the situation thus allowing one to make predictions and draw conclusions about the situation by studying the model. Because every model or framework is biased in that it selects certain aspects of a particular situation and discriminates them from others, the model is a good model if the choice of essential features is appropriate[2]. Consider the implications of what has been discussed. Everyday people are faced with a situation which they are trying to 'manage' into behaving in a desirable manner. This requires that they act on the basis of some framework (and it is precisely this framework which forms the basis of the methodology which is described later in this chapter) which includes at least four elements:[3]

1. Some idea of the current behaviour or state of the situation.
2. Some idea of a desired behaviour or state of the situation.
3. Some idea of 'the way the situation works'.
4. A belief, based on the three previous ideas, that the situation might be improved by a given sort of 'managing'.

Beliefs about the relationship between action and outcome constitute a model of 'the way the situation works', and if one is to take meaningful action, it is imperative that the model one uses is appropriate. Very often this model is implicit and frequently amounts to no more than an intuitive 'feel' for the situation resulting in an inability to explain one's actions clearly and furthermore an inability to learn from one's mistakes. The question of how the situation works is clearly an important one and the formulation of a rigorous, explicit model should be an integral part of planning an intervention to improve the situation.

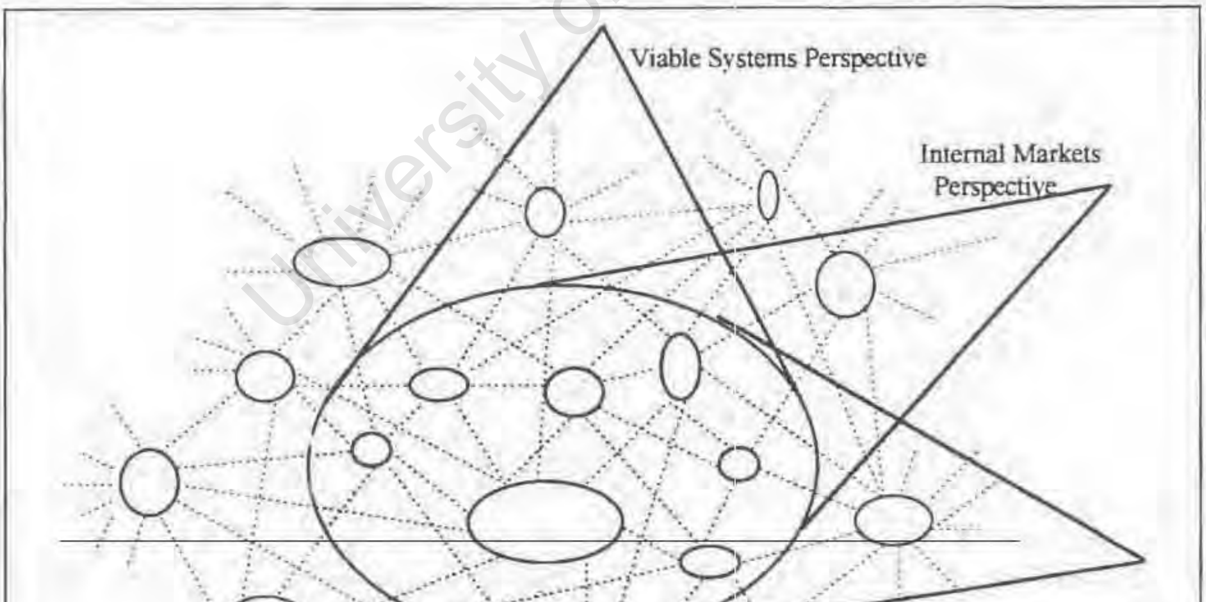

Figure 7.2: Different but compatible perspectives of an organisation

[1] Brain of the Firm, Stafford Beer, Wiley, New York, 1981, second edition, pages 110-111.
[2] OMDP lecture notes on Human Appreciative System, Warren Topp, 1997.
[3] Cybernetics: A New Management Tool, Barry Clemson, Abacus Press, 1984, pages 77-79.

In the paragraphs to follow, a model for effective organisation is described which will later be used in the methodology to drive inquiry into Mike's Sports and provide insight as to its current behaviour as well as provide a clearer picture of its desired behaviour. As mentioned previously, the organisational model draws heavily from three well established models namely the Viable Systems Model , the Internal Markets Model and the Multidimensional Organisation model. Each of these models offers a different perspective (see Figure 7.2) on organisational design/structure and is based on systems thinking and cybernetic principles (see Appendix E for a list of key Cybernetic laws and principles). The model synthesises key concepts from the three models in an attempt to capitalise on their strengths and minimise their weaknesses. The reason that this can be done is that the philosophy and principles underlying the three models are compatible and not in conflict with each other.

The philosophy behind the model is that we are in an age of increasing rate of change and complexity, and need some way of organising ourselves to cope with this. There is a need to design organisations which can deal with high variety whilst ensuring that they learn and adapt rapidly to their changing environments in order to remain viable. In learning and adapting to these changes, most organisations are having to reorganise and restructure with great frequency which is both costly and very disruptive. Therefore, what is provided here is a model for organisation which has learning and adapting inherent in it. Furthermore, it is flexible in that rather than prescribe specific structures or designs, it provides a meta-structure for the organisation. In other words, the model accommodates changes in the organisation's structure with little disruption and directs these changes according to a scientific, rational plan.

In providing a theoretical answer to the question, it should be noted that the organisational model described and used here is far simpler than a real organisation and there is no claim that it will cover all the issues. However, if the assumption that the root of the concerns raised within Mike's Sports are primarily a result of the way it is organised is correct, then the model is one which will best capture the features or properties of Mike's Sports that are important to improving its effectiveness and efficiency. The description of the model is divided into four sections namely *The Building Blocks*, *Criteria for Viability*, *Structuring for Change*, and *The Internal Market Economy*. In the first section, the basic building blocks used to construct the model are described. The next section then describes necessary criteria for viability and shows how the basic building blocks should be organised. This is expanded upon in the third section which discusses an organisational design which eliminates the need to reorganise in response to change. Lastly, the fourth section shows how the model is enhanced by considering an organisation as an internal market economy.

7.1.1 - The Building Blocks

The description of the model begins by considering its basic building block - namely the highly autonomous organisational unit (which is a system). This unit is represented by the shape of a dotted circle and can be thought of as a 'black box' which takes inputs and transforms them into outputs through some sort of process within the unit[1]. This is represented in Figure 7.3 on the next page. Taking one step further and looking within this unit, it will be seen that the transformation process consists of a number of operations taking place which act to co-produce the output. These operations are represented as solid circles within the organisational unit with lines representing their interactions as in Figure 7.4[2] on the next page.

[1] OMDP lecture notes, Tom Ryan, University of Cape Town, 1996.
[2] The diagrammatic representations of our organisational unit were adapted from Cybernetics: A New Management Tool, Barry Clemson, Abacus Press, 1984, pages 99-102.

Figure 7.3: The highly autonomous organisational unit - a building block

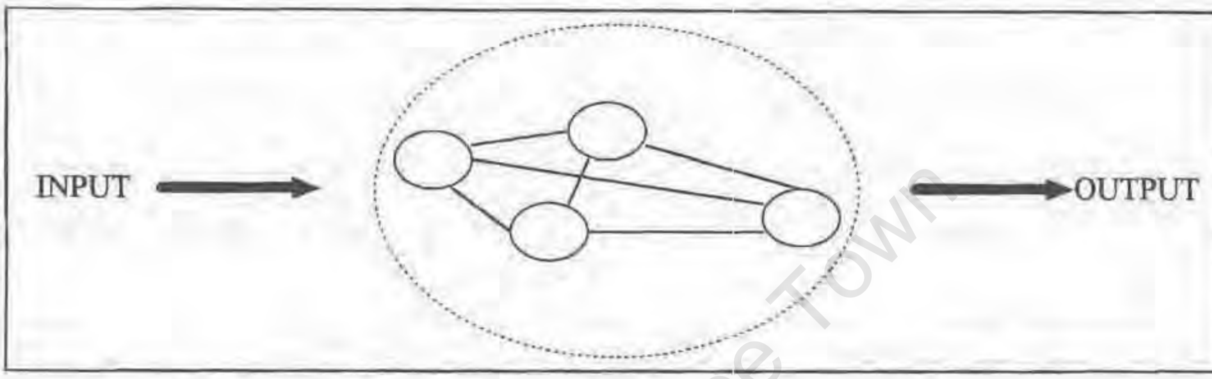

Figure 7.4: An organisational unit with interacting operations

Each operation is embedded in its own local environment with a distinction being made between the operation and its environment by representing the environment by an amoeba shape as in Figure 7.5. Notice that the diagram shows the operation's local environment as being partially internal and partially external to the organisational unit highlighting the fact that operations within a unit can affect and be affected by factors outside of the unit.

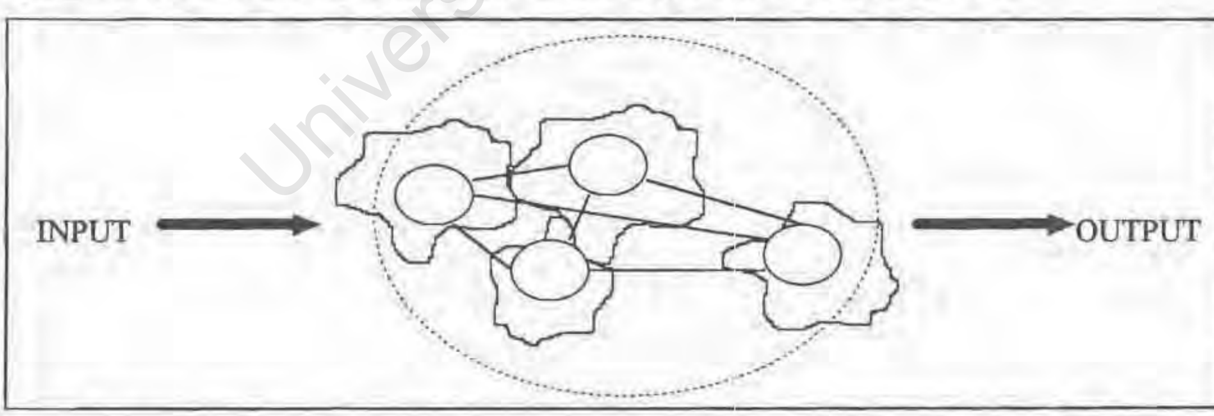

Figure 7.5: An organisational unit with its operations and their local environments

Similarly, within each operation in the unit is its own local management which is represented by means of a square as in Figure 7.6 on the next page. Lastly, a distinction is made between the management of an operation and the models that management holds of that operation. These models are partially explicit and partially implicit and as was discussed in the previous section of this chapter, form the basis for all action taken by management. These models are represented by means of a triangle and are shown embedded within the management function as in Figure 7.7.

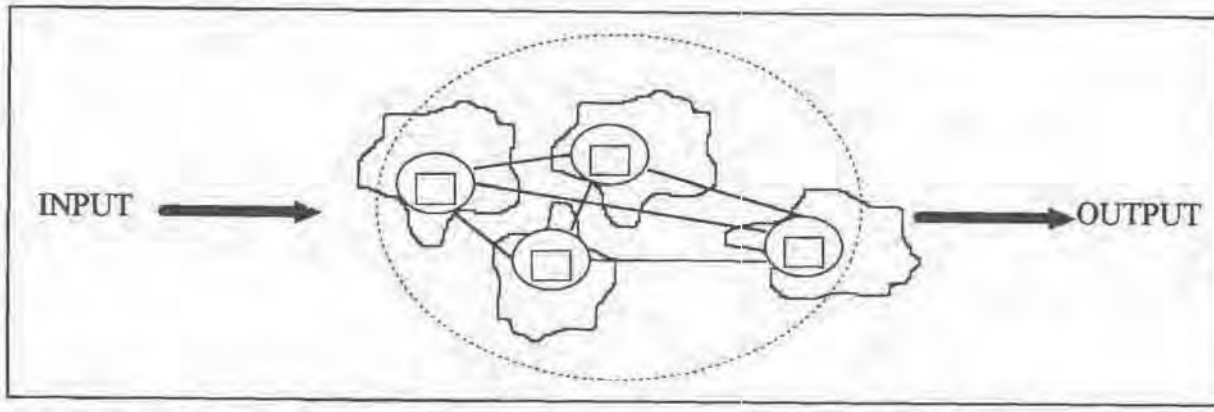

Figure 7.6: An organisational unit with operations, management and local environments

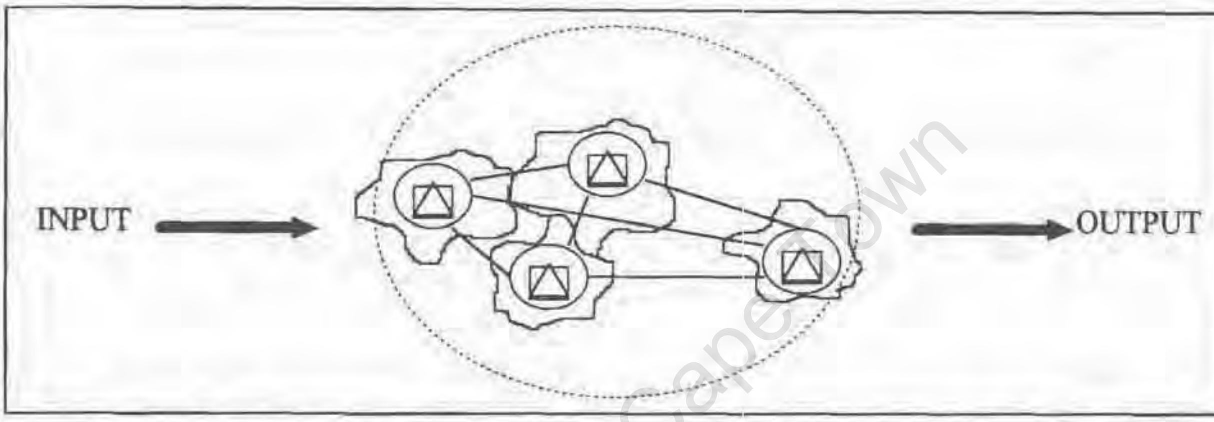

Figure 7.7: An organisational unit with operations, management, models and environments

For clarity of representation, the operation with its local environment, management and associated models, are pulled apart to show the major interactions as in Figure 7.8 below.

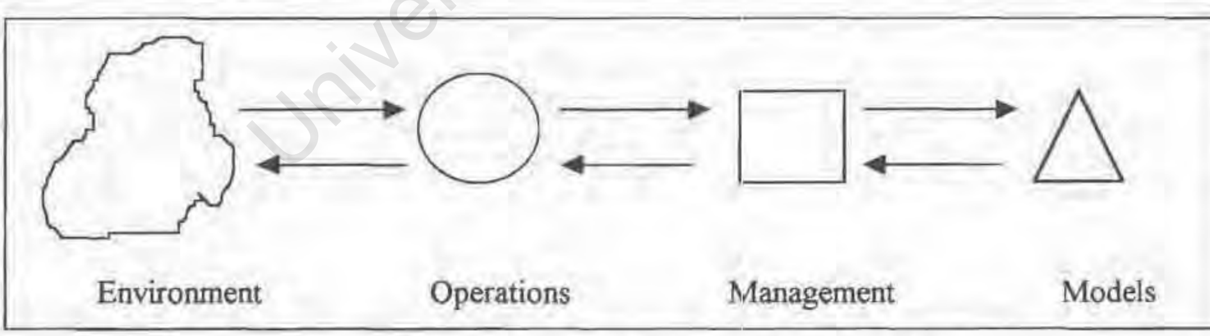

Figure 7.8: An operational unit pulled apart[1]

The arrows represent flow of information between the parts. This information could be about anything related to the unit and could include products, money or people for example. Moving from left to right in the diagram, a path of decreasing complexity is traced. The environment is the most complex (since it contains all the rest and more), the operation is the next most complex and the models the least complex of all. The law of requisite variety (see Appendix F for a list of key Cybernetic laws and principles) says that the degree of regulation attainable is limited by the complexity of the regulator compared to the complexity of the system to be

[1] Cybernetics: A New Management Tool, Barry Clemson, Abacus Press, 1984, Figure 5.2.

regulated[1]. This means that management at best can only hope to partially control the operation.

A number of conclusions can be drawn from this. Firstly, according to Bateson[2], without some element of chance or error, there is no possibility of learning or growth. Mistakes play a fundamental role in our personal development and therefore it is evident that some degree of lack of control is needed to avoid being totally rigid and unable to adapt. Secondly, since the supposed controllers lack the variety to regulate the systems, the systems must always be in part self-regulating. This self-regulating ability is necessary because without it systems would collapse. However, it is also troublesome because often it is ignored and problems are encountered when attempts at change are made. It is quite common for management to behave in ways which interfere with the system's ability to regulate itself with the result that management's efforts at regulation result in a net loss of regulation. Lastly, systems left to themselves may or may not evolve in ways which are found desirable. Therefore it is required that the parts of the organisation are designed in such a way that they have appropriate mixes of randomness and regulation.

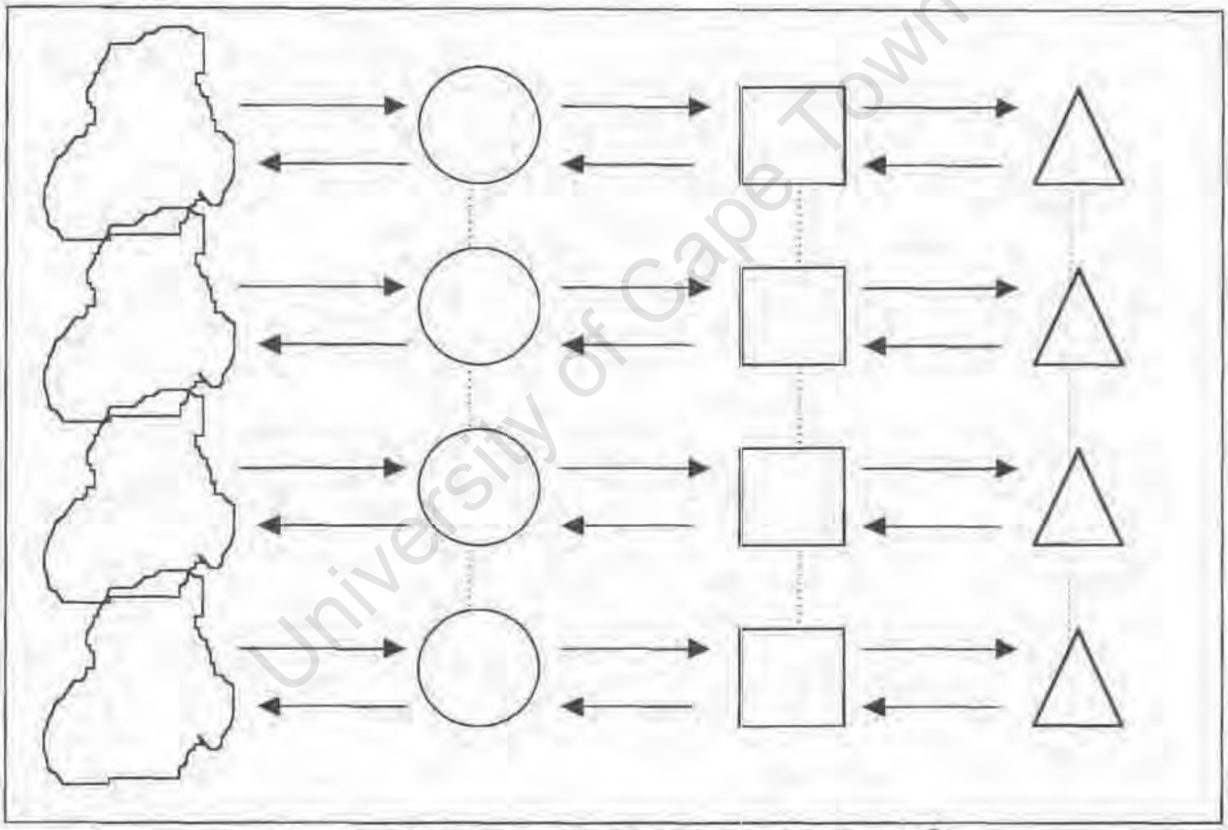

Figure 7.9: The interaction of operational units[3]

As was shown in Figures 7.3 - 7.7, the operational unit depicted in Figure 7.8 is just one of many units all of which are interacting with each other. Inevitably their local environments will overlap, their operations will impact on each other and in any organisation the management units will certainly interact with each other. Furthermore, the interaction of the management units will affect the way managers think about their operations and as a result, we can show interaction between the models too. This is all depicted in Figure 7.9. Due to the limitations of two-dimensional drawings, only adjacent environments are shown as overlapping whereas in reality each environment should overlap with every other environment. The same applies to

[1] Cybernetics: A New Management Tool, Barry Clemson, Abacus Press, 1984, Page 102

[2] Mind & Nature, Gregory Bateson, Bantam New Age Books, 1985, pages 159-161

[3] Cybernetics: A New Management Tool, Barry Clemson, Abacus Press, 1984, Figure 5.4

the operations, management units and models. Having described the basic building blocks for our model, the next section describes how they all fit together.

7.1.2 - Criteria for Viability

In addition to the individual management of its operations, a group of operational units needs some sort of holistic management. Even if a group of units are running perfectly smoothly, sooner or later something is going to happen which is going to cause a change in one of the units. This may not cause any concern immediately, but inevitably one of the units will make a change which poses a problem for one of the other units that is not resolvable without the intervention of a higher level, holistic management. The reason for this is that each unit is looking out only for its own best interests and as was discussed in Chapter 2 on systems thinking, sub-optimisation of the parts may be needed to optimise the whole. Thus, a particular unit may be required to operate in a way which is not optimum for its performance individually but which will enhance the overall performance of the organisation. Thus there is a need for a higher level or meta-management for this group of units. This meta-management can be thought of as an arrangement of four functional elements which are inter-linked with the operational units by a set of control and information loops. The entire arrangement provides us with our first set of necessary (but not sufficient) criteria for any system or organisation to be viable. The four elements are described in the next few paragraphs[1].

The Co-ordination Function
This function has the responsibility to co-ordinate the operational elements and promote synergy thus preventing the various operational elements from affecting each other adversely. As operational elements are themselves highly autonomous, they will have a tendency to act independently and try to optimise their performance in the context of their local environment - often at the expense of the overall system. Competing for limited resources will be a constant source of conflict and it is the co-ordination system's role to resolve such conflicts and promote a holistic management approach with interdependency amongst the operational elements. In times of rapid change, the importance of this function will increase and in order to co-ordinate effectively it will have to operate much faster (or more often) than the relevant changes in the elements being co-ordinated. The Co-ordination Function plays a very important role in promoting viability. It balances the autonomy of sub-systems with the integration of the system as a whole (see viability principle in Appendix F) by promoting the free flow of information to and between operational elements. In Figure 7.10 the Co-ordination Function is shown as operating through the management models of each operation and this is because it affects the way in which local management of each operation takes place.

The Control Function
The Control Function is responsible for maintaining homeostasis within the organisation as a whole and is also known as the 'Internal Here and Now' function. It considers the operational elements as black boxes and is only concerned that the outputs required of each element are produced and that the resources needed by each element are supplied. This in effect reduces the variety that management has to consider. The darkness principle (see Appendix F) tells us that an organisation must be managed without complete knowledge of its parts by the meta-management which means that managers at this level should avoid detail which is irrelevant to them. They must acknowledge the self-organising law and let subordinate units get the job done. In essence, the Control Function ensures that the operational units function efficiently and also looks at its own organisation's outputs as a whole and ensures that the outputs

[1] Cybernetics: A New Management Tool, Barry Clemson, Abacus Press, 1984, Pages 132-138.

required by the larger system are produced. The Control Function uses the command, audit and co-ordination channels to achieve its aims. The Co-ordination Function has already been discussed. The command channel is a two way communication link between the meta-management and the various managements of the operational units. It is used to send directives to the operational units, enforce accountability and generally forms the feedback loop by providing targets and monitoring the outputs of each unit. As per the feedback law (see Appendix F), all outputs of the unit that are important to management need to have associated feedback loops and furthermore the output will be dominated by the feedback over a wide range of inputs. The audit channel is an independent channel that will allow the Control Function to audit an operation and thus confirm that the information it receives from that unit reflects the true situation.

The Intelligence Function
Exploration of the environment and the future of the organisation is the job of this function, sometimes called the 'External and Future' function. Thus the term 'intelligence' is used in a military sense to mean information gathering both in the organisation's external environment as well as internal environment. The tasks of the Intelligence Function can be summed up as[1]:

- Intelligence gathering and reporting to improve the organisation's explicit knowledge of its problematic environment thereby highlighting what needs to be achieved by the operations function in order for it to be relevant to its environment.
- Intelligence gathering and reporting to improve the organisation's explicit self knowledge thereby illuminating what the operations function is actually achieving.
- Providing an environment for planning the organisation's desired future by using the previous two points.

In essence, the Intelligence Function ensures that it identifies opportunities as well as threats within the organisation's environment and uses the organisation's self knowledge to plan how best to address them.

The Identity Function
The task of this function is to form policies which act as guidelines for the functioning of the whole system. It provides and maintains the identity of the organisation, and has everything to do with defining and clarifying the organisation's basic purpose i.e. "This is the sort of outfit we are and when all else fails we make decisions in terms of this self image". The Identity Function (also known as the Policy Function) promotes viability by regulating the interaction between the Control (Internal Here and Now) function and the Intelligence (External and Future) Function, providing a balance between stability and rate of change.

The previous paragraphs are represented by Figure 7.10 on the next page. The four elements of the meta-management system are shown on the top left and are grouped by a dotted square. The operational units are grouped by a dotted circle and together form the organisational unit. Now, if all the operational units are lumped together and considered simply as one large operation (the dotted circle) interacting with its environment, and if the meta-management system is considered to be its local management (the dotted square) with its own associated models, then the set of environment-operations-management-models, as shown previously in Figure 7.8, is once again evident. This illustrates the recursive nature of the organisational model and as a result means that the whole system is replicated in the parts so that the same principles of viability may be used to model a sub-system or division within an organisation.

[1] The Viable Systems Model, Tom Ryan, OMDP, University of Cape Town, lecture notes, 1996.

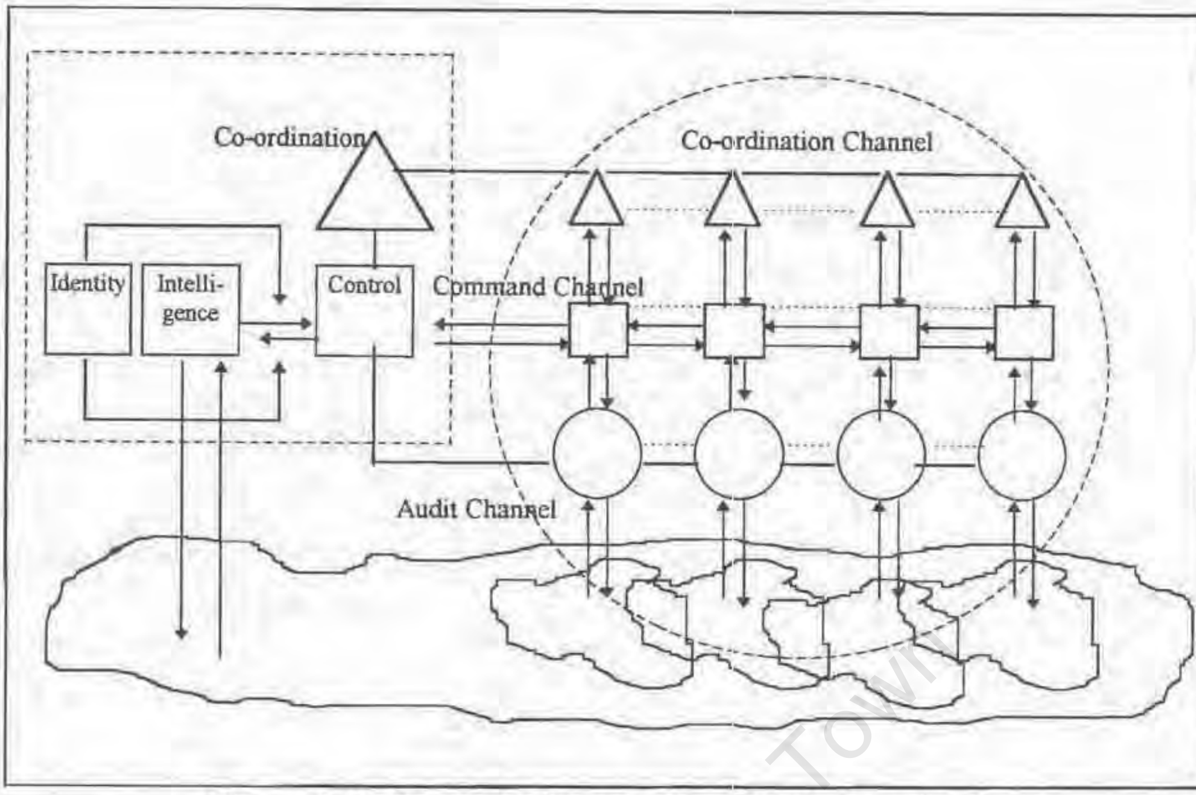

Figure 7.10: Necessary Elements for a Viable Organisation

7.1.3 - Structuring for Change

Thus far an organisational model which offers criteria for viability and is equipped to cope with a complex, turbulent environment, has been described. In fact the model is a meta-structure designed to continually produce changes within the organisation in order for it to adapt and remain viable in its rapidly changing environment. One of the most common routes taken by organisations to help them cope with change is to reorganise themselves. Now what does it mean to reorganise and how should we direct these changes?

To organise is to divide labour and co-ordinate it in such a way as to obtain a desired output. According to Ackoff[1], there are only three ways to divide labour; by function, by products/services provided or by users supplied/served, and all reorganisations consist of changing the relative importance of the above criteria. A great deal of time and energy is consumed in the process of reorganising, and aside from being a costly affair, the process is very unsettling and frequently leads to decreased productivity. To cope with this, the model developed here incorporates Ackoff's multidimensional design, which eliminates the need to change the basic structure, by establishing organisational units based on the three ways of dividing labour, at every level of the organisation.

The three types of organisational units are defined as:

- **Functional (input) units,** the outputs of which are principally consumed or used internally.
- **Product/service (output) units,** the outputs of which are principally consumed or used externally.
- **Market units,** which sell the outputs of any other unit in the organisation who wants to use their services. They represent the company to the market as well as the market to the company. Market units are usually defined by the groups of clients they serve.

[1] The Democratic Corporation, Russell L. Ackoff, Oxford University Press, 1984, pages 168-170

Ackoff claims that if units of all three types are established at a particular level of an organisation, then as their relative importance changes, all that is required is a reallocation of the resources invested in them. Reorganisation at that level is not required. Units of any of the three types can be added or subtracted without requiring any change in structure. The three types of organisational units are drawn as circles along axes in Figure 7.11 (the dotted circles show how units can be added or subtracted).

The large blue dotted circle surrounding the units represents an organisational unit at one level of recursion higher and will once again form part of a collection of units of all three types. Because the organisational model is recursive, looking at the internal structure of any of the three types of units, functional, product/service, and market units will once again be seen. In other words, every unit in the organisational model can be organised in the same way as the organisation as a whole.

One important difference between the traditional organisational approach and the organisational design presented here, is that the former looks at structure in terms of people whilst the latter looks at structure in terms of functional units.

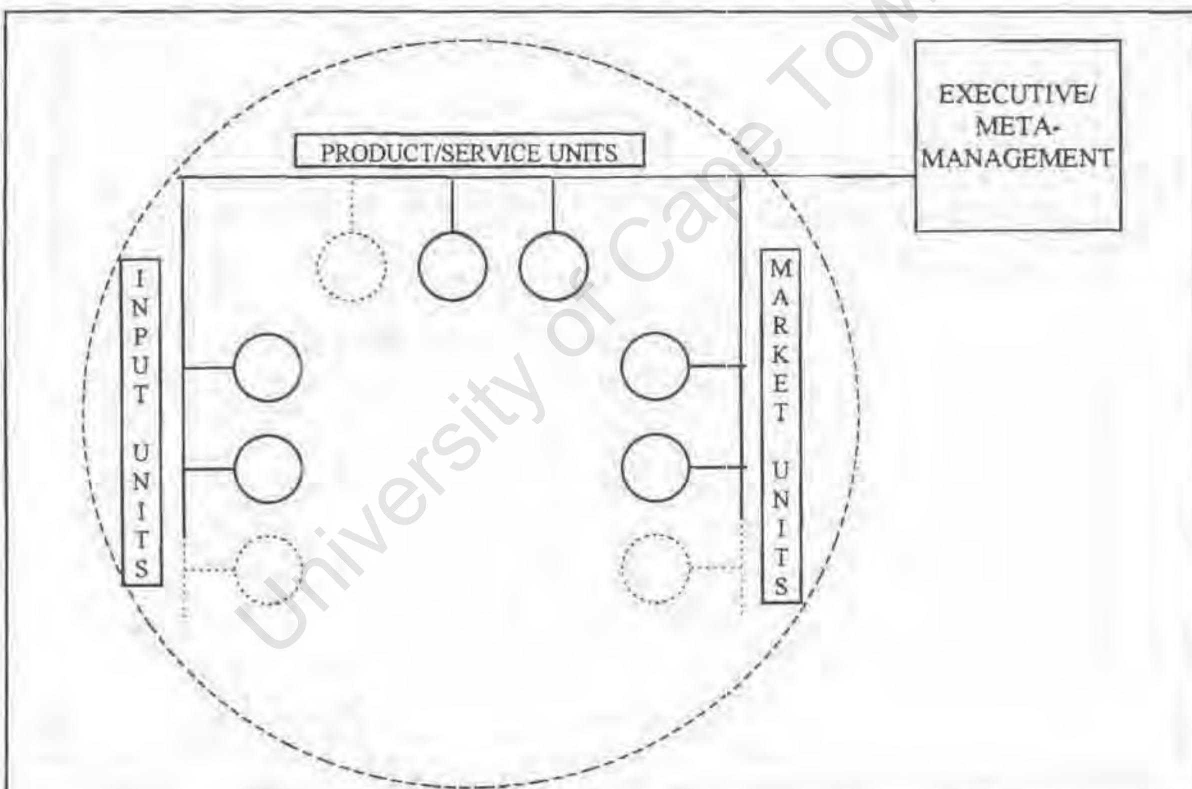

Figure 7.11: The three types of organisational units[1]

This means that the essential functional units for the business can first be defined and afterwards the relevant resources (money, people, equipment etc.) allocated to them. This approach is more flexible in that employees entering or leaving the business will not upset the structure.

[1] Adapted from Figure 6.2, The Democratic Organisation, Russell L. Ackoff, Oxford University Press, 1984, page 173.

7.1.4 - The Internal Market Economy

In the description of the model thus far, the basic elements of the design have been discussed and a diagrammatic representation has been given thereof. The model has been shown to provide necessary criteria for viability as well as providing a scientific, rational plan for the way in which organisations should restructure themselves in response to changes in their environments. After all, the central idea behind the model is to provide some means of organisation to cope in an environment of increasing rate of change and complexity. In the paragraphs to come, the mechanism which drives the learning, adaptation and change needed within every organisation is described. This mechanism will not simply allow an organisation to make adaptive changes in order to survive, but will also drive innovation and creativity from within so that the organisation can take advantage of conditions in its environment to thrive and prosper. This mechanism or feature of the organisational model is described by Halal, Pourdehnad and Geranmayeh in their book titled 'Internal Markets' and relies on three central principles[1]:

- *The organisation is composed of internal enterprise units.* The organisational units, which are the building blocks of an organisation, should be regarded as 'internal' enterprises. All internal enterprises are accountable for their performance and have autonomous control over their operations - just like any ordinary 'external' enterprise. Because of the recursive nature of the model, this concept can be taken right down to the grassroots level by decentralising enterprises into autonomous work teams.
- *Corporate executives manage the organisational infrastructure.* This relates back to the systems principle of managing the interactions of the parts. By having autonomous organisational units, corporate executives are able to concentrate on the design and regulation of the infrastructure of their 'organisational economy' rather than managing operations through the chain of command. They are responsible for developing common systems for accounting, communications, financial incentives, education, governing policies and the like. Once again, due to the recursive nature of the model, this concept can be applied to the meta-management of each set of organisational units right down to the lowest level.
- *Leadership fosters collaborative synergy.* The model is much more than a laissez faire market and suggests that an organisation should be like a community of fellow entrepreneurs that fosters collaborative synergy by encouraging joint ventures and alliances, the sharing of technology, solutions for common problems, and mutual support among both internal and external partners. It develops a creative tension between competition and co-operation amongst the units.

There are many desirable features of an organisation which is designed from organisational units operating in an internal market economy as a community of entrepreneurs. Units use their freedom to launch new products and services, hire and fire, buy and sell, both internally and externally which brings all the advantages of the self-organising, creative interplay which occurs in market driven economies into the organisation. As a result, powerful solutions to difficult problems emerge quickly and almost spontaneously. The internal market economy is a very useful concept because under turbulent conditions, "free" enterprise (the word free is placed in inverted comma's because in practise it is never really free) is the only economic philosophy which is able to produce an unending stream of adaptive change rapidly and efficiently.

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[1] Internal Markets, Halal, Pourdehnad & Geranmayeh, John Wiley & Sons, 1993, pages 6-7.

Halal, Pourdehnad and Geranmayeh's concept of an internal market economy requires that units within an organisation should be viewed as profit centres or autonomous business units where possible. Even the executive could operate as a profit centre and the only exceptions are units whose output cannot or should not be provided to any external user (usually for competitive reasons). Subject to as few constraints as possible (which will be in the interest of the whole), these units should have the freedom to[1]:

1. Buy any service or product they want from whatever source they want at whatever price they are willing to pay. Remember that products or services are not only evaluated in terms of cost, but also in terms of quality and delivery.
2. Sell their outputs to whomever they want at whatever price they want or are willing to accept.

This will allow units to source their requirements from outside sources and thus disallow internal units to have a monopoly. This increases responsiveness of internal suppliers since they now have to compete with their counterparts outside of the company or they will lose their internal customers. It will also allow units to sell their products and services to external customers in order to improve profitability. Not all units are expected to be profitable, but their profitability acts to provide a consistent measure of their performance throughout the company and allows reward to be linked to performance. For example, an unprofitable unit may be retained because of the prestige or recognition it brings to the company as a whole. It is easier to see the contributions of units to the whole and we can therefore manage efficiencies on an objective basis.

Halal, Pourdehnad and Geranmayeh prescribe the control and co-ordination of units in the following way. As was mentioned earlier, some units may lack relevant information about other units and as a result may take action which is to their benefit but to the detriment of the organisation as a whole. For this reason, higher level units must be able to intervene when lower level units fail to act in the interests of the whole of which they are part. For example, an executive unit may believe that a purchase made by a subordinate unit from a particular source is harmful to the organisation. In such a case, the executive can require the purchase to be made from a different source even if it means a higher price, but the executive must pay for the difference in price. This means that the buying unit will not have to pay more than it would have paid had it been free to buy from its original source and will motivate it to continue to search for better priced products/services. In addition the executive unit, which is also a profit centre, will have to bear the cost forcing it to explicitly consider the benefits as well as the costs of its intervention

Likewise, when an executive unit believes that a sale a subordinate unit wants to make is not in the interests of the organisation as a whole, even if at a premium price, it can override that sale but once again must compensate the unit so that it will never have to sell its output at a price lower than it has negotiated. When an executive believes that a purchase or sale should never be made, it can establish restrictive rules or regulations to disallow this. In order to cover its operating costs, the executive unit imposes a 'tax' or administration fee on its subordinate units.

The model advocates decentralising decision making which pushes decision making down to the lowest levels thereby empowering employees. In an environment where their subordinates know more about their jobs, managers should be facilitators and should give their subordinates the freedom to make decisions. Decentralisation in this context is a combination of control of

[1] Internal Markets, Halal, Pourdehnad & Geranmayeh, John Wiley & Sons, 1993, pages 18-20.

performance with freedom of operations. There are tight financial controls with a looseness in how this may be achieved. This focus enhances both control and autonomy which leads to 3 major advantages:

a) It ensures accountability for the performance of all units.
b) It fosters entrepreneurship within the units allowing them to seek new opportunities and experiment. This will increase their learning and as a result enhance the chances of survival for the organisation.
c) It develops general management skills within the units which generates a resource pool of well-rounded managers within the company as a whole.

In conclusion, the organisational design which has been described in the preceding pages embodies the principles of the systems approach and offers a powerful way of allowing a company to evolve and grow. While this model provides a better method for dealing with variety and complexity, it is still a far cry from being able to cope with the variety and complexity that abounds. Other relevant perspectives are needed. Furthermore, it is not a straightforward process to implement the model in practise. In order to reach the type of organisation prescribed by the model one cannot simply make structural changes alone, but rather it requires that one make fundamental changes in the culture, management style, and the like within the business. In other words a new management paradigm is needed in order to appreciate the implications of the model. In this respect, the model remains silent and does not address the human element and the associated politics involved. The next section, the methodology, takes cognisance of the human element and describes the way in which the model is used in order to redesign the organisation of Mike's Sports.

7.2 - THE METHODOLOGY PLAN

In this chapter so far, the usefulness of models has been discussed and a model for effective organisation has been described. The next step is to describe a rigorous methodology which will make use of this model to address the problematic situation and serve as a guide in the solution process. Before continuing however, some thought should be given as to what is meant by the term 'problematic situation'.

Traditionally problems have been viewed as real and solvable with ends that are easily and objectively definable. Furthermore, this view suggests that problems can exist in isolation and be treated as such. The traditional approach, therefore, is to ask how these predefined ends can be reached and what best means are available. By contrast, the view taken here is that a problematic situation consists of a complex set of interdependent problems which Russell Ackoff[1] refers to as a 'mess'. By treating one of these problems in isolation, it will be found that a number of others will be unintentionally affected. This 'mess' will also have emergent properties which are not present in any of the individual problems and as a result will not yield to a reductionist approach which tackles one sub-problem at a time. Problems which are experienced today can often be traced back to yesterday's solutions, and what becomes increasingly apparent is that the way problems and their solutions interact, is far more important than their behaviour independent of each other.
Also part of the view taken is that problematic situations are in fact partly the result of the contrasting views that people have of the 'same situation'[2]. In other words, 'problems' which arise in organisations do not have an existence independent of the humans involved in them. Based on the philosophy of Kant which was discussed previously in Chapter 1, each of us as

[1] The Democratic Organisation, Russell L. Ackoff, Oxford University Press, 1994, page 210.
[2] Creative Problem Solving, Robert L. Flood & Michael C. Jackson, Wiley, 1991, page 169.

humans have different appreciations of situations. We look at and interpret the world through a kind of personal 'lens' or 'filter' which shapes all our experiences and gives each of us a unique picture of reality[1]. This complex 'filter', commonly referred to as 'weltanschauung' or world view, can be thought of simply as including two types of belief - beliefs about what is, and beliefs about what ought to be. The first type includes things which are regarded as facts and take to be true e.g. that the earth is round, that we can't breath without oxygen, etc.. The second type are often classified as morals and values and are beliefs about 'what is right or wrong', 'good or bad', etc.. These personal 'filters' are extremely important in determining how we as individuals interpret the world.

The definition used here for a problematic situation incorporates both types of beliefs described above and can be stated as 'a perceived discrepancy between an actual state and a desired state'[2]. This implies that in order to take action to 'improve' the situation, the following steps are needed:
a) Develop a good model/understanding of the current situation.
b) Develop a good model of the target or 'more desirable' situation which will be based on the deficiencies in the current situation as well the consideration of possible future scenarios of the situation.
c) Design an intervention which will over time transform the current situation into the desired one.

These three simple steps, along with the assumptions pointed out in the next section, have guided the design of the methodology and as such can be considered a meta-methodology. To achieve these three steps, the methodology makes use of five stages, namely:

1. *Research into the Situation*
2. *Shared Understanding and the Need for Change*
3. *A Framework for Group Inquiry*
4. *The Idealised Organisational Redesign*
5. *Practical Considerations*

The first stage is used by the author to gain a better understanding of the current situation in order to gain confidence in his hypothesis about the situation and to confirm that the methodology he has designed is appropriate. It is also used to select a group of participants who will be responsible for a solution process in subsequent stages. These participants begin by taking part in a workshop in the second stage in order to generate a shared understanding of the current problematic situation (of which they are part) and to establish the need for change. This is the beginning of a model of the current situation and the need for change will motivate them to continue with the process. The participants are then equipped with some key theoretical knowledge in the third stage in an effort to build a shared framework for inquiry into the organisation. This framework is used to diagnose the organisation and complete their model of the current situation. The theory is then used in an organisational redesign in the fourth stage which constitutes the 'more desired' situation. The fifth and final stage is used to consider the practical implications of implementing the new design and plan an intervention to achieve this.

7.2.1 - Methodological Assumptions

[1] The Soft Systems Approach, Block IV, 'Soft Systems Analysis - An Introductory Guide, Open University Press, 1994, page 11.
[2] Soft Systems Analysis: An introductory guide (block IV), The Open University Press, Walton Hall, Milton Keynes copyright 1984, page 7.

In compiling the methodology, a number of assumptions were made. As was mentioned earlier in this chapter, the assumption is made that the roots of the concerns and issues raised in this thesis are predominantly due to the way the enterprise is organised. The assumption is also made that the system being dealt with is complex, and the relationships between the participants of the group chosen in the methodology to drive the solution process are a combination of unitary and pluralist[1]. In other words the participants:

1. share common interests.
2. have values and beliefs which are largely compatible.
3. largely agree upon ends and means, and when they disagree, compromise is possible.
4. all participate in decision making.
5. act in accordance with agreed objectives.

As a result, an appropriate methodology for tackling the problem situation as it has been perceived is presented here with elements from both Peter Checkland's Soft Systems Methodology (SSM)[2] as well as Stafford Beer's Viable Systems Diagnosis (VSD)[3]. It is important to always recognise that other possible perceptions of the problem situation are possible, and in deciding to view a problem situation in a certain way, only a partial representation is being made[4]. Furthermore, in using a methodology which conforms with that partial representation, only certain aspects of the problem situation are being addressed. In other words, this is not a methodology which will address all the issues and concerns which Mike's Sports faces, but rather a rational approach which makes use of rigorous and formalised thinking to provide a set of useful tools for a particular application. If at some stage it became the perception that the issues and concerns raised were not predominantly organisation related, but rather the result of other factors, the methodology would have to be modified to suit the new perception.

7.2.2 - Stage 1 - Research into the Situation

To improve the situation, meaningful action is needed - action that is directed to attaining a purposeful end. This type of action requires access to relevant and useful information which is not always readily available and needs to be obtained by research. This research must collect good quality information in a systematic and rigorous manner so that there can be a sound basis for making decisions[5]. Thus the purpose of this first stage is for the author (who is also the facilitator and person guiding the application of this methodology) to gain a richer understanding of the current situation by gathering information in order to better formulate his hypothesis with regards to addressing the problematique. After this stage, revisions to the rest of the methodology could be made if needed.

The situation has been loosely defined to include the Mike's Sports group, the South African sports industry and the South African soccer community. The scope of this thesis requires that Mike's Sports be our system in focus, whilst the sports industry and soccer community be regarded as part of the environment. The objectives of the research are:

[1] Creative Problem Solving, Robert L. Flood & Michael C. Jackson, Wiley, 1991, pages 33-34.
[2] Creative Problem Solving, Robert L. Flood & Michael C. Jackson, Wiley, 1991, pages 167-194.
[3] Creative Problem Solving, Robert L. Flood & Michael C. Jackson, Wiley, 1991, pages 87-117.
[4] Creative Problem Solving, Robert L. Flood & Michael C. Jackson, Wiley, 1991, page xi.
[5] How to get the best from Action Research - A guidebook by Roger Bennet and Jim Oliver MCB University Press Ltd copyright 1988, page 6.

1) To Generate a Time View of the Situation.

A study of the history of the situation is motivated by referring to the philosopher Hegel, who was discussed in the epistemology in Chapter 1. He considered the world to be in a continual process of development which is dialectical in nature. The development of all things and ideas, he said, is brought about through the establishment of a thesis, which then leads to an antithesis and then a synthesis or integration. Thus it follows that the present situation is inextricably linked to its historical context and moreover will form the basis for the future situation. To view the situation in a meaningful way, a snapshot in time cannot be taken alone. Both the situation's past as well as possible futures need to be considered. This idea was encapsulated in Chapter 2 by Churchman who stated that the most flagrant example of the environmental fallacy was not to consider the history of a problem situation. The first step is to consider how the South African sports industry and soccer as a sport has evolved with time and then use this to provide the context for Mike's Sports. The history of Mike's Sports as a business during this same time is then considered along with its growth and development since its establishment. This is all achieved via informal talks with key people who are knowledgeable in these areas.

2) To Sweep in Multiple Perspectives and Surface Different Aspects of the Situation.

The need for multiple perspectives is based on the philosophy of Kant and Churchman[1]. Kant held that each of us has a framework, built on our own set of apriori concepts or assumptions, which we use to interpret the world via our senses. It follows that each of us will have different, but equally legitimate, interpretations of any particular situation. Once this is recognised, it becomes clear that every view of a particular situation is subjective, and the only way to come close to objectivity is to sweep in as many different perspectives as possible. The way in which these perspectives are swept in is via interviews with employees, directors, suppliers and customers of the Mike's Sports group. To guide the process of inquiry, the following set of questions has been developed[2]:

1. If you had to explain to someone what Mike's Sports does, what would you tell them?
2. What is the atmosphere or mood like at Mike's Sports?
3. How would you describe the working environment at Mike's Sports?
4. What, in your view, is the root or nature of the problems that we need to address within Mike's Sports?
5. What names/labels could you give to the problem situation?
6. What is the history that led to these problems?
7. Who are the people who have the authority to make the changes necessary to deal with these problems?
8. What could not be changed by these decision makers?
9. What difficulties do you foresee in trying to eliminate these problems?
10. Who should be involved in trying to solve these problems?
11. What should implementation strategies be for this solution process?
12. Who would be hurt or worse off by implementing changes?
13. How will you know when our problems are solved?
14. Who are the people who would benefit if these problems were 'solved'?
15. How do you see you and your team, contributing to Mike's Sports?
16. Who does Mike's Sports serve?
17. Who should Mike's Sports serve?

[1] Creative Problem Solving, Robert Flood & Michael Jackson, Wiley, 1991, page 121
[2] Questions adapted from Johan Strümpfer's 'Questions for Systems Design and Analysis', OMDP notes 1997, University of Cape Town.

18.How are you (or your team) evaluated by the group?
19.How should you be evaluated?
20.What factors could affect Mike's Sports, positively or negatively, which are outside of its control?
21.What is the purpose of Mike's Sports?
22.What should the purpose of Mike's Sports be?
23.How does Mike's Sports contribute to the purpose of the containing systems of the soccer community and sports industry in general?
24.What are the measures of performance of Mike's Sports?
25.Who else should we approach for views on this situation?

The above questions are listed in no particular order and are not asked sequentially. The questions are paraphrased according to the interviewee's level of English and answers are treated as totally confidential. The results of this exercise are used to evaluate whether the author's initial perspective of the situation was appropriate and gives him the confidence and insight to continue with the methodology. Further confirmation will be made possible in *Stage 2* where issues and concerns are surfaced within the situation.

3) To Determine the Selection of Participants for Stage 2.

Having gained a more objective view of the problematic situation, and having generated information as to who should be part of the solution process, the group of participants who will be responsible for driving this solution process are now selected. The selection of participants will be based on the following criteria:

- Candidates are to have a high level of influence on the business and their fellow employees.
- The selection of participants will be such as to gain the broadest range of perspectives.
- The number of participants will be restricted to a group of manageable size which can meet at regular intervals over the thesis implementation period.
- Due to the limited scope of the thesis, only employees of the Mike's Sports group will be considered as candidates.
- Candidate availability (and cost thereof - e.g. branch managers in other provinces).

7.2.3 - Stage 2 - Shared Understanding and the Need for Change

This stage describes a process of group learning and inquiry with the participants selected in *Stage 1*, and is driven through a series of workshops with the facilitator and the group. The need for participation is based on the idea that due to the wide range of valid perceptions of a situation, it is important for individuals to have a shared understanding of the situation in order for any proposed action to be justified and carried out successfully[1]. The individuals chosen for the group will be instrumental in bringing about changes and therefore any solution process needs to be grounded in the reality of these individuals and their work environment to ensure that any action taken is seen as relevant by them.

The emphasis in this stage is on developing a shared understanding of the current situation and establishing the need for change. The purpose of this stage is NOT to try to find 'solutions' to perceived problems within the situation. The reason the temptation to surface problems and tackle them must be resisted in this step is related to two of the key ideas underlying the methodology:

[1] Creative Problem Solving, Robert L. Flood & Michael C. Jackson, Wiley, 1991, page 171.

a) In order to take any meaningful action, there needs to be a clear idea of the current situation, the desired situation and a detailed plan of how to transform the current situation into the desired situation.
b) The 'problems' which are being experienced may well be the result of individuals having differing perceptions of the current situation (as well as the desired situation and how to arrive at the desired situation).

So, having established that 'solutions' to the 'problems' are not going to be thrashed out just yet, the first step of the group's journey begins. This stage is completed in the first workshop which proceeds in the following manner:

<u>WORKSHOP 1</u>: Surfacing Issues and Areas of Concern within the Current Situation

The group session starts with a very rough outline of what is to be achieved i.e. that there are many concerns within the business which need to be addressed and that the group will be meeting on a regular basis in order to produce a solution process which will address these concerns. The location, time and dates of the forthcoming workshops are planned with the participants. Next the philosophy behind this particular step in the methodology is introduced. It is stressed that solutions to the problems should not be considered in this first workshop, but rather the group should strive for a shared understanding of the current situation. This is especially relevant in the context of Mike's Sports because typically the approach to problem situations within the business has been to identify 'problems' piecemeal and attack them immediately in order to remove them - no attention being given to the environment of the problem and the consequences of 'solutions'.

To better the group's shared understanding, the session continues by surfacing issues or areas of concerns within the situation by making use of brainstorming techniques[1]. Brainstorming starts by identifying the objective of the exercise and making sure that everybody is clear about this. Next, each participant, in turn, gives an idea which is then recorded without any criticism. With each rotation around the group, any member can pass at any time which encourages participation yet does not place undue pressure on any individual to present an issue. As concerns and issues are surfaced they are written on a large flipchart (or other display medium which is visible to the group) and recorded in the same words of the speaker. The wording must not be interpreted or abbreviated to ensure the accurate recording of the idea. This process continues until each person passes indicating that ideas are exhausted (don't let the process stall - keep it moving). At this point the list of ideas is reviewed for clarity and duplicates are eliminated. Each idea is revisited and expanded on by its creator in turn. Members of the group are allowed to question (but not criticise) the ideas in order to provide a clearer understanding of the list.

In many cases it is found that the issues and concerns raised in a particular situation are interrelated in one form or another. For efficiency and manageability, where possible, concerns which are strongly interconnected are grouped together in order to form a list of the core issues. The next step is to prioritise the list of concerns and issues before moving on to explore their nature and determine their root causes. This needs to be done in a participative way which will build commitment to the team's choice and eliminate dominant members from pressurising others. One way of achieving this[2] is to allocate a letter to each item on the list of issues and concerns, allow each member to rank the items numerically on a piece of paper in terms of priority, and then to combine the rankings of all team members to arrive at an overall

[1] The Memory Jogger II, Michael Brassard & Diane Ritter, GOAL/QPC, 1994, page 19.
[2] The Memory Jogger II, Michael Brassard & Diane Ritter, GOAL/QPC, 1994, page 91.

ranking. (When dealing with a large number of choices, it may be necessary to limit the number of items ranked). For each item on the list in order, a list of causes is brainstormed which are used as building blocks for a fishbone diagram[1].

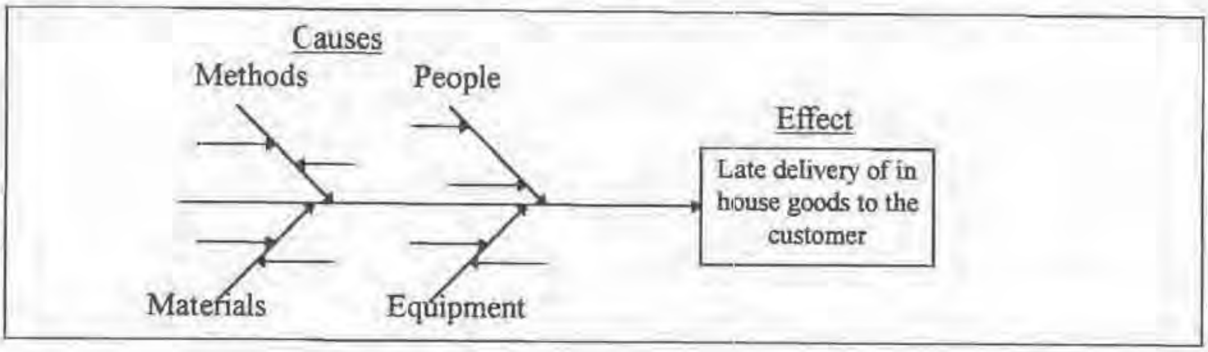


Diagram x: Constructing the fishbone diagram

Constructing the diagram starts by identifying major cause categories or steps in the production or service process which are then connected to the 'backbone' of the fishbone chart. The brainstormed causes are then placed in the appropriate categories (a particular cause may fit in more than one category) to generate the secondary 'bone' structure. The diagram is now used to generate a deeper understanding of the issue by analysing the causes further and considering their implications.

7.2.4 - Stage 3 - A Framework for Group Inquiry

Having developed a shared understanding of some of the issues they are faced with in *Stage 2*, and realising the need for change within the organisation, the group is better prepared to be presented with some key principles and concepts of systems based organisational theory. This is done over two workshops and the theoretical knowledge gained will form the basis for a shared framework which the group will use as a tool for inquiry into the organisation and to guide the development of an organisational redesign in the next stage. A result of the workshops will be to generate a common language with which the group can think and talk about the business in the future. Remember that in compiling this methodology two major assumptions were made. Firstly, it was assumed that the roots of the concerns and issues raised would be predominantly due to the way the enterprise is organised, and secondly that problem situations are not easily definable and that in fact they are partly the result of the contrasting views that people have of the 'same situation'. It is for these two reasons that a shared framework with which to view the situation is needed and furthermore that this framework be based on sound organisational principles. If it became apparent that the assumptions were incorrect, the methodology would have to be modified at this point to be congruent with the new perspective of the problematique.

<u>WORKSHOP 2</u>: A Systemic View of the Business

The workshop begins with a brief introduction to inform the group that over the next two workshops some theoretical concepts will be introduced which are useful as tools for thinking about the business. It is made explicit that the reason these concepts will be introduced is because they are useful for thinking about the business at any level and will give the group a common 'language' with which to communicate. Furthermore, the concepts will give the group a shared organisational perspective which will enable them to diagnose the business and

[1] The Memory Jogger II, Michael Brassard & Diane Ritter, GOAL/QPC, 1994, page 23.

allow them to make the changes necessary to improve viability and in the process address the concerns which were raised earlier.

The concept of systems is introduced by means of a lecture followed by an informal discussion to answer any questions members of the group may have. These concepts are fundamental to the methodology and together with the organisational model, which was described in the previous section of this thesis, are used in a powerful approach to addressing the problematique. It is important that all the participants develop an understanding and an appreciation for the concept of systems in order for the organisational model to be used within a systemic paradigm. It is possible for the organisational model to be used in a non-systemic paradigm but much of its richness will be lost. It is all to easy to set up a management structure based on the model without recognising and reaping the benefits of systems analysis.

The key ideas discussed are:

- A system consists of interacting, interdependent parts which together form a whole.
- A system has inputs which are transformed into outputs.
- A system has a boundary which separate its internal and external environments.
- A system has a client who is served by the system.
- The client of a system has an expectation of that system which can be satisfied by certain outputs.
- A system has measures of performance.
- A system is goal seeking and has purpose.
- The concept of a system is recursive. Each system can be considered as composed of sub-systems and in turn can be considered as part of a larger system.

These terms and concepts form part of the vocabulary of the group's shared language and as a result channel the way in which they think about the business. The theoretical content of this workshop is summarised in a handout to the participants and is included as Appendix A. The workshop concludes with a group exercise to begin the building of a shared systemic view of Mike's Sports. The following questions have been formulated to drive the process:

1. What type of 'business' are we in?
2. What is our purpose?
3. What elements of the environment can affect us and over which we have no control?
4. What are the inputs and outputs of our organisation? (Think of the organisation as a 'black box' which you feed with inputs from which it produces outputs).
5. Which operational elements are directly responsible for producing the outputs?
6. What resources are used?
7. Who are our clients?
8. What are the needs of our clients that we seek to satisfy through our service?
9. What role or function do we play within the community? What do we seek to provide the community with?
10. What expectations/measures of performance do our clients have of us?
11. What do we need to produce or provide to satisfy those expectations?
12. Who are the stakeholders who are influenced by the organisation?
13. What are their expectations?
14. What are the required outputs to satisfy those expectations?
15. What are our goals/objectives over the long-term and short-term?
16. Does the organisation answer the need it came into existence for?

In order to ensure that each member contributes to the shared view, and that dominant members do not override the process, once again use is made of a structured brainstorming technique[1]. The exercise begins with the selection of a question from the above list. The question is stated, agreed upon and written down on a flipchart or other display medium for everyone to see. It is important that everyone understands the question and this can be checked by asking one or two members of the group to paraphrase it. Next, each member in turn gives an idea in answer to the question which is recorded on the display medium without criticism. Members may question the idea for clarity or understanding but never criticise it. With each rotation of questioning, any member can pass at any time. Ideas are generated in turn until everyone passes indicating that the ideas are exhausted. Another question is then selected and the cycle begins again until all the questions have been answered. At this stage, some of the questions may be revisited to summarise and rank answers in order of importance.

<u>WORKSHOP 3</u>: Necessary Criteria for a Viable Organisation

Having established an appreciation for the concept of systems in the previous workshop, and having begun the construction of a shared systemic view of Mike's Sports, use of the organisational model will now be made to enrich the group's shared framework. Since it is the assumption that the roots of the concerns and issues raised by the group in the first workshop are due to the way Mike's Sports is organised, it can be further assumed that the organisational model will provide the group with insight as to how these issues can be addressed. Thus the third workshop begins with a recapitulation of the issues and concerns raised which motivates the introduction of the model to the group.

The organisational model is introduced by means of a lecture followed by an informal discussion to enrich the participants' understanding and answer any questions they may have. The following key terms and concepts are discussed in the workshop and serve to expand the vocabulary of the group's shared language:

- The basic building block of an organisation is the highly *autonomous organisational unit*. This unit can be considered as being composed of an *operation* which takes place within an *environment*. The operation has a *local management* which takes action according to its own set of *models*.
- The organisational units at every level in an organisation have, in addition to their local managements, a *holistic* or *meta-management* which has four functional elements. These are the *Intelligence, Control, Co-ordination* and *Policy Functions*.
- The organisational model is *recursive* so that within any particular organisational unit we can find a number of organisational units at a lower level of recursion with their own meta-management.
- There are three types of organisational units namely, *Functional (input) units, Product/ Service (output) units* and *Market units*. If units of each type are established at every level of the organisation, it eliminates the need to restructure.
- Organisational units should be regarded as *internal enterprises* who have the freedom to largely run themselves. They are subject to overrides from a *corporate executive* which manages the interests of the whole and which fosters *collaborative synergy* amongst the units.

The theoretical content of the workshop is summarised in a handout to the participants and is included as Appendix B. The workshop concludes with a practical exercise which uses the theory as a framework for inquiry into Mike's Sports. This serves to provide the group with a clearer picture of the current organisation and structure, as well as to highlight areas which are

[1] The Memory Jogger II, Michael Brassard & Diane Ritter, GOAL/QPC, 1994, pages 19-21

deficient in terms of the model. By using the model to perform the diagnosis, a sound rational basis for redesigning the organisation is provided which takes place in the next stage. The following set of questions are used to guide the diagnosis:

1. What are the primary operations within our organisational unit?
2. How is accountability exercised?
3. What control structures exist for the units?
4. How, where and when are these exercised?
5. How are directives issued and followed up?
6. How is the performance of each operational unit measured?
7. What feedback is there from management to the units?
8. What are the areas of responsibility for the various units?
9. Who is considered responsible and accountable for each unit?
10. How does each operation feed back to its meta-management, what information and how often?
11. What audits are done?
12. What possible sources of conflict are there between the various units?
13. How are these avoided/resolved?
14. How is co-ordination regarded by the rest of the system?
15. What information does the Intelligence Function gather externally, how often, and who is involved?
16. What information does the Intelligence Function gather internally, how often, and who is involved?
17. How often are meetings held to discuss and plan future changes within the organisation based on the information gathered in points 15 & 16?
18. Who is involved with these meetings?
19. What planning (long-term & short-term) takes place within the organisation?
20. What forms the basis for this planning?
21. How is information within the organisation collated for decision making?
22. Who is involved?
23. How is planning for the future balanced with control of the present?
24. How are policies decided?
25. How are policies communicated to the organisation?
26. Is policy biased towards Intelligence or Control?
27. What is the identity of the organisation? Why?
28. Which are the support/functional units within the organisation i.e. those units whose outputs are used primarily internally?
29. Which are the product/service units within the organisation i.e. those units whose outputs are used primarily externally?
30. Which are the market units within the organisation?
31. Which units in the organisation are viewed as enterprise units?
32. What levels of autonomy are they given?
33. What type of executive overrides are they subject to?

The exercise follows a top-down approach and the diagnosis of Mike's Sports begins at the top level of recursion. The questions are displayed on a large sheet of paper for the group to see and are addressed sequentially in an unstructured manner whereby participants are free to contribute at will. When ideas for a particular question are exhausted, the group moves on to the next question. The facilitator will promote participation by asking different members of the group to attempt various questions first.

Once all the questions have been answered for the top level of recursion, the group is split up into smaller groups and they are asked to complete the exercise again for an organisational unit at the next level of recursion. Each group will diagnose a different unit and the number of groups will correspond to the number of units at that level so that a complete diagnosis for the top two levels of recursion of Mike's Sports is made. The results of each group are tabulated and shared at the end of the workshop.

7.2.5 - Stage 4 - The Idealised Organisational Redesign

In *Stage 3* the group was presented with the concept of systems and the organisational model which were used together to diagnose Mike's Sports. *Stage 4* uses the results of the diagnosis to provide an indication of which areas of organisation need to be addressed. The areas which are weak or lacking are redesigned participatively according to the prescription of the organisational model. As was discussed earlier in this chapter, the model prescribes a design which promotes learning and inquiry so that if implemented, Mike's Sports will be able to adapt and change according to its environment in the future. Furthermore, since the model provides a meta-structure for organisations, there will be a consistent way of evolving the structure of Mike's Sports to these changes with minimum disruption.

The motivation for using workshops in a participative process of redesigning Mike's Sports relates back to what was said in *Stage 2*. The individuals chosen for the group will be instrumental in bringing about the changes needed, and therefore the solution process needs to be grounded in the reality of these individuals and their work environment to ensure that any action taken is seen as relevant by them. If these individuals are not part of the solution process, it is unlikely that any proposed action will be seen as justified by them nor will it be carried out successfully. By generating the design together, the participants will have a shared understanding of what needs to be achieved and therefore a coherence of action. Problems which arise from contrasting views of the 'more desired' situation will be avoided. This stage forms the second step of the meta-methodology, namely, creating a picture of the 'more desired' situation.

<u>WORKSHOP 4:</u> Redesigning the Organisation

The workshop begins with a brief review of the results of the previous workshop which are displayed on large sheets of paper for all participants to see. The group is asked to evaluate the diagnosis performed in the previous workshop and to identify ways of eliminating weaknesses and shortfalls of the current organisation at a top level in terms of the model. This is done by means of a semi-structured process whereby each participant in turn is asked to choose an area of the organisation which he/she feels can be improved. Once the participant has completed his/her contribution (and not before), other members of the group may question him/her for clarity of understanding or contribute other ways in which improvements may be made. Criticism is to be avoided. Once ideas for that particular area are exhausted, the cycle continues with a new participant and a new area until all areas of the organisation are covered. If the process stalls or is slow in generating results, the list of common faults found in organisations shown below can be used as a catalyst. The results of this exercise constitute a picture of the 'desired' situation and the idealised re-design at a top recursion level.

Some of the common faults found in organisations are[1]:

- Certain operations lack local management.

[1] Adapted from Creative Problem Solving, Robert L. Flood & Michael C. Jackson, Wiley, 1991, pages 95-96.

- Irrelevant structures which hamper viability exist.
- The Policy Function collapses into the Control Function in a hands-on action orientated manner.
- The Control Function interferes with the local management processes of the operation.
- The necessary information flows within the organisation and between the organisation and its environment are not present.
- The identity function is not creating an identity for the organisation and representing it to the wider system of which it is part.
- The feedback from the Intelligence Function is ignored due to political reasons.
- Measures of performance of a unit are not consistent with its purpose, and the feedback loops from management do not correspond to the required outputs.

The group is then split into the same sub-groups as in workshop 3 of *Stage 3* and are asked to perform the exercise for each unit at the next level of recursion. The results are recorded and stored for the fifth and final workshop where the implementation of the design is planned.

7.2.6 - Stage 5 - Practical Considerations

In *Stages 1, 2* and *3* a good understanding of the current situation was developed. In *Stage 4* the idealised re-design of the organisation was generated which is in essence the target or 'more desirable' situation. All that remains to be done is to complete the third step of the meta-methodology - to plan an intervention which will transform the current situation into the desired one. This stage is about the practical considerations of *how and when* the organisational design is going to be implemented and is achieved via a group workshop. The idealised design is used to prescribe the *ends* (or what needs to be achieved in the organisation) and the participants decide on the *means* which are best suited. The motivation for a participative workshop to generate a plan for the intervention remains the same as in *Stage 4*.

<u>WORKSHOP 5:</u> Planning implementation

The workshop begins with a review of the results of the idealised organisational redesign. In order to realise the design, a number of changes need to be made to the existing design and the following points need to be considered:

- Resources which are needed:
  - People
  - Hardware/software
  - Money
  - Skills
  - Other
- Chronological order and time span for implementing the changes

These points are addressed by the group using a structured brainstorming technique[1]. A top down approach is used and the session begins with organisational units at the top level. The idealised organisational design is compared to the current design with the above considerations for implementation addressed one at a time. Each member of the group, in turn, contributes an idea which is recorded on a display medium for all to see. Other members may question the idea for clarity or understanding but never criticise it. With each rotation around the group,

[1] The Memory Jogger II, Michael Brassard & Diane Ritter, GOAL/QPC, 1994, pages 19-21.

8 - TEST (IMPLEMENTATION RESULTS OF THE METHODOLOGY)

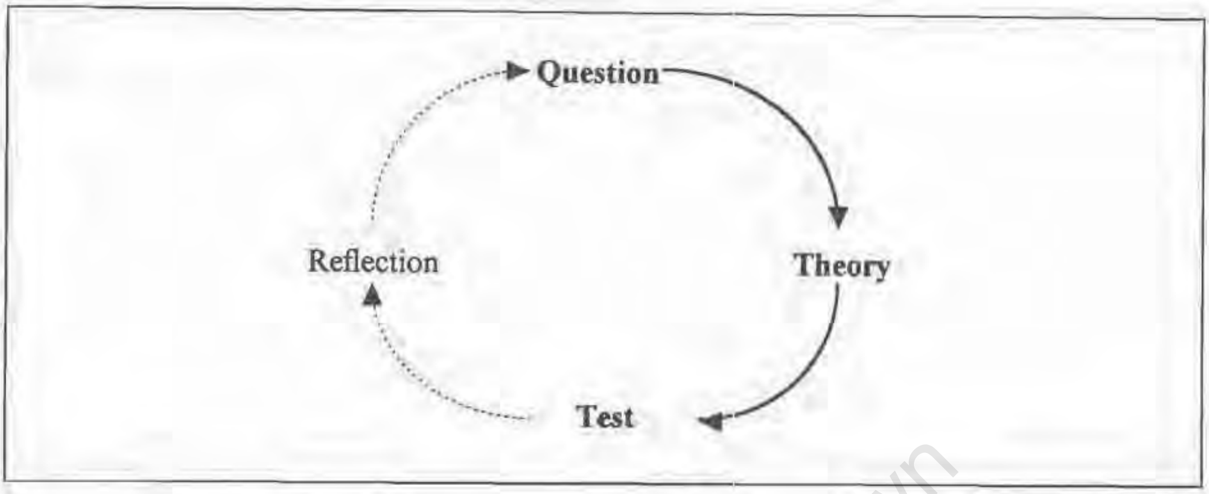


Figure 8.1: The third stage of the learning cycle

In this section, the milestones in the process leading up to the final redesign of Mike's Sports are shown. The results of implementing the methodology are recorded as a hard, almost crude, statement of the outcomes of each stage and have been placed in a light grey block for ease of reading. The softer, more interprative results are reflected upon in Section 9.1 of the next chapter. Chapter 8 forms the third stage of the learning cycle and is the testing of the answer, the methodology to make use of the organisational model, to the question. This is illustrated in Figure 8.1.

8.1 - RESEARCH INTO THE SITUATION

As per the methodology, the research was conducted to improve the author's initial understanding of the situation in order to better formulate his hypothesis and plan a solution process. The research was done with three primary goals in mind:

1. Generate a time view of the situation.
2. Sweep in multiple perspectives of the situation to promote objectivity.
3. Choose a group of participants who would drive the solution process.

8.1.1 - A TIME VIEW OF THE SITUATION

The time view of the situation, is split into two sections - namely the history of the South African sports goods industry and the history of Mike's Sports as a business. Before the year 1994, Mike's was not a specialist sports shop, but rather a departmental type store also catering for sport, and as a result the context for Mike's before 1994 was not only the sports industry and soccer community, but inter alia the clothing industry, furniture industry and appliance industry. Therefore, for clarity, the descriptions are kept separate. The attempt to compile a history of soccer in South Africa was abandoned due to lack of accurate references and the difficulty in acquiring relevant information. The assumption is made that South African soccer will continue to grow in popularity and provide a sustainable demand for soccer merchandise.

The historical account, as documented below, is a synthesis of the information generated by informal talks with members of the Mike's Sports staff, key wholesalers and retailers in the trade as well as other individuals who have had close ties with Mike's Sports and the sports goods industry in South Africa.

The history of the South African sports goods industry

In the interests of completeness, the history of the sports industry is described from just after World War II. In the 1950's and 1960's following the war, the sports industry was tightly controlled and governed by two national bodies, namely the South African Sports Traders Federation (SASTF) and the South African Sports Goods Agents and Manufacturers body (SASGAM). SASTF represented all the retail sports stores around the country, and in fact if one was not a member of SASTF, one was not allowed to be supplied by SASGAM (SASTF dictated who was given supply of sports goods). Sports retail during this time and into the 1970's was quite limited and developed from top level sportsmen who were either retired and needed a source of income or wanted to continue playing and needed a job which incorporated their sport. These people opened sports stores and supplied goods via word of mouth to the sports community of which they were part. With time they established good businesses with a loyal base of customers which continued to grow. Good examples of these type of people would be the soccer player Reg Wright who opened Reg Wrights, the all-round sportsman Eric Logan who opened Logan's (and the now famous Logan's Sportsmans warehouse chain), and the King family who were all good sportsmen and opened the legendary King's Sports in Natal. Many sportsmen also found themselves approached by the SASGAM side of the industry and today there are people like Gavin Cowley (provincial cricketer and rugby player) who is marketing director of Adidas S.A., Peter Whipp (S.A. rugby team) who is marketing director for Mitre S.A., Clive Barker (top soccer player and past coach of Bafana Bafana) who has the agency for Puma, and Tony O'Hagan (S.A. tennis player) who is the managing director of Adidas S.A. to mention but a few. Thus to enter the sports industry in those years, one was not required to possess good business skills but rather to be a prominent figure in sport and to have a good network of contacts in the sports game.

Through SASTF, the sports retailers had a great deal of influence on the industry and dictated standard retail mark-ups and price points which were adhered to by all its members around the country (no retailer was allowed to discount his prices). At that time the retail sector was being centrally controlled by SASTF, and in fact the whole sports industry was essentially driven by the retailers. For over two decades these two bodies, SASTF and SASGAM, worked in close collaboration with each other and met regularly to discuss agendas such as import duties, government regulations, price points of goods etc. By the early 1970's, the membership of SASTF had grown to about 300 and credit applications were very strict. To become a sports retailer, one first had to be approved by both SASTF and SASGAM, and then had to trade on a C.O.D. (cash on delivery) basis for a year before any terms were offered for payment.
With time, because they had complete control over the price of the goods that were offered to the consumer, SASTF gradually started advocating larger and larger mark-ups. Where previously the retailers had been operating with 40% and 50% mark-ups, they began marking their goods up by 70 % and more. This was great for the sports retailers who began making larger profits, but it also opened the door for the chain discount stores to enter the market.

In 1972 the first Pick 'n Pay Hypermarket was opened in Boksburg by Raymond Ackerman and was soon followed by the opening of Dion's by Dion Friedlander in Johannesburg. Both these stores sold a range of goods from food to garden spades to appliances, and eventually they asked themselves the question "Why not sell sports goods?". They approached SASGAM who refused to supply them because they were discounters and because they were under pressure from SASTF. They then approached the wholesalers who also all refused them with the exception of two companies, the Transvaal Rubber Company Sports Division and Eric Andrews Sports. At that time, wholesalers were also required to be members of SASTF and acted as the interface between the suppliers and the general dealer stores who were non-specialist sports stores. The general dealers were not members of SASTF and were supplied at the suggested retail price (set by SASTF) less a 25% discount which protected the specialist sports retailer because the general dealers were buying at a premium and could never undercut the prices.

These two wholesalers, Transvaal Rubber Company and Eric Andrews Sports, saw an opportunity for big business and grabbed it with both hands. They offered a deal to Pick 'n Pay and Dion's whereby the terms of payment would be 15 days and the price would be based on a cost +15% mark-up. So, although the discounters were paying R1.15 for a product which was costing the specialist sports store R1, the sports stores were selling the goods for R1.70 which allowed the discounters to sell at quite a bit less and still make a large enough margin to be profitable. This led to havoc in the industry and eventually the Transvaal Rubber Company and Eric Andrews Sports were expelled from SASTF. SASGAM, however, had tasted the 'honey' of big business and agreed to supply the discounters direct as long as they made a separate sports division or department within their stores. With the entry of the discounters into the industry, relations between SASTF and SASGAM broke down and eventually SASTF fell apart.

The mid 1970's was a point of inflection for the retail sector which was in the following state:

- A few key stores had established themselves well and were responsible for the bulk of the sales of the specialist sports stores. These were:
  Logan's Sports in Cape Town
  Lemkus Sports in Cape Town and Johannesburg
  Pope Sports in Kimberly
  King's Sports in Durban
  Brian Band's Sports in Port Elizabeth
  Taylor's Sports in East London.
  There were a few other minor stores around the country such as Varsity Sports, Reg Rights etc. but by and large the above six stores dominated the scene.
- Large discount stores such as Pick 'n Pay, Dion's, Makro, OK Bazaars, Game and Checkers had opened and had begun supplying sports goods to the consumer. At this time the bulk of the retail sales of sports goods had already shifted from the independent retail sports store to the discounter.

The next decade into the late 1980's saw a huge growth in the large discount stores. A move began to decentralise business from the centre of towns to the suburban areas, and around the country large shopping malls were established in the suburbs where one could do nearly all one's shopping in a central location close to home. These malls all contained one or more of the discount chain stores and as a result were largely responsible for driving public interest in sportswear. During this time the Morkels group, which owns a number of chain stores in other sectors of the retail market, also decided to open a chain of sports stores called Total Sports. This was the start of a new era. For the first time big business was getting involved in the retail sector of the sports industry and no longer was it a prerequisite to have good sporting ability in order to enter the game. The Total Sports chain of stores had little experience in the sports game but lots of capital and good business sense. They opened general sports stores with the emphasis on fashion sports clothing and footwear, and were the first to capitalise on the nation-wide trends which were becoming increasingly apparent.

From the late 1980's and into the 1990's, sportswear started to become fashion wear as South Africa became more exposed to sport via television. This led to the following important changes in buying trends of the South African consumer:

1. The average South African began to buy sports clothing as casual wear and there was a surge in the sales of sports clothing.
2. There was a surge of interest in sports footwear and the public latched onto the cross-trainer which is currently dominating sales in the footwear market.
3. Consumers have become more brand conscious.

Together with this trend and the increase in brand awareness, all the big international brands such as Nike, Adidas, Reebok, etc. entered the South African market and immediately received a good response. The brands felt, however, that the image and merchandising of their product was not being done justice in the discount stores. Furthermore the discount stores did not have sales people with the expertise to inform the consumer about sports products which were becoming increasingly technical. Thus with time, retail distribution was shifted from the discount chain stores to the credit chain stores such as Edgars, Sales House, Markhams and Foschini and also back to the sports stores.

In the meanwhile, the independent sports retailer was put under tremendous pressure by the large chains of stores opening around the country. These chains had enormous purchasing power and as a result commanded better prices from the suppliers and in addition were always first to get delivery of stock which was becoming an increasingly scarce resource. Slowly well established companies like King's Sports, Pope Sports and Taylor's Sports, who had once dominated their local markets began closing shop, as did countless other smaller stores around the country. Others, like Logan's Sports, began to open up branches and form mini-chains in order to be able to compete. These businesses did not have the same reserves as the larger chains and soon found themselves undercapitalised to achieve the kind of growth they needed. The interest by big business in sports retail, combined with the need for capital by the smaller chains of sports stores, has led to the current situation where a number of sports mini-chains have suddenly been bought over by large companies in a short space of time. These companies have all invested heavily in expanding their newly acquired sports businesses by opening stores around the country and with their business expertise have brought a level of professionalism towards running a sports store which has never been seen before. To add to the growth in the retail sector, some of the smaller sports stores have resorted to franchising in order to generate the capital they need to expand, whilst some of the credit chain stores have begun opening their own chains of sports stores.

The History of Mike's Sports

While the sports industry was evolving and changing, Mike's Sports too was experiencing some dramatic changes. Having set the context of the S.A. Sports Industry, the history of Mike's Sports is now described. Mike's Sports was established in 1949 in Woodstock, Cape Town and was a small family business owned and run by Mr M.T. Augoustides (Mike Snr) and his two nephews, Mr A.A. Augoustides (Nick) and Mr M.A. Augoustides (Mike). The family concern was originally opened as an outfitting store and later progressed to become a retail departmental store trading in goods ranging from furniture, appliances, sports, clothing and school wear to outboard motors. In addition, a small manufacturing division was later developed which supplied the sports department with some of their goods. The manufacturing enormous cost of producing, printing and distributing catalogues was avoided and with time the venture began to show a profit.

- A sophisticated vinyl printing machine was bought in order to revolutionise the printing of the names and numbers for the kits. Other printing jobs such as sponsor's logos, club badges, replica prints etc. were now also possible. The printing department has since become so successful that Mike's Sports has the contract to do all the numbering of jerseys for some of the major suppliers such as Reebok and Adidas as well as having numbered nearly all the soccer premier league teams around the country, the provincial rugby teams and hundreds of club teams.
- The group saw the potential for opening other retail outlets for the following reasons:
  Their manufacturing concern and production capabilities
  Their experience in the sports clothing market
  The utilisation of the mail order catalogue to promote and drive the stores
  The demand for quality sports goods at affordable prices

In 1994 Nick's third son Casey decided to join the business after completing his studies at U.C.T.. He entered the business during a time of rapid change and eagerness to improve and expand the business. Also in this year, the Mail Order was relocated to the second floor of the Woodstock premises and the premises in Long Street, Cape Town were converted into a retail sports outlet which served as a pilot branch store where systems for operation were developed and tested. The Woodstock and Town stores both had a product selection which included all the goods advertised in the catalogue. Much was learnt from the venture, but in the end the store was not able to generate a profit and was closed at the beginning of 1997. It was concluded that although the concept of the store was good, it had not been effective in reaching its target market and also could not compete with the nearby Head Office branch which was much bigger in size, had better stockholding in terms of quantity and range, and had been established for many years.

The partners decided to open another branch along the same lines as their previous one, but this time in an area which was not serviced by their Head Office branch. A Mike's Sports store was opened in November 1996 in Pine Street, Durban and has since proven to be highly successful. A little while later, another branch was opened in Paul Kruger Street, Pietersburg, and the partners see as part of the future of the group, the establishment of a number of retail stores in the major towns around the country in order to capture larger portions of the market.

8.1.2 - MULTIPLE PERSPECTIVES OF THE SITUATION

The purpose of this stage was to gain multiple perspectives of the situation in order to have a more objective view. A total of twenty key people were interviewed using the list of questions documented in *Stage 1* of the methodology. These people consisted of the four partners of Mike's Sports, five representatives from key suppliers, two representatives from SASGAM, four employees of Mike's Sports and the remainder being long established customers of the business. The author attempted to classify the results of the questionnaire according to content analysis techniques described by Weber[1], but found that this did not prove very useful. Instead, what the author has done is to examine the answers of the various people interviewed for each question and to thread together the most common themes. The reason the author found this to be a viable alternative was because the answers to the questions were closely correlated. If the author had been faced with large deviations in the answers from the people

[1] Basic Content Analysis, Robert Phillip Weber, Sage Publications, Second Edition, 1990, pages 21-24

division started off with a staff of just three machinists and produced soccer jerseys and tracksuits on a very small scale. Mike's Sports catered mainly for its local community and developed a strong base of loyal customers which slowly expanded by word of mouth. The motto of the store was 'Your satisfaction is our pleasure' and the staff took pride in offering excellent service and 'going the extra mile' for customers. The business operated successfully in this manner for nearly 40 years and underwent a number of successive expansions in its premises and trading circles. In 1985, Nick's son Aleco joined the business after completing his Business Science degree at U.C.T. and brought new enthusiasm and energy to the business. He was followed by his younger brother Michael the next year who terminated his studies in favour of the business.

The business continued to grow, but as it tried to capture larger portions of the market, competition from the bigger furniture and appliance chains began to set the limits to its growth as an independent retailer. Also, the clothing trade was seriously affected by Rex Trueform, one of the largest suppliers of clothing at that time, entering the retail sector and selling direct to the public under the name of Queenspark (with the main retail outlet unfortunately just 400m away from Mike's Sports). In an effort to continue to survive, it was felt that Mike's Sports should expand its trading circle by opening up a mail order company, and in 1992 its first catalogue, S.A. Sports Illustrated, was launched. Premises were secured at street level in Long Street, Cape Town which kept stock of all the products advertised in the catalogue and served as the operating premises for the new mail order business as well as acting as a retail store to passing trade. The new division generated good turnover but the cost of producing and distributing catalogues was exorbitantly high and the venture was not profitable. However, much valuable experience was gained and the partners saw the potential for expansion into the sports market.

Also in this year 1992, both Mr M.T. Augoustides (Mike Snr) and Mr M.A. Augoustides (Mike) decided to leave the business. Mr M.T. Augoustides was at the age of 75 and was ready to retire whilst Mr M.A. Augoustides took the cash value of his shares and started a separate business of his own. This left Nick and his two sons, Aleco and Michael as owners and managers of a business which had serious liquidity problems. Within a short period of time Nick, Aleco and Michael came to the conclusion that Mike's Sports was entering a new era of competitiveness and decided that in order for the business to continue to grow and prosper, they would have to be more focused in their activities and become experts in their field. In 1994, they took the bold step of closing their furniture, formal clothing and school wear departments, and decided to narrow their product range to sports goods with the emphasis on soccer. Along with this decision, a number of other significant changes occurred:

- The manufacturing concern, which had been successfully producing sports goods for a period of over 15 years, was redesigned and expanded to three times its original capacity in order to cope with the increase in procured business. The group started its own in-house brand which they developed and produced and, with the increase in production, the factory also made use of two CMT (cut, make & trim) contractors.
- The group acquired the licence to develop, produce and distribute exclusively for an international brand within South Africa as well as to neighbouring African countries. The distributing arm is handled independently and is not publicly associated with the Mike's Sports group.
- The Sports Illustrated Catalogue was discontinued and was replaced with a soccer mail order catalogue. Kick Off Mail Order Catalogue was started and exclusive rights for space were procured in the Kick Off magazine - which currently has the largest readership of its kind in South Africa and in Africa. By having the catalogue printed in the magazine, the

interviewed, use of this technique would not have been possible. Below are the summarised results:

Mike's Sports was viewed as a family business where the partners formed an integral part of the day-to-day running of the business. The business was in all cases seen as predominantly a retail sports business with the major emphasis on soccer. Most of the interviewees saw Mike's Sports as very service orientated and many of the customers reported that they liked the personal service that they received with both partners and employees. The personal involvement of the partners in the business with their expertise was seen as a definite strength by employees, customers and suppliers alike. The mood and working environment within Mike's Sports was described as pleasant and cheerful by all interviewees. This seems to confirm the assumption that the situation is a combination of unitary and pluralist, which means the nature of the problems experienced are not cultural or political.

The general view of the partners was that Mike's Sports was based on a good business concept and that there was an excellent opportunity for the company to succeed. They considered themselves to blame for the problems being experienced and attributed the problems to be a result of their unprofessional attitude towards business. They identified that:

- they did not look at performance indicators of the business regularly enough.
- they did not work closely enough with their staff and give them regular feedback.
- there was not enough planning taking place.
- there was a serious lack of control.
- in general, their approach to managing the business was flawed.
- they did not work closely enough as a team.

The employees' perspective of the problems being experienced was entirely compatible with that of the partners and included the following:

- Some employees are not motivated.
- Most employees do not have an understanding of their role in the business.
- No regular meetings are held and no feedback is received from management.
- Often good ideas are brought forward, but are rarely implemented.
- No-one takes responsibility for action.
- There are no targets or budgets.
- Communication within the company is bad.

Both parties labelled the problem as being one of lack of communication, feedback and control. The partners were viewed as being the only people with the authority to make the necessary changes and it was felt that there was nothing which couldn't be changed by them. The employees regarded the partners as being responsible for improving the situation and did not regard themselves as being able to make changes.

A major difficulty in trying to eliminate the problems was identified as being that of changing mindsets within the business. Things had been done in the same fashion for so long that it would be difficult to 'teach old dogs new tricks'. It was the consensus that a lot of discipline and teamwork would be needed in order to 'do things right'. The answer as to who should be involved in the solution process and who were regarded as sources of expertise was virtually unanimous. The list included the partners, the managers of the various divisions and the most senior employees. The participants chosen for the group which would be responsible for driving the solution process is shown in the next section.

8.1.3 - SELECTION OF PARTICIPANTS

The participants who would be responsible for driving the solution process were chosen based on the criteria documented in *Stage 1* and the results of the research described in the text above. The participants chosen for the group were:

Gerry Wakefield, who is the most senior employee and has been with the business for over 25 years. He is currently the leading salesman the business has and oversees the sales team of the Woodstock branch.
Nick Augoustides, who is one of the four partners of the business and a founder member. Nick is currently retired, but has a large sum of capital invested as well as assets which stand surety for outstanding loans of the business. Nick attends management meetings occasionally and gives input as to the direction of the business.
Mike Augoustides, who is a partner in the business. He forms part of the sales force and is responsible for all the product selection for the group. Together with Gerry Wakefield, Mike is responsible for the Cape Town store.
Aleco Augoustides, who is a partner in the business and is responsible for overseeing the manufacturing and wholesale divisions. Aleco is also responsible for compiling regular financial reports on the business.
Paul Stone, who is an employee responsible for all stock purchases and distribution for the group. Together with the author he oversees the Pietersburg and Durban branches as well as the Mail Order. He was chosen for his central role in the business.
Casey Augoustides (the author), who is a partner in the business and works together with Paul Stone to ensure the effective running of the branches. Casey is responsible for maintaining the newly installed management information system in the business as well as assisting Aleco with financial reports.
Fahreed Layloo, who is the production manager and oversees the running of the manufacturing division.
Tania Koen, who is the manager of the Mail Order.
Virginia Fester, who is the manager of the wholesale division.

For obvious reasons the partners are the most powerful stakeholders in the business and had to be included in the group. The remaining participants were chosen so that there was a representative from each division in the business who had authority (or would be given authority) to make the necessary changes. Mr Wakefield was chosen for his wealth of experience and also his important role in the running of the Cape Town store with Mike. The managers of the Durban and Pietersburg branches were not included due to the problem of location. Both branches have fairly new staff and have not as yet sufficiently well trained assistant managers who could run the branches in the absence of the managers. It was decided to keep them informed as to the results of each workshop and to try and involve them as much as possible in the process by giving them representation through the author and Paul Stone.

8.2 - SHARED UNDERSTANDING AND THE NEED FOR CHANGE

The first workshop began with the aim to develop a shared understanding of the situation amongst the participants and for them to perceive a need for change[1]. After planning the times, dates and venues of the subsequent workshops, the group of participants began a structured brainstorming session in order to surface issues and concerns within Mike's Sports.

[1] The idea to develop a perceived need for change was recommended by Johan Strümpfer in order to motivate the participants to proceed further with a solution process.

The session proceeded as planned in *Stage 2* of the methodology and the following list of was compiled after the initial ideas had been revisited and clarified:

1. There are far too many interferences in the factory by employees from other areas of the business resulting in an upset of the work schedule. An example of this is salesmen communicating directly with machinists about their orders.
2. There are no defined channels for communication in terms of inquiries about progress of orders or production between the factory and the rest of Mike's Sports.
3. There is a lack of communication between the various divisions/departments. For example, policy decisions made in one area of the business are not communicated to the rest of the business.
4. More transparency is needed with regards to the progress of goods through the factory - from the capturing of the initial order to the completion of the finished goods. This is needed for customer inquiries.
5. More transparency is needed with respect to the overall stockholding of the company which is viewed as a shared resource amongst the various divisions.
6. There is a general lack of forward planning throughout the company. People do not look far ahead enough and decisions are taken without careful consideration of the consequences.
7. There is no setting of targets e.g. financial targets, optimum stock levels, purchasing budgets, turnover targets etc. so that performance can be measured.
8. There is generally a difficulty in acquiring relevant information within the company.
9. There is a lack of clarity with regards to what an employee's priorities are in their jobs and also what is expected of an employee. No direction or guidance is given from management.
10. The company as a whole does not have a shared vision/goal and as a result employees do not work as a team. Each division/department looks out for their own interests which is often at the expense of the company as a whole.
11. There is a conflict of interests over the stock between the various departments.
12. People tend not to finish tasks that they've started. Often employees are faced with multiple tasks, but never complete any of them properly resulting in lots of half completed jobs.
13. There are no work schedules for a logical approach to work and therefore no time management. A result of this is that there is no respect for set deadlines.
14. There are no clear lines of authority, responsibility and accountability within the company.
15. The 'housekeeping' within the company needs to be improved. Stock is not properly sorted and stored in the correct areas, and also there is lots of room for improvement in terms of general neatness and cleanliness of areas.
16. There is a lack of space (capacity problem) in the stock room areas to keep stock stored and ordered properly on the ground floor.
17. There is a lack of respect by one department for another and there is no feeling of teamwork. This is shown when employees from one department work in another department's area (there is a lot of overlap in the company) and show no pride or respect for that area.
18. A specific place for employees to take lunch is needed. At present employees take lunch in company work areas and distract other employees who are not on lunch from doing their work. Coupled to this, defined times for lunch and tea are also needed.
19. Employees need to be more customer orientated in general. Service levels to customers entering the stores need to be improved.
20. There is lots of room for improvement for merchandising, pricing and representation of stock in the Woodstock store.

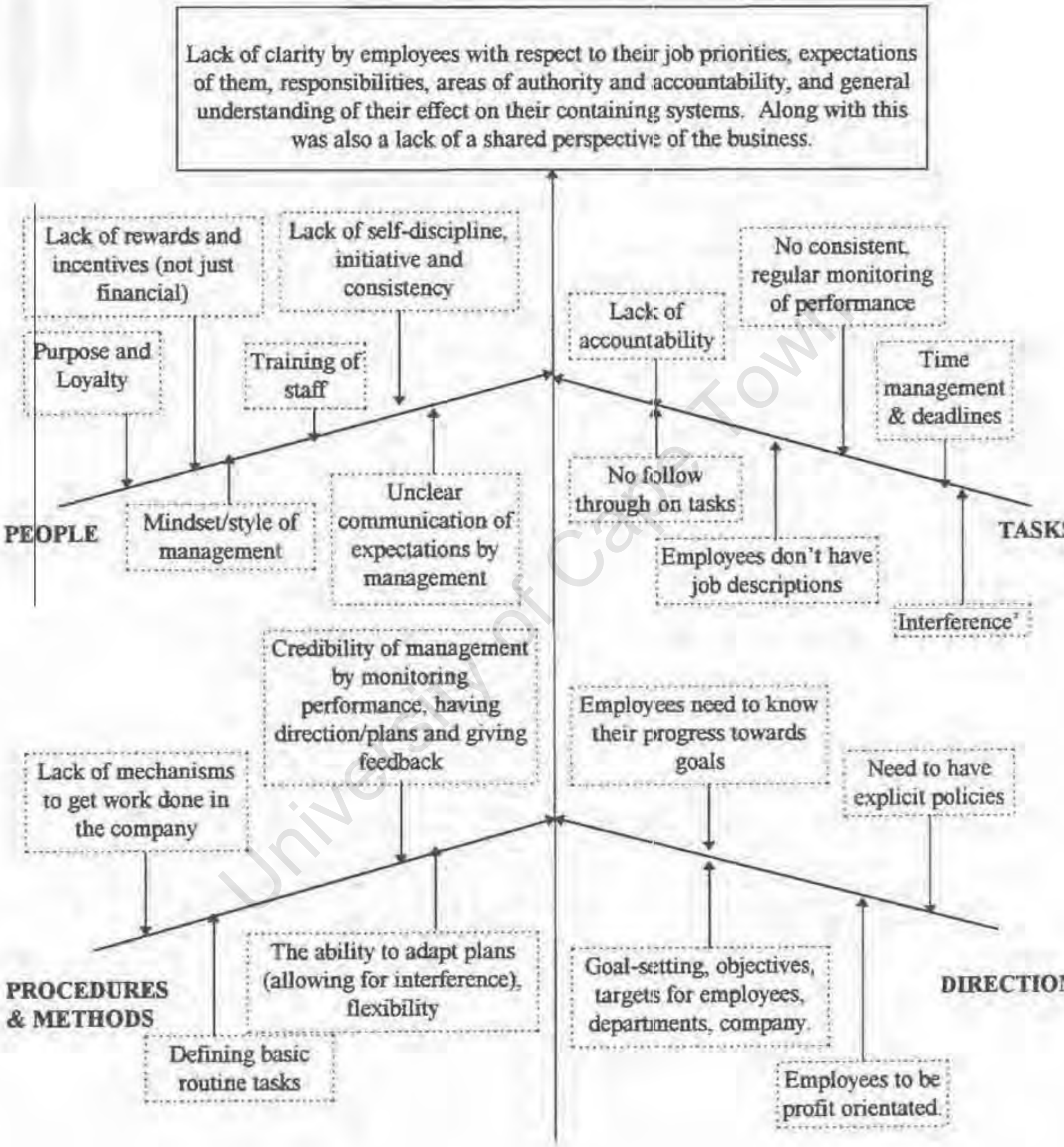
21. The management style within the company reflects the people's attitude and their approach to work and as a result needs to be changed.
22. There is a need for greater understanding by employees of their role in the business and the implications thereof.
23. There are two sets of rules at work. Some employees act outside of the official procedures and seem to ignore policies.
24. There is no mission statement for the company as a whole or for divisions/departments for that matter.
25. There is a general lack of procedures and routines for basic tasks which need to be done at work.
26. The staff are not properly motivated by management. There is not enough feedback on the work that they do and few measures of performance or rewards exist.

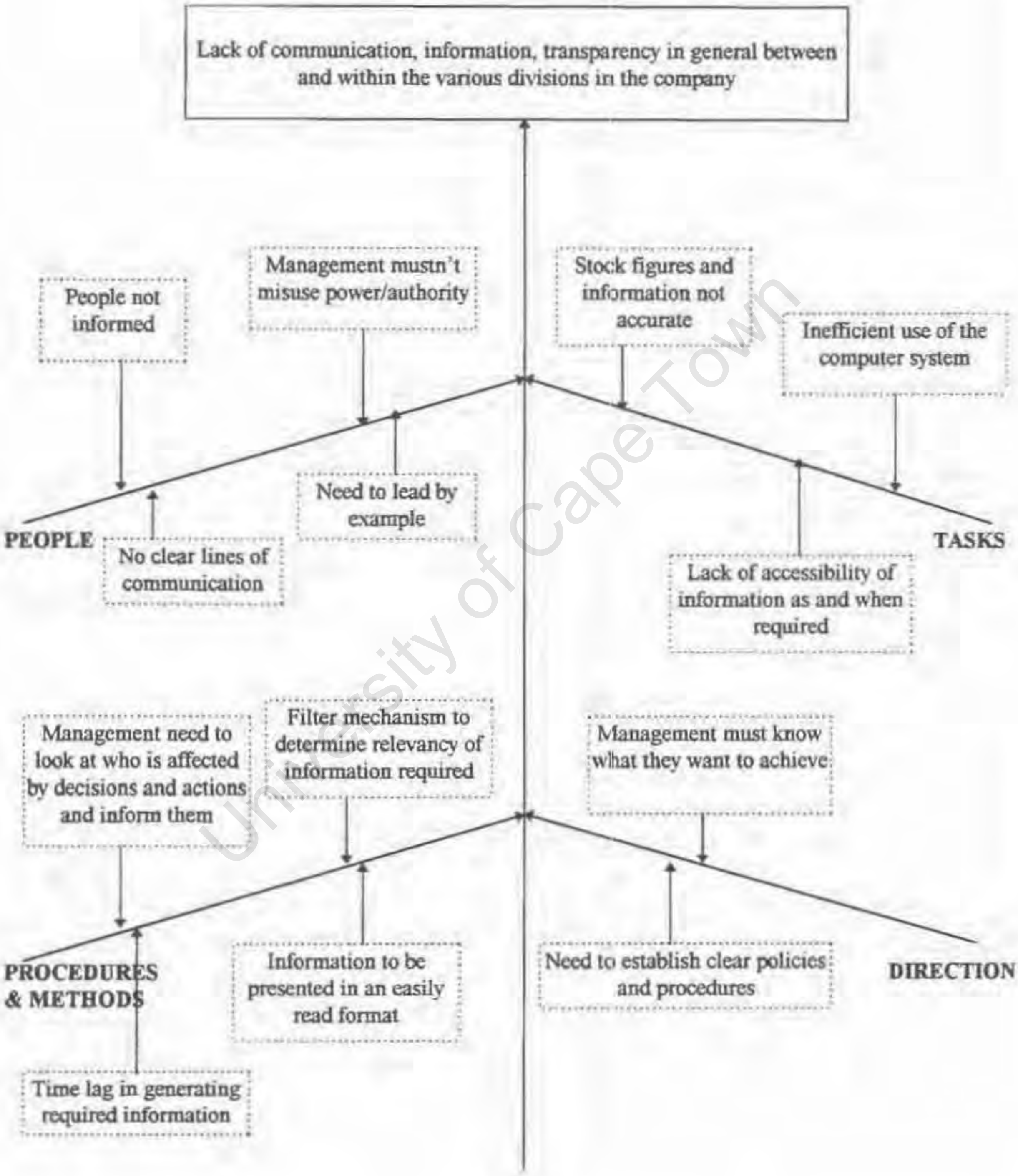
The above issues were discussed again and grouped together through a participative process. The consensus was that all of the above points could be clustered into six main points which were then prioritised and have been listed in order of importance:

1. There is a lack of clarity amongst employees with respect to their job priorities, expectations of them, their responsibilities, their areas of authority and accountability, and in general, a lack of understanding of their role in the business. Along with this, is the lack of a shared perspective of the business.
2. There is a lack of communication, information and transparency in general between and within the various divisions in the company. Important information needed to make decisions cannot be obtained easily.
3. There is a lack of forward planning in general within the business. There are no goals in terms of setting optimum stock levels, expense budgets, sales targets etc. in the company, and as a result few measures of performance exist with very little feedback to employees.
4. People tend not to finish the tasks they start. There are no work schedules or logical approach for basic tasks which need to be performed and as a result no respect for deadlines. This is a consequence of both lack of planning and lack of feedback.
5. There is negative conflict between divisions within the business. This is characterised by self-interest, lack of respect for others and a general lack of a feeling of teamwork and being an integral part of the business as whole.
6. This point is about housekeeping and in general taking pride in the workplace. Neatness of areas, order in the stock rooms, merchandising of stock, pricing, and stock representation all need to be improved.

The most important issues (points 1 & 2) were then discussed further by constructing a fishbone diagram to examine their roots and causes in order to develop a deeper understanding and appreciation for the nature of the problems being faced. The fishbone diagrams are shown on the next two pages.

The mood throughout the duration of the workshop was very positive and all members of the group participated actively and viewed the exercises as relevant and instructive. There was a genuine collaborative effort on the part of all the participants to share their perspectives and a willingness to understand those of others. The participants concluded at the end of this first workshop that the issues listed above needed to be addressed and that some fundamental changes would have to be made within the business in order for this to be achieved. What the solution process would be was still unclear to them at this stage.


Lack of clarity by employees with respect to their job priorities, expectations of them, responsibilities, areas of authority and accountability, and general understanding of their effect on their containing systems. Along with this was also a lack of a shared perspective of the business.
Lack of rewards and incentives (not just financial)
Lack of self-discipline, initiative and consistency
Purpose and Loyalty
Training of staff
Mindset/style of management
Unclear communication of expectations by management
PEOPLE
No consistent, regular monitoring of performance
Lack of accountability
Time management & deadlines
No follow through on tasks
Employees don't have job descriptions
Interference[7]
TASKS
Credibility of management by monitoring performance, having direction/plans and giving feedback
Lack of mechanisms to get work done in the company
The ability to adapt plans (allowing for interference), flexibility
Defining basic routine tasks
PROCEDURES & METHODS
Employees need to know their progress towards goals
Need to have explicit policies
Goal-setting, objectives, targets for employees, departments, company.
Employees to be profit orientated.
DIRECTION


Lack of communication, information, transparency in general between and within the various divisions in the company
People not informed
Management mustn't misuse power/authority
Stock figures and information not accurate
Inefficient use of the computer system
PEOPLE
No clear lines of communication
Need to lead by example
TASKS
Lack of accessibility of information as and when required
Management need to look at who is affected by decisions and actions and inform them
Filter mechanism to determine relevancy of information required
Management must know what they want to achieve
PROCEDURES & METHODS
Information to be presented in an easily read format
Need to establish clear policies and procedures
DIRECTION
Time lag in generating required information

8.3 - A FRAMEWORK FOR GROUP INQUIRY

Stage 3 was achieved through the second and third workshops in the series. The purpose of this stage was to educate the participants with key concepts of systems based organisational theory which would be used as the basis for a shared framework for inquiry. The aim of the shared inquiry framework was for the participants to generate a shared view of the business, have a common language with which to talk about the organisation and also for them to use it as a tool to drive the organisational redesign in the next stage.

At the start of the second workshop, the mood once again was positive amongst the members of the group. However, at the mention of learning some theory and concepts, some of the members of the group lost enthusiasm and it was perceived that they questioned the relevance of learning theory. To further complicate matters, one of the partners was not content with the vague outline given of the next two workshops and was also not convinced of their relevance. He attempted to take control of the workshop and use his political power to redirect the proceedings and it was necessary for the author to override this attempt to bring the workshop back on track.

The remainder of the session proceeded according to the second workshop in of the methodology and the participants were presented with basic systems concepts. The answers to the set of questions documented in the second workshop are presented below:

1. *What type of 'business' are we in?*

- We are manufacturers, wholesalers and retailers of soccer related merchandise and casual sports clothing. Our business is built on good relationships with our customers and suppliers.

2. *What is our purpose?*

- To make long-term & short-term profits.
- To offer the best possible service to our customers. This means keeping stock of a large range of quality products at competitive prices.
- To grow the business on a national basis and become the number one retailer of soccer goods in the country.
- To have a good quality of work life.

3. *What elements of the environment can affect us over which we have no control?*

- The economic state of the country and especially the currency exchange rate.
- Rules and regulations by SAFA, the controlling body of soccer in South Africa.
- Delivery and price from our suppliers.
- Government legislation.
- Other competitors in the market.
- The informal trading and manufacturing segment.

4. *What are the inputs and outputs of our organisation? (Think of the organisation as a 'black box' which you feed with inputs from which it produces outputs).*

INPUTS	OUTPUTS
Fabrics & trims (raw materials)	Finished goods
Labour	
Orders for products	Sales of products
Money	More money
Employees	Employees with skills
Customers with needs	Customers with needs satisfied
Employees with needs	Employees with needs satisfied

5. *Which operational elements are directly responsible for producing the outputs?*
- Woodstock retail store.
- Pietersburg retail store.
- Durban retail store.
- Mail Order .
- Manufacturing division.
- Wholesale division.

6. *What resources are used?*
- Machinery.
- Computer hardware and software.
- Money.
- Labour.
- Knowledge, expertise and experience.
- Stock of sports related products.

7. *Who are our clients?*
- Soccer players.
- Large companies.
- Schools and tertiary institutions.
- Sports clubs.
- Welfare organisations.
- Individual 'man in the street'.
- Other sports retail stores.
- Tourists.
- Unions and associations.
- Government departments (prisons, police, RDP, etc.).
- Ship chandlers.
- The partners in the business.

8. *What are the needs of our clients that we seek to satisfy through our service?*
- The need for good quality sports goods and clothing.
- The need for products at affordable prices.
- The need to be able to purchase goods from stock.
- The need to be able to purchase customised products according to their needs.
- The need for short lead times.
- The need for variety and choice of products.
- The need to be able to purchase goods from remote locations and have them delivered.
- The need for the partners to get a return on the capital they have employed in the business.

9. *What role or function do we play within the community? What do we seek to provide the community with?*

- We provide members of the sporting community with access to the equipment and clothing that they need to play their sports. We try and make this as affordable as possible by using relatively low mark-ups. We also try and help develop soccer by contributing financially to the governing bodies as well as procuring sponsors for promotional events.

10. *What expectations/measures of performance do our clients have of us?*

- Friendly, efficient service.
- Knowledge and expertise with respect to our products.
- Availability of stock i.e. immediate delivery.
- Competitive prices.
- Good after sales service.
- The partners measure the business in terms of profitability and growth.

11. *What do we need to produce or provide to satisfy those expectations?*

- Salesmen who are well trained with respect to the products we offer. Employees who are trained to be well mannered and efficient with respect to catering for the customers needs.
- A stockholding which is representative of our sales and which also takes into account availability of certain products i.e. making sure we do not run out of stock of products which are difficult to obtain or which have large lead times for delivery.
- We need to source the best quality products at the best possible prices from suppliers so that with our standard mark-up we can pass this on to the customer. We also need to be aware of what competitors are offering.
- We need to communicate closely with our suppliers so that we can offer good backup service to our customers.
- We need to produce profits on an ongoing basis and continue to find new and better ways of interfacing with our markets.

12. *Who are the stakeholders who are influenced by and can influence the organisation?*

- The customers of the business.
- The partners of the business.
- The employees of the business.
- The suppliers from whom we buy our goods.
- The Receiver of Revenue.

13. *What are their expectations?*

- The partners expect profits from the business.
- The employees expect a wage/salary as well as scope to progress upwards in the business. They expect guidance and training from management.
- The suppliers expect us to buy certain minimum quantities and to represent them in the market place.
- The Receiver of Revenue expects regular payment of taxes.

14. *What are the required outputs to satisfy those expectations?*

- Profits.
- Regular payment of employee wages as well as regular reviews.
- Training courses for employees.
- Continual monitoring and feedback of employee's performance.
- Good in-store merchandising and marketing of each supplier's products.

- Regular payment of taxes.

15. *What are our goals/objectives over the long-term and short-term?*
- To make profits.
- To increase our sales and market share.
- To forge closer ties with SAFA and other governing bodies of soccer.
- To become better organised.

16. Does the organisation answer the need it came into existence for?
- The organisation partly answers the need it came into existence for. It provides a good service to its customers in terms of quality and range of products, prices and delivery times. However, it does not provide its employees with enough training and also does not provide a large enough return on investment for the partners.

In conclusion, the workshop had a less than ideal start and the mood to begin with was mixed. However, once the concept of systems had been grasped and the group began answering the questions, the mood became more positive and the participants perceived the systems perspective of the business to be relevant and useful. The brainstorming technique once again proved successful and the participants thrived on the challenge of providing better answers to the questions than their colleagues. The author noted repeated use of key words such as 'inputs', 'outputs', 'clients', 'parts' and 'environment' not only during the workshop, but also during work by participants. For example, at a staff meeting an employee began explaining to his co-workers about being 'part of a team (whole)' and that their overall performance could be enhanced by improving their interactions.

The third workshop continued with the process of education and the participants were presented with the organisational model as described in Chapter 7. The mood was very positive and it was the general consensus of the group that the model was a very useful way of looking at the business and in many ways embodied 'common sense' principles which were easily overlooked in the everyday running of the business. All the members of the group agreed that Mike's Sports needed to be better organised and that the model prescribed a good way of doing just that. There was an atmosphere of excitement at the prospect of having a clear rational way of organising the business. In particular, the group was enthusiastic about the concept of autonomous business units and the four functional elements of management i.e. Policy, Intelligence, Control and Co-ordination. Some of the members questioned the rationale behind defining the three types of business units namely Functional units, Product/Service units and Market units. They were unsure of the relevance of having three types of units but upon further discussion concluded that there was some merit to viewing the organisation along those lines. Once again the author noted repeated use of concepts from the organisational model by participants in their working environment. Two employees were heard discussing the need for 'intelligence' at a sales staff meeting. There was mention of the need for 'co-ordination' between the Mail Order, the Cape Town branch and the manufacturing division by another employee at a subsequent management meeting.

On the following pages are a summarised set of answers to the list of questions in the methodology. The first set of answers are at the top level of recursion within the business with the second set of answers being at one recursion level lower.

Top Level:

1. *What are the primary operational elements within our organisational unit?*
   The Woodstock retail store, the Mail Order, the Pietersburg retail store, the Durban retail store, the manufacturing division and the wholesale division.

2. *How is accountability exercised?*
   It is not really exercised. No clear lines of authority, responsibility and accountability exist for the units. The managers of the various divisions in the company are not sure of their authority or responsibility as the partners often get directly involved in their operations. Systems have been put in place to measure the performance of the units, but are not used by the executive on a real time basis to formally enforce accountability.

3. *What control structures exist for the units?*
   At present, there are very few formal control structures in place. Some financial control is achieved by having a centralised administration function for all the units. Purchasing, payment of expenses and creditors are all done from Head Office. Banking is reconciled in some of the units, but not all. Control is achieved by the partners issuing directives to the various units and doing sporadic audits to check that things are getting done. Self regulation of the units is relied on heavily by the executive. A sophisticated software package called 'Quicktill' was recently installed in the retail and wholesale areas. The package is used to record all daily transactions in each area, but is not used correctly and therefore is not the valuable control tool and variety amplifier that it could be for management.

4. *How, where and when are these exercised?*
   The central administration function is effected by the partners and one or two highly trusted employees. The control of the units consists of monitoring sales/production, stock levels, expenditure and cash flow of the units on a monthly basis. Sales figures, margins and stock levels are generated by Quicktill with the expenditure being recorded on an accounting package called 'Pastel'. The cash flow is determined from bank statements. The monitoring, however, is not done on a regular basis for all the units and accurate figures are not always made available.

5. *How are directives issued and followed up?*
   Directives are issued verbally from the partners to the managers of the various units and sometimes directly to staff of the units. They are followed up on an ad hoc basis. The partners often do not communicate amongst themselves with the result that sometimes a unit is issued directives by one partner which are in conflict with directives issued by another partner.

6. *How is the performance of each operational unit measured?*
   At present, only the sales figures and profit margins are used as formal measures of performance of the retail and wholesale divisions. Expenditure is also measured for the various units, but it is unclear where to allocate expenses in the Cape Town building since there is a lot of overlap and sharing of expenditure amongst the Cape Town store, Mail Order, wholesale and manufacturing divisions.

7. *What feedback is there from management to the units?*
   The Durban and Pietersburg branches, as well as the Mail Order, are given monthly feedback on their sales figures, margins, expenditure and stock levels. The Cape Town branch, wholesale division and manufacturing division are given feedback only on their

sales and production. The feedback is in the form of verbal praise or rebuff as well as an incentive financial bonus scheme which is split amongst the employees of the unit.

8. *What are the areas of responsibility for the various units?*
   Each unit is entirely responsible for itself except for certain functions which are performed centrally. These are product selection, stock pricing, purchases, salary and wage payments, creditor control, payment of expenses and marketing. Although each unit gives input as to the product range it carries, the product selection is all done centrally.

9. *Who is considered responsible and accountable for each unit?*
   Each unit has a manager as well as one of the partners who oversees the unit. At present the author and Paul Stone are together responsible for overseeing the Mail Order, Pietersburg and Durban branches. The manufacturing and wholesale divisions are overseen by Aleco Augoustides and the Cape Town store by Michael Augoustides.
   These four people should form the executive or meta-management team of Mike's Sports and manage the interactions, yet seldom meet together and act more as independent managers of their respective units. No clear lines of authority or accountability exist amongst these four people and they often get directly involved in each other's areas.

10. *How does each operation feed back to its meta-management, what information and how often?*
    The Mail Order, wholesale division, Durban, Cape Town and Pietersburg branches submit on a monthly basis their sales, cost of sales, closing stock levels, closing debtors levels, petty cash expenses, laybyes, stock receipts, interbranch stock transfers and stock shrinkage via reports from Quicktill which are sent electronically and collated in Cape Town. The Durban and Pietersburg stores also submit their daily cash-ups and banking. Control of the cash for the Mail Order, wholesale division and Cape Town is kept by the partners physically doing the banking themselves. All the figures mentioned above are supposed to be used as measures of performance and to reconcile the stock and cash of each unit, but in reality only the sales figures are monitored regularly by the executive with much trust placed in the honesty of the managers of the units and their abilities to run their operation well. The manufacturing division submits its production figures in its clothing factory, sock factory and printing department on a weekly basis. This comes in the form of a hand-written logbook and contains only the number of units produced. Stock levels in the manufacturing division are monitored roughly to ensure that they do not run out of stock and this is submitted monthly.

11. *What audits are done?*
    Stock figures are checked once every three months in the Mail Order, Durban and Pietersburg stores. The manufacturing division, wholesale division and Cape Town store are not audited for stock. The banking of the Durban and Pietersburg stores is audited every month or two, but the banking of the Mail Order, Cape Town store and wholesale division is not audited at all. All creditor and expense payments are audited on a monthly basis.

12. *What possible sources of conflict are there between the various units?*
    The stock is viewed as a pooled resource between the units and is a source of conflict when stock of certain products runs low. Staff are also viewed as a pooled resource and often staff are removed from one unit for a portion of the day to work in another which causes conflict. Conflict arises when the manufacturing division becomes backlogged and also when orders from certain units cause delays in another units orders. Lastly the retail

stores and the Mail Order are in competition for each others customers which causes conflict.

13. *How are these avoided/resolved?*
The conflict arising from stock and staff resources is resolved by the intervention of a member of the executive. The executive also tries to instil a feeling of an integrated company where the units are not simply looking out for themselves but also for the interests of the company as a whole. This also helps avoid conflict between the Mail Order and the stores. The Mail Order uses the catalogue to drive the stores and likewise any contacts the stores may have of customers in outlying areas are referred to the Mail Order. Conflict arising from the manufacturing division is avoided by working overtime when backlogs occur.

14. *How is co-ordination regarded by the rest of the system?*
Co-ordination by the executive is regarded as a process of mediation between the units to reach a compromise which is acceptable to all parties. It is viewed in a very positive manner and in most instances eliminates conflict between the units.

15. *What information does the Intelligence Function gather externally, how often, and who is involved?*
Information is gathered informally on an ad hoc basis. At a top level, the partners communicate with their suppliers to keep informed as to developments within the sports industry. They also maintain contact with members of the SAFA executive in order to keep abreast of developments in soccer and meet occasionally with members of financial institutions to monitor the economy of the country. Other general information is gathered by word of mouth and through local media which is communicated through the company. Lastly, information is filtered back to the executive from the managers of the various units with regards to customer demands and occasionally with regards to other competitors in the market place.

16. *What information does the Intelligence Function gather internally, how often, and who is involved?*
The Intelligence Function is greatly assisted by Quicktill which is used to record all the daily transactions in the wholesale and retail divisions. This is collated by the author on a monthly basis and stored electronically for retrieval at any time. The production of the manufacturing division is recorded in a log book by Fahreed Layloo (the production manager) on a daily basis and monitored weekly. The expenditure and stock purchases of each unit is recorded by an accounting clerk, but is rarely looked at. Close contact is kept with the unit managers and operational problems are addressed quickly.

17. *How often are meetings held to discuss and plan future changes within the organisation based on the information gathered in points 15 and 16?*
Meetings to discuss and plan future changes within the organisation very seldom take place. Changes occur continually, but without much planning and are effected by the individual partners in a haphazard way - often without the knowledge of the other partners. Meetings are only held where future changes are planned in response to crisis conditions.

18. *Who is involved with these meetings?*
The partners of the business.

19. What planning (long-term and short-term) takes place within the organisation?
Very little long-term planning takes place and the few plans that are made are quickly forgotten and never followed up. The company is evolving all the time, but without any clear long-term plan. Each of the partners has their own idea of where the company is going, but no shared vision exists between them or any other members of the business. The short-term planning revolves around stock levels, product selection, sales and cash flow for the wholesale and retail divisions. The executive plans 6 months ahead in terms of purchases, projected sales, projected expenditure and projected cash flow, all of which are interrelated. The only planning which takes place for the manufacturing division is the purchase of raw materials and production.

20. What forms the basis for this planning?
Historical data as well as complimentary information is used to project the sales and expenditure for the wholesale and retail units. The monthly sales for each unit are recorded very accurately, but expenditure is unclear for some of the units. The product selection is derived from the sales figures across product groups in the previous season. Monthly stock levels are budgeted for according to projected turnover. The assumption is made that each unit should carry roughly three times its monthly turnover in Rand value in stock, with percentage breakdowns across product categories according to time of year. These figures are based entirely on experience. Cash flow is derived from the sales, expenditure and stock purchases.

21. *How is information within the organisation collated for decision making?*
Information is not formally collated for decision making. Most of the information needed to make decisions is recorded, but not often presented to the executive as a whole for decision making. In practice the information is fragmented across the business and is not readily available to gain a holistic picture of what is happening. In essence information is not presented in a format which is conducive to good decision making.

22. Who is involved?
At present the author is responsible for managing Quicktill as a management information system. He maintains the stock code system and trains the employees of the business how to use the system in order for management to be able to retrieve the reports they need. The wholesale and retail units all use Quicktill and the managers of each unit generate and submit their monthly reports from the system. The accounts clerk is responsible for recording all creditor information (purchases, payments, credits etc.) as well as expenditure. At present this is not done in a manner which makes the information easy to retrieve. The production manager is responsible for recording all production in a hand-written log book.

23. How is planning for the future balanced with control of the present?
Control of the present heavily outweighs planning for the future. At present the executive is focused inwardly in an attempt to try and get themselves better organised. As a result they are neglecting to look outward and plan their future.

24. How are policies decided?
Policies are decided on an ad hoc basis by the individual partners and usually centre around control issues.

25. *How are policies communicated to the organisation?*
Policies are usually communicated verbally by one of the partners to members of staff in a haphazard way. Sometimes one partners is not even aware of a policy decided by another.

26. *Is policy biased towards Intelligence or Control?*
Policy is entirely biased towards control. Policies are firmly communicated about internal issues of security or co-ordination of operations on a regular basis, but very rarely address future or external issues.

27. *What is the identity of the organisation? Why?*
Mike's Sports is a company which specialises in the manufacture, retail and wholesale of quality soccer related merchandise and sports clothing at competitive prices. It has taken on this identity because of its experience in the field and the large demand for soccer related merchandise It has decided to specialise in soccer in an attempt to secure a niche market and combat the multitude of general sports stores which exist.

28. *Which are the support/functional units within the organisation i.e. those units whose outputs are used primarily internally?*
The support or functional units within the organisation are the manufacturing division which produces for the wholesale and retail outlets, and the Head Office function. The Head Office function includes accounts (payment of creditors and expenses), human resources (staff recruitment and dismissal, wages and salaries, training, etc.), marketing and advertising, stock management and finance. The Head Office function provides these services to all the divisions.

29. *Which are the product/service units within the organisation i.e. those units whose outputs are used primarily externally?*
The product/service units within Mike's Sports are the three retail stores in Woodstock, Durban and Pietersburg, the Mail Order, and the Wholesale division. These units all offer their products/service to external customers.

30. *Which are the market units within the organisation?*
At present the market units within the organisation are the four retail outlets and the sales representatives of the wholesale division. The three retail stores interface with their local regions and the Mail Order interfaces with the outlying areas in South Africa as well as with neighbouring countries. The sales representatives in the wholesale division operate on a regional basis and as a result interface with their different regions. Although many market segments have been identified for the retail outlets e.g. corporate institutions, sports clubs, schools etc., there are no market units geared to represent the needs of customers within these segments and to offer them customised service.

31. *Which units in the organisation are viewed as enterprise units?*
The four retail outlets, the manufacturing and the wholesale divisions are all viewed as profit centres with their own income and expenditure. The manufacturing division, for example, is regarded as another supplier and 'sells' its products and services at a premium to the retail outlets so that its profitability can be measured. The expenditure for the Mail Order, manufacturing and wholesale divisions however, is difficult to retrieve and as a result their profitability is not measured regularly.

32. *What levels of autonomy are they given?*
The retail units differ from the enterprise units as defined by our model in that they do not have the freedom to buy or sell whatever products they want. The pre-season product

selection and bulk buying of stock for the retail outlets is determined centrally with input from the manager of each unit. Stock codes and prices are standardised across the group. The manager of each unit is then responsible for re-ordering and filling in stock according to budgeted stock levels. Unit managers are allowed to discontinue product lines if they are slow moving and are also allowed to request products not normally in the range to cater for local demands. The stock of non-standard products however is kept to a minimum. Any expenditure by the units has to be sanctioned by the executive with budgets set for overheads such as telephone, petrol, electricity etc. In general the staff of each retail unit are trained and given firm guidelines for operation but at the same time are encouraged to use their initiative and make suggestions to improve the performance of their unit.

33. *What type of executive overrides are they subject to?*
The retail units are given firm guidelines for operation and therefore are not subject to many executive overrides. The overrides that occur are related to requests for stock or for price discounts as well as suggestions for changes within the unit.

<u>Second Recursion Level:</u>

1. *What are the primary operational elements within our organisational unit?*
Cape Town: Sales, Merchandising, Administration, Stock Control, Security
Mail Order: Enquiries and Quotes, Capturing Orders, Picking, Stock Control, Invoicing, Packing and Dispatch, Debtors Control, Catalogue Design.
Pietersburg: Sales, Merchandising, Administration, Stock Control, Security
Durban: Sales, Merchandising, Administration, Stock Control, Security
Manufacturing: <u>Clothing:</u> Capturing and Scheduling Orders, Fabric and Trim Procurement, Laying and Cutting, Machining, Checking Out and Dispatch.
<u>Vinyl:</u> Capturing and Scheduling Orders, Cutting, Unpicking, Printing, Checking Out and Dispatch.
<u>Socks:</u> Capturing and Scheduling Orders, Fabric and Trim Procurement, Machining, Finishing and Quality Control, Checking Out and Dispatch.
Wholesale: Sales, Capturing Orders, Picking, Stock Control, Invoicing, Packing and Dispatch, Debtors Control.

2. *How is accountability exercised?*
3. *What control structures exist for the units?*
4. *How, where and when are these exercised?*
5. *How are directives issued and followed up?*
6. *How is the performance of each operational unit measured?*
7. *What feedback is there from management to the units?*
8. *What are the areas of responsibility for the various units?*
9. *Who is considered responsible and accountable for each unit?*
10. *How does each operation feed back to its meta-management, what information and how often?*
11. *What audits are done?*
12. *What possible sources of conflict are there between the various units?*
13. *How are these avoided/resolved?*
14. *How is co-ordination regarded by the rest of the system?*
It was felt by the group that is was not meaningful to answer questions 2 to 14 as they were phrased. Because of the size of each division (the smallest being the Mail Order with a core staff of two and the largest being the manufacturing division with a core staff of twelve), it was decided that it would be more meaningful to look at individual staff

members in terms of responsibility and accountability rather than operational units. In essence, the answers to the questions received were all very similar and are summarised in the following sentences.

Within each division, employees are allocated specific tasks. For example, an employee in one of the retail stores might have sales as his/her primary function. In addition, the employee might be allocated an area of the store to merchandise as well as to maintain stock levels of those items displayed. Accountability is exercised by the manager physically checking up that his employees are doing their work and giving them verbal feedback. There are no formal control structures within each of the divisions. Because of the size of operation of each of these areas, control is maintained through a hands-on management approach on a daily basis. Directives are issued verbally from managers to employees and are followed up regularly.

In general the performance of each unit within a division is not formally measured, but rather a holistic, hands-on management approach is used. The overall performance of the division is measured by meta-management with the performance of individual employees measured by the division managers through a combination of informal and formal means.

15. *What information does the Intelligence Function gather externally, how often, and who is involved?*
    Retail branches: Customers are an important source of intelligence of the external environment. By communicating with them on a daily basis, the staff of each branch get to hear of developments in the soccer community as well as understanding the needs of their clients better. The branch managers will regularly monitor what their local competition is doing by making trips to their competitors' stores. The postal service is closely monitored by the Mail Order division with regards to postage rates, missing parcels, C.O.D. moneys outstanding, postal policies, service levels etc.
    Manufacturing: Nearly all external intelligence is generated via the retail and wholesale arms since they are responsible for generating all the work in the manufacturing division. Some informal intelligence takes place with regards to monitoring labour laws, wage standards, etc.
    Wholesale: The wholesale division uses the retail branches as a source of intelligence for end-users of its products. Its network of sales representatives around the country also offer valuable feedback with regards to demands and trends in the South African market. The brands parent body in Europe offers regular feedback on world-wide trends as well as forthcoming ranges of products to be available. Exchange rates and shipping costs are monitored regularly since many of the wholesale division's products are imported.

16. *What information does the Intelligence Function gather internally, how often, and who is involved?*
    Retail Branches: Goods which are selling well are identified by the sales staff as well as slow moving lines to generate the 'what's hot and what's not' report. Goods which are not selling well are not repurchased. The 'bread and butter' lines are also closely monitored to make sure that there is stock at all times. The Quicktill system is used to capture all transactions on a daily basis and can be used to generate a multitude of reports on debtors, stock levels, sales, orders etc.
    Manufacturing: The only formal information gathering which currently takes place on a daily basis is the progress of orders through the division as well as the quantity of goods produced. Stock levels of raw materials are monitored and ordered on demand.
    Wholesale: The internal information gathering consists of monitoring what goods are on order, what goods are in stock, and what needs to be manufactured or procured.

17. *How often are meetings held to discuss and plan future changes within the organisation based on the information gathered in points 15 and 16?*
18. *Who is involved with these meetings?*

    The answers to questions 17 & 18 are grouped together. There are no formal meetings in any of the units to discuss and plan future changes. Rather these take place on an ad hoc basis in response to problems which occur. The partners have the authority and responsibility for planning any changes in the branches and work closely with their respective unit managers.

19. *What planning (long-term & short-term) takes place within the organisation?*
20. *What forms the basis for this planning?*

    The answers to questions 19 & 20 are grouped together. Very little planning takes place in the wholesale and retail divisions at the unit level. The planning that does take place revolves around stock procurement on a weekly basis and is based on information generated by Quicktill. The manufacturing division plans its production schedule for a one to two weeks in advance, as well as procurement of raw materials on a weekly basis. Most of the planning for the units is supposed to take place at executive level with the units left to run their day-to-day operation.
21. *How is information within the organisation collated for decision making?*
22. *Who is involved?*

    The answers to questions 21 & 22 are grouped together. In each of the divisions of Mike's Sports, information is not collated for decision making. Rather the decisions are made on 'gut feel' and approximations by the managers who are intimately involved in each operation.

23. *How is planning for the future balanced with control of the present?*

    As there is little planning at the unit level, there is no balance in any of the units.

24. *How are policies decided?*

    Policies are decided for the units by the partners at the meta-management level. This is usually in response to problems that arise within the business.

25. *How are policies communicated to the organisation?*

    Policies are communicated verbally via the chain of command i.e. from the partners to the managers to the employees at floor level.

26. *Is policy biased towards Intelligence or Control?*

    In all of the units, policy is biased towards control.

27. *What is the identity of the organisation?*

    Cape Town, Durban & Pietersburg: A soccer specialist retail store also catering for casual sports clothing and other sports codes.
    Mail Order: A soccer specialist mail order catalogue also catering for casual sports clothing which is used to reach customers who do not have access to the retail stores.
    Factory: A manufacturing concern which produces sports clothing as well as a printing and numbering service.
    Wholesale: A wholesale distributor of brand name soccer related merchandise.

The group felt it was not meaningful to answer questions 28-33 at the second level of recursion and as a result the answers to these questions are omitted.

8.4 - THE IDEALISED ORGANISATIONAL REDESIGN

The purpose of *Stage 4* was to generate an idealised organisational redesign based on the results of the diagnosis in the third workshop and the organisational model. The fourth workshop was used to generate the design participatively so that it would be grounded in the reality of the group who would be responsible for implementing the required changes. The motivation for this was discussed in *Stage 4* of the methodology. The mood during the workshop was one of great excitement at the prospect of improving the organisation of Mike's Sports. The workshop proceeded smoothly according to the methodology and in the paragraphs to follow, the organisation of Mike's Sports as designed in the workshop, is described recursively.

First recursion level

At a top level, Mike's Sports is conceptualised as being comprised of seven organisational units. Of these, the Mail Order, wholesale division, Cape Town, Durban and Pietersburg stores are all viewed as product and service units. The retail outlets are also considered as market units which act to represent the company in different regions of South Africa. The remaining two units, the manufacturing division and Head Office, are functional units which exist primarily to provide products and services for the other five units. All of the above units are viewed as enterprise units and have large degrees of autonomy over their operation (the way in which they are measured and held accountable for their performance is described later in this chapter). The entire collection is overseen by the executive unit which serves to control the interactions of these units in a way which is beneficial for the company as a whole. Rather than control the business through the chain of command, the executive unit is responsible for continually revising the design of the organisation and developing new and better systems in order to promote efficiency and effectiveness.

The executive holds a meeting once a month for:

- the evaluation of the performance of each unit which is then given the relevant feedback.
- sharing information about any relevant changes in the environment of the business.
- balancing stability with adaptation and establishing policies which are communicated to the rest of the organisation.

In order to provide a sound basis for the decisions made at these meetings, a 'control'[1] room is maintained where all pertinent information regarding the business is collated. The room is 6m by 5m in dimension and is equipped with a boardroom table, chairs and audio visual equipment. Three of the walls are covered with notice boards and the remaining wall has a white board and a flipchart. The notice boards are used to display the necessary information for each meeting with the white board and flipchart used to record any discussions. The one wall of notice board area is dedicated to recording information about the business as a whole. The organisational design at a top level is depicted on a diagram with details of the respective control loops and communication flows. This is accompanied by reports on the vital indicators of the business. The remaining two walls of notice board are divided amongst the units at the next recursion level. Once again the notice board is used to depict the organisation design of each unit as well as displaying the necessary weekly and monthly reports received from each unit. The notice boards are updated on a weekly basis by members of the executive and the

[1] The notion of a control room was partly derived from Stafford Beers concept of an operations room (Cybernetics: A New Management Tool, Barry Clemson, Abacus Press 1984, pages 149-161

room is available for them to view at any time. The various units are measured and given feedback in the following way:

Mail Order

1. Profitability - a profit and loss statement of all income and expenditure. (The list of expenses includes inter alia stock shrinkage and administration fees for the Head Office function).
2. Average turnaround time - an orders age analysis for each week to determine average turnaround time from order to dispatch of goods. This is one measure of customer service.
3. Returns - an analysis of monthly returns.
4. Debtors - an age analysis of all moneys outstanding by the post office and other debtors.
5. Stockholding - the levels of stock present in the division.
6. Cash flow in - all moneys banked for the month.

Targets are set for sales, returns, average lead time from order to dispatch, optimum stock levels, debtors ageing and expenditure. Monthly feedback is given in the form of verbal praise/rebuffs as well as an incentive bonus scheme based on the six measures of performance listed above. A full audit of the division is done every three months which includes measuring softer issues like service levels over the phone etc. The banking is reconciled with all payments processed on a daily basis. Inter unit stock transfers are reconciled on a monthly basis.

Cape Town, Durban and Pietersburg stores

1. Profitability - a profit and loss statement of all income and expenditure. (The list of expenses includes inter alia stock shrinkage, bad debts and administration fees for the Head Office function).
2. Debtors - an age analysis of all moneys outstanding by debtors.
3. Return of faulty goods - the number of customers and average waiting period for them to receive repaired/replacement goods.
4. Stockholding - the levels of stock in the division.
5. Cash flow in - all moneys banked for the month.

Targets are set for sales, repair/replacement lead times, optimum stock levels, debtors ageing and expenditure. Monthly feedback is given in the form of verbal praise/rebuffs as well as an incentive bonus scheme based on the five measures of performance listed above. A full audit of the division is done every three months which includes a full stock take, analysis of transactions etc. as well as softer issues like customer service on the floor. The banking of the Cape Town branch is reconciled on a daily basis and the other two branches on a weekly basis. Inter unit stock transfers are reconciled on a monthly basis.

Manufacturing division

1. Internal Profitability - a profit and loss statement of all income and expenditure (which includes stock shrinkage and administration fees for the Head Office function). Most of the income generated is fictitious and is from the division 'selling' its products at cost plus a mark-up to the wholesale division and retail outlets. The remaining income is derived from sales to external clients.
2. Production - the number of units of each product produced for the month.
3. Stockholding - the levels of stock in the division.
4. Delivery - the average lead time before orders can be manufactured.

Targets are set for production, delivery lead times, optimum stock levels, expenditure and wastage/shrinkage. Monthly feedback is given in the form of verbal praise/rebuffs as well as an incentive bonus scheme based on the four measures of performance listed above. A full audit of the division is done every three months. All stock 'sold' to the other units is reconciled with their stock receipts on a monthly basis.

<u>Wholesale division</u>

1. Profitability - a profit and loss statement of all income and expenditure. Some of the income generated is fictitious and due to the wholesale supplying the Mail Order and other retail branches. This is treated in the same manner as the manufacturing division. (The list of expenses includes inter alia stock shrinkage and corporate tax for the Head Office function).
2. Customer service - an age analysis of sales orders for each week to determine lead times from order to dispatch of goods.
3. Debtors - an age analysis of all moneys outstanding by debtors.
4. Stockholding - the levels of stock in the division.
5. Cash flow in - all moneys banked for the month.

Targets are set for sales, repair/replacement lead times, optimum stock levels, debtors ageing and expenditure. Monthly feedback is given in the form of verbal praise/rebuffs and an incentive bonus scheme based on the five measures of performance listed above. A full audit of the division is done every three months which includes softer issues like customer service over the phone. The banking is reconciled on a daily basis and all internal 'sales' of stock to the Mail Order and branches is reconciled with their stock receipts on a monthly basis.

<u>Head Office</u>

1. The ability of the unit to work within the purchasing and marketing budgets set by the executive. Moreover the status of the stock i.e. levels of redundant stock and traceable sales through marketing are used as measures of performance.
2. The maintenance of good accounting practices and recording of all expenditure and payments accurately. This is measured by the ease in which the executive can retrieve desired information.
3. The payment of all creditors and expenses on time.
4. The ability of the unit to maintain a competent workforce through continual evaluation and training of employees.
5. The following up of credit notes from suppliers for all the returns of stock from the various units to their suppliers.

Targets are set for stock purchases and total expenditure with verbal feedback given monthly to the unit. The other areas of responsibility are measured on a real time basis with regular verbal feedback.

On a weekly basis the executive and the managers of the units meet for a 'synergy' meeting. The meeting begins with a production schedule report on the status of all orders in the manufacturing division and their expected delivery dates as well as lead times associated with new orders. Problem areas are identified such as shortage of certain fabrics and therefore the delay or inability to produce certain products. The various units then give feedback on their impending orders so that possible capacity problems in the manufacturing division can be foreseen and circumvented. Each of the units also has a chance to present any problems that it is experiencing and gain feedback on possible solutions. In this way, the units are encouraged to collaborate and draw on a shared resource pool of knowledge and skills to address their problems. Members of the executive play a facilitative role at the meeting which provides them with a better understanding of the business which in turn promotes the design of better systems and policies by the executive. Lastly, each unit manager uses the meeting to share intelligence information with other unit managers (who in turn share this with their units) so that knowledge about the business and its environment is transmitted rapidly throughout.

2nd recursion level

Head Office

The Head Office unit can be viewed as performing four major functions namely Purchasing, Marketing, Accounts and Human Resources. These functions are centralised and are performed for each unit in the company by Head Office with the purpose of removing the administration work from each unit in order to allow them to concentrate on maximising their sales/production. Also, it allows for better control of the business as a whole whilst still allowing a large degree of autonomy of the units.

Purchasing

All product selection and pre-season bulk buying is done centrally by Head Office and a fairly uniform product selection is maintained across the retail units. Input is received from the manager of each division and small variations in stock levels and product selection are allowed in each unit to cater for their local demand. All goods are receipted centrally and distributed thereafter to the various divisions.

Accounts

All payment of expenses and creditors are performed centrally from Head Office. Reports of expenditure for each unit are generated each month as well as a monthly age analysis of creditors for the company as a whole. A list of creditor purchases, as well as creditor payments, is also generated monthly.

Marketing

The marketing of the group as a whole is planned centrally. Prices are set from Head Office and standardised across the retail units with small variations in prices across the units allowed according to local demand. The Mail Order catalogue is used as a national marketing tool to drive the whole group and adverts/promotions are planned to promote each of the units locally with input from their respective managers.

Human Resources

The Human Resources function is responsible for determining remuneration packages for staff members of each unit and ensuring that wages and salaries get paid. The managers of each unit are used to perform monthly appraisals of their staff and give feedback to Head Office. In addition, an audit of staff motivation, morale, staff satisfaction, and staff competency levels is performed every three months for each unit. This is used to resolve conflicts, schedule employees for training, as well as determining which employees are to be considered for promotion. Hiring and firing of employees is performed jointly by Head Office and the respective unit manager.

Mail Order

The Control Function is formalised through the use of the following reports by the Mail Order's manager:

- The daily cash-up report is used to reconcile the money to be banked each day.
- The 'month to date sales by product' report indicates how many goods have been invoiced for the month. Monthly sales targets are set and the report is used to give verbal feedback on the progress on a daily basis.

- The 'mail orders outstanding by customer by take-on date' report indicates each week how long customers are waiting to have their goods dispatched and is one measure of service levels. Targets are set for lead times and regular verbal feedback is given.
- The 'mail orders outstanding by product' report is used together with the 'purchase orders by product' report and the 'stock listing' report to determine which products have to be ordered from suppliers on a weekly basis.
- The 'debtors age analysis' report is produced monthly to monitor debtor payments and is used to follow up on collection of payments. Targets are set for a percentage breakdown of the total debtors across the current, 30, 60, 90 and 120+ day fields with regular verbal feedback.
- The sales returns report is used to monitor how many goods are returned unwanted or uncollected each month. A target is set as a percentage of sales for the month with regular verbal feedback given.

Once a month, a full physical stocktake is done and the figures are reconciled with those of Quicktill. At this stage any products in stock which have not been advertised in the last two catalogue issues are transferred out to the Cape Town branch to be sold. Because of the size of operation of the Mail Order, co-ordination of its activities and internal intelligence is easily achieved through the intimate hands-on involvement of its manager. A meeting is held once a week to plan what needs to be achieved for the forthcoming week as well as reviewing what was achieved in the previous week.

External intelligence is achieved through:

- Close liaison with the Kick Off and Moneysaver magazines (which advertise the catalogue) which regularly do market research and yield important information as to the distribution and readership profile of their publications.
- Close liaison by the manager with the Post Office to monitor postage rates etc.
- Dealing with customers telephonically.
- Filtering of information from weekly management meetings of the managers of the other units and the partners.
- Analysis of sales by product, by customer, by catalogue, by issue, by area etc.
- The manager of the Mail Order monitoring other print media for mail order catalogues in competition with Mike's.

Once a month, a meeting is held with a delegated member of the executive and the staff of the Mail Order to discuss and plan future developments within the division. This will include the planning of the next layout of the catalogue which is the face of the business. The 'sales by product by catalogue by issue' report is used to gauge the response to previous issues of the catalogue and forms the basis for deciding which products are to be included in the forthcoming catalogue.

<u>Retail Stores</u>

The operation of the three retail stores is almost identical and therefore their organisation is described jointly. The Control Function is formalised through the use of the following reports by the store manager:

- The 'month to date sales by product' report is produced daily and is used to motivate the sales staff and track the units progress towards target.
- The 'cash-up' report is produced daily and is used to reconcile the moneys to be banked.

- The 'stock listing' report and 'purchase orders by product' report are used in conjunction with set optimum product stock levels (based on sales) to determine which products have to be ordered from suppliers on a weekly basis.
- The 'debtors age analysis' report is used monthly to monitor debtors and follow up on those who are in excess of terms. Targets are set for a percentage breakdown in the current, 30, 60, 90 and 120+ day fields with regular verbal feedback given.
- The 'bad debts' report is used to monitor the number of debts which are written off each month. A monthly target is set as a percentage of total debtors on hand with regular verbal feedback.
- The 'returns' report is used to monitor how many goods are returned for repair/replacement and how long it takes for customers to receive their goods back. Targets are set for the lead time for customers to receive their goods with regular verbal feedback.
- The 'laybye by customer' report is produced on a monthly basis to see which laybyes are in excess of terms and have to be cancelled. The goods are then returned back to stock.

In addition to the reports, the manager of the store needs to enforce control in a hands-on manner. Employees are delegated certain areas of the store to maintain and the manager will inter alia ensure on a daily basis that the floor display is satisfactory, the stock rooms are kept neat and tidy, all paperwork is filed appropriately and that customers receive good service in the store. Once a month a full physical stocktake is done and the figures are reconciled with those of Quicktill. The discrepancies are followed up by an audit to find out the source of error.

Co-ordination of the activities and internal intelligence is facilitated by a weekly staff meeting. This purpose of this meeting is to:

- get general feedback from each of the staff on what was achieved in their areas.
- discuss operational problems.
- plan what needs to be achieved in the store for the forthcoming week.
- discuss feedback from customers with regards to their needs as well as developments in their communities which may impact on the business.

The store manager is required to visit the stores of his local competition once a month to keep abreast of their development and to observe their pricing of products and services offered. The remaining intelligence filters through from weekly management meetings of the managers of the other units and the partners as well as from supplier representatives who are out in the market place.

<u>Manufacturing division</u>
The Control Function is formalised through the use of the following reports by the production manager:

- The 'production units' report is produced daily and is used to motivate employees. Once products have been scheduled for production, minute ratings are used to set a target for the number of units to be produced for that day and feedback is given with respect to actual production.
- The 'quality control' report is produced daily and records the number of products produced below standard.
- The 'stock listing' report is produced on a weekly basis and is used to reorder raw materials according to predetermined optimum levels (based on usage).

- The 'debtors' report is used to monitor the few external clients that the manufacturing division has and to ensure payment.

In addition to the reports, the production manager needs to enforce control in a hands-on manner. Employees are delegated certain areas to maintain. Once a month a full physical stocktake is done and the figures are reconciled. The number of minutes worked by each employee is recorded on a daily basis as well as the time taken to complete each batch of products. This is used to calculate costings for products based on raw materials used, wastage and labour cost. Each month these costings are revised and submitted to the other divisions.

Wholesale division

The Control Function is formalised through the use of the following reports by the division manager:

- The 'month to date sales by rep' report is produced weekly and is used to motivate the sales reps and give them feedback on their progress. The sales reps of the wholesale division work strictly on a commission basis.
- The 'cash-up' report is produced daily and is used to reconcile the moneys to be banked.
- The 'stock listing' report is used to monitor stock levels. Targets are set for optimum levels with feedback given on a monthly basis. The 'stock listing' report and 'purchase orders by product' report are used in conjunction with set optimum product stock levels (based on past sales) to determine which products have to be ordered from suppliers (including the manufacturing division) on a weekly basis.
- The 'return of goods' report is used to monitor monthly returns from clients. Targets are set as a percentage of monthly sales and monthly feedback is given.
- The 'debtors age analysis' report is used monthly to monitor debtors and follow up on those who are in excess of terms. A target is set for a percentage breakdown of debtors across the current, 30, 60, 90, and 120+ day fields with regular feedback given.
- The 'bad debts' report is used to monitor the number of debts which are written off each month. A monthly target is set as a percentage of total debtors on hand.

Control of the stock and money is maintained by the manager. Sales representatives procure orders from customers which are then submitted back to the manager. From there the customers credibility is first verified and, if suitable, the order is processed and the goods are invoiced and dispatched.

Sales representatives are allocated geographical areas to operate within. Intelligence is effected by daily communication with the sales representatives via reports and verbal liaison with regards to availability of stock and prices thereof. The sales representatives reciprocate by offering regular feedback in terms of developments in the market place and changes in customer needs. Weekly communication is also kept with the brand's parent body in Europe with regards to new product developments and global trends.

8.5 - PRACTICAL CONSIDERATIONS

The purpose of this last and final stage, was to plan how and when the organisational design was going to be implemented. The results of this last workshop are summarised in the paragraphs to follow:

The brainstorming technique described in *Stage 5* of the methodology was abandoned after a few iterations because the group (including the author) felt it would be more meaningful to enter an interactive discussion to determine the practical requirements. It was agreed by the participants that very few new resources were needed to implement the design. Better utilisation of the existing management information system by employees was needed within the business. The need for easier access to information was recognised earlier in the year and a sophisticated software package called Quicktill was installed. Transactions such as cash sales, credit sales, laybyes, debtor payments, stock receipts, inter branch stock transfers, etc. are all recorded on a daily basis in the retail and wholesale units (the Manufacturing division currently uses the software package Q&A to capture and schedule orders with all other transactions being recorded manually in books). Quicktill however, is not a full accounting package and another package called Pastel Partner is used to record expenditure and creditors accounts. With a few minor changes, the management information system will be able to generate all the reports required for the new organisational design easily and efficiently.

The following changes are to be effected in the management information system:

1. An additional software module for Quicktill is to be purchased which allows for easier collation of information from the retail arm of Mike's Sports. The module allows all the transactions from the Mail Order and three branches to be sent daily via modem to Cape Town. Reports can then be generated for each individual outlet as well as for all four as a group. Any amendments like selling price changes, cost changes, stock code or description changes etc. can all be performed centrally from Cape Town and sent to all the outlets. The module will improve accessibility of information and remove a lot of paperwork currently being generated by the branches.
2. A customisation is to be made in the Quicktill package. The existing invoicing module does not allow the recording of post office tracking numbers when goods are invoiced. The inclusion of this feature will allow for easier and more efficient processing of payments from the post office in the Mail Order.
3. A creditors module is to be purchased for Quicktill. At present a full stock system is run on Quicktill and all stock receipts are recorded. The creditors module allows for each creditor to have an account on which all stock purchases as well as creditor payments are recorded. The module offers better reporting capabilities than Pastel Partner and circumvents the need to capture receipts twice (at present receipts are captured on Quicktill to maintain the stock system as well as on Pastel to maintain the creditors accounts).
4. At present expenses are recorded together on Pastel Partner for the company as a whole. In the interest of having enterprise units, 'branch' accounts are to be created for each unit with all income and expenditure recorded so that a monthly profit and loss statement can be generated for each unit. Invoices for expenses are currently manually filed together by month. This is to be changed so that invoices are filed by unit by month for ease of access during audits.

The cost of purchasing the two new software modules and modems needed to implement the above changes amounts to approximately R15 000. To utilise the system properly, the relevant staff will also need to undergo training.

It was agreed that the physical creation of the control room would be straightforward. The three storey building out of which the Mail Order, wholesale division, manufacturing division and Cape Town store operate, has an unused office on the second floor which will suit the needs of a control room. Audio visual equipment, a flipchart and a whiteboard already exist for the purpose of meetings and all that is required are the notice boards, table and chairs. A budget of R5 000 was set for this.

There was consensus that no chronological order was needed and a time span of two months was set to bring about the above changes needed to fully implement the design. The group identified that the most important consideration would be the hard work and effort on the part of the participants to drive the redesign process. People are generally creatures of habit and it would take a while before the new design was accepted and internalised amongst all the employees in the business. Part of the design was to establish clear lines of authority and responsibility. The executive unit will comprise the following members who will oversee the operation of the following units:
Aleco Augoustides - wholesale and manufacturing divisions
Michael Augoustides - Cape Town store
Casey Augoustides (the author) - Mail Order
Paul Stone - Durban and Pietersburg stores
In this respect the executive members will not get involved directly (aside from Michael who is also the unit manager) with managing any of the units, but rather play a facilitative role and act as a resource for the unit managers. The Head Office unit will not have a unit manager, but rather will answer directly to members of the executive.

The following are the unit managers and are responsible for the implementation of the design at unit level:
Cape Town store - Michael Augoustides
Durban store - Basil Moodley
Pietersburg - Derek Duvenhage
Mail Order - Tania Koen
Manufacturing - Fahreed Layloo
Wholesale - Virginia Fester
Each unit will be given clear guidelines within which to operate and total autonomy over their local operation.

9 - REFLECTION

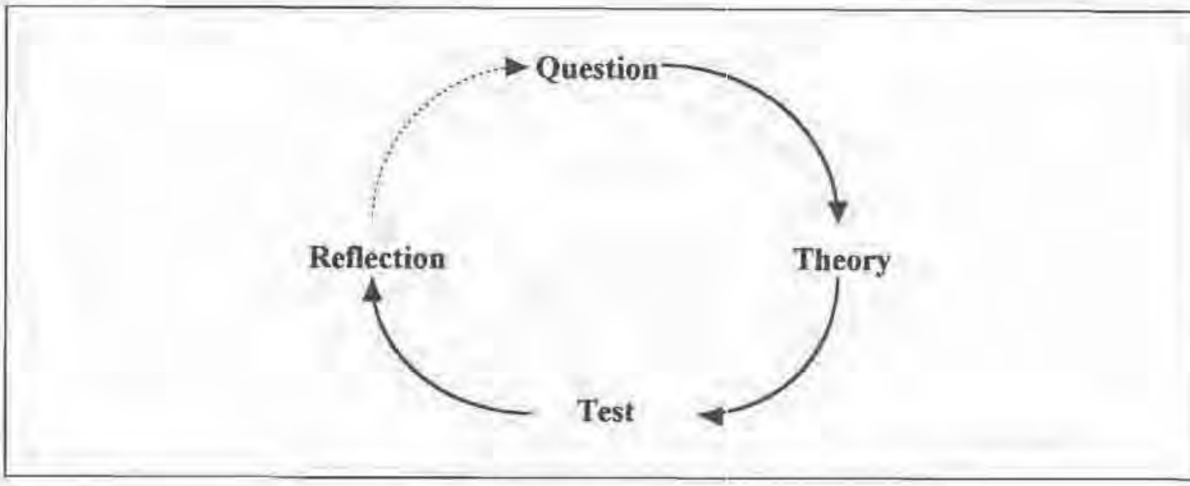


Figure 9.1: The fourth stage of the learning cycle

This chapter, as illustrated in Figure 9.1, is the *fourth* and last stage of the author's learning cycle. In Chapter 6 the *first* stage of the learning cycle began with the author's question: "With Mike's Sports rapidly growing and evolving, how can it be organised in order to continually adapt and thrive within its changing environment which is becoming increasingly competitive?" The *second* stage of the learning cycle was described in Chapter 7 where the author attempted to answer that question by:
a) providing an organisational model which was designed to cope with an environment of increasing complexity and change.
b) compiling a methodology which made use of the organisational model in a participative process of redesigning the organisation of Mike's Sports.

The *third* stage of the learning cycle was the testing of the author's answer to his question. The results of implementing the methodology and using the organisational model are described in Chapter 8. In this final chapter, the results of testing the answer are reflected upon and provide an opportunity for the author to re-examine the framework he has used thus far. If, as a result of this, the author's framework evolves or changes in a way which is more meaningful and useful to him, then true learning will have taken place.

Reflection takes place at two levels in this chapter. First, the appropriateness of the methodology is reflected upon. This is then taken to the next level by reflecting on the idealised design of Mike's Sports which is a result of the methodology. In order to achieve this, use is made of a reflective framework which consists of a number of categories - all of which unfold into each other. The idea of trying to understand experience in terms of categories originally comes from Kant and is expanded upon by Churchman in his book 'The Systems Approach and its Enemies'[1]. Churchman formulated twelve categories which can be used as a tool for inquiry into the planning or designing of systems. The reflective framework used in this thesis is derived from Churchman and is based on seven of these twelve categories. In describing the categories, it is important to remember that the process of unfolding the categories is more important than the definitions themselves as definitions tend to hold concepts in their place. Thus the emphasis is to allow each of the categories to expand its meaning and draw in each of the others resulting in a comprehensive meaning for the whole.

[1] The Systems Approach and its Enemies, C. West Churchman, Basic Books, 1979, pgs 77-99

These categories are based on the idea that people are the centre of the designer's reality and should be divided into three groups: those who should be served (*clients*), those who should make the decisions (*decision makers*) and those who should plan or design (*designers*). Three of the categories centre on each of these groups of people with the remaining categories being used to expand upon them. The seven categories are:

- ***Purpose*** - The *purpose* can be thought of in terms of goals (short-term), objectives (longer-term) and ideals (stretch indefinitely into the future). It refers to future states of the world which can be partially shaped by decision making and which are intended to occur by the *decision maker*.
- ***Client*** - The *clients* are the group of people who should be served.
- ***Measure of Performance*** - This category expresses the meaning of improvement for the *designer*. It is closely related to the category of *purpose* and of *client* such that the *client* should be served better when the *measures of performance* improve.
- ***Decision Maker*** - This category is used to describe the group of people who are able to influence decisions.
- ***Components and Environment*** - *Components* refer to aspects of reality that *decision makers* are able to change. By contrast, the *environment* includes all aspects of reality that *decision makers* are not able to change, but which conversely may influence them.
- ***Designer*** - The *designer* plays the important role of unfolding all the other categories. This category is a question of who should plan or design.
- ***Implementation*** - This is about the transformation of the intellectually conceived design into action. This category is a question of whether the design is implemented successfully and if the results thereof are in accordance with the *designer's* intention (which may have evolved during the process).

The motivation for using the categories is that they are systemic in nature and are therefore compatible with the framework used thus far for this thesis. There is no claim that the categories are exhaustive or 'all encompassing' but rather that they are useful for this particular application. The reflection begins in the next section by first considering the methodology which was used to guide the intervention. The methodology as a transformation system is illustrated in Figure 9.2.

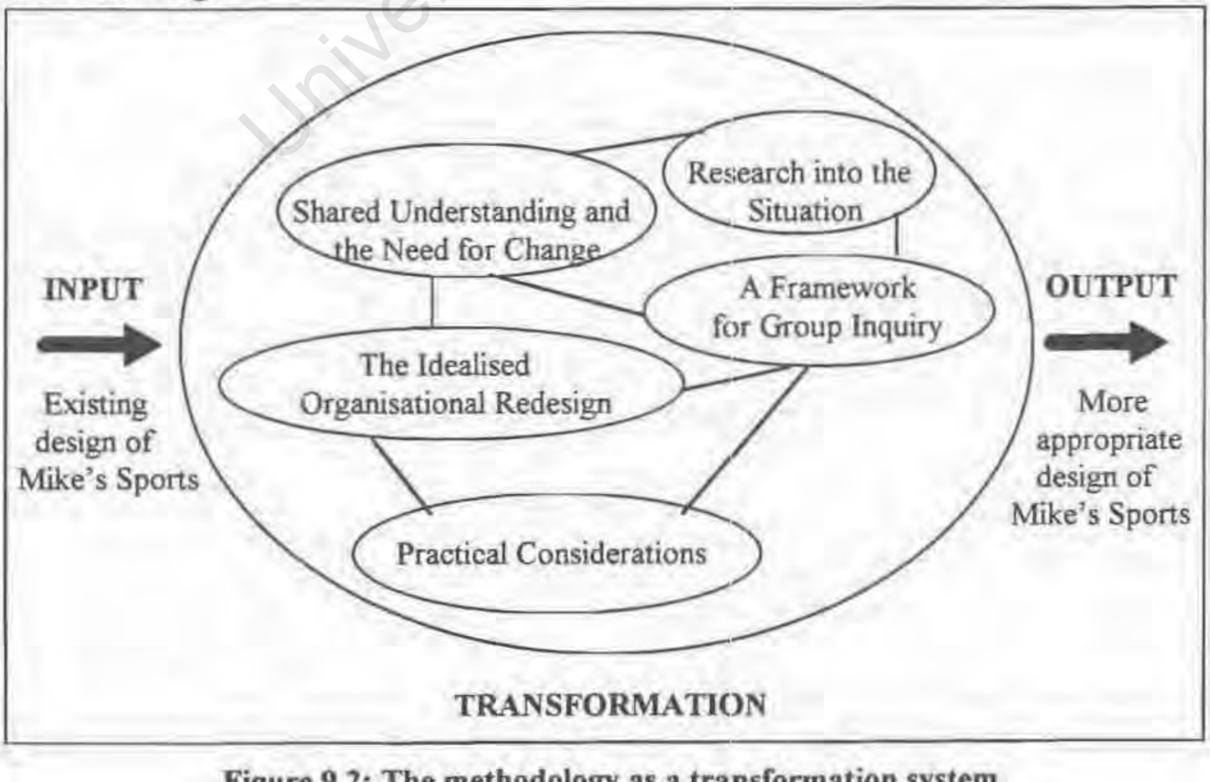


Figure 9.2: The methodology as a transformation system

9.1 - REFLECTING ON THE METHODOLOGY

Purpose

The methodology can be regarded as a transformation system which was designed with the ideal purpose of taking the existing organisation of Mike's Sports and designing a more appropriate one i.e. generating a design which can offer the best utility in terms of the clients the business should serve. From the previous sentence it can be seen that the question of appropriateness hinges entirely on who the clients are defined to be. If, for example, external investors are regarded as the only clients of the business, then an appropriate design is one which would maximise profitability above all other considerations. If, on the other hand, employees are regarded as the only clients, a design which focused on quality of work life and development of employees would be appropriate.

As part of the purpose, the objectives of the methodology were to:

- provide the author with an improved understanding of the current situation.
- generate a shared understanding of the problematique amongst the group of participants and motivate them to continue with the solution process.
- provide the group with a shared framework which would be useful for thinking about the business and which would form the basis for the redesign.
- detail a plan for implementing the resultant organisational design.

Given the concerns and issues raised within the situation, the methodology was designed with the goal of generating a design for Mike's Sports which was based on the organisational model described in Section 7.1 and which could be implemented successfully. Whether the purpose, objectives and goals were achieved or not are discussed under the heading of Implementation. In the paragraphs to follow, the clients of the methodology are considered along with the question of appropriateness of the output design.

Client

Regarding the business as a social system, all those who work at Mike's Sports should be regarded as clients of the design process. The organisational design influences the way work is done and therefore affects the employee's quality of work life. Furthermore, since the business is part of a larger social system, the customers of Mike's Sports should also be regarded as clients. The organisational design promotes the efficiency and effectiveness of the business which in turn can be used to improve the service offered to its customers. The partners are perhaps the most important clients because they are the reason the business exists and are also the most powerful decision makers in the organisation. Likewise, the author (who is also one of the partners) is an extremely important client because the design process forms the essence of his thesis which is being submitted for a masters degree. Therefore, the clients of the methodology ideally should have been:

- the author.
- the partners of the business.
- the employees of the business.
- the customers of the business.

These four groups of clients all have different expectations of the methodology as a transformation system and as a result would require different outputs to satisfy those expectations. Thus we end up with a situation where a compromise or trade-off between the various clients is needed in order to satisfy all parties.

Upon reflection, it is apparent that very little compromise occurred and the author and his fellow partners became the primary clients to be served by the methodology. The author's primary motivation for the undertaking of this thesis and the facilitation of an organisational redesign of Mike's Sports was to promote the viability of his business and to increase it's profitability. As a designer, client and decision maker of the methodology, the author unwittingly put himself in a dangerously powerful position to influence the outcome of the methodology to suit his own needs above those of the other clients. A result of this was that the application of the methodology was strongly weighted in favour of the partners as clients. One of the implementation results was that four of the nine participants chosen for the group were the partners of the business with the remaining participants being employees. Furthermore, the facilitator of the workshops was the author, who is one of the four partners. This indicates that the author's initial assumption that the group of participants was a combination of unitary and pluralist is not correct. There would have been a political element and a tendency for employees to not oppose the partners with the result that the end design would have been biased towards the partners. Evidence of the powerful effect that the partners had on the group as a whole is shown in the answer to Question 7 of the second workshop where the group neglected to consider employees of the business as clients. To combat this effect, the participants of the group should have explicitly decided on who the clients of the design process were before beginning the design process. The other group of clients, the customers of the business, have absolutely no representation in terms of the methodology and have to rely on market forces to ensure that they are catered for adequately by Mike's Sports.

Measure of Performance

The measure of performance of the methodology is the quality of the design generated which in turn is linked to it's acceptance and implementation within Mike's Sports. Without the implementation of the design, there is very little or no benefit to anyone except for the author for academic purposes. Since the implementation of the design lies outside the scope of this dissertation, the author will critically reflect on the integrity of the design in the second part of the reflection and will use his critique as a measure of performance of the methodology.

Decision Maker

As previously mentioned, the most powerful decision makers are the partners. The author, who is one of the partners, was the main designer of the methodology and facilitated the group workshops. He, together with the other partners, commissioned this thesis and as a result any one of them were able to override decisions at any stage in the process. This took place in the second workshop where one of the partners tried to override the author as a facilitator. Upon reflection, the author should have entered into a firm contract with his partners regarding this study. By making a contract with his fellow partners, who are the most powerful decision makers, the author could have eliminated any attempted overrides and promoted participation. The employees are the other decision makers involved, however they have far less influence than the partners. They too should have entered into a firm contract with the author which would have ensured motivation for completing the transformation process. By entering into a contract with all the participants of the group, the author could have ensured that each participant enjoyed an equal status in decision making which in turn would have reduced the coercive element in the process.

Components and Environment

The components or parts of the methodology as a transformation system are depicted in Figure 9.2. The parts, although interdependent, operate in a sequential manner and are discussed further on in the *Implementation* section. The environment, by definition, contains all those factors which may affect the transformation process and over which the decision makers have no control. An environmental problem which occurred was that due to the distance of the managers of the Pietersburg and Durban branches, it was not feasible to include them in the group workshops even though they were important stakeholders. This was less than ideal and their representation through the author and another employee contributed to the coercive element previously mentioned. Another problem which occurred was that due to the intimate 'hands-on' management of the business, it was not feasible to run the workshops during working hours. This resulted in the workshops being run after hours when the participants were tired and wanted to go home. This was a very real problem for the author as a facilitator and intensified the need for participants to see the process as relevant and beneficial to them.

Designer
To be strictly accurate, the designers of the methodology as a transformation system were the author, his supervisor and other authors of the reading material referenced for this thesis. The author synthesised key ideas from these authors and under the guidance of his supervisor, made use of his intimate knowledge of Mike's Sports to design a methodology which was appropriate for the situation. The biggest learning experience for the author was understanding the subtle group dynamics of each of the workshops in the methodology. Before commencing this thesis, the author spent two years (1996-1997) on the Operations Management Development Program (OMDP) where he acquired a firm grounding in organisational theory. However, the author had had no prior experience in designing methodologies which involved participative group work. On planning his intervention, the author initially had only a rough idea of what he was hoping to achieve with each workshop in the methodology. In hindsight, the complexity of what he was trying to achieve was far greater than he had imagined. The author's intentions for each stage of the workshop along with the actual outcomes are discussed in the next section.

Implementation
Chapter 8 was the hard, almost crude, statement of the outcomes of each stage of the methodology. In this part of the reflection, the softer more interpretive results of each stage are reflected upon. The author's intention in *Stage 1* was to improve his knowledge and understanding of the situation in order to better plan his intended solution process with the selected group of participants. In this respect, compiling a time view of the South African sports goods industry was of immense value in terms of understanding the challenges which Mike's Sports faced and confirmed the author's initial concerns that:
a) competition within the sports industry is increasing dramatically.
b) the environment in which Mike's Sports operates is changing rapidly.

Furthermore, this historical account gives insight into how the future of the South African sports goods industry may plausibly unfold. This is of vital importance in considering how to plan the future of Mike's Sports and motivates the need to constantly monitor and adapt it's environment. The time view of Mike's Sports as a business provides further insight into the current situation and supports the author's hypothesis that the roots of the concerns within Mike's Sports are partly the result of its recent, rapid growth.

The results of the interviews conducted with the employees, partners, suppliers and customers of Mike's Sports indicate that there is a need for improved organisation within the business. An overwhelming majority identified a lack of communication, control, feedback and in general a lack of planning within the business. The above results indicate that the 'Question' that was asked appears to be the appropriate one.

In *Stage 2*, the intention of the author was to develop a shared need for change amongst the participants of the group and for them to take ownership of the problem. If the participants did not feel that it was *their* problem, they would not be motivated to continue with the solution process. The positive mood and general enthusiasm during the workshop provides evidence that the participants saw a need for a solution process and that the designer's intention was fulfilled. Furthermore, the six main issues and concerns listed by the group are all organisation related and therefore provide additional evidence that the 'Question' asked was appropriate. The collaborative effort by the participants to share their perspectives and their willingness to understand each other provides less tangible evidence that the group was beginning to build a shared understanding of the problematique.

Stage 3 of the methodology was designed to develop a shared framework based on systems concepts and the organisational model amongst the participants of the group. The purpose of the shared framework was to guide inquiry into the existing organisation of Mike's Sports and also to provide a common language with which to talk about the business in the future. Developing a shared framework for inquiry involved a process of educating the participants with systems and organisational theory. This was met with some resistance which, upon reflection, can be attributed to the low level of formal education received by the participants. Aside from the author, only one participant had received tertiary education and many of the others had not even finished secondary school. Thus the relevance of learning the theory was questioned by the group and some impetus in the solution process was lost. Furthermore, the lack of a firm contract between the author and the participants of the group resulted in one of the partners trying to override the process. The author resolved to use his political power to coerce participants to continue with the process as planned and negate his fellow partner's attempts to redirect the proceedings. The beginnings of a shared framework became evident when members of the group began using key words from systems theory in their normal working environment. The use of theoretical terms learnt in the workshops by the participants to discuss and address problems at work with their fellow colleagues served to provide further evidence of a shared framework.

The intention in *Stage 4* was to generate an idealised organisational design of Mike's Sports based on the organisational model and the results of the diagnosis in *Stage 3*. The discussion of the design produced by the participants in this stage is left for Section 9.2.

Lastly the author's intention in *Stage 5* was to take the first step towards implementing the organisational design. For the purpose of the thesis, implementation of the design is not necessary and is beyond the scope of this dissertation. However, the author's intention was to implement the design as it is in the interests of himself and his fellow partners. Due to the history of many good ideas and plans not being translated into action, the author felt that this was a vital stage. From this perspective, perhaps the single biggest mistake made by the author in this stage was to not set dates and milestones for the implementation of the design by the various participants of the group.

9.2 - REFLECTING ON THE DESIGN OF MIKE'S SPORTS

The second part of the reflection concerns the output of the methodology as a transformation system which is the idealised design of Mike's Sports. Once again the seven categories of the reflection framework are applied.

Purpose
In Chapter 7 the organisational model used in the methodology was described. The model is designed to promote profitability and viability in a rapidly changing environment. Put another way, the model is a system for effective organisation which allows any business to adapt to changes in it's environment by closely monitoring both it's internal and external environments. By contrast, the purpose of the idealised design of Mike's Sports is to improve control, co-ordination and profitability of the business. The design is focused on internal monitoring of the business and is weak in terms of monitoring and adapting to changes in the external environment. Few explicit means for monitoring the external environment are given with the result that this function is left to informal, ad hoc methods. This is a concern because management could easily become preoccupied with the internal operation of the business whilst the very needs they are attempting to satisfy are changing.

Client
The true clients of the idealised design are the partners. Considerations such as quality of worklife and opportunities for the development of employees are not explicitly addressed even though lack of employee satisfaction was surfaced as a concern in the very first workshop. The design is also weak in that the communication of policies to the various units is not explicitly addressed which means that guidelines for operation and direction for the employees is neglected. This too was one of the concerns raised in the first workshop. Similarly, the design is weak in terms of serving the customers of the business by understanding their needs and measuring how well those needs are satisfied. The interpretation of promoting the effectiveness and efficiency of the business is in financial terms only and is strongly weighted in favour of the partners. In other words, the methodology was used to generate a design which was 'more desirable' and more appropriate for the partners, but not necessarily for the other clients.

Measure of Performance
The formal measures of performance used by the executive for feedback to the units, and which are used at unit level by the unit's managers for feedback to the employees, are largely financial. 'Hard' measures such as profitability, expenditure, cash flow, etc. form the thrust of the formal feedback loops. The design remains silent about measuring how well the organisation is doing in terms of preparing for the future by, for example, building good relationships with customers or by investing in research and development of new and better products and services. The design is also weak in terms of formally measuring and giving feedback on abstract issues like employee morale, customer satisfaction, scope for advancement of employees and suchlike. Non-financial measures of performance have been left to informal ad hoc means not because of their lack of importance, but rather because they are less tangible and not so easily measured. This is a dangerous condition and if not monitored carefully could deteriorate into a situation where long-term viability gets sacrificed for short-term profits.

Upon reflection, Stafford Beer's indices of performance[1] should have perhaps been incorporated into the design. Beer advises that three levels of achievement should be adopted namely actuality, capability and potentiality. Actuality refers to the current achievement using existing resources within existing constraints; capability is the possible achievement using existing resources within existing constraints; and potentiality is what could be achieved by developing resources and removing constraints. These levels are combined to give three indices of performance which can be used as comprehensive measures of performance in

[1] Creative Problem Solving, Robert L. Flood & Michael C. Jackson, John Wiley & sons, 1991, page 93.

relation to all types of resources within the organisation. Actuality is compared to capability to give a productivity index, capability is compared to potentiality to give a latency index, and the combination of the productivity and latency indices gives a performance index.

Decision Maker

The new design of the organisation dictates that the decision making be decentralised as much as possible and that the units be made highly autonomous. The Head Office and executive units serve to balance this autonomy of the units by focusing on integration of the whole and in this way promote viability. Thus the primary decision makers in the new design are the members of the executive and the unit managers. The decentralisation of decision making extends right down to the shop floor which means that every employee is regarded as a 'specialist' in some area and has the ability to make some form of discretionary decisions. This improves both the quality of work life for the employee whilst fostering innovation. However, with employees given the freedom to make discretionary decisions, it becomes increasingly important for management to tolerate mistakes, offer regular feedback and to ensure alignment.

Components and Environment

The components of the organisational design are the organisational units. Therefore the Head Office unit, Manufacturing division, Wholesale division, Mail Order division, Cape Town store, Durban store and Pietersburg stores are the primary elements of the design. These elements are fairly well defined in terms of the control and co-ordination of their operation, but are weak in terms of the Policy and Identity functions. Although the units are well defined, they are not truly enterprise units. They do not have the freedom to buy any service or product that they want from any source at whatever price they are willing to pay. Rather the purchasing function is performed centrally by Head Office with input from each unit. Similarly the units are not free to sell their products at whatever price they want. Head Office determines the selling prices of the products for each unit, but allows them to offer discounted prices if need be in order to match their competitors. The author did not find the category of Environment useful and therefore it is not considered.

Designer

The designers of the organisation of Mike's Sports are all the participants of the group as well as those authors who have contributed to the literature referenced on organisational design. It would be wrong to ignore the fact that people such as Stafford Beer, Russell Ackoff, Robert Flood, Proudenhad, Halaal, and Michael Jackson, to name but a few (see bibliography for a complete list of references), as well as the author's supervisor Johan Strümpfer, were a large part of the design process. The theory and principles which they have put in print form the very basis for our organisational design.

In order to ensure viability, the organisation will continually change and adapt according to it's environment. These changes will be directed by the executive who in effect become the future designers of the organisation of Mike's Sports. The shared framework which was built in *Stage 3* will ensure that there is a common language for discussing the business and a consistent way of allowing it to evolve. Thus the author has compiled a methodology which not only produced a design for a more appropriate organisation of Mike's Sports, but also generated a basis for the development of future organisational designs in response to changing conditions.

Implementation
Even though the implementation of the design is beyond the scope of this thesis, some practical considerations of implementing the design were made by the group of participants in Section 8.5. Upon reflection, the author has identified some additional pitfalls which need to be avoided. As was previously mentioned, the standard of education of all of the employees, with the exception of the accounts clerk and two of the partners at Mike's Sports, is very basic. This together with the past autocratic management style of the partners has an enormous impact on their decision making capabilities. The challenge of introducing a more liberated democratic style of management has to be met by some sort of training and education program for employees within the company. Better educated employees are required to fulfil the management positions at Mike's Sports. Implementing the more appropriate design described in this thesis will mean better financial performance of the company as a whole and because both the partners and employees have generated the design participatively, there is some sort of guarantee that both parties will benefit (even though the benefit will be weighted strongly in favour of the partners).

9.3 - CONCLUSION

On commencement of this thesis, the author was faced with a problematic situation, namely that of Mike's Sports. The perspective taken was that a problematic situation consists of a complex set of interdependent problems and furthermore, that problematic situations are partly the result of contrasting views that people have of the 'same situation'. As a result, a participative, systems based methodology was designed in order to improve the situation. As was discussed in Section 7.2, the basis for the approach used in this thesis consisted of three simple steps:

1. Develop a good understanding or model of the current situation.
2. Develop a good model of the target or 'more desirable' situation.
3. Design an intervention which will with time transform the current situation into the desired situation.

The first step was achieved in *Stages 1,2* and *3* where through a process of research and group inquiry, a much better understanding of Mike's Sports was gained. A shared framework, which was based on the organisational model and systems concepts, was developed in this first step and was used to guide the inquiry. This framework was and continues to be very useful for a number of reasons. Firstly, the root of the issues and concerns raised within the business were organisation related and therefore developing a shared framework which was based on sound organisational principles was appropriate. Secondly, the framework serves to align the thinking of the individual participants who are also the most important decision makers in the business. This ensures that problems which arise from the contrasting views that decision makers have of the same situation can now be circumvented. The problem of contrasting views in a family business like Mike's Sports is of particular importance because in the past each of the four partners continually made 'on the spot' decisions which were frequently at odds with what their fellow partners were trying to achieve. With the overlap of responsibility and authority which is characteristic of a family business, employees often found themselves receiving contradicting directives from different partners. With the partners and other members of management now operating from within the same framework, this will be avoided. Lastly, the shared framework has made the organisation of Mike's Sports a focal point for the participants. This is significant because with the business evolving and growing so rapidly, the shared framework provides a way of constantly directing these changes in a meaningful and useful way. The framework helps to reduce the variety which faces management and to form a well motivated and focused management team.

The second step was achieved in *Stage 4* where a model of the 'more desired' situation was built. As was previously discussed, the resultant idealised organisational design is strongly biased towards the partners and has the purpose of improving the control, co-ordination and profitability of the business. Long-term viability of Mike's Sports is jeopardised by the design not adequately prescribing external monitoring of the environment and not measuring how well the organisation is doing in terms of preparing for the future. However, the previous organisation of Mike's Sports did not formally prescribe monitoring of the external environment nor did it formally measure how well the organisation was doing in terms of preparing for the future. Therefore from this perspective the new design is a partial improvement over the previous one in that it improves some areas of the organisation whilst remaining silent about others. Upon reflection, even though the idealised design has faults, the shared framework based on the organisational model and systems concepts will be used as a meta design for the organisation and will continue to emphasise the importance of monitoring the external environment and the need to prepare for the future.

The definition used for a problem situation was 'a perceived discrepancy between an actual state and a desired state'. Thus having defined the actual and desired states, the final step took place in *Stage 5* which was to plan the implementation of the new design and transform the current organisation of Mike's Sports into the desired one. This concludes the authors plan to take meaningful action in order to address the problematic situation at Mike's Sports.

It is the view of the author that his intention to build a shared framework based on the organisational model and systems concepts was good. Furthermore, to use this framework to guide group inquiry and help generate a more appropriate organisational design for Mike's Sports was also a good idea. However, the task of trying to get the participants of the group to start operating from within the shared framework and to form a management team which was aligned in their thinking was far more complex than the author had imagined. This was the author's true task in order to improve the organisation of Mike's Sports. The fact that the author was the designer, client and facilitator of the methodology only served to confuse the process and in retrospect it is no surprise that the results of the methodology were biased towards the partners. To have been fair to all the clients of the business, a neutral party should have been chosen to design and facilitate the methodology. Thus the author admits that although he has a fair understanding and appreciation of systems and organisational theory, he has much to learn when it comes to working with people and facilitating group workshops.

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APPENDIX A - WORKSHOP 2

Introduction

This paper is a summary of the theoretical content of the second management workshop at Mike's Sports. The content of the paper will provide the reader with an introduction to some basic systems concepts which will prove to be invaluable as tools for thinking about the business. The purpose of the workshop is to develop a systemic paradigm within the group which will form the basis for generating a shared framework with which to view Mike's Sports.

The concept of a system

A system can be defined as a number of parts which interact in an organised manner for a specific purpose. Put another way, a system is a collection of elements which are related to each other and which make use of resources to transform a set of inputs into a set of outputs (the inputs and outputs may be concrete or abstract).

Figure A1 is a graphical representation of a system. It's boundary is represented by a large dotted ellipse and the elements or parts of the system by smaller solid ellipses lying within the boundary[1]. As mentioned before, these parts are related to each other in a purposeful way, and we represent the relationships and interactions between the parts by connecting lines.

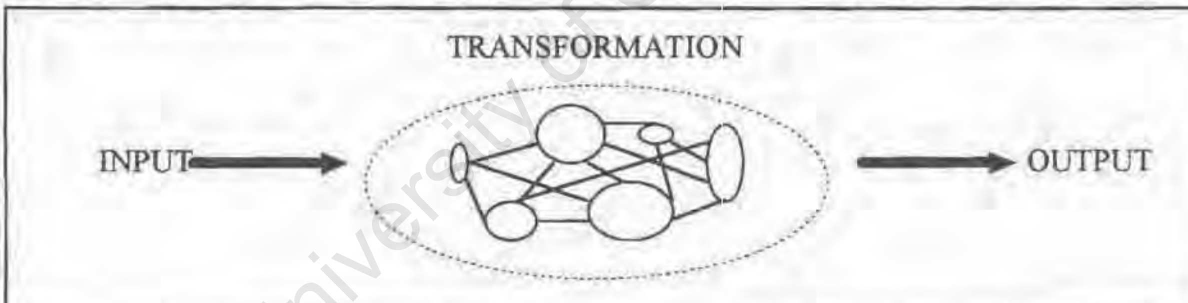

Figure A1: Graphical representation of a system

The area inside the dotted ellipse is defined as the internal environment whilst the area outside we term the external environment. A system is embedded in its external environment and by definition has no control over it. It is important to realise that a system is more than just a collection of parts. Some of the properties of systems include[2]:

- *A system is teleological i.e. it is goal seeking (this goal may be explicit or implicit) and has one or more defining functions.*
- *The way the behaviour or properties of each part of a system affect that system depends on the behaviour or properties of other parts of the system.*
- *When a part is removed from the system of which it is part of, that part loses its defining function.*
- *The performance of a system is not simply the sum of the performance of its parts taken separately, but the product of their interactions.*

[1] OMDP course lectures, Tom Ryan, University of Cape Town, 1996.
[2] The Democratic Organisation, Russell L. Ackoff, Oxford University Press, 1994, pages 18-24;
The Systems Approach and its Enemies, C. West Churchman, Basic Books, 1979, pages 80-92.

- *The concept of a system is recursive.*
- *Every system has a client who is served by the system.*

To illustrate some of these properties, consider the concept of an automobile as a system[1]. One of its defining functions is to transport people comfortably across land. Now the way in which the engine (a part of the system) affects the behaviour of the automobile depends on the behaviour of inter alia the gears and the clutch (also parts of the system). If, for example, the speed of the engine is increased, but at the same time a change to a lower gear is made, the automobile will not necessarily move faster. In other words one cannot look at the engine in isolation and predict how its behaviour will affect the behaviour of the automobile as a whole without considering other parts of the automobile. If any part of the automobile is removed, that part loses its defining function. An engine removed from the automobile moves nothing and a steering wheel removed from the car steers nothing. One of the implications of this is that the parts can be thought of as co-producing the function or behaviour of the whole, and therefore the performance of the system is not simply the sum of the performance of its parts taken separately.

Consider a simple example. A group of automobile mechanics is consulted and asked to make a list of which automobile has the best engine, which automobile the best gearbox, and so forth until a list of all the best parts needed to make up an automobile is generated. Now if the mechanics assemble the parts, the end result should be the best automobile - after all it will be made up from all the best parts available. Wrong! The fact is, they will probably not even get an automobile, never mind the best automobile, because the performance of an automobile is a direct result of how its parts interact, and not their individual performances. It is often the case that sub-optimisation of the parts is needed in order to optimise the performance of the whole.

The next concept, that of recursion, is simple yet deceptively useful in dealing with complex systems. The word recursive is used to describe things which refer to themselves or have a repetitive nature. Every system, therefore, can be considered as part of a containing system, and similarly, each part of a system can be considered as a sub-system itself. The beauty of this concept is that when one defines a system, one can proceed recursively to any level of detail that one wishes. In Figure A2, the system in focus is at recursion level two (R2). Its containing system is at recursion level one (R1), while its subsystems are at recursion level three (R3)[2].

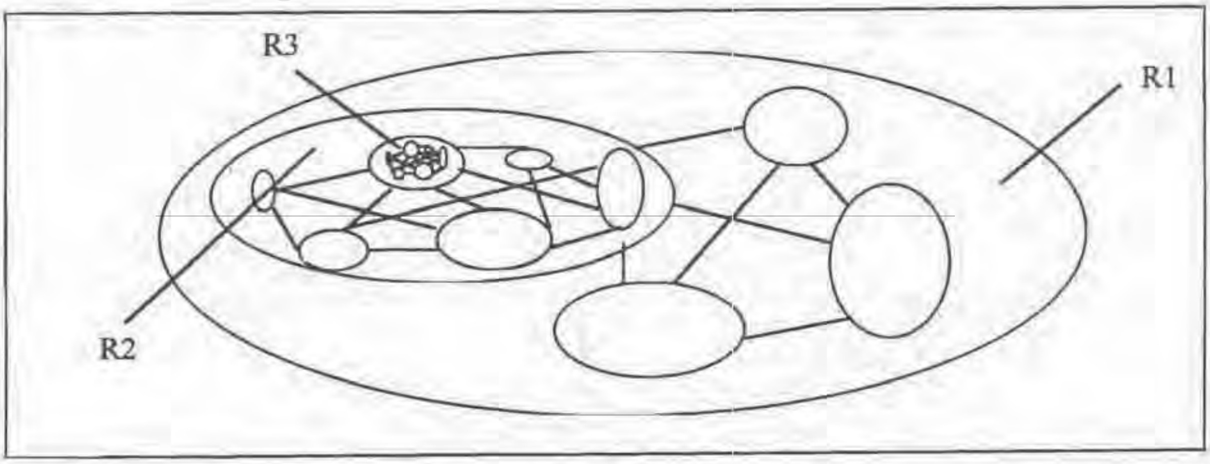

Figure A2: The recursive nature of systems

[1] The Democratic Organisation, Russell L. Ackoff, Oxford University Press, 1994, pages 18-24.
[2] Cybernetics: A New Management Tool, Barry Clemson, Abacus Press, 1984, pages 112-124.

In earlier paragraphs, it was said that a system must be teleological i.e. have purpose and be goal-seeking. In order to measure the system's performance with respect to its goals and purpose, certain variables are looked at. Depending on what the purpose of the system is, appropriate measures of performance are selected and therefore it is imperative that the purpose of the system is absolutely clear so that the correct variables are monitored. Closely related to the purpose and measures of performance is the client of the system. The client is defined as an entity whose interests are served by the system in a manner that the higher the measure of performance (MOP), the better the interests are served, and more generally the client is the standard of the MOP. Clients have the ability to affect the purpose of the system. Furthermore, different clients will have different expectations of the system and therefore different measures of performance[1].

Group exercise[2]:
Compile a systemic description of Mike's Sports. Below is a set of questions which can be used as guidelines for inquiry. Discuss and answer the questions as a group.

1. What type of 'business' are we in?
2. What is our purpose?
3. What elements of the environment can affect us and over which we have no control?
4. What are the inputs and outputs of our organisation? (Think of the organisation as a 'black box' which you feed with inputs from which it produces outputs).
5. Which operational elements are directly responsible for producing the outputs?
6. What resources are used?
7. Who are our clients?
8. What are the needs of our clients that we seek to satisfy through our service?
9. What role or function do we play within the community? What do we seek to provide the community with?
10. What expectations/measures of performance do our clients have of us?
11. What do we need to produce or provide to satisfy those expectations?
12. Who are the stakeholders who are influenced by the organisation?
13. What are their expectations?
14. What are the required outputs to satisfy those expectations?
15. What are our goals/objectives over the long-term and short-term?
16. Does the organisation answer the need it came into existence for?

[1] OMDP course lectures, Johan Strümpfer, University of Cape Town, 1996.
[2] Some of the questions adapted from lecture notes on organisation by Johan Strümpfer, University of Cape Town, 1996.

APPENDIX B - WORKSHOP 3

Introduction

This paper is a summary of the theoretical content of the third management workshop at Mike's Sports. Having developed an appreciation for the concept of systems, the reader will now be introduced to some systemic based theory on organisation. The knowledge gained in this workshop will serve to build a shared framework and generate a common 'language' with which members of the group can 'talk' about the business.

Criteria for effective organisation

Having developed a better understanding of what a system is, the group is going to look at organisations as systems and some of the necessary criteria to ensure their long-term viability within a changing environment. Begin by considering why any particular organisation exists at all. At the most basic level, one can say that an organisation is formed in order to fulfil needs in its environment. This can be taken one step further and it can be concluded that if the organisation does not fulfil the correct needs, it would eventually be rendered redundant and cease to exist. Thus, in order to ensure the survival of the organisation, it has to constantly monitor its environment to make sure that it is catering for the correct needs. Furthermore, it has to monitor, control and co-ordinate its internal environment to make sure that the transformation processes taking place produce the outputs which are needed to adequately fulfil those needs. In the preceding sentences, some of the elements needed for viability have been revealed. In the paragraphs to follow, a model for effective organisation is introduced which shows how these necessary elements interact to produce a viable system.

In the previous workshop, the concept of systems was discussed along with some of their associated properties. A system was defined as a number of parts which interact in an organised manner for a specific purpose. A system was also described as being recursive so that any system can be regarded as being comprised of sub-systems as well as being part of a larger system. The description of the organisational model begins by considering its basic building block, namely the highly autonomous organisational unit (which is itself a system). This unit is represented in Figure B1 by the shape of a dotted circle and can be thought of it as a 'black box' which takes inputs and transforms them into outputs through some sort of process within the unit.

Figure B1: The highly autonomous organisational unit - a building block

Taking one step further and looking within this unit, the transformation process is found to consist of a number of operations taking place which act to co-produce the output. These operations are represented as solid circles within the organisational unit with lines representing their interactions as in Figure B2[1]

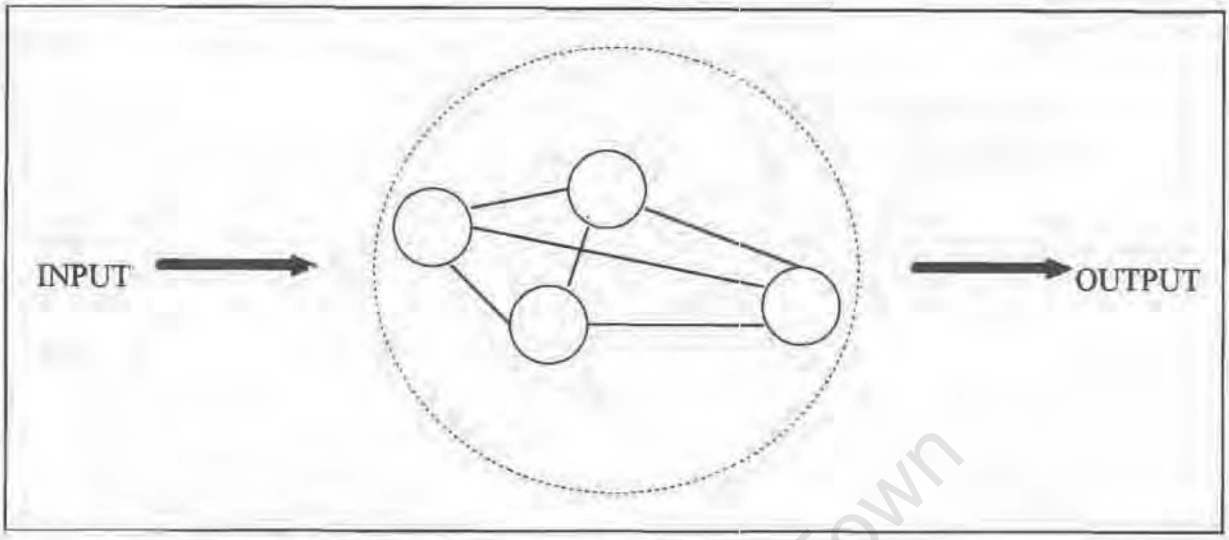

Figure B2: An organisational unit with interacting operations

Each operation is embedded in its own local environment so let's distinguish between the operation and its environment by representing the environment by an amoeba shape as in Figure B3. Notice that the diagram shows the operations environment as being partially internal and partially external to the organisational unit highlighting the fact that operations within the unit may affect and be affected by factors external to the unit.

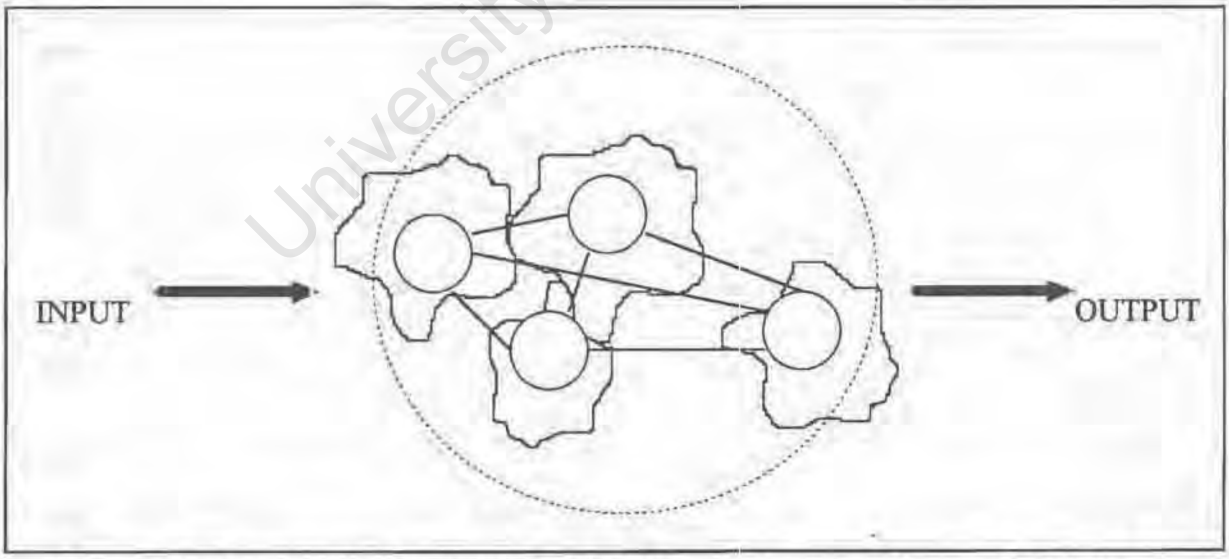

Figure B3: An organisational unit with its interacting operations and their local environments

Similarly, within each operation in the unit is its own local management which is represented by means of a square as in Figure B4.

[1] The diagrammatic representations of our organisational unit were adapted from Cybernetics: A New Management Tool, Barry Clemson, Abacus Press, 1984, pages 99-102.

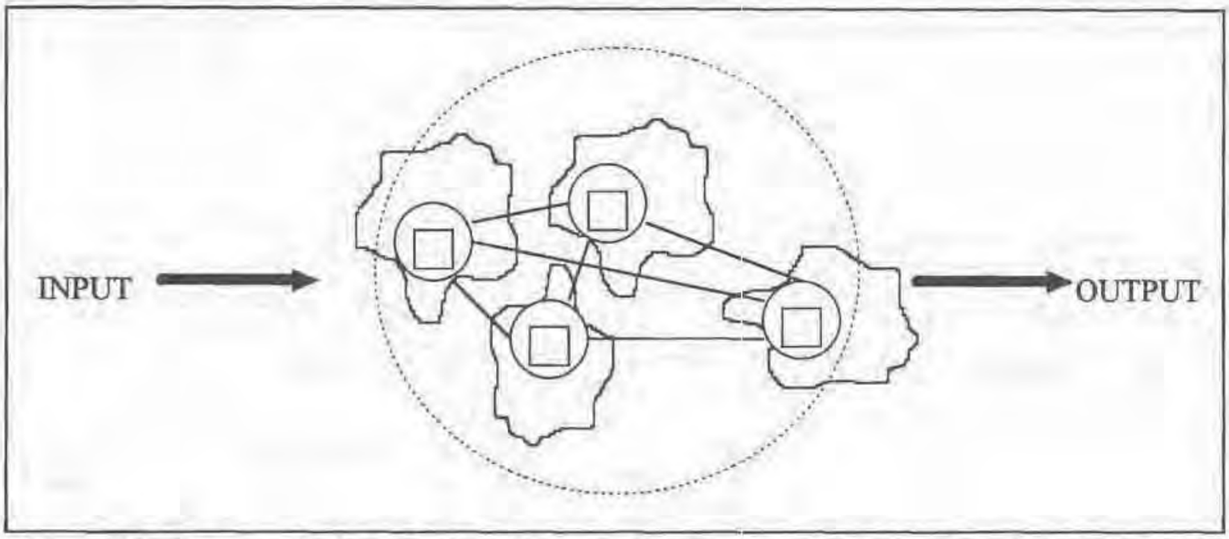

Figure B4: An organisational unit with operations, management and local environments

Lastly, a distinction is made between the management of an operation and the models that management holds of that operation. These models are partially explicit and partially implicit and as was discussed in the previous section of this chapter, form the basis for all action taken by management. These models are represented by means of a triangle and are shown embedded within the management function as in Figure B5.

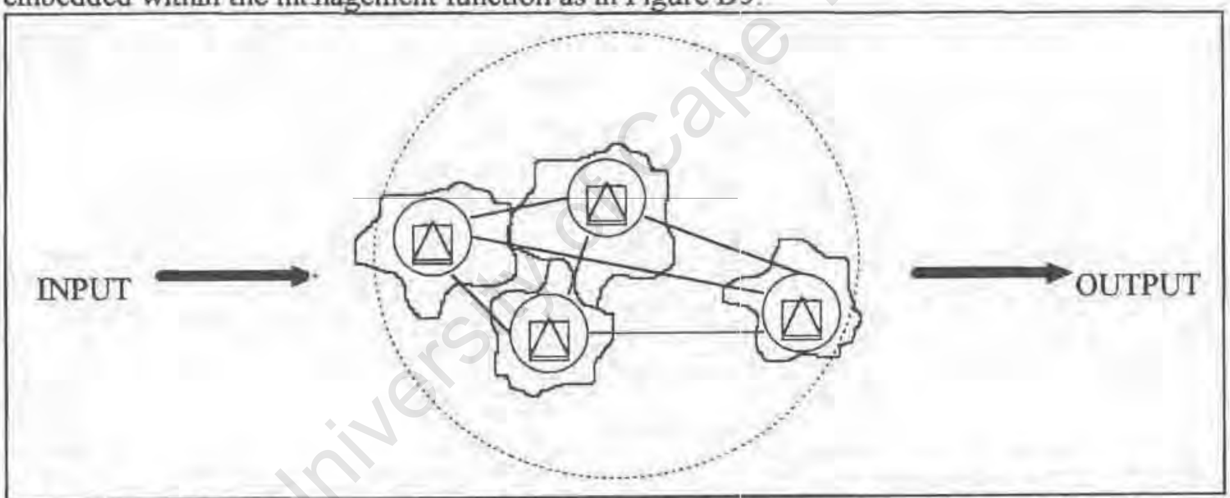

Figure B5: An organisational unit with operations, management, models and environments

For clarity of representation, an operation with its local environment, management and associated models, is pulled apart to show the major interactions as in Figure B6.

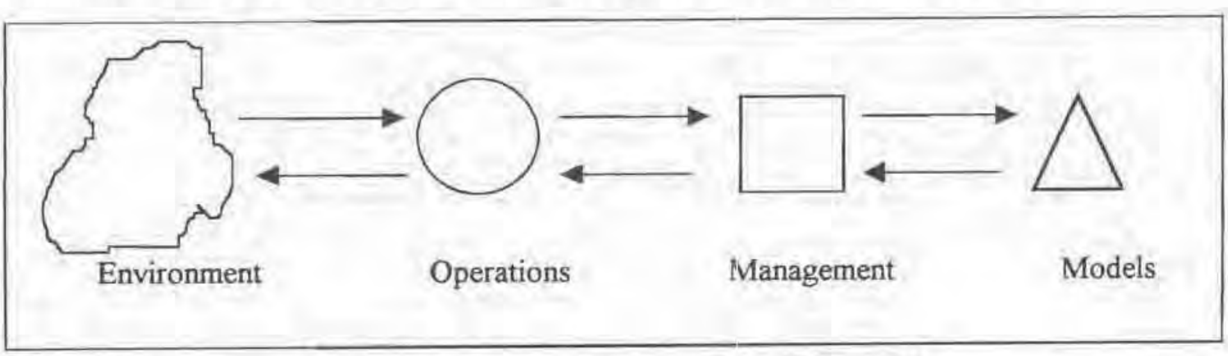

Figure B6: An operational unit pulled apart[1]

[1] Cybernetics: A New Management Tool, Barry Clemson, Abacus Press, 1984, Figure 5.2.

The arrows represent flow of information between the parts. This information could be about anything related to the unit and could include products, money or people for example.
As was shown in Figures B1 - B5, the operational unit depicted in Figure B6 is just one of many units all of which are interacting with each other. Inevitably their local environments will overlap, their operations will impact on each other and in any organisation the management units will certainly interact with each other. Furthermore, the interaction of the management units will affect the way managers think about their operations and as a result, interaction between the models is shown too. This is all depicted in Figure B7 below. Due to the limitations of two-dimensional drawings, only adjacent environments are shown as overlapping whereas in reality each environment should overlap with every other environment. The same applies to the operations, management units and models.

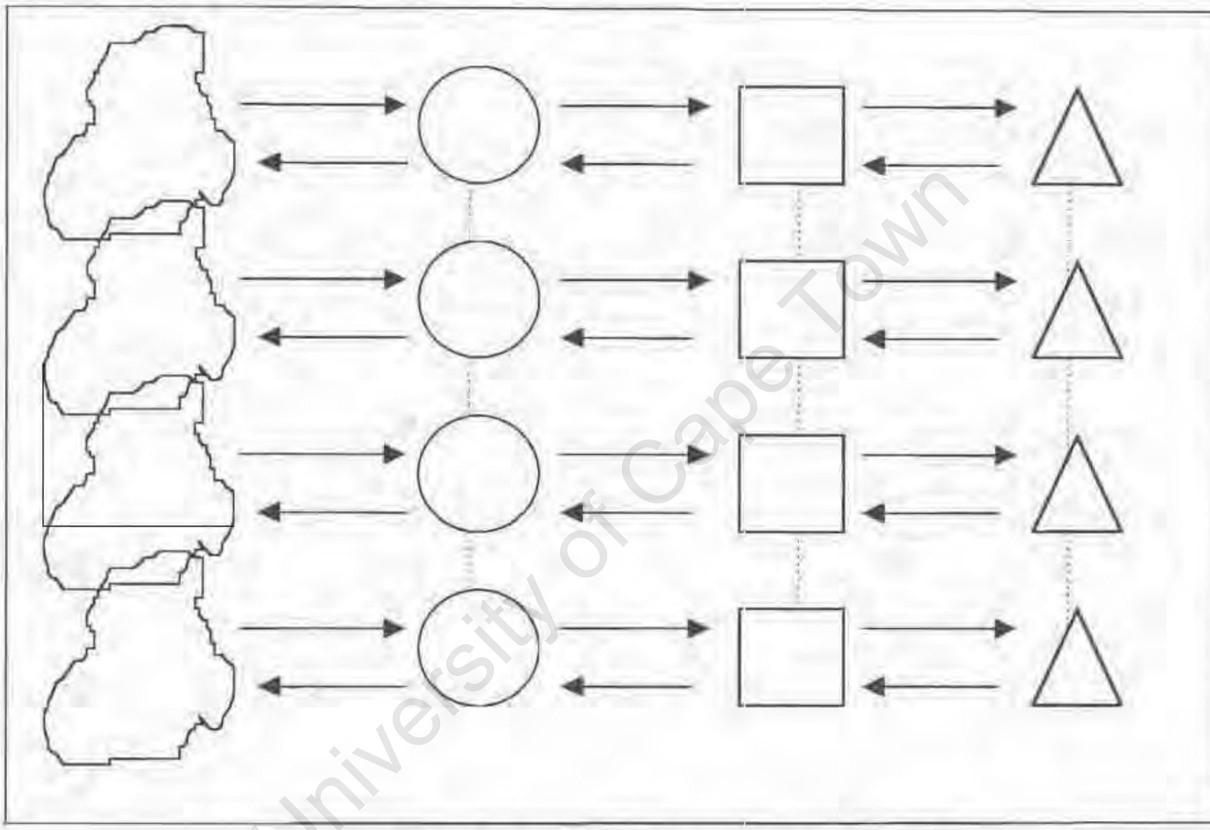

Figure B7: The interaction of operational units[1]

In addition to the individual management of its operations, a group of operational units needs some sort of holistic management. Even if a group of units are running perfectly smoothly, sooner or later something is going to happen which is going to cause a change in one of the units. This may not cause any concern immediately, but inevitably one of the units will make a change which posed a problem for one of the other units that was not resolvable without the intervention of a higher level, holistic management. The reason for this is that each unit is looking out for its own best interests only and, as was discussed in the previous workshop, sub-optimisation of the parts may be needed to optimise the whole.

Thus ther is a need for a higher level or meta-management for this group of units. This meta-management can be thought of as an arrangement of four functional elements which are inter-linked with the operational units by a set of control and information loops. The entire

[1] Cybernetics: A New Management Tool, Barry Clemson, Abacus Press 1984, Figure 5.4

arrangement provides the first set of necessary (but not sufficient) criteria for any system or organisation to be viable. The four elements are described in the next few paragraphs.

The Co-ordination Function
This function has the responsibility to co-ordinate the operational elements and promote synergy thus preventing the various operational elements from affecting each other adversely. As operational elements are themselves highly autonomous, they will have a tendency to act independently and try to optimise their performance in the context of their local environment - often at the expense of the overall system. Competing for limited resources will be a constant source of conflict and it is the Co-ordination Function's role to resolve such conflicts and promote a holistic management approach with interdependency amongst the operational elements. In times of rapid change, the importance of this function will increase and in order to co-ordinate effectively, it will have to operate much faster (or more often) than the relevant changes in the elements being co-ordinated. The Co-ordination Function promotes the free flow of information to and between operational elements and in Figure B8, it is shown as operating through the management models of each operation. This is because it affects the way local management of each operation takes place.

The Control Function
The Control Function is responsible for maintaining homeostasis within the organisation as a whole and is also known as the 'Internal Here and Now' function. It considers the operational elements as 'black boxes' and is only concerned that the outputs required of each element are produced and that the resources needed by each element are supplied. In essence, the Control Function ensures that the operational units function efficiently and also looks at its own organisation's outputs as a whole and ensures that the outputs required by the larger system are produced. The Control Function uses the command, audit and co-ordination channels to achieve its aims. The Co-ordination Function has already been discussed. The command channel is a two-way communication link between the meta-management and the various managements of the operational units. It is used to send directives to the operational units, enforce accountability and generally forms the feedback loop by providing targets and monitoring the outputs of each unit. The audit channel is an independent channel that will allow the Control Function to inter alia audit an operation and thus confirm that the information it receives from that unit reflects the true situation.

The Intelligence Function
Exploration of the environment and the future of the organisation is the job of this function, sometimes called the 'External and Future' function. Thus using the term 'intelligence' is used in a military sense to mean information gathering both in the organisations external environment as well as internal environment. The tasks of the Intelligence Function can be summed up as:

- Intelligence gathering and reporting to improve the organisation's explicit knowledge of its problematic environment thereby highlighting what needs to be achieved by the operations function in order for it to be relevant to its environment.
- Intelligence gathering and reporting to improve the organisation's explicit self knowledge thereby illuminating what the operations function is actually achieving.
- Providing an environment for planning the organisation's desired future by using the previous two points.

In essence, the Intelligence Function ensures that it identifies threats as well as opportunities in the organisation's environment and uses its self-knowledge to plan how best to address them.

The Identity Function

The task of this function is to form policies which act as guidelines for the functioning of the whole system. It provides and maintains the identity of the organisation, and has everything to do with defining and clarifying the organisation's basic purpose i.e. "This is the sort of outfit we are and when all else fails we make decisions in terms of this self image".

The Identity or Policy Function also serves to regulate the interaction between the Control (Internal Here and Now) function and the Intelligence Function (External and Future) providing a balance between stability and rate of change.

The above paragraphs are represented by Figure B8 below. The four elements of the meta-management system are shown on the top left and are grouped by a dotted square. The operational units are grouped by a dotted circle and together form the organisational unit. Now, if all the operational units are lumped together and considered as one large operation (the large dotted circle) interacting with its environment, and if the meta-management system is considered to be its local management (the large dotted square) with its own associated models, then we have arrived right back at the set of environment-operations-management-models as shown previously in Figure B6. This illustrates the recursive nature of the organisational model and as a result means that the whole system is replicated in the parts so that the same principles of viability may be used to model a sub-system or division within an organisation.

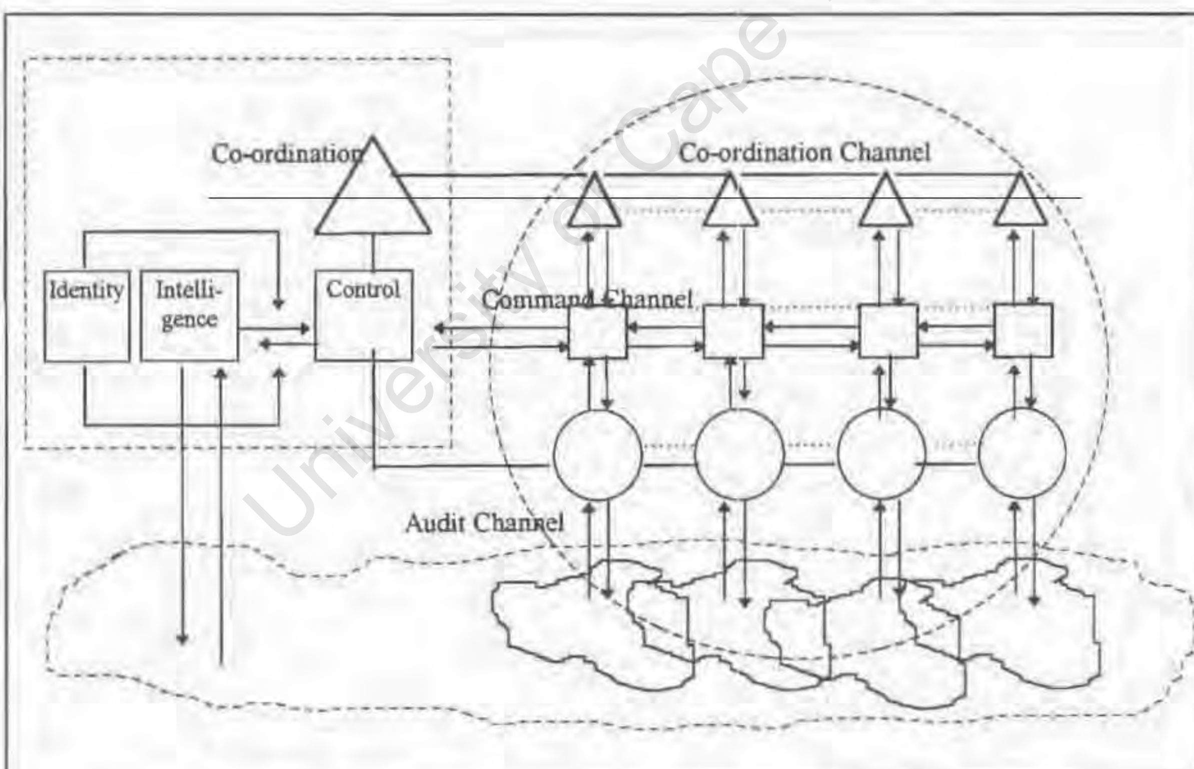

Figure B8: Necessary Elements for a Viable Organisation

Thus far an organisational model which offers criteria for viability and is equipped to cope with a complex, turbulent environment, has been described. In fact the model is a meta-structure designed to continually produce changes within itself in order for it to adapt and remain viable in a rapidly changing environment. A meta-structure is a recipe or design for structuring an organisation. In other words, it does not prescribe a specific structure for an organisation, but rather provides criteria for how one should structure an organisation. During turbulent times, one of the most common routes taken by organisations to help them cope with change is to restructure or reorganise themselves.

To organise is to divide labour and co-ordinate it in such a way as to obtain a desired output. According to Ackoff[1], there are only three ways to divide labour, namely by function, by products/services provided or by users supplied/served, and all reorganisations consist of changing the relative importance of the above criteria. A great deal of time and energy is consumed in the process of reorganising, and aside from being a costly affair, the process is very unsettling and frequently leads to decreased productivity. To cope with this, the model provides a design which eliminates the need to change basic structure by establishing organisational units based on the three ways of dividing labour at every level of the organisation. The three types of organisational units are defined as[2]:

- **Functional (input) units,** the outputs of which are principally consumed or used internally.
- **Product/service (output) units,** the outputs of which are principally consumed or used externally.
- **Market units,** which sell the outputs of any other unit in the organisation who wants to use their services. They represent the company to the market as well as the market to the company. Market units are usually defined by the groups of clients they serve.

If units of all three types are established at a particular level of an organisation, then as their relative importance changes, all that is required is a reallocation of the resources invested in them. Reorganisation at that level is not required. Units of any of the three types can be added or subtracted without requiring any change in structure. The three types of organisational units are drawn as circles along axes in Figure B9 below.

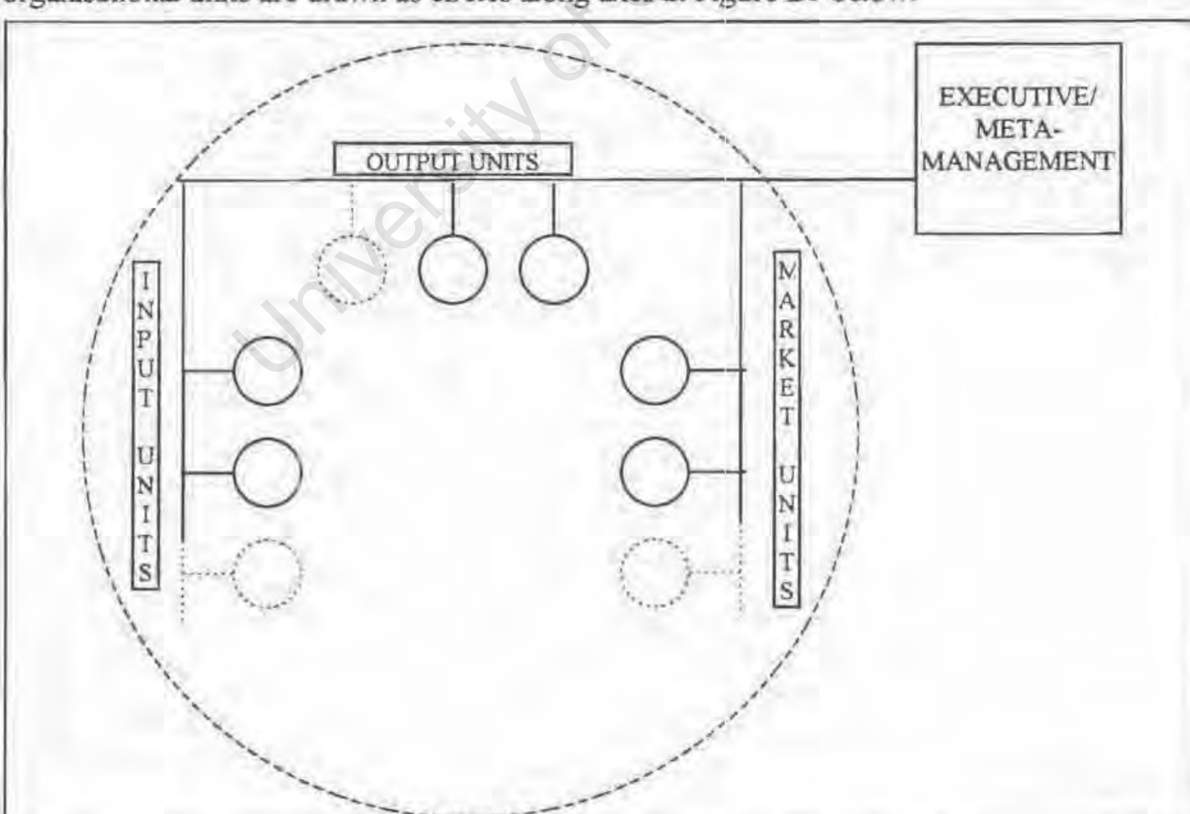

Figure B9: The three types of organisational units[3]

[1] The Democratic Organisation, Russel L. Ackoff, Oxford University Press, 1984, pages 168-170.
[2] The Democratic Corporation, Russell L. Ackoff, Oxford University Press, 1984, pages 168-170.
[3] Adapted from Figure 6.2, The Democratic Organisation, Russell L. Ackoff, Oxford University Press, 1984, page 173.

The dotted circles show how units can be added or subtracted. The large blue dotted circle surrounding the units represents an organisational unit at one level of recursion higher and will once again form part of a collection of units of all three types. Because the organisational model is recursive, looking at the internal structure of any of the three types of units, functional, product/service, and market units will once again be seen. In other words, every unit in the organisational model can be organised in the same way as the organisation as a whole. One important difference between the traditional organisational approach and the organisational design presented here, is that the former looks at structure in terms of people, whilst the latter looks at structure in terms of functional units. This means that the essential functional units for the business can first be defined and afterwards the relevant resources (money, people, equipment etc.) allocated to them. This approach is more flexible since employees entering or leaving the business will not upset the structure. Each unit as depicted in our organisational design is highly autonomous and serves or is served by other units in the organisation. Since the units are highly autonomous, the executive unit or meta-management system can concentrate on managing the interactions of the units and thus take a holistic approach.

In the description of the model thus far, the basic elements of the design have been discussed and a diagrammatic representation has been given thereof. The model has been shown to provide necessary criteria for viability as well as providing a scientific, rational plan for the way in which organisations should restructure themselves in response to changes in their environments. After all, the central idea behind the model is to provide some means of organisation to cope in an environments of increasing rate of change and complexity.
In the paragraphs to come, the mechanism which drives the learning, adaptation and change needed within every organisation is described. A mechanism which will not simply allow an organisation to make adaptive changes in order to survive, but also to drive innovation and creativity from within so that the organisation can take advantage of conditions in its environment to thrive and prosper. This mechanism or feature of the organisational model relies on three central principles[1].

- *The organisation is composed of internal enterprise units*. The organisational units, which are the building blocks of our organisation, should be regarded as 'internal' enterprises. All internal enterprises are accountable for their performance but gain autonomous control over their operations - just like any ordinary 'external' enterprise. Because of the recursive nature of the model, this concept can be taken right down to the grassroots level by decentralising enterprises into autonomous work teams.
- *Corporate executives manage the organisational infrastructure*. This relates back to the systems principle of managing the interactions of the parts. By having autonomous organisational units, corporate executives are able to concentrate on the design and regulation of the infrastructure of their 'organisational economy' rather than managing operations through the chain of command. They are responsible for developing common systems for accounting, communications, financial incentives, education, governing policies and the like.
- *Leadership fosters collaborative synergy*. The model is much more than a free market system and suggests that the organisation be like a community of fellow entrepreneurs that fosters collaborative synergy by encouraging joint ventures and alliances, the sharing of technology, solutions for common problems, and mutual support among both internal and external partners.

[1] Internal Markets, Halal, Pourdehnad & Geranmayeh, John Wiley & Sons, 1993, pages 6-7.

There are many desirable features of an organisation which is designed from organisational units operating in an internal market economy as a community of entrepreneurs. Units use their freedom to launch new products and services, institute new ideas, buy or sell for themselves, both internally and externally, which brings all the advantages of the self-organising, creative interplay which occurs in market driven economies into the organisation. As a result, powerful solutions to difficult problems emerge quickly and almost spontaneously. The internal market economy is a very useful concept because under turbulent conditions, free enterprise is the only economic philosophy which is able to produce an unending stream of adaptive change rapidly and efficiently.

The concept of internal markets requires that units within an organisation should be viewed as profit centres or autonomous business units where possible. Even the executive could operate as a profit centre and the only exceptions are units whose outputs cannot or should not be provided to any external user (usually for competitive reasons). Subject to as few constraints as possible (which will be in the interest of the whole), these units should have the freedom to[1]:

1. Buy any service or product they want from whatever source they want at whatever price they are willing to pay. Remember that products/services are not only evaluated in terms of cost, but also in terms of quality and time/delivery.
2. Sell their outputs to whomever they want at whatever price they want or are willing to accept.

This will allow units to source their requirements from outside sources and thus disallow internal units to have a monopoly. It will also allow units to sell their products and services to external customers in order to improve profitability. Not all units are expected to be profitable, but their profitability acts to provide a measure of their performance. For example, an unprofitable unit may be retained because of the prestige or recognition it brings to the company as a whole.

Some units may lack relevant information about other units and as a result may take action which is to their benefit but to the detriment of the organisation as a whole. Therefore higher level units must be able to intervene when lower level units fail to act in the interests of the whole of which they are part. For example, an executive unit may believe that a purchase made by a subordinate unit from a particular source is harmful to the organisation. In such a case, the executive can require the purchase to be made from a different source even if it means a higher price, but the executive must pay for the difference in price. This means that the buying unit will not have to pay more than it would have paid had it been free to buy from its original source and will motivate it to continue to search for better priced products/services. In addition the executive unit, which is also a profit centre, will have to bear the cost forcing it to explicitly consider the benefits as well as the costs of its intervention. Likewise, when an executive unit believes that a sale a subordinate unit wants to make is not in the interests of the organisation as a whole even if at a premium price, it can override that sale but once again must compensate the unit so that it will never have to sell its output at a price lower than it has negotiated. When an executive believes that a purchase or sale should never be made, it can establish restrictive rules or regulations to disallow this. In order to cover its operating costs, the executive unit imposes a 'tax' or administration fee on its subordinate units.
The systems view of the organisation that the model provides emphasises the importance of designing the interaction between the different components to ensure that the whole operates as a purposeful system rather than as an undirected aggregate of competing parts.

[1] Internal Markets, Halal, Pourdehmad & Geranmayeh, John Wiley & Sons, 1993, pages 18-20.

APPENDIX C - A BRIEF HISTORY OF WESTERN PHILOSOPHY

Epistemological problems have been addressed by many philosophers over a number of centuries. In contemporary Western philosophy, the seventeenth century was dominated by an essentially rationalistic approach whereby reason was thought to be the primary source of knowledge. This was challenged by philosophers in the eighteenth century who believed that we have absolutely nothing in the mind which we have not experienced through the senses. A view such as this is called empiricism and is derived from the Greek word 'empiria', meaning experience . The account begins with the rationalist Rene Descartes (1596-1650).

Descartes was in serious doubt as to the validity of the knowledge of his day and decided to question everything and begin afresh. His aim was to start from the ground up and build all his knowledge on an unshakeable base of 'truths'. Thus he began by, in principle, doubting everything.

> *I suppose, accordingly that all the things which I see are false (fictitious); I believe that none of those objects which my fallacious memory represents ever existed; I suppose that I possess no senses; I believe that body, figure, extension, motion, and place are merely fictions of my mind. What is there, then, that can be esteemed true? Perhaps this only, that there is absolutely nothing certain.*
> - Meditation II. Descartes' Meditations and Selections from the Principles of Philosophy, trans. John Veitch, pages 29-30.

At this point he was struck that one thing had to be true, and that was that he doubted. When he doubted, he had to be thinking, and because he was thinking, it had to be certain that he was a thinking being. This he encapsulated in his famous expression: '*Cogito, ergo sum*.' (I think, therefore I am). He went on to conclude the existence of a perfect entity and used this as his point of departure.

Descartes believed that the real world had certain characteristics which we could perceive with our reason. These characteristics were all quantitative or measurable e.g. length, breadth or depth, and were considered clear and distinct to reason. On the other hand, qualitative properties such as colour, smell, and taste which are linked to our perceptions, were not considered a true description of the real world. In other words, according to Descartes, the more self-evident a thing is to one's reason, the more certain it is that it exists.

The next two philosophers considered are the empiricists John Locke (1632-1714) and David Hume (1711-1776). John Locke held that at birth, the human mind is like a 'tabula rasa' or blank slate on which experiences of the outside world are recorded. When we see, hear, smell, taste and feel the world around us, 'simple ideas of sense' arise. These single ideas of sense are then worked on by thinking and reasoning to give rise to what Locke calls 'reflection'. With this reflection and the aid of memory, sensations are organised and classified into bodies of knowledge. For example, when one eats an apple, one experiences a whole series of simple sensations - the thing is green, its hard, it smells fresh and is quite juicy. After eating an apple a number of times, one will form a 'complex idea' of an apple. In a similar way concepts of oranges, chairs, trees etc. are built up to describe the world around us. Locke maintained that all the material for our knowledge of the world derives from sensory experience, and if any

particular body of knowledge cannot be traced back to a simple sensation, then it is false and must be rejected.
Hume took these ideas further and began by establishing that man has two different types of perception, namely 'impressions' and 'ideas'. By 'impressions' he meant the immediate sensation of external reality and 'ideas' were the recollection of such impressions. For example, if one burns oneself on a hot stove, one gets an immediate impression. Later, when one recollects that one burnt oneself, one is retrieving an idea stored in memory. The difference is that the impression is much stronger and livelier than the idea which by contrast is only a pale imitation of the experience. Furthermore, Hume, like Locke, said that both an impression and an idea can either be simple or complex. Sometimes, however, we form complex ideas for which there is no corresponding object in the physical world. For example, consider the winged horse Pegasus. We have each had an impression of wings and of horses, but yet when these are combined into a complex idea, we end up with something which does not exist in the real world. Our mind has done a good job of pasting two ideas, which are not in fact related, together. Hume went on to question the validity of the knowledge that we hold and said that we need to investigate the source of every idea to see whether it was compounded in a way that does not correspond to reality.

The next philosopher to be discussed is Immanuel Kant. Kant (1724 - 1804) was born in the Baltic city of Konigsberg and for the duration of his life seldom ventured beyond the city and never went outside of the province, East Prussia, Germany. He had a solid grounding in the philosophic tradition of the past, being familiar both with the rationalism of Descartes and Spinoza as well as the empiricism of the British philosophers Locke, Berkeley and Hume. Both groups of philosophers were concerned with the question of what one can know about the world but had different approaches. Remember, the rationalists believed that the mind has the power to know some truths that are logically prior to experience. To put it more simply, they believed that the basis for all human knowledge lay in the mind and that we interpret the world according to our reason. The empiricists, on the other hand, held the opposing view that all knowledge of the world comes from experience or through the senses.

Kant did not see these views as mutually exclusive and partly agreed with both groups. He thought that both 'sensing' and 'reason' came into play in our conception of the world. In his point of departure, Kant agrees with Hume and the empiricists in that all our knowledge comes from our sensations. He also, however, incorporates the ideas of the rationalists by concluding that in our reason there are factors which influence the way in which we perceive the world around us.

> *It is beyond a doubt that all our knowledge begins with experience. For by what should our faculties be roused to act, if not by objects that affect our senses, and thus partly of themselves produce impressions, partly, again, bring the understanding itself into movement, in order to compare these, to join or disjoin them, and in this manner work up such crude material of the intimations of sense into a cognition or recognition of objects which is named experience. So far as time is concerned, then, no cognition of ours precedes experience, and with experience all our knowledge begins. But, though all our knowledge begins with experience, it does not follow that therefore it all derives from experience. For it is just possible that experience is itself a compound. It is just possible, that is, that there is experience, besides what is due to the impression of sense, something (when merely acting because of impression); and in that case, it would take long practice, it may be, to enable us to distinguish the latter, and separate it from the former.*
> - Critique of Pure Reason, Introduction, Part 1, Immanuel Kant.

Kant continues by saying that such a component part of knowledge may be 'a priori' or prior to experience and thus not all of our knowledge is derived from experience. In other words, each of us has a framework, built on a set of apriori concepts or assumptions, which we use to interpret the world through our senses and generate the knowledge that we have. It follows, therefore, that one can only interpret experiences in terms of what one knows.

> *We shall understand by cognition's a priori, not such as are independent of this or that experience, but such as are totally independent of any experience. Opposed to these are empirical cognition's, or such as are only possible a posteriori, or from experience.*
> - Critique of Pure Reason, Immanuel Kant.

Kant was also concerned with the nature of our knowledge and argued that we can never know the real world. All the things which we perceive are simply phenomena of 'das Ding an sich' or the thing in itself. The actual thing remains forever unknown and there is no reason why it should resemble our perceptions in any way. In other words, for each of us the world is simply a series of phenomena which we experience. The things which cause these phenomena we cannot know. Instead, we have a framework in our minds which links these phenomena together so that we can interpret our experiences in a way which is meaningful to us.

The last philosopher to be considered is Georg Wilhelm Friedrich Hegel (1770 - 1831) who was born in Stuttgart, Germany[1]. Unlike his predecessors, Hegel did not believe in 'eternal truths' or a timeless reason, but rather a basis for human cognition that changed from one generation to the next. He believed that the thoughts of past tradition as well as the prevailing current state of affairs helped determine how we think. For example, not so many years ago it wasn't considered unreasonable to burn off large areas of forest in order to cultivate the land. By contrast it is considered extremely unreasonable today as we have a completely different basis for such judgements. Furthermore, according to Hegel, human thought is in a continual process of development which is 'dialectic' in nature[2]. By this he means that as soon as a particular thought is proposed, it will be met by another which is contradictory. The contradiction between the two thoughts causes tension which can be resolved by the proposal of a third thought which accommodates parts of both viewpoints whilst removing the contradiction. This is also known as a process of proposing a thesis or affirmation, which is then met by an antithesis or denial which results in a synthesis or integration. An illustrative example is when Descartes' rationalism (the thesis) was contradicted by Hume's empiricism (the antithesis), it resulted in Kant's synthesis where he agreed with parts of empiricism as well as parts of rationalism. Kant's synthesis now becomes the starting point of the whole dialectic process again and will serve as the thesis to be met by another antithesis.

[1] Living Issues in Philosophy, 7th edition, Titus/Smith/Nolan, D. Van Nostrand Company, 1979, page 223.
[2] Living Issues in Philosophy, 7th edition, Titus/Smith/Nolan, D. Van Nostrand Company, 1979, page 257.

APPENDIX D - THE KICK OFF MAGAZINE: CATALOGUE, READERSHIP AND DISTRIBUTION

- The magazine publishes a new issue every two weeks.
- Kick Off magazine currently has a readership of 984 000 per issue.
- The readership can be broken down as follows:

Race groups		Gender(%)		Age group(%)	
White:	3 000	Male:	89%	16-24	56%
Coloured:	24 000	Female:	11%	25-34	29%
Indian:	8 000			35-49	13%
Black:	949 000			50+	2%
Total:	**984 000**	**Total:**	**100%**	**Total:**	**100%**

Geographics(%)		Monthly Income(%)		Home Language	
W.Cape	8%	R10 000+	3%	Nguni (Zulu, Xhosa, Swazi)	- 49%
N.Cape	1%	R7-10 000	2%	Sotho (Tswana, Pedi, S.Sotho)	- 48%
E.Cape	9%	R4-7000	8%	Other	- 3%
O.F.S.	11%	R2-4000	14%		
K.Natal	19%	R1200-2000	20%		
Mpumalanga	5%	R900-1200	21%		
N.Province	18%	R600-900	17%		
Gauteng	19%	<R600	15%		
North West	10%				

APPENDIX E - THE MONEYSAVER MAGAZINE: CATALOGUE, READERSHIP AND DISTRIBUTION

- The magazine publishes a new issue every month

- Moneysaver magazine has a monthly circulation of 1.2 million copies and is mailed monthly to 'blue chip' account holders at Lewis Stores, Foschini, Markhams, Pages, American Swiss and Sterns (1400 retail stores in total).

- The readership can be broken down as follows:

Race groups(%)	
White:	25.1%
Coloured:	21.0%
Black:	53.9%
Total:	**100%**

Gender(%)	
Male:	43%
Female:	57%
Total:	**100%**

Age group(%)	
16-24	10.2%
25-34	30.4%
35-49	21.0%
50+	7.2%
Unknown	31.2%
Total:	**100%**

Geographics(%)	
W.Cape	16.2%
N.Cape	9.0%
E.Cape	12.7%
O.F.S.	12.4%
K.Natal	11.9%
N.Province	8.9%
Gauteng	15.0%
North West	6.0%
Mpumalanga	8.7%

Monthly Income(%)	
R6 000+	3.0%
R5000-6 000	2.0%
R4000-5000	3.5%
R3000-4000	7.1%
R2000-3000	15.6%
R1500-2000	16.2%
R1000-1500	23.4%
R500-1000	24.5%
<R500	4.7%

APPENDIX F - KEY CYBERNETIC LAWS AND PRINCIPLES

Below is a list of key cybernetic laws and principles which have been taken from 'Cybernetics: A New Management Tool' by Barry Clemson, Abacus Press, 1984.

1. SYSTEM HOLISM PRINCIPLE: A system has holistic properties possessed by none of its parts. Each of the system parts has properties not possessed by the system as a whole.
2. DARKNESS PRINCIPLE: No system can be known completely.
3. EIGHTY-TWENTY PRINCIPLE: In any large, complex system, eighty percent of the output will be produced by only twenty percent of the system.
4. COMPLEMENTARY LAW: Any two different perspectives (or models) about a system will reveal truths about that system which are neither entirely independent nor entirely compatible.
5. HIERARCHY PRINCIPLE: Complex natural phenomena are organised in hierarchies with each level made up of several integral systems.
6. GODEL'S INCOMPLETENESS THEOREM: All consistent axiomatic foundations of number theory include undecidable propositions.
7. ENTROPY: THE SECOND LAW OF THERMODYNAMICS: In any closed system, the differences in energy can only stay the same or decrease over time: or, in any closed system, the amount of order (or organisation) can never increase and must eventually decrease.
8. REDUNDANCY OF INFORMATION THEOREM: Errors in information transmission can be protected against (to any level of confidence required) by increasing the redundancy in the messages.
9. REDUNDANCY OF RESOURCES PRINCIPLE: Maintenance of stability under conditions of disturbance requires redundancy of critical resources.
10. REDUNDANCY OF POTENTIAL COMMAND PRINCIPLE: In any complex decision network, the potential to act effectively is conferred by an adequate concatenation of information.
11. RELAXATION TIME PRINCIPLE: System stability is possible only if the system's relaxation time is shorter than the mean time between disturbances.
12. CIRCULAR CAUSALITY PRINCIPLE ONE: Given positive feedback (i.e. a two part system which each stimulates any initial change in the other), radically different end states are possible from the same initial conditions.
13. CIRCULAR CAUSALITY PRINCIPLE TWO: Given negative feedback (i.e. a two part system in which each part tends to offset any change in the other), the equilibrial state is invariant over a wide range of initial conditions.
14. FEEDBACK LAW: The output of a complex system is dominated by the feedback and, within wide limits, the input is irrelevant. All outputs that are important to the system will have associated feedback loops.
15. HOMEOSTASIS PRINCIPLE: A system survives only so long as all essential variables are maintained within their physiological limits.
16. STEADY STATE PRINCIPLE: If a system is in a state of equilibrium (a steady state), then all sub-systems must be in equilibrium. If all sub-systems are in a state of equilibrium, then the system must be in a state of equilibrium.
17. REQUISITE VARIETY LAW: Given a system and some regulator of that system, the amount of regulation attainable is absolutely limited by the variety of the regulator.

    Most of the regulation of very complex systems is achieved through the interaction of the parts i.e. one part acts to regulate another.

18. CONANT-ASHBY THEOREM: Every good regulator of a system must be a model of that system.
19. SELF ORGANISING SYSTEMS PRINCIPLE: Complex systems organise themselves; the characteristic structural and behavioural patterns in a complex system are primarily a result of the interactions among the system parts.
20. BASINS OF STABILITY PRINCIPLE: Complex systems have basins of stability separated by thresholds of instability. A system 'parked' on a ridge will 'roll downhill'.
21. VIABILITY PRINCIPLE: Viability is a function of the balance maintained along two dimensions: 1) autonomy of sub-systems versus integration of the system as a whole, 2) stability versus adaptation.
22. RECURSIVE SYSTEM THEOREM: If a viable system contains a viable system, then the organisational structure must be recursive, or, in a recursive organisational structure, any viable system contains and is contained in a viable system.

APPENDIX G - A DESCRIPTION OF THE OPERATION OF THE INDIVIDUAL RETAIL OUTLETS

Cape Town retail store

The Cape Town branch operates out of a three-storey building situated on the main road in Woodstock and has remained at the same address since its establishment in 1949. This retail store operates during standard business hours from Monday through to Friday and is open half-days on Saturday. It is located on the ground floor which covers an area of about 600 square metres (the first and second floors are used by the manufacturing division, wholesale division and Mail Order) and operates as a destination store where soccer clubs, schools and individuals come to get their goods. Mike's Sports Cape Town has a staff complement of approximately fourteen, is the largest of the three retail stores and has the identity of a specialist soccer store also catering for casual clothing with a sports 'feel'.

As far as the operation of the store is concerned, the activities of the store are split amongst the staff in the following manner:
There are four full-time salesmen who are responsible for customer service and liaison, maintaining security in the store (a very real problem in the South African environment), maintaining the stock rooms and the merchandising of goods. There are another two members of staff who are responsible for the checking, receipting, coding, labelling and packing of all new stock that arrives at the store. They are also responsible for doing regular stocktakes in order to ensure that minimum levels of inventory are kept. Both the sales staff and the stock staff are overseen by the store manager. The office staff number four, two of which specialise in point of sale and have the job of invoicing out goods and receipting in cash and debtor payments. The Cape Town store has built up a large base of debtors through its many years of operation and offers a six month revolving credit facility to its customers. As a result the third member of the office staff is responsible for monitoring the debtors and following up on debtors who fall behind in their terms, whilst the fourth is responsible for the creditor accounts and expenses. The partners, along with some of the staff from the Cape Town store, are responsible for the Head Office function.

Durban retail store

The store is located on street level at 323 Pine Street in the central business district of Durban and has a floor area of 122 square metres with a 200 square metre basement which is used for storage. Mike's Sports Durban was opened in November 1996 and its operation is modelled on the Cape Town branch, but on a smaller scale. It operates as a destination, soccer specialist store where clubs and schools from around the province come to purchase their playing uniforms and equipment. Aside from the walk-in trade, members of staff will also regularly go out on the road to call on schools, clubs and other large organisations in order to try and procure new business. As with the Cape Town store, a holistic service is offered to its clients with the availability of custom designed kits and a full printing and numbering service.

The product selection and price structures of all three retail stores is almost identical (with small variations in relative stock levels according to local demand) and the internal design and merchandising is according to the same formula. In contrast to the Cape Town store, the Durban store is predominantly a cash store and 30 day accounts are only given to large

organisations who accompany their purchases with an official order. Thus debtors accounts are kept to a minimum resulting in less administration work. The store has a staff of four who share their duties in the following way:
One of the staff is responsible for all invoicing, receipting and general paperwork in the store. The other staff, one of which is the manager of the store, are responsible for customer service and liaison, maintaining stock levels, merchandising and maintaining security on the floor. The manager is responsible for key functions such as the daily banking, opening and closing the store, and maintaining the smooth operation of the store in general.

The pre-season product selection, bulk purchases and pricing structures for the store are all done from Cape Town after getting input from the branch manager. All that remains to be done with the stock is to receipt in, label and pack the goods that arrive, and occasionally to place 'fill in' orders on current product lines in order to maintain the required stock levels. In this regard, the store manager has a certain amount of autonomy and can determine his own stock purchases from the factory and other suppliers. Creditor accounts and expenses (aside from petty cash expenses) as was mentioned previously, are handled by Head Office in Cape Town.

Pietersburg retail store

The 133 square metre retail store is located at 103 Paul Kruger street in the central business district of Pietersburg and was opened in September 1997. Pietersburg was chosen as the next location for a store because according to a survey done, 27% of Kick Off magazines (the leading soccer magazine in South Africa) are sold in the Pietersburg area indicating a high level of interest in soccer as a sport. The position of the store is such that it has a high volume of passing trade and is in close proximity to public transport - specifically the bus and taxi ranks. The reason for this is that the soccer community is largely black and of the lower income groups, and make use of the buses and taxi's to travel into town.

The store has a staff complement of four and is modelled exactly on the Durban store in terms of operation and product selection. As with the store in Durban, all product selection, pre-season bulk purchases, and payment of creditors and expenses is done from the Head Office in Cape Town.

Mail Order retail division

The Mail Order operates from the 120 square metre premises located on the second floor of the Mike's Woodstock building in Cape Town and was established in 1994 as the successor to S.A. Sports Illustrated catalogue (the group's first attempt at a mail order business). It has the sole rights to advertise sporting goods in the Kick Off soccer magazine which has the largest readership in South Africa and currently distributes about 100 000 copies every two weeks (see Appendix D). The mail order catalogue is published every second issue in Kick Off magazine and also advertises its catalogue in most issues of the Moneysaver magazine (Appendix E) which is part of the Foschini/Lewis stores group and has a distribution of about 1 200 000 every month. The catalogue is a tremendous marketing tool for the group and is used to drive the stores by advertising them in the catalogue as official stockists of all the merchandise shown. Also, the name Kick Off is synonymous with soccer in South Africa and the group takes full advantage of this by associating itself with the name through the catalogue.

The Mail Order is a retail outlet which caters for the sporting needs of clients in the outlying areas of South Africa who do not have access to quality sports goods at affordable prices. It requires a minimum cash deposit to accompany orders and the goods are posted C.O.D. (cash on delivery) to the client. Thus it targets that portion of the soccer market which is not serviced by the stores and receives orders from all over South Africa as well as Namibia, Botswana, Lesotho, Swaziland and other neighbouring countries. The mail order catalogue has a core staff of two and makes use of a casual employee for packing and delivery parcels to the post office. Its entire product selection is within the same range of products as the stores. The Mail Order and Cape Town store work closely together in that they use their stockholding as a pooled resource. Sometimes the Mail Order will draw stock from the store in order to meet the demand through the catalogue and at other times the store will help sell stock from the Mail Order which is not selling through the catalogue.

The operation of the business is as follows. The manager of the Mail Order will give input to Head Office to determine what products will be advertised in the forthcoming catalogue (which are also made available in the stores). The products are selected to form a comprehensive range across the brand names after considering the following:

- New products available from the suppliers
- Availability of stock of products in the current range advertised
- Past sales of products in the catalogue

In practice, products are only advertised in two or three consecutive catalogues before being removed because customers like to see new products advertised and also because demand within the product groups is seasonal. For example, soccer uniforms and equipment are usually in peak demand from beginning of March to end of July during which time the majority of the catalogue will be dedicated to these products. Effort is made to keep interest in the catalogue by changing the layout of the products as well as offering different equivalent products each issue. From August to December more interest is shown in casual sports clothing and soccer replica items and the product selection of the catalogue changes correspondingly. January and February have proven to be a very quiet period and no catalogue is produced as a result of the high costs (orders are still received from previous catalogues during this time). After finalising the product range, purchase orders are placed with the suppliers to ensure that optimum stock levels are achieved for the expected demand from the new catalogue. The manager then arranges for samples of the goods to be photographed and then digitally scanned so that the catalogue can be designed on computer (the design work is usually completed three weeks before the magazine is released). The completed catalogue is then submitted to the company which publishes the magazine.

On a daily basis the manager will spend time with another member of staff answering queries (telephonically, by fax and by mail), capturing orders and processing payments received. In order to better interface with the clients of the business, these two staff are fluent in the major languages of South Africa namely English, Afrikaans, Zulu, Xhosa and Sotho. Twice a week they print a stock picking list which the casual employee will work from to pack goods on order. Once the goods have been packed and checked, they are invoiced to the customer, sealed (with the invoice) and delivered to the post office for weighing and dispatch.
The remaining duty for the staff occurs when new stock arrives from the suppliers. The goods are checked against the supplier invoice, receipted on to the computer, coded, labelled and packed into the stock room. Like the other retail branches, the manager of the Mail Order has the authority to place 'fill in' purchase orders to maintain the optimum inventory levels. The daily flow of work as described above is neatly summarised in Figure G1 overleaf.

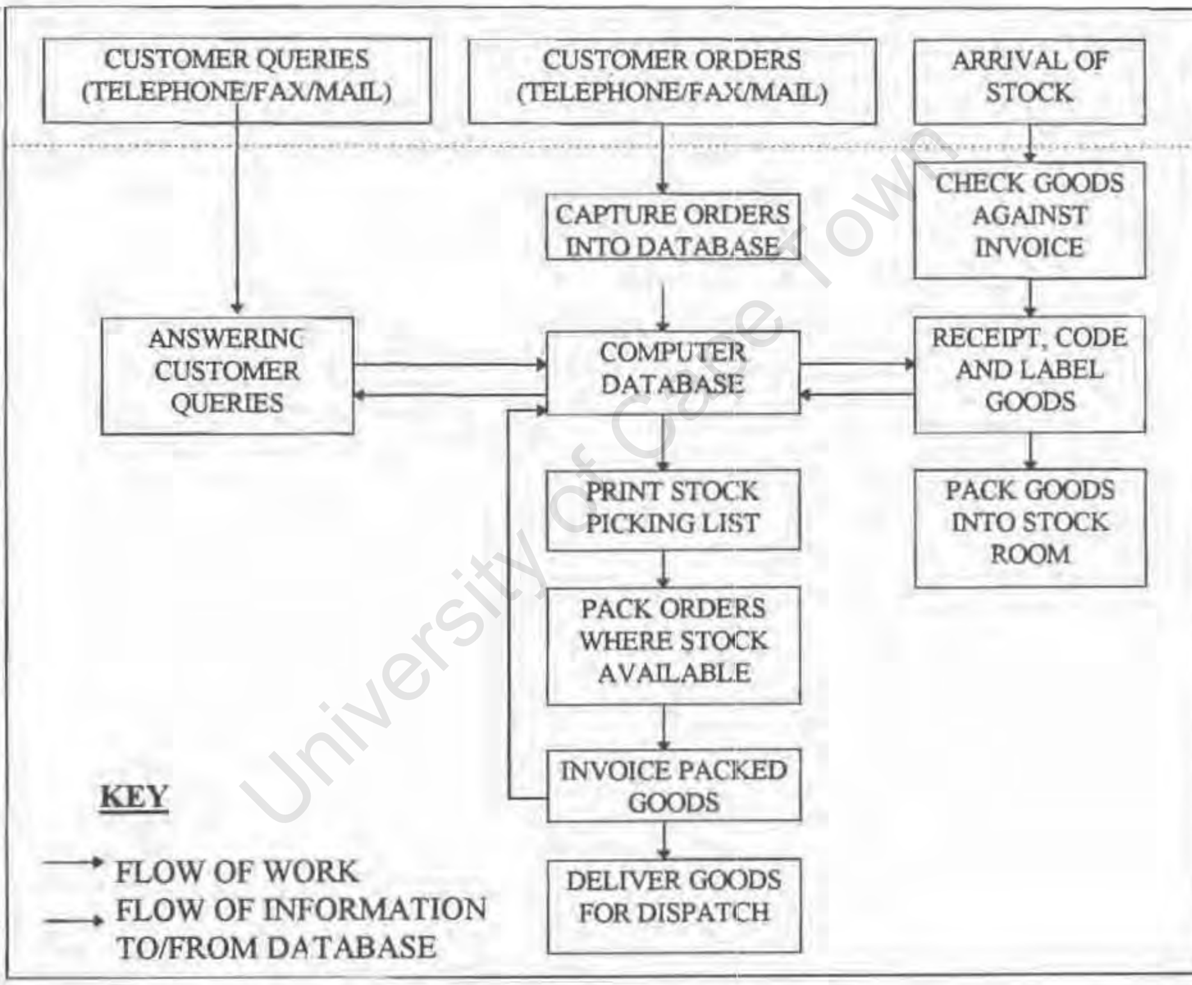

Figure G1: Daily flow of work in the Mail Order

APPENDIX H - THE LAYOUT OF THE CLOTHING FACTORY

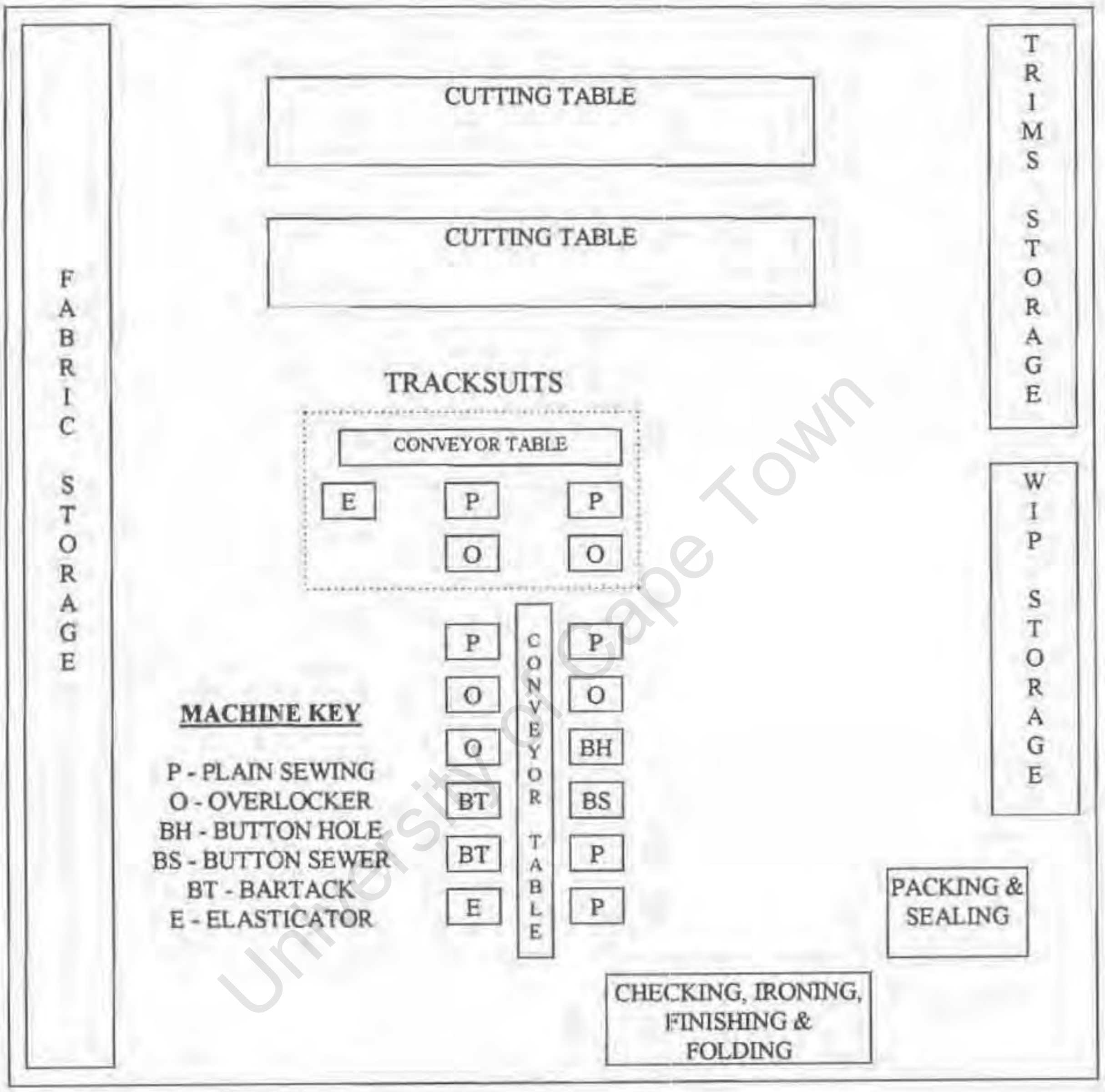

Figure H1: The layout of the clothing factory