

# **The Process to African Rainbow Minerals**

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## **INTRODUCTION**

Changing dusk to dawn!

Mining by its nature is a finite operation. The traumatic part of it is to take out the final remnants, which result in lower volumes and higher costs. It almost inevitably results in losses or very small margins. It is during this phase of the life cycle of a shaft when retrenchments occur, productivity levels are declining and morale in general is low.

Managing this type of situation requires a lot of management time, for a very small profit.

Anglogold, like any other South African Mining House has numerous of these types of operations, which hamper the capability to achieve the strategic objectives which are, amongst others, to be globally competitive and to produce gold at \$ 250 per ounce.

It is for these reasons that the Management of Anglogold and Vaal Reefs in particular decided to empower a new organisation to manage the business in a different structure and method. Careful consideration was given to the size of the operation, the services rendered to it and shafts to be included in this new organisation. The important consideration was that this new organisation had to be able to sustain high profit margins and be totally independent. The decision to sell shafts 1, 3, 4, 5, 6 and 7 at Vaal Reefs to ARM was made.

No. 2 Shaft was to be managed by African Rainbow Minerals and Exploration on a tribute basis. These constitute a mixture of low grade shafts with high productivity, and shafts with relative high grade, but difficult mining conditions and low productivity.

The most important aspect of the change the new organisation faced, was to take the people, who were working on these shafts, along in

the process as partners in this new organisation which still had to secure its future in the gold mining industry.

This had to be an organisation whereby:

- The people determine the profit margin;
- People are motivated, not controlled or exploited;
- People are optimally utilised and grow within the individuals' capacity;
- People are aligned and committed to a shared vision.

### **ROAD MAP TO SUCCESS**

A process model was developed to assist leadership in:

- Identifying the team's status or a milestone line;
- Determining what intervention teams had to undergo to move forward towards self directed work teams ® Small Business Units;
- Ensuring the dynamism is maintained. (Figure 1)

Key Concepts:

#### **The process towards developing authority and responsibility re decision-making**

The movement from a current, mainly autocratic leadership model to a small business unit type of organisation is a process with some clear, recognizable "states" through which the teams grow.

#### **Support**

The process will not be dynamic or sustainable if the organization's business rules / operating principles are not supportive of the interventions required to ensure movement. Therefore the systems, policies and procedures need to be tested against the operating principles.

Training, development and education of the human resource component is also considered a strong supportive facet of this process.

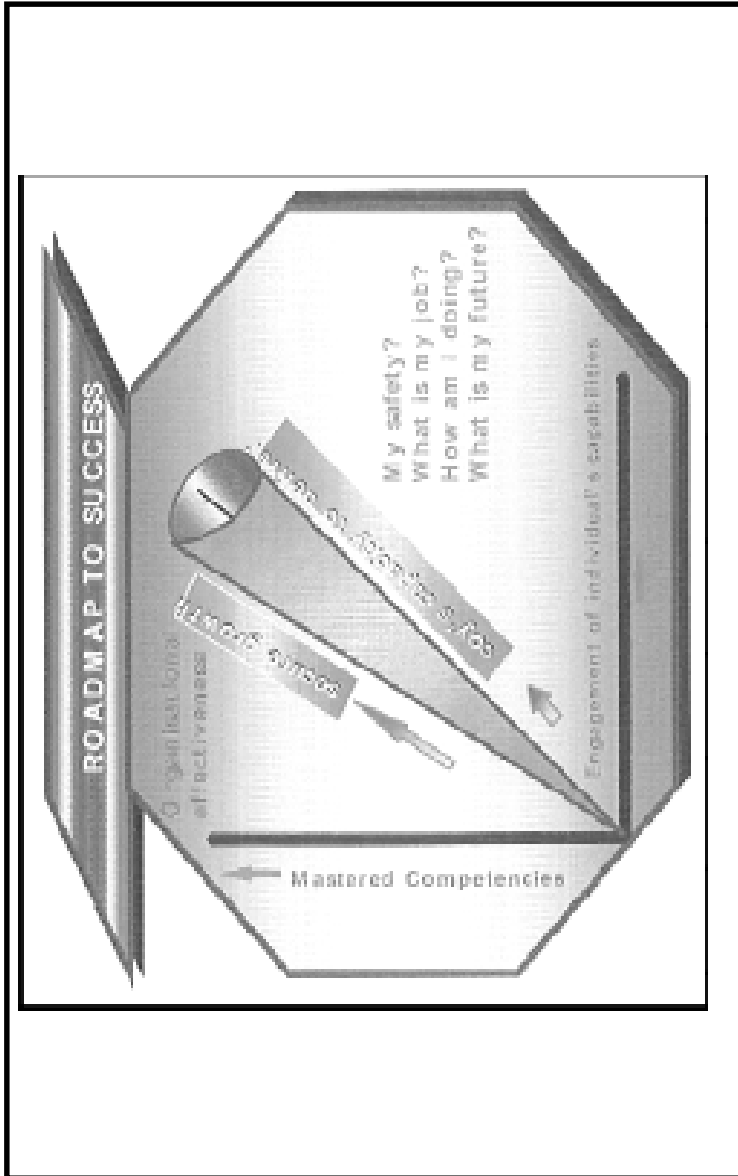


Figure 1

### **The competency growth process**

This process is the visible, behavioural "output" aspect, which has to be synchronized with the "input" process of 1. This aspect encompasses the "practices" - how we do things.

### **The relations process**

It is through this process where the climate becomes real. High willingness and acceptance or alienation could manifest itself in the Organization.

### **The leadership cone**

The boundaries are simply, expectations of employees or of clients, and the Company's capacity to deliver. Care should be taken not to lead outside these perimeters. (Figure 2)

### **The corkscrew dynamism**

Full synchronization is not always possible - when backward movement seems to manifest in a team, or in the Organization, the leadership has to fix either the policies, or procedures or enhance the systems or training aspects whilst keeping things going. (Figure 3)

Because of the vision, it becomes clearer how to move forward again and design new methods to lead the team.

## **ARM STRATEGIES**

The strategies adopted were arrived at during workshops with senior leaders, prepared to move to the new organisation, as well as through extensive lobbying with organised labour. These strategies can be divided into four main areas ie.

- Competitiveness through quality principles and application of technology;
- Focus on people development as on operating principle;
- Focus on intrinsic values;
- Creating a learning organisational culture.

## **The Leadership Cone**

- Employee or client expectations
- The Company's Capacity to deliver

Figure 2

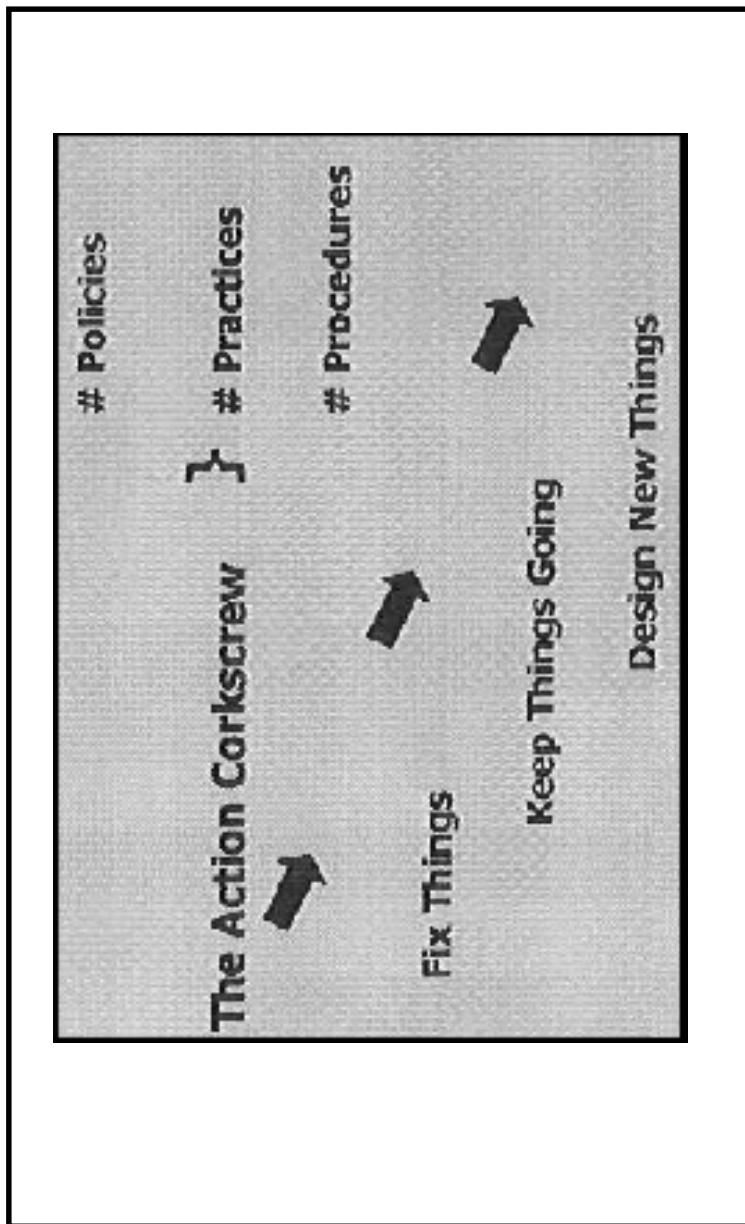


Figure 3

## **Competitiveness through Quality Principles and Application of Technology**

To mine the type of ore body available for the new organisation ARM's competitive edge is to do ore reserve cleaning better than anybody else.

To create this competitiveness the following needed to be focussed on:

- Ensure effective overhead management;
- Create a competitive culture;
- Develop benchmarking and the understanding thereof;
- Create a winning culture;
- Nurture champions;
- Encourage best practices.

Whilst focusing on the above the company needed to:

- Generate acceptable returns on investment;
- Ensure continued growth;
- Keep cost escalation to below 3 % below inflation;
- Maintain employment in an environment where ore reserves deplete rapidly, and
- To become the preferred employer.

## **People development as an operating principle**

It is of paramount importance for the leadership in ARM to create an organisation where people feel comfortable, focussed and secure.

The following were addressed as strategies:

- Create opportunities for multi-competencies;
- Develop entrepreneurial thinking amongst employees;
- Fostering participative decision making and problem solving;
- Create a culture of intrinsic rewarding;
- Adapt to a learning organisation culture.

As a strategy it was decided upfront that a competitive wage will

be paid. No sacrifice of wage should be the reason for profit. The following principles were set for incentives:

- Involvement during design of new alternatives;
- The schemes to be simple and understandable;
- No penalties;
- Win-win schemes;
- Measurable;
- Sound admin systems;
- Reward excellence.

### **Focus on intrinsic values**

An Intrinsic value is values that will motivate a person, from within, to be more productive, and to give his utmost best at work. In all the philosophies and actions the following is important for an individual.

- Self pride and self respect stimulation;
- Sense of belonging;
- Recognise willingness;
- Action awareness vs indicator awareness;
- Sense of achievement.

### **Develop a learning organisation culture**

James Motlatsi said during a productivity workshop at Vaal Reefs that "Productivity can only be achieved through education". It is therefore critical to develop a culture of learning where

- Every line leader is a trainer, coach and motivator;
- The focus is on English learning and employee development;
- Competency based training is given;
- All have ownership.

## **IMPLEMENTING THE STRATEGIES**

To put these strategies and principles into practice the following was done:



- The organisation had to function outside traditional decision making levels.
- The organisation was divided into business units. A typical business unit is a matrix management structure with only seven levels shown in Figure 4.1.
- Teams being developed to create self directed work teams.
- The Business Unit became a stand alone operation looking after its own finance, investments and bottom line profits. To assist the Business Unit a Business Engineering Unit was created with competencies such as Mineral Resource, Human Resources, Finance and Mine Planning. Its responsibility was facilitating best practices, exploring new business and to ensure sound ore resource management. (Figure 4)
- ARM focused on core business only ie. Stoping, Engineering and MRM, all other activities were to be out sourced.
- Build on a leading edge, in terms of a ore reserve clean up programme, to increase operations flexibility.
- No overtime allowed, only incentives are paid.
- Profit Sharing for Non Stoping Crews.
- Annualised wages.
- Personal contracts and flexible packages were negotiated with the individuals.
- Continuous operations on a 10 - 4 cycle, ensuring everybody has 2 off weekends of 4 days in every 4 weeks.
- Multi - competencies for the total workforce had to be planned.
- Everybody treated equally i.e. all are:
  - Monthly paid
  - Have 30 days paid leave a year

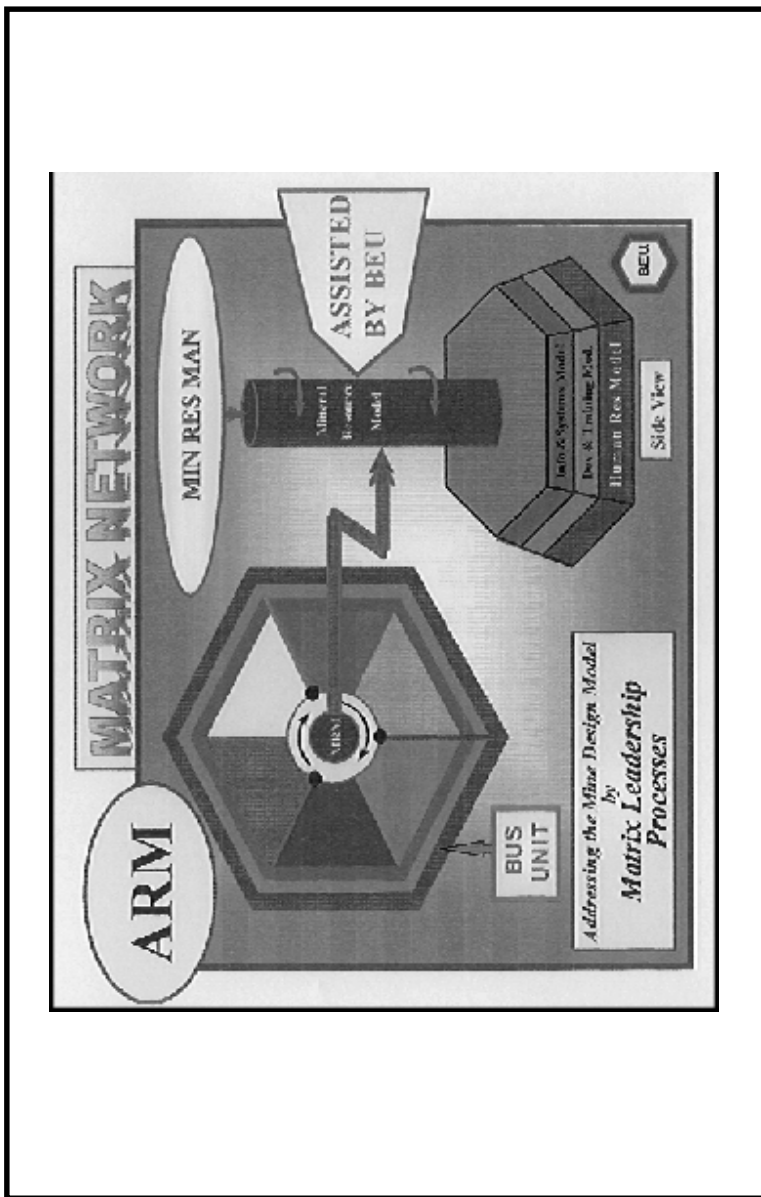


Figure 4

- Have 10 days unpaid leave
- Maximum accumulation of leave allowed is 60 days
- Have 12 Days sick leave per year which can accumulate to 36 days over three years, a refund of 50 % of 12 days after 3 years is allowed
- No negative talking allowed

## **COMPANY AND UNION RELATIONSHIPS**

Right from the birth of the company it was stressed, in all fora, by the leadership of the company that this business should be a partnership between the company and organised labour.

The ARM structure is divided into 3 bargaining units. (Figure 5)

- Leader level
- Supervisor / Specialist level
- Worker level

Two levels of negotiations exist. This model was developed on Vaal Reefs and has proved to be very successful. The first tier is the company level, where Organised Labour eg. the Branch Committee of the National Union of Mine Workers and a Company team will decide on policies and principles.

A second tier, on Business Unit Level, where eg. a Shaft Committee and a Business Unit Leader team implement these policies and principles on Business Unit level. (Figure 6)

To date recognition agreements are in place for the Leader level and Worker levels, and access agreements are in place for the Supervisor / Specialist level.

## **THE IMPLEMENTING PHASE**

Implementing these strategies was an enormous challenge. The total workforce on these shafts had to be briefed on the new company

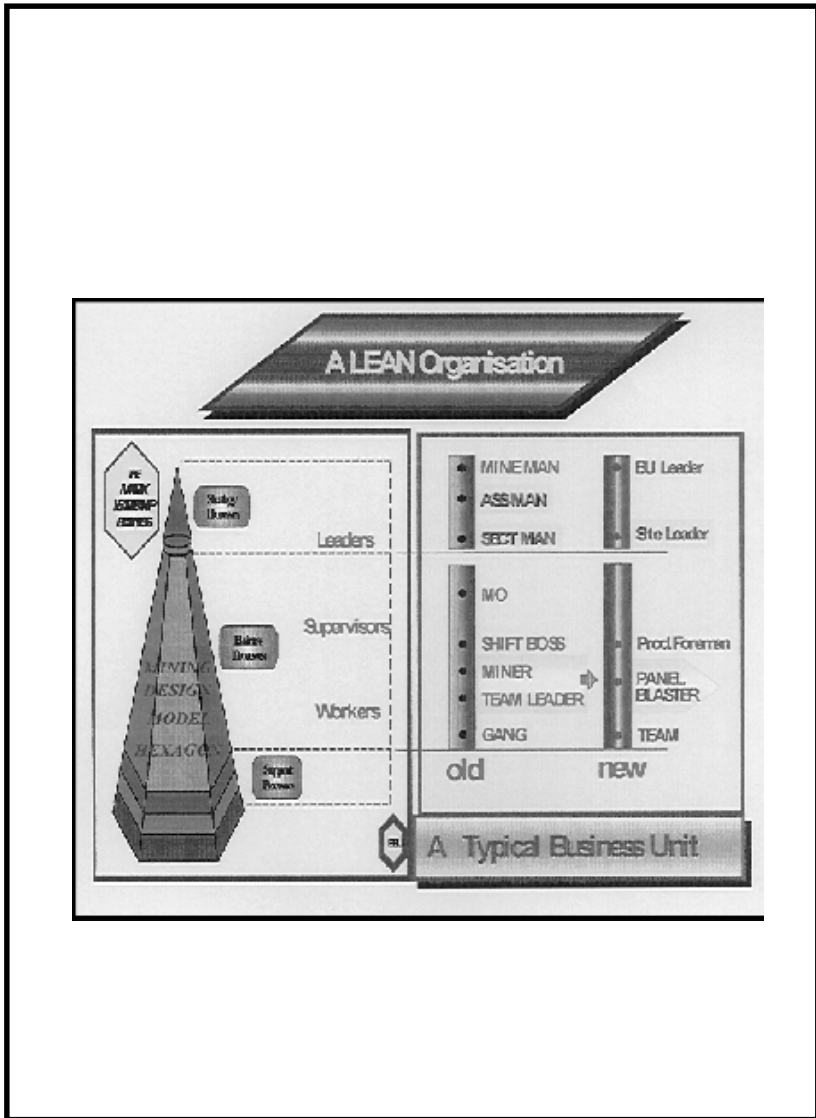


Figure 4.1

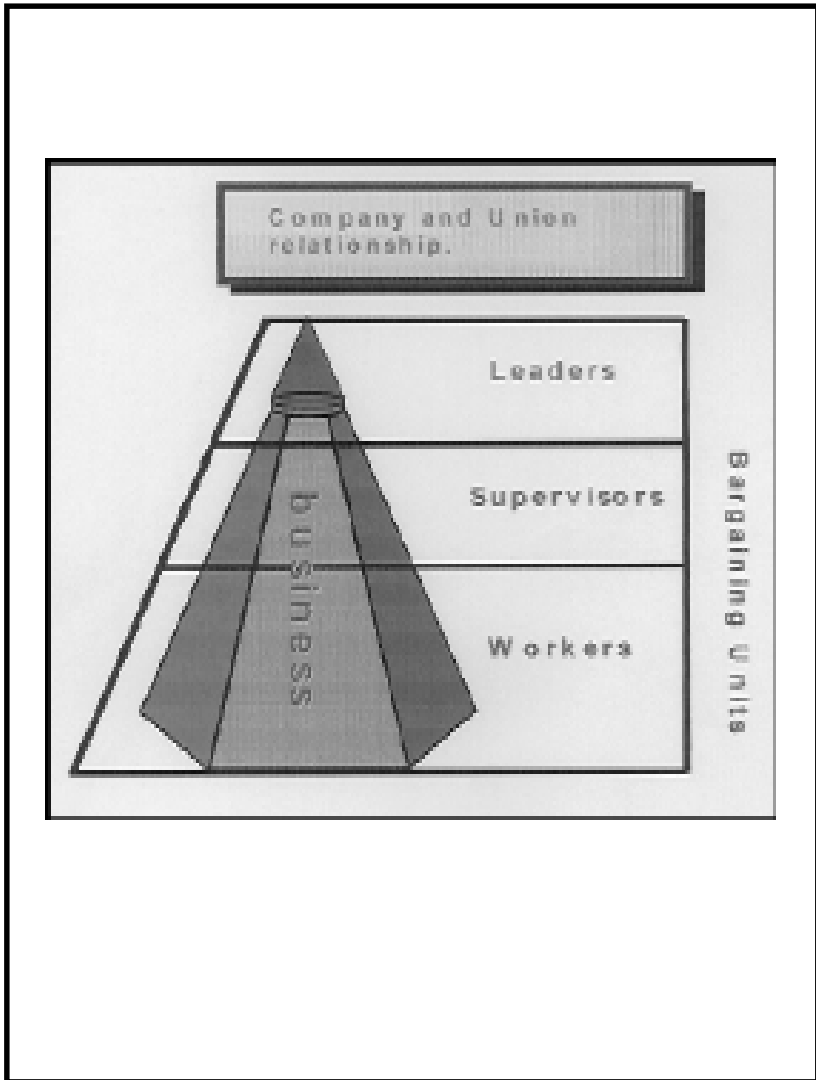


Figure 5

and informed that they would be retrenched. They were influenced to become part of the team, by explaining the benefits. This was no mean feat.

The decision by Vaal Reefs, that the full retrenchment packages would be paid to affected employees assisted to persuade the individuals to accept the challenge to join the new company.

Extensive briefing took place with the employees on individual basis and in groups. During these sessions mining plans were discussed with particular focus on the profitability of the shafts under a new leadership. In particular the following key questions in engaging human capability were addressed:

- What is my safety and security?
- What is my job?
- How am I doing?
- What is the future?

(See Figure 7)

Discussion with Organised Labour took place from National level to Shaft level. The need to change and the understanding of the philosophies of the new company, remuneration, and the security of their members were stressed during these discussions.

### **First wave actions**

On the retrenchment from Vaal Reefs a broad based company induction was given by the leaders to these employees. Supervisors were empowered to select and make job offers to their teams. Remuneration systems were developed to ensure correct payment. New incentive schemes such as a profit share scheme and an efficiency based production incentive was introduced.

All employees went through the same pre - employment medical.

New mining cycles were designed to satisfy the specific needs of a particular shaft and introduced. This was coupled to a continuous operation, a cycle where each individual will work for ten days and have four days off. This enables each individual to be off on

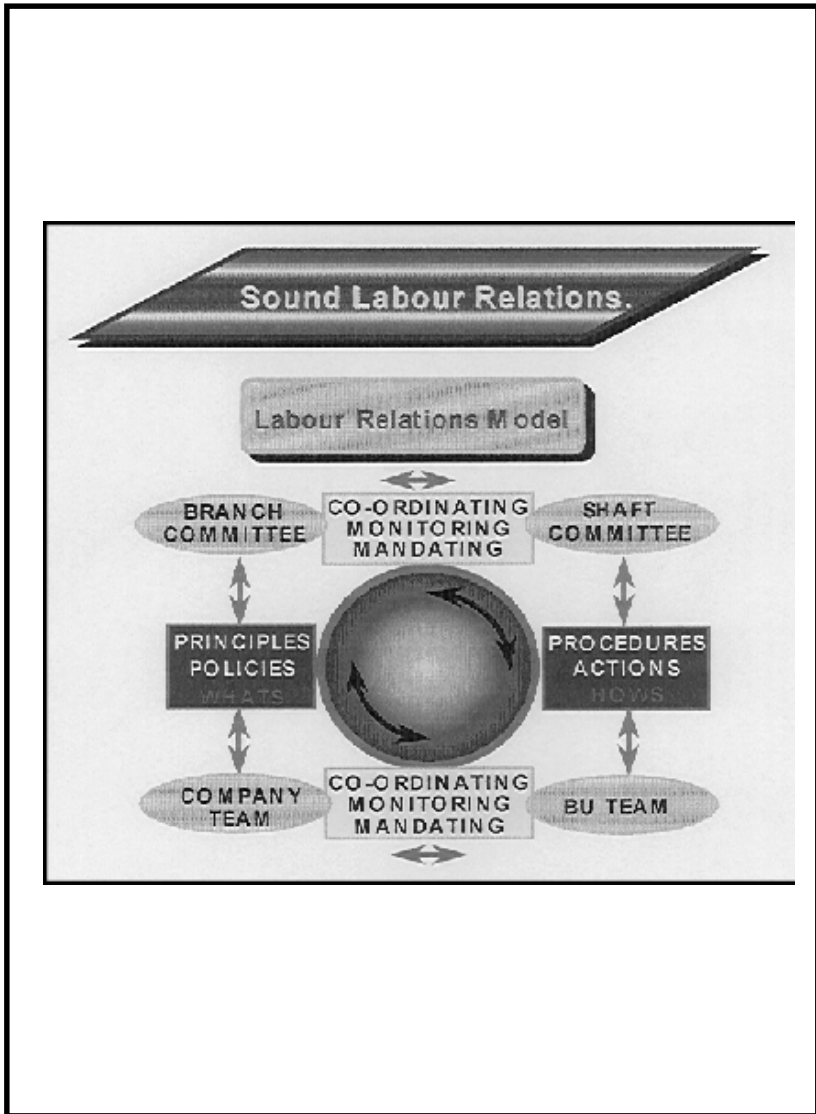


Figure 6

every second Sunday.

### **The second wave**

Stopping crew members were multi-skilled to ensure that sufficient skills are available on all days in the ten - four cycle. Multi skilling was also introduced in the specialists ranks where artisans were multi skilled to inspect and use but not to repair. Example: A fitter is trained to do rigging and to electrically couple and de-couple motors but can not splice ropes or repair motors electrically.

Learner mining training was introduced to train panel blasters. Full time ABE students were selected for training.

Mass meetings were held by the chairman and chief executive officer to align the employees with the management philosophies in ARM.

A shaft specific team room communication system, designed to foster downward and upward communication, was introduced.

### **The third wave**

The current climate and understanding of employees regarding the company was measured by an independent party. Shortfalls in the understanding were addressed by awareness training where all the employees were trained in the strategic objectives, business principles, conditions of employment and management philosophes.

All teams were trained to improve their ability, motivation and opportunity to achieve a daily safe quality blast.

Production foreman and panel blasters were trained to identify bottle necks in production and to develop a "mining game plan".

Their managerial skills were enhanced by training in:

- Conducting review session
- Conflict handling
- Motivating their crews
- Decision making skills.



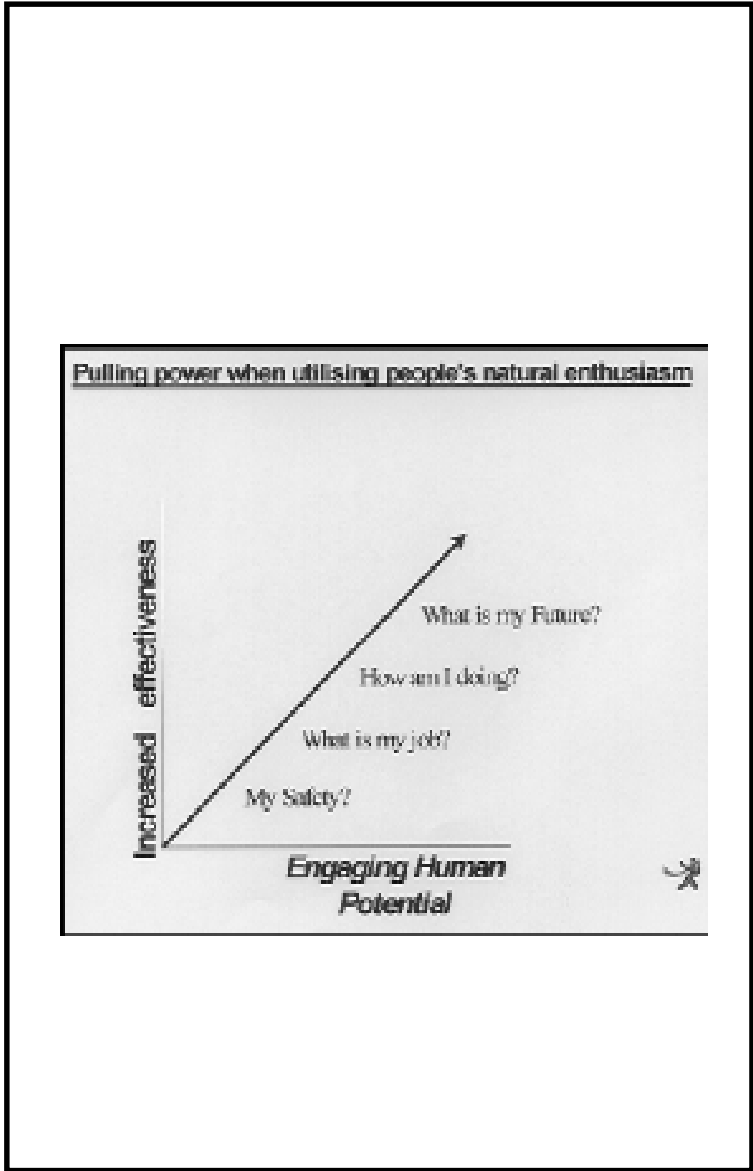


Figure 7

This enabled them to change from being a "boss" to a trainer, motivator and a coach.

### **INITIAL RESULTS**

It is still early days for African Rainbow Minerals, but the first three quarters results for 1998 is extremely encouraging:

- Rand per kilogram cost down by 34%,
- Operating cost down by 25%
- Centare per in stope employee up by 23%
- Grams per total employee costed by 21%

All operations are profitable despite an increase of 42% in development and a 34% increase in the opening up rate. Company overhauls are 76% lower than in 1997.

### **THE WAY FORWARD**

Many of the principles on the road to self directed work teams are not yet fully implemented and the enormous potential for improvement in both productivity and profits must still be realised.

New initiatives to further improve productivity will be started in early 1999. The focus will be in training of causes and effects through knowledge based training and the improvement of the business skills within a team.