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Workplace Reorganisation Course

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September 2002

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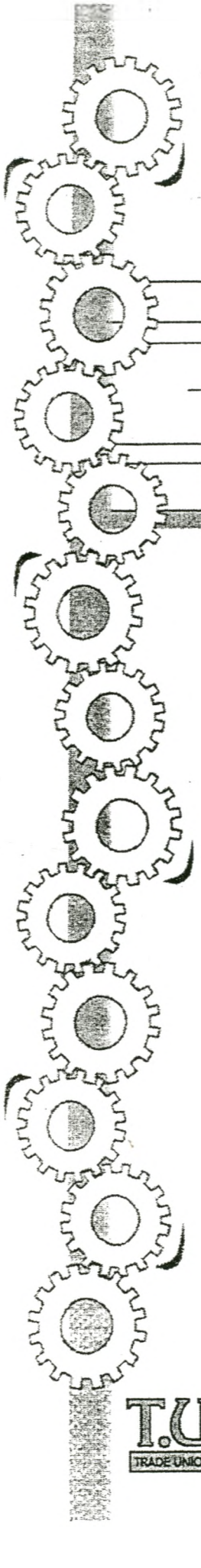

Workplace restructuring

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KwaZulu-Natal
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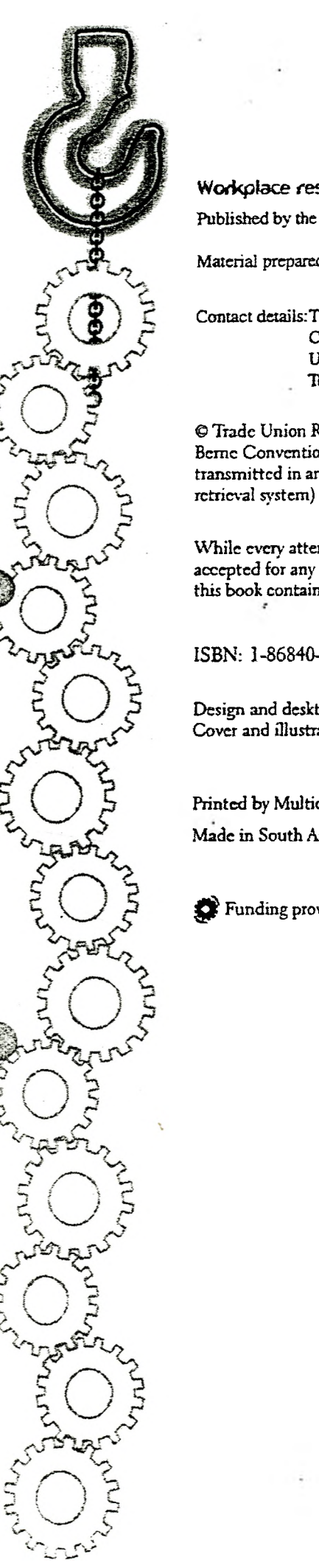

Workplace restructuring

Published by the Trade Union Research Project (TURP) and KwaZulu-Natal Benchmarking

Material prepared by Trade Union Research Project, KZN Benchmarking and Kabelo Reid

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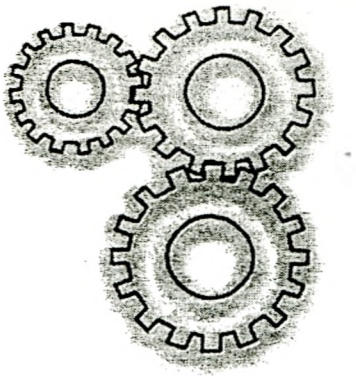

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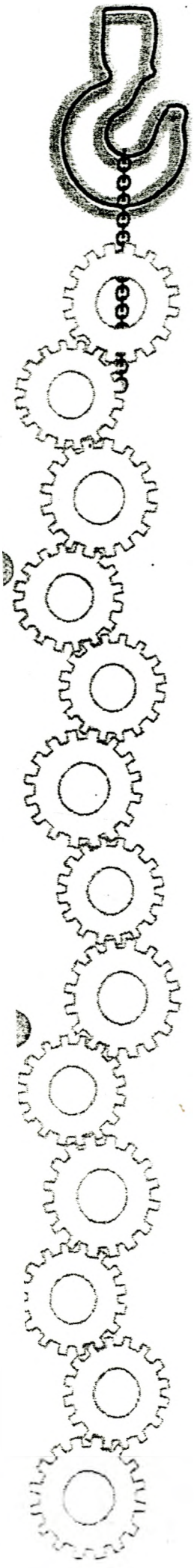


This booklet is about the way in which work is being restructured in the workplaces of South Africa. It is the first in a series of booklets dealing with various restructuring issues faced by workers. There are major changes being made in the workplace that impact on the lives of workers. For workers, restructuring brings changes to the way that their workplace is organised and this will impact on their working lives. These changes could hold threats or opportunities for workers.

This first book will explain what is meant by restructuring and look at why many companies in South Africa are considering restructuring. It will also look at some trade union strategies around restructuring and some suggestions for negotiating restructuring.

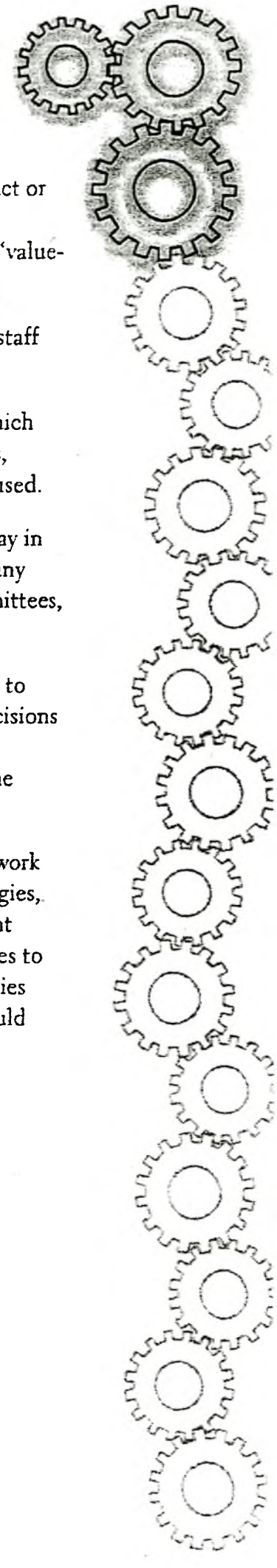
What is workplace restructuring?

Restructuring can take place at any level of an economy. For example, South Africa's economy is still being restructured from an inward-looking Apartheid based economy to one that is more focussed on the international economy. Restructuring may also take place in a region, or an industry. This booklet, however, is going to deal with the issues around restructuring at the level of the workplace.

When restructuring happens in the workplace it involves a change in 'work organisation'. The easiest way of understanding 'work organisation' is to think of it as *the way work is set up or organised.*

Five factors influence the way work is organised:

The way the workplace is laid out: where machines are placed, where stores are kept, where administration is located.



The flow of the product or service within the workplace: how the actual product or service moves through the organisation and the type of relationship the organisation has with suppliers and customers (this is sometimes called the 'value-chain' relation).

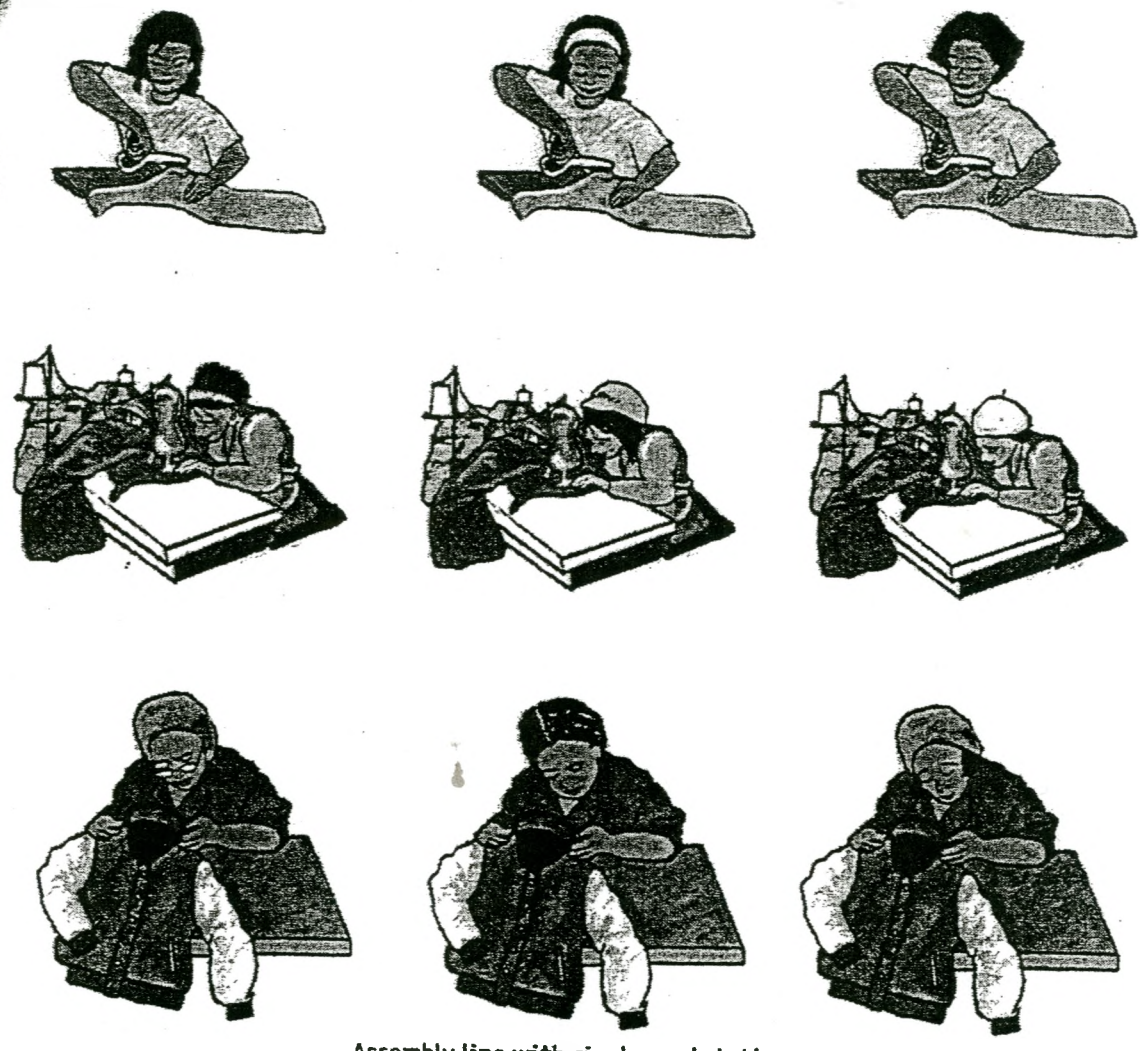
The employee, or human resources, needs of the workplace: what workers and staff the organisation needs, their skills, and how they are graded.

The planning of production and the distribution of work: this is the way in which work is divided amongst different sections of the plant and amongst workers, whether or not work is outsourced and what machinery and technology are used.

The control and supervision of work: the way the plant is managed and the way in which supervision takes place. This would include whether or not there are any worker participation forums such as quality control circles, suggestion committees, transformation committees or workplace forums.

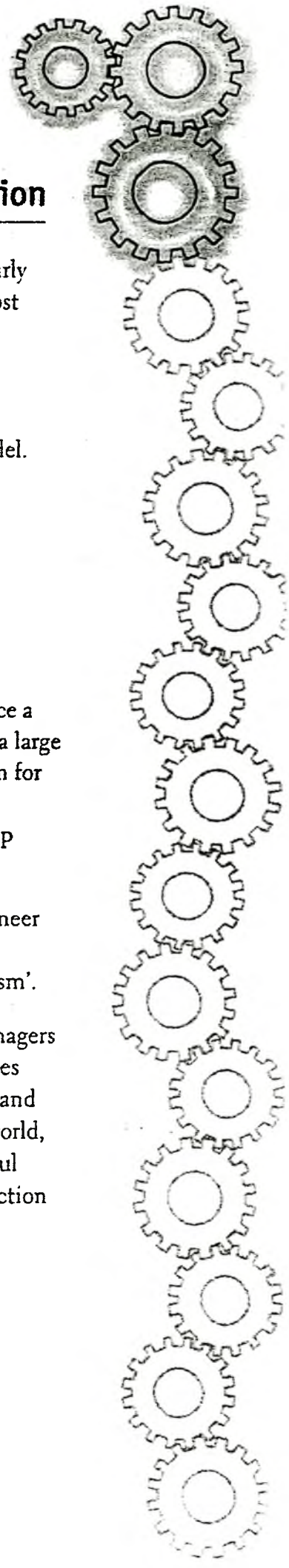
There are many different choices to be made when deciding on the best way to organise work. Work organisation does not stay the same all of the time. Decisions about one area will impact on other areas. For example, investing in new technology could lead to increased training, the hiring of more workers, or the retrenchment of workers.

Restructuring happens whenever major changes are made to any of the five work organisation issues. Restructuring may introduce new human resource strategies, new technology, new employment practices, new plant layout or management techniques. Many managers argue that they are trying to help their companies to compete successfully with companies in the rest of the world. Some companies argue that there is one best way to organise work and that all companies should use that work organisation. This is called 'best practice'.



Assembly line with single workstations

Cellular production



Changing ideas of 'best practice' work organisation

The idea that there are 'best practice' ways to organise work started in the early 1900s. The first of these models was called 'Taylorism'. This was also the most widespread.

However, the idea of what 'best practice' is has been changing over time depending on the circumstances companies find themselves in. Currently, companies see the best way of organising work as being the 'world class' model. The change from Taylorism to new ideas around work organisation will be discussed below.

Mass production and Taylorism

Taylorism was a best practice model that was designed to support mass production. Mass production is a manufacturing strategy that aims to produce a high volume of the same type of good on order to sell them at a low price to a large number of customers. Everything happened at high volume: mass production for mass consumption. Mass production could produce goods at a low price and proved very successful. Because of this, most manufacturing companies set up their companies for mass production.

For mass production to be successful, it needed to be managed well. An engineer called Frederick Winslow Taylor developed such a strategy around 1900 in America. He called it 'scientific management' but it is also known as 'Taylorism'.

Taylor believed that his particular form of work organisation would allow managers to "get the most" out of workers and machines. He proposed a set of principles that he said would make mass production companies successful. Henry Ford and other industrialists used Taylor's ideas and soon businesses throughout the world, including in South Africa, applied them. Because Ford was the most successful adaptor of scientific management principles in manufacturing, a mass production system known as Fordism developed.

Restructuring today

Circumstances have been changing for companies since the 1970s. Taylorism is no longer seen as the best work organisation for manufacturers, and companies have been restructuring their work organisation to implement a new 'best practice'. Restructuring has mainly been aimed at making production methods more **flexible**. This has meant changing the layout of plants, cutting down on waste, improving quality, introducing new technology and making more effective use of all the resources available (including labour). It has also meant looking at new ways of using flexible labour, such as the introduction of teamwork, as well as casual, part-time and subcontracted work. This form of work organisation has been called 'world class manufacturing'

flexible: means to be able to change or do things in many different ways. Production can be flexible, which means that there are different ways to do things or different products that can be made when and if they are needed. Workers can also be flexible, which means they are able to do different tasks or jobs on the factory floor, or adapt the hours that they work according to what the organisation needs.

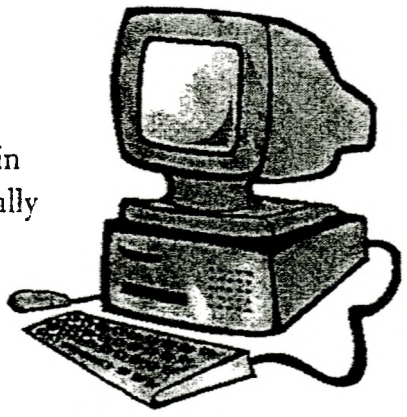
What has caused the current restructuring?

Changes to the system of mass production have been prompted by a number of factors. These include:

- New technology
- Changing markets
- The rise of South East Asian and Japanese economies
- The growth of militant trade unions
- Globalisation and rising global competition

new technology: technology that has recently been invented or introduced. Computers have had the biggest influence on today's new technology. The development of information technology (IT) such as computers and fax machines, computer controlled machine tools and computer networks are examples of new technology.

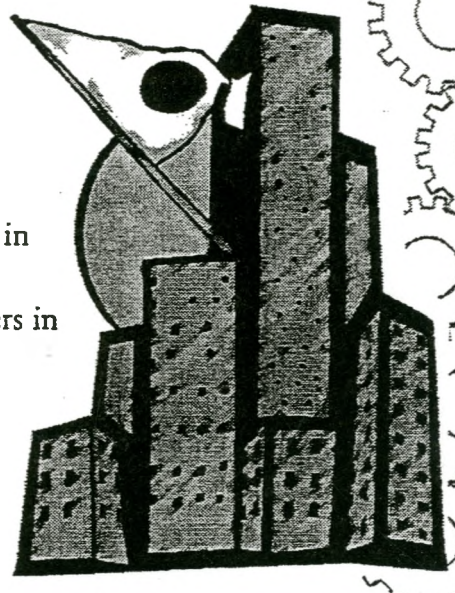
New technology



Since the 1970s rapid advances have been made in technology, especially through the use of computers in production. Computers can speed up work dramatically and even replace labour. The introduction of **new technology** into a workplace usually results in workplace restructuring and introduces new forms of work organisation. This is discussed in more detail in the second booklet.

Changing markets

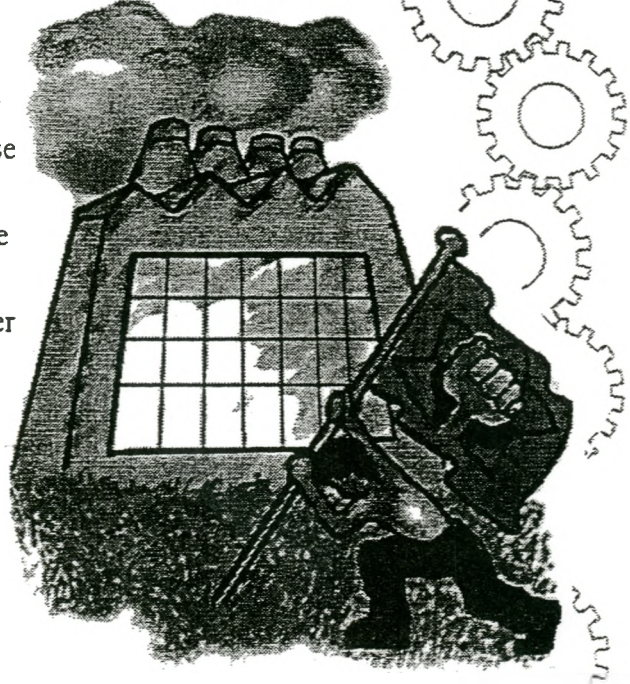
With new technology comes new products and new markets. People in advanced industrialised countries are consuming a wider variety of goods. New technology has allowed for products to have slight variations to suit the individual interests of consumers. Markets in industrialised countries have also become more demanding regarding factors not linked to price; such as quality, safety features, etc. While price was the major production factor during the time of mass production, these other factors are now becoming important. This has made the manufacturing of goods more complex.



The rise of South East Asian and Japanese economies

From the late 1960s through to the early 1990s, the economies in South East Asia and Japan performed very well. A lot of this success was attributed to the work organisation of manufacturers in these countries. This caused firms in Western countries to see Eastern work organisation methods as 'best practice' above Taylorism. This was particularly true of the Japanese work organisation, which has become known by different names, such as 'Japanese Management Techniques' and 'Toyotism'.

The growth of militant trade unions



Trade unions became increasingly powerful in Europe in the 1950s. They began to fight for control over the labour process and influence how work was organised. In response to increased worker militancy, companies introduced new methods of organising work. Some of these new ways were aimed at fragmenting the workforce by ensuring that production took place at a number of different sites, either around the country or even around the world. Other new methods were aimed at encouraging workers to feel that they were participating in the mental as well as the manual aspects of work. Sometimes trade unions would themselves put restructuring on the agenda. They did this to try to introduce new ways of organising work that benefited workers and improved their experience of work.

Globalisation and rising global competition

Globalisation refers to the process whereby the economic, social and cultural links between different countries, industries, companies and individuals of the world are increasing. This has happened more and more since the 1960s. It is now commonplace to have foreign companies in South Africa and for us to know about political and cultural events in other countries. Today, the media often refers to the world as a 'global village' of which we are all a part.

Globalisation has also led to increasing competition amongst producers of goods and services. This is because companies are no longer only competing with other companies inside their country, but also with those who are importing goods from elsewhere in the world. This has caused companies to search for better ways than Taylorism to improve production methods.

Rising global competition

Globalisation has led to increased competition between manufacturers and providers of services on a global scale. This is called global competitiveness. This competition is about:

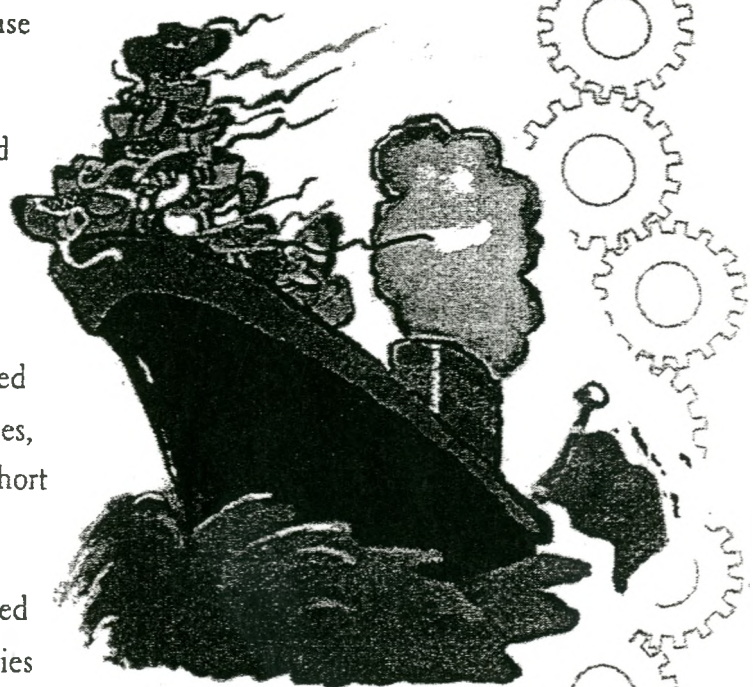
- selling the most goods and services at the most profitable rates possible
- capturing as many customers on the world market as possible
- selling goods and services at prices that are lower than other companies and economies that sell the same goods on the world market
- selling goods and services of a better quality than those sold by other companies on the world market
- having the best inputs in production: the best access to natural resources, the cheapest labour, the most skilled and educated labour, and the latest technology and equipment
- attracting investment from multinational companies and foreign companies
- being able to adapt to the changing needs of customers

South African companies and restructuring

Factories began developing in South Africa in the 1920s. This was much later than in European countries, such as Britain, where factories started arising in the 1700s. The way work was organised and managed in South African plants was based on Taylorism, which had already been accepted as 'best practice' in Europe and America. However, because of Apartheid in South Africa, there were strong racial divisions as well. This meant that, in the average South African firm, managers and skilled workers were almost always white men, while unskilled workers were mainly black, with black female workers at the lower levels of the job market. Some economists say that the 'best practice' of work organisation used by companies in South Africa was called 'racial Taylorism'.

Current workplace restructuring in South Africa is strongly influenced by globalisation:

- There is increasing competition between firms around the world. South African firms entered the global economy in the 1990s and are being restructured in order to survive and compete with foreign companies.
- The lowering of tariffs on goods coming into South Africa has led to increasing competition from imported goods. Goods can be moved around the world easily today because transport costs are lower than in the past.
- Integration into the global economy has led to an increase in illegal imports. South Africa does not have strong border controls.
- Companies in some industries have switched to informal working relations with employees, such as short term contracts, home-work, short time, etc.
- Companies in some industries have relocated out of South Africa to neighbouring countries in the southern African region where labour is cheaper. With globalisation, it is easier for companies to move between countries, because there are fewer laws and taxes preventing this than before.



Multinational corporations: companies that own companies in a number of countries or operate throughout the world..

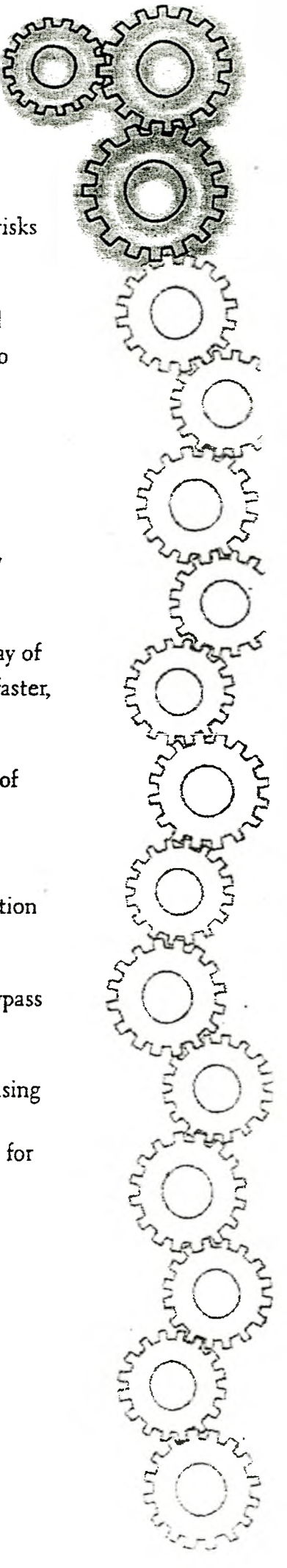
- Companies can operate more easily outside their national borders, and so South African companies are having to compete with foreign companies setting up business in South Africa.
- There is an increase in the flow of information around the world, so managers can learn quickly about new 'best practice' ways of organising work.
- More **multinational corporations** have invested in South Africa, bringing with them their particular ways of restructuring and organising work. Often, they transfer this knowledge to the South African companies with which they work.

Opportunities and threats for workers in workplace restructuring

New forms of work organisation, introduced through workplace restructuring, can provide both opportunities and threats for workers. Below is a summary of some of the positive and negative features that could arise from workplace restructuring:

Opportunities for workers

- ✔ *Increased training*: increased training can lead to better jobs with higher skills and career paths.
- ✔ *Increased industrial democracy*: through restructuring, workers can increase their control over their working lives and over production. This could happen as a result of increased participation, improved access to information, or a reduction of work supervision.
- ✔ *More secure jobs*: restructuring may be necessary to protect the long-term survival of the organisation and therefore make workers' jobs safe.



✔ *A decline in work intensity and work stress*: restructuring can be used to improve working conditions, leading to possible benefits such as lower risks of injury or shorter working hours.

✔ *A stronger union*: if the union has played an active part in the successful restructuring of a company, this will strengthen its position in relation to both workers and employers.

Threats for workers

✗ *Job losses*: restructuring may be a way for employers to cut their costs by retrenching workers.

✗ *Increased pressure for workers on the shopfloor*: restructuring may be a way of increasing the workload of workers by getting them to work harder and faster, or increase stress on workers.

✗ *Increased control of workers*: restructuring may lead to more monitoring of workers through increased levels of supervision and decreased levels of industrial democracy.

✗ *Undermining working conditions*: restructuring may lead to the introduction of dangerous work practices.

✗ *Undermining the union*: employers may try to divide the workforce or bypass the union by setting up alternative structures and committees.

It is important to recognise that there is no single 'best practice' way of organising work and that there are always choices involved. Work organisation is not a 'science' as Taylor suggested. It can be challenged and changed, as it has been for most of the 1900s. Trade unions can provide input to ensure that the work organisation of a company maximises the opportunities outlined above and minimises the threats.

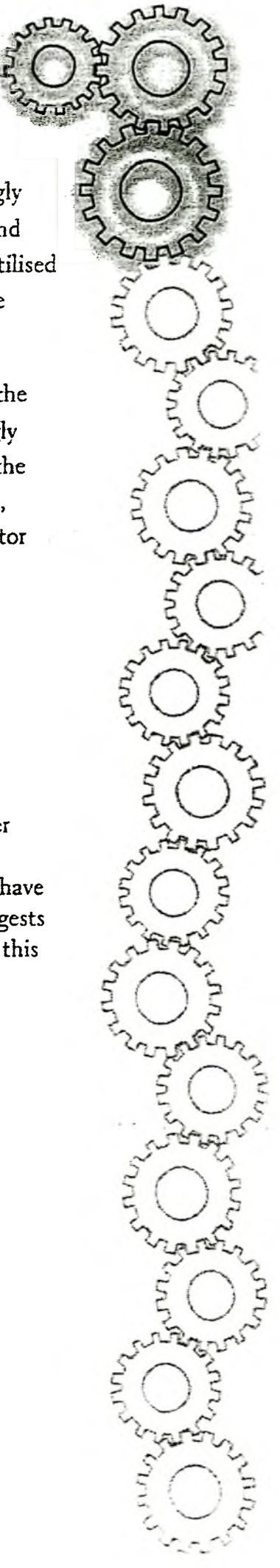
What restructuring are companies in South Africa doing?

There are many different experiences of workplace restructuring in South Africa. Generally companies are moving from 'racial Taylorism' to 'world class manufacturing'. The changes differ from company to company, but they tend to be along the following lines:

- *The way the workplace is laid out:* Workplaces are being laid out in new ways to increase the use of space and in manners that contribute to increased flexibility on the shopfloor. Many assembly lines are being removed and in their place cellular structures are being introduced. Some companies are reducing their factory sizes.

- *The flow of the production or service within the workplace*: Flow is being changed to reduce waste. This has been done by using a more direct route for work as well as by reducing the amount of work in progress. Cellular production, as opposed to single workstations, deals with larger production steps (more tasks) than before.

- *The employee needs of the workplace*: The trend in most workplaces is to have a smaller but more skilled workforce. Companies are increasingly using workers who are not permanently employed by the company, but are sub-contracted or employed on a casual basis. In addition, companies are outsourcing departments, leading to retrenchments. Increasingly, workers are working on short-term contracts and other types of flexible work arrangements. There is a growing periphery or outer layer of workers whose working conditions and job security are poor.



- *Planning the production and distribution of work*: Workers are increasingly being integrated in the planning of work through suggestion schemes and production planning teams. This means that workers' suggestions get utilised in improving the production process as well as in planning who does the work and when.

- *Control of work and supervision*: Whereas managers used to emphasise the control of work through supervisors and foremen, workers are increasingly being relied upon to 'control' and supervise themselves. This can be in the form of teams, which may have team leaders, or through other methods, such as the introduction of new technology which may be used to monitor work (for example computer systems and cameras). Supervisors and chargehands are not required as much as before.

Strategising concerning restructuring

Developing policy and strategies about workplace restructuring is critically important. In 1998, COSATU initiated an investigation (called the September Commission) into the future of trade unions. The September Commission pointed out that where unions have taken opportunities and won rights, they have found it difficult to make use of these gains in practice. The Commission suggests that the reason for this is a lack of clear policy on what unions should do with this new influence. The box below summarises some of what the September Commission said around trade union responses to restructuring.

COSATU's September Commission identified the following weaknesses in union responses to restructuring:

- unions lack direction and policy on workplace restructuring
- unions are reactive rather than proactive
- unions lack capacity to engage effectively and support shopstewards
- shopstewards develop their own initiatives without support from union officials
- the unions are left on the sidelines as workers respond directly and accept things such as voluntary retrenchment packages and work teams

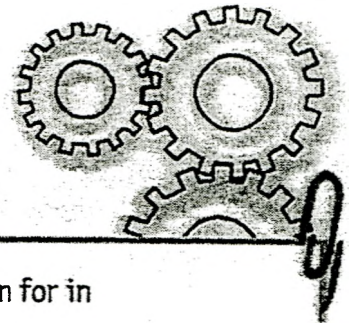
Strategic engagement with restructuring

The September Commission Report identifies three union strategies for workplace restructuring. These are militant abstention, strategic engagement with restructuring; and institutionalised participation. The Commission recommends strategic engagement as the best strategy for unions to adopt.

Strategic engagement means that unions approach restructuring issues as a means of transforming and democratising the workplace. It is a strategy aimed at defending workers' interests, but it also advises unions to engage with restructuring issues in order to increase workers' control of production, gain access to training and skills, and improve wages and working conditions. Unions have the right to be involved in such issues because their members are stakeholders in the company.

The advantage of strategic engagement is that the union can prevent unilateral restructuring and make substantial gains for workers. It can prevent restructuring at the expense of workers, and make mismanagement costly. It may define areas where management and union can both benefit from co-operation. The result may be a healthier company.

One danger is that participation may be ineffective, this is likely to happen if management does not provide sufficient information, if it does not really consult, and if it still takes unilateral decisions. The union may have to spend all its time fighting for the right to participate, rather than developing strategies for workplace change. Another danger is that the union could be co-opted into the view that restructuring is merely a means of increasing profitability.



The September Commission suggests the following union goals to be striven for in workplace restructuring:

- defend and improve workers' pay, benefits, conditions, job security and other rights
- preserve and expand the number of jobs
- strengthen the union
- overcome the legacy of Apartheid in the form of racist practices, the Apartheid wage gap and authoritarian management
- improve workers' skills, access to training and career paths
- improve the quality of jobs and the way work is organised
- ensure that workers, the community and society share the rewards of improved productivity
- extend democracy and participation in the workplace
- contribute to improving productivity and quality

Workers need to decide on their particular approach to workplace restructuring. However, a strategic approach to workplace restructuring begins with a careful evaluation of any restructuring proposals.

To help in this evaluation, the following questions should be asked whenever managers propose workplace restructuring:

What are the changes aimed at achieving?

Do the changes involve new technology?

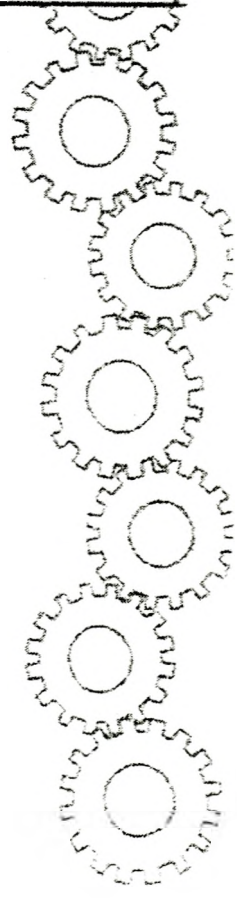
Do the changes involve new forms of management?

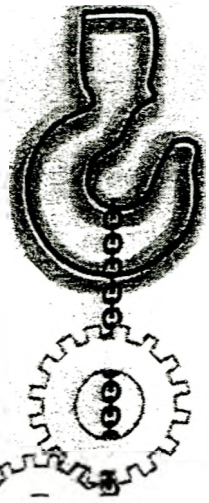
What other restructuring issues are being pursued by managers?

What are the possible effects of the change?

What is expected of workers?

What is expected of management?



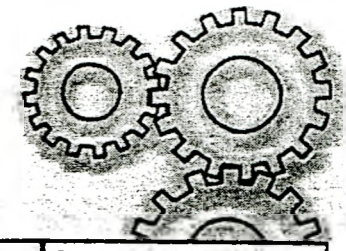


On the basis of your answers and the policy of your trade union or federation, you can start to draw up a response to the restructuring plans of the company. Booklet 4 of this series gives you negotiating assistance.

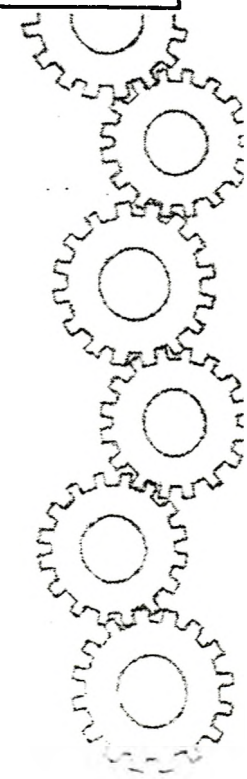
Know the policy of your union! It is your best defence

'Best practice' initiatives: their contribution to competitiveness and potential benefits and dangers for workers[1]

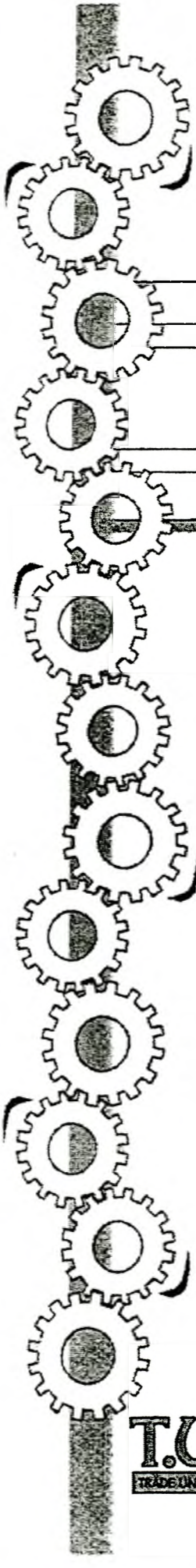
Type of practice	Description	Contribution to competitiveness	Dangers for workers	Benefits for workers
Performance-based pay system	Workers are paid according to the amount of work they do and not according to a fixed wage	Increased output; it eases wage determination	work speed-up; increased stress; peer pressure may result in conflict	Opportunity to receive increased pay (not guaranteed)
Kaizen	A system which emphasises continuous improvements to the production process and products	Provides quick feedback through easy communication between managers, workers and engineers	*Kaizen* may lead to suggestions that do not benefit workers, eg. Retrenchments	*Kaizen* can lead to increased say in the workplace with the potential to make it more worker friendly
Autonomy at shopfloor	Workers at lower levels participate in the decision-making process before decisions are put to managers	Low cost of co-ordination; quick decision-making and problem solving; workers have strengthened sense of identity with the company	If union structures exist, these may be undermined; over-identification with company goals	To varying degrees, workers have more say in decisions that affect their working life
Job rotation	Workers move from one job to another over a period of time	Organisational learning; workers more familiar with different functions of the company; increased knowledge of various functions and increased co-operation among staff in different functions	May not result in up-skilling; may result in work speed-up and health and safety risks	Workers get to do a variety of different jobs that can make work more interesting and may give workers a chance to learn new skills



Teamwork (multi-tasking)	Small teams of skilled workers build complete products	Increasing productivity of labour	Teamwork can be introduced without improving skills; work speed-up; health and safety dangers	Some research has shown that workers prefer working in teams, as they are more sociable
Just-in-time system	Suppliers deliver parts and components at the moment and at a volume that a company needs	Reduces inventory costs; reduces handling costs; removes the testing procedure for the products delivered	Outsourcing; reduction in work areas such as handling and dispatch; retrenchments	Potential to learn new skills, for example quality assurance
Quality control circles	Participation of employees in quality control in order to improve production	Increases information exchange, thereby increasing a sense of unity within the company	Stress may increase for workers; retrenchment of quality controllers and chargehands	Potential to learn new skills
Flexible specialisation	Workers are trained to become multi-skilled	Allows flexibility of production; frequent changes of product lines	Can lead to multi-tasking; may not result in training	If linked to training, workers may have an opportunity to learn new skills.
Benchmarking	Definition of precise performance targets	Provides tool for measuring performance; improves performance by setting clear targets	Unfair work standards are set; wages linked to performance	Increased information available about performance of the company they work for



1. This table was adapted from the United Nations Conference on Trade and Development. 1995. World Investment Report 1995: transnational corporations and competitiveness. New York: United Nations. The last two columns were added by TURP.



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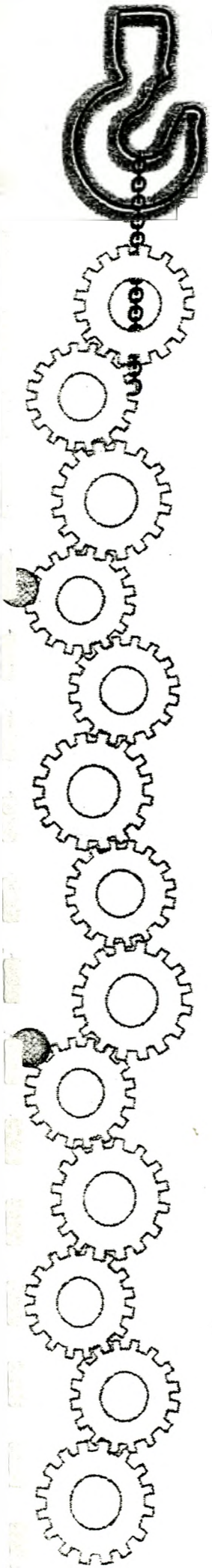

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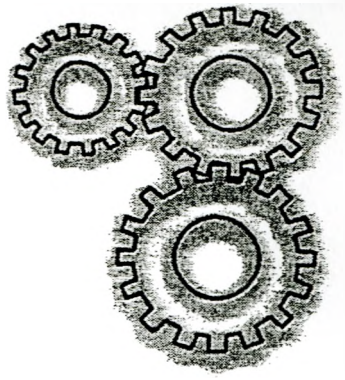


Contents

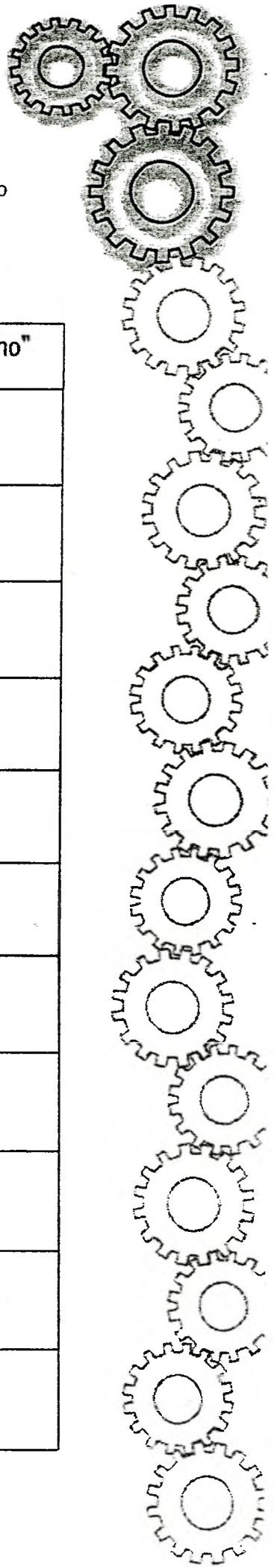
Introduction

This booklet consists of a number of examples of restructuring agreements that different trade unions have concluded with employers. The aim of the booklet is to provide you with ideas when you are negotiating restructuring.

The agreements and policies give examples of the kind of strategies and approaches that trade unions have used when dealing with workplace restructuring.

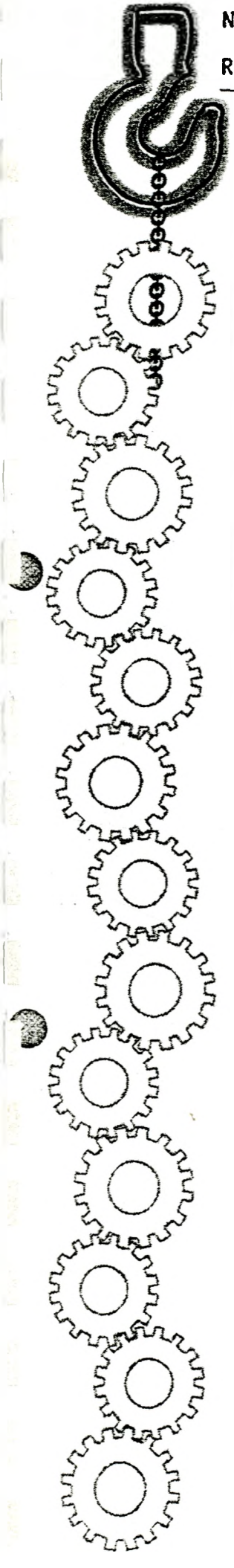
Some examples may not be as helpful as others. If you are a member of a trade union, examples may conflict with your trade union's policies. Where this happens, it is important to follow your union's policies, since it is the best guide for negotiating restructuring. Union policy represents the collective understanding and experience of restructuring that a particular union has. However, if your union doesn't have a policy on a particular area of restructuring, if you are not a part of a trade union or if you are a workplace forum representative, then this booklet can provide extra assistance.

Many areas of working life can be affected by restructuring. Some of the main areas include:



The table below highlights the kinds of things that are important to take into account when restructuring is taking place. The table can also warn you of potential dangers of particular forms of restructuring.

Question	"yes"	"no"
Did the skills used by workers increase or decrease as a result of this new practice?		
Does this new practice include a change in the way workers are paid?		
Has the new practice led to more production in the same amount of time?		
Are workers working harder as a result of this new practice?		
Are workers complaining of any new injuries, strains or aches because of this new practice?		
Because of this initiative have the number of jobs decreased?		
Has the number of temporary workers or contract workers increased?		
In your view has the role of the union been weakened by these changes?		
Do supervisors and managers have more control over the production process because of this initiative?		
Are workers happy about this initiative?		
Has the layout of the plant (eg where the machines are) been changed?		



Not every area of workplace restructuring is covered here because of lack of space. Important restructuring areas which are covered here include:

- establishing overall principles for negotiating restructuring
- negotiating productivity
- negotiating team work
- negotiating flexibility and job rotation
- negotiating new technology
- negotiating job security and casualisation
- dealing with management consultants
- establishing worker/management committees
- negotiating gainsharing
- a negotiating checklist

Examples from both South Africa and the world have been used.

Overall principles for negotiating restructuring

Some trade unions have found it useful to pass resolutions that give their opinions and set an agenda for workplace restructuring. Shop stewards and negotiators of these trade unions are then in a stronger position because they know they make decisions or negotiate outcomes that have the support of the broader organisation. In other words, policies can shape practice.

EXAMPLE 1: The National Union of Metal Workers' of South Africa (NUMSA) 1996 Congress Resolution on Competitiveness and New Management Techniques

For many years, management has unilaterally restructured our workplaces. The campaign of restructuring by management has intensified as each company strives for competitiveness. Depending on the company's agenda, unions have or have not been involved in the process. Big and wealthy companies have tried to implement their restructuring proposals with the blessing of unions.

It is high time that, as a union, we should put forward a programme of workplace democratisation in line with our ideal of workers' control.

NUMSA resolves that:

1. We need to be productive, but as a union we reject the ideology and proposals for competitiveness.
2. We will oppose any attempt to make us compete against our fellow workers.
3. We should reject the new management and production techniques, as they do not lead to genuine worker participation and democratisation of the workplace.
4. Instead of focussing on making different companies competitive, as a union we should devise industrial policies that will lead to:
   - the development of our productive capacities;
   - job creation.

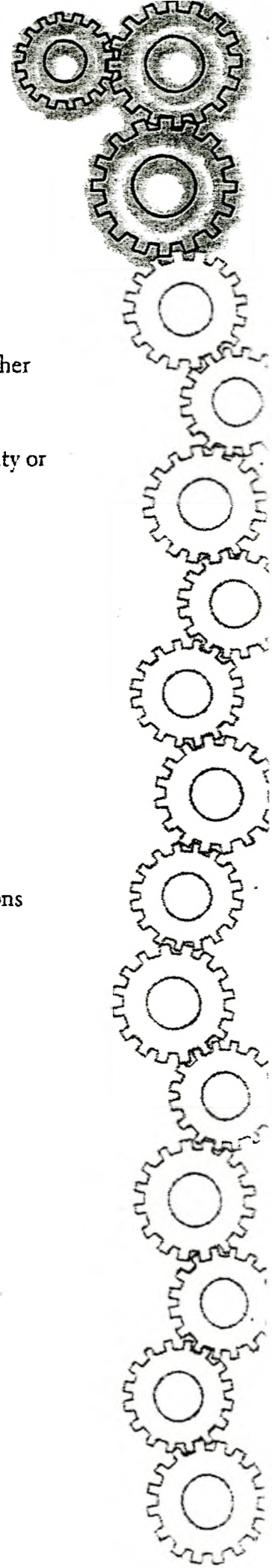
EXAMPLE 2: The Chemical Workers' Union (CWIU) 1996 Resolution on Work Reorganisation

Work reorganisation holds no benefits for workers. It leads to a reduction in wages, an intensified pace of work, unemployment and lower standards of health and safety. Its sole aim is to increase profits... All restructuring issues should become issues for collective bargaining with clear dispute resolution procedures.

The CWIU drew up a list of demands and principles to guide negotiations with management.

The principles are:

1. No job losses.
2. A commitment to create jobs.
3. Increased competitiveness/productivity shall not be obtained through a deterioration of health, safety and the environment.
4. Restructuring will not weaken the union or its structures.
5. There will be no informal discussions around restructuring, only negotiations.
6. Senior management must be committed to the process and implement agreements
7. Restructuring will not discriminate against any specific groups. Special attention will be paid to ensuring that women are not discriminated against.



EXAMPLE 3: The Australian Council of Trade Unions (ACTU) Principles of Good Work Design

Jobs should provide the following:

1. A variety of tasks: as far as possible, these should be complete tasks rather than fragments
2. Responsibility: for example, employees can make decisions about quality or production planning
3. Adequate recognition and payment for skills
4. A basis for working groups
5. Good social interaction between employees
6. A healthy and safe working environment
7. An understanding of the total system in the enterprise
8. Constant learning
9. Adequate information to enable people to make all the relevant decisions
10. A product or service that is useful and environmentally sound
11. Equal opportunity for all

Negotiating productivity

As is discussed in Booklet 2 of this toolkit, productivity is an important issue in workplace restructuring. Companies are increasingly focussing on improving productivity. They will want commitment and agreement from workers to improve productivity. The examples below show how some trade unions have responded to this. An important aspect of negotiating productivity is the issue of gainsharing. This is examined later in this booklet.

EXAMPLE 1: Extract of the productivity section of an agreement of a South African trade union

5. Scope of the Agreement

5.1 Productivity Principles

5.1.1 The Union hereby agrees to participate in negotiations, consultations and joint decision making, as the case may be, regarding current and future Company initiatives relating to the reorganisation of work practices, in order to increase operational efficiencies, via the Operations Committees.

In addition, the parties agree that productivity improvements at all operations will be addressed through the immediate implementation of the following aspects:

- Restructuring of working arrangements
- Planning
- Full disclosure of information will be provided

- Logistics: Amongst other things,
- Transport will be improved
- Supply of material will be improved
- Communication: Amongst other things,
- Structures will be implemented to improve communications
- Multiskilling
- Teams will be empowered through training and development, and clear career development paths will be established
- Efficiency improvements through, amongst other things,
- Hoisting
- Vamping
- Sweeping
- Minimising accumulations
- Labour and Management relationships
- Adversarial Management and Union relationships offer one of the major stumbling blocks. The quality of the relationship between the Union and Management, based on mutual respect, will be enhanced

5.1.2 In addition, the parties agree that the effective utilisation of every employee for the maximum time period allowable, as per Notes and Agreements, in his/her work area will further enhance productivity. The parties will therefore implement all measures required to ensure the abovementioned.

EXAMPLE 2: Extracts from the metal and engineering industries bargaining council productivity framework agreement (1998)

In terms of this new arrangement an individual employer, his employees, any employee representative body and any trade unions representing the affected employees may, by mutual agreement, enter into voluntary negotiations to conclude a productivity agreement with the objective of achieving measurable improvements in productivity performance, increased efficiency, effective utilisation of all resources, flexibility and improved work life at company-level in terms of the principles and guidelines contained in the national agreement.

The new provision specifies that the company-level negotiations to achieve these objectives do not constitute the opening of the way for general plant-level negotiations on wages and conditions of employment covered in the Main Agreement. The productivity improvement negotiations are to be conducted in accordance with the following principles and guidelines:

- Any wage increases, benefit improvements or improvements to any other working conditions and conditions of employment negotiated in terms of the productivity improvement agreement must be directly linked to measures designed and accepted by the employer, employees, trade union representatives and other employee representative bodies to achieve real gains in productivity, efficiency, effective utilisation of all resources, flexibility and other related objectives. Any wage or benefit increases resulting from productivity gains are to be shared among the workers concerned. It has been agreed that these gains should be reflected separately from normal earnings. How these productivity gains will be shared is a matter for determination at company level.

- All work reorganisation and other related issues undertaken within the context of the productivity improvement agreement are regarded as subject matters for negotiation, including any new methods and approaches for work and work organisation.

- The negotiated changes must be genuine, be in accordance with the objectives and principles of the new provision, and be designed to improve efficiency and enhance productivity and living standards without compromising health, safety and environmental standards.

- The enabling agreement states unequivocally that it is the express intention of the parties to the national bargaining council that the decision whether or not to negotiate and introduce productivity and efficiency improvement agreements at company level should be a voluntary one on both sides.

EXAMPLE 3: Extracts from the NEDLAC workplace challenge model agreement on productivity (1999)

8. Productivity bargaining

8.1 The parties are committed to ensuring that the benefits from productivity improvements achieved through the restructuring set out in this agreement are distributed fairly, in accordance with new skill grading levels and in such a way as to narrow the wage gaps between different categories of employees.

8.2 Accordingly, the parties agree that for any given level of productivity improvement, the share of the benefits distributed to profits and management salaries should not exceed the share allocated to wage and non-wage benefit increases for employees.

8.3 It is further agreed that an additional amount representing a fixed proportion of the share of the improved productivity benefit be allocated for increased expenditure on education and training programmes for all employees.

8.4 The precise levels of the distribution are to be determined by the Workplace Challenge Committee (made up of 4 managers and 4 shop stewards) at its first meeting.

8.5 The parties also agree to establish a method for productivity performance assessment and other performance indicators prior to the implementation of workplace restructuring.

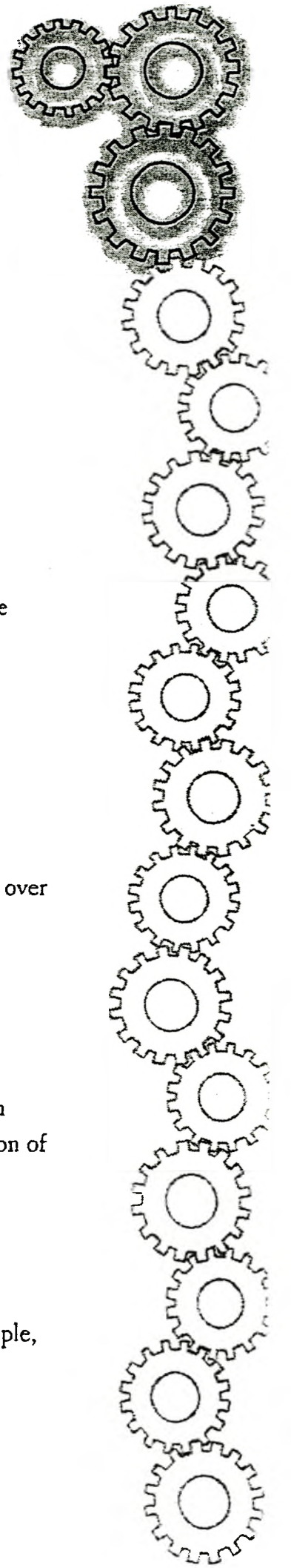
Negotiating team work

The reorganising of workers into production teams is a key part of workplace restructuring. The benefits and dangers of team work have been discussed in other booklets. Some unions have developed principles and resolutions to assist negotiators in creating the kinds of teams that will benefit workers.

EXAMPLE 1: NUMSA resolution on teams

Teamwork will only be acceptable if:

- the union and workers have the right to negotiate:
  - production targets
  - production schedules
  - line speed
- participation in teams is voluntary;
- management offers no material incentive or preferential treatment to employees who decide to participate in teams;
- there is no unfair treatment of those workers who refuse to go into teams;
- team leaders are to be elected on a rotational basis;
- there is no additional pay or incentive for team leaders;
- team leaders have no right to discipline workers;
- there is an entrenched right of the union to represent workers, including team leaders, on production related issues;
- an absentee-cover or floater is attached to each team- a role that can be played by the team leader;



- there is no obligation to meet targets if team members are absent;
- there is full pay for overtime and team meetings;
- the skill profile of teams combines common and specialised skills;
- bona fide negotiations take place with the union on:
  - areas of work for the team
  - team size
  - responsibility of teams
  - the rights and obligations of team members in relation to first line management.

EXAMPLE 2: Going our own way, IG Metal's policy on teams

1. Self-regulation and decentralisation

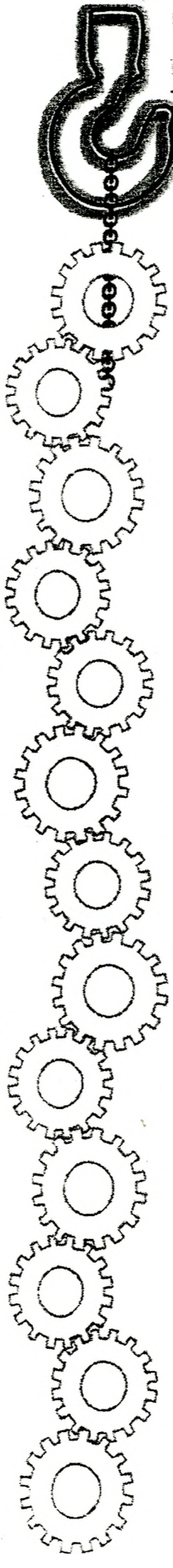
Self-regulation is a principle that argues that teams should have control over planning and control of work. Decentralisation argues for a flattened management structure and greater decision-making by workers.

2. Common work tasks

Under lean production, work processes are strictly defined. The German union model proposes that workers have more control over the delegation of jobs and job rotation.

3. A right to self-organisation

Self-organisation refers to the management of team members (for example, when they can take leave) as well as control over team organisation (for example, calling a team meeting).



4. Humane working conditions

This involves setting production goals that are reasonable, and not based on 'self-exploitation'.

5. Equal opportunities in terms of pay

Skills-based pay, with smaller differentials between grades.

6. Teamwork as a form of workplace solidarity

Teams should be a way of promoting workplace solidarity. All workers should be integrated into the teams and the training of semi and unskilled workers should be encouraged.

7. Promotion of skills and competencies

Training should be outcomes-based (that is vocational training that is accredited at either a bargaining council or Sectoral Education and Training Authority), and develop the worker's career.

8. Technology and organisation that promotes teamwork

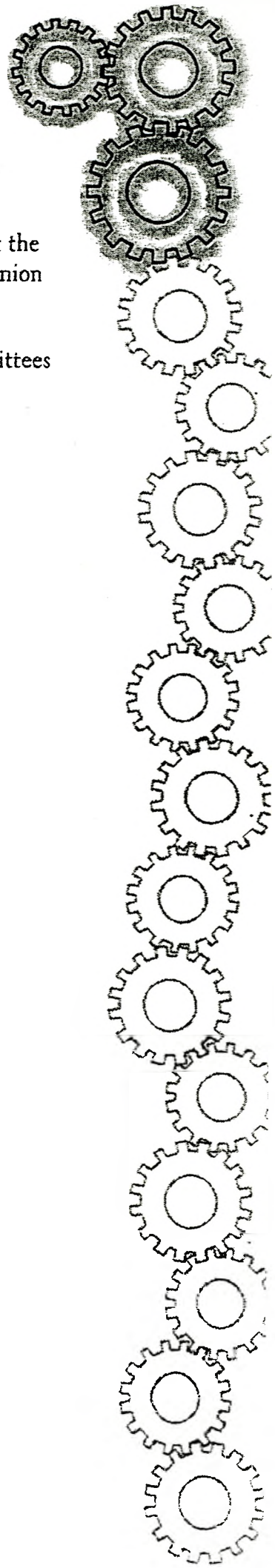
The recommendation to do away with the conveyer belt within a manufacturing environment calls for technology that promotes teamwork and self-organisation.

9. Enhanced group discussion and representation

The team should elect its team leader. Information should flow through the team leader. The team should discuss specialised, organisational and social issues.

10. Participation through teamwork

Teams should be a forum for consensus-based decision making, within and between teams.



EXAMPLE 3: CWIU proposals on team work[5]

The union is against the use of teams on the shop-floor. Workers must reject the introduction of new teams or teams that already exist in our factories. The union believes teams can:

- undermine the union by dealing with issues that shop stewards' committees and formal negotiation should deal with
- increase the amount and pressure of work, and threaten the working conditions and health and safety of the workforce
- take workers' suggestions and ideas without any return or benefits
- break down solidarity by making workers compete against each other
- require workers to discipline or supervise each other

Negotiating job rotation and flexibility

Job rotation and multi-tasking are becoming commonplace with the introduction of teams in companies. Job rotation and multi-tasking can lead to work speed-up and increased stress if workers are not protected by a good negotiation strategy.

EXAMPLE 1: Extracts from the Negotiating Committee Agreement between Volkswagen South Africa and Metal Unions, 1994

2.1 Flexibility of employees within and between VWSA business/product units

a) Employees will be required to work in different classifications (or jobs) than those to which they are assigned, on a temporary or permanent basis, under any of the following circumstances:

(i) in order to balance manpower requirements within areas, sections or departments;

(ii) in order to fill in for absentees;

(iii) to facilitate efforts aimed at their career development and/or training;

(iv) to perform work which is available when no work is available in the short-term within their specific department;

(v) to stand in for employees who are required to undergo training.

b) The parties agree that transfers, whether permanent or temporary, within and between business/product units, can be actioned provided that:

(i) the employee is capable of performing the duties and responsibilities of the position to which he/she is transferred;

(ii) the safety requirements associated with the position to which the employee is transferred, in keeping with appropriate legislation, must be made known to the employee;

(iii) the conditions of employment of an employee will not be reduced as a consequence of a transfer to another position in terms of clause 2.1 (a) above;

(iv) the reason for transferring the employee(s) on a temporary basis will be communicated to the appropriate employee representative(s);

(v) dissatisfaction which may arise as a result of the permanent or temporary transfer of an employee will be addressed through recourse to the grievance procedure.

c) Employees who have been classified as medically unfit to work within specific areas of a plant or operation will not be required to work within such areas.

EXAMPLE 2: The South African Commercial, Catering and Allied Workers' Union (SACCAWU) Guidelines on job rotation

Employees will undertake work that management directs them to only if:

- they are competent and have had the necessary training required for the work
- the employee is physically able to do the work
- the work is within the employee's working time
- management must allow the employee sufficient time to finish the job she or he was busy with before moving to a different job
- work in a higher category job will be paid at the higher level
- management does not exploit, abuse or victimise employees

Negotiating technological change

Booklet 2 focused on technological change in detail. Automation of tasks is often seen as a means of lowering costs and improving efficiency. This has implications for those workers whose jobs are affected (what will happen to them?) and for those workers who remain (will they be working harder?).

EXAMPLE 1: International Association of Machinists' Model Clauses on technological change

To support its local branches in negotiating this strategy, the American International Association of Machinists (IAM) developed a set of model clauses to be included in existing collective agreements. These model clauses can be put into a 'technological change' section in the agreement and call for:

- advanced notice of any technological change
- the establishment of a joint union-management committee on technological change
- workforce reduction by means other than retrenchment when such a reduction is unavoidable
- a commitment to retraining
- inter-establishment transfer of workers before retrenchment
- prevention of the classification of new jobs as non-bargaining unit jobs
- automatic recognition of the union at new plants
- the right to information

EXAMPLE 2: CWIU resolution on technological change

The resolution proposes the adoption of the following guidelines on new technology:

There should be no introduction of new technology that leads to job losses. In the case of the introduction of new technology and new machines, the following conditions should be adhered to:

a) Companies must disclose their strategic business plans to the Union

b) Introduction of new technology and changes in plant layout must be negotiated with the Union

c) The technology or changes in layout should not impact on employment security or jobs

d) Workers must be involved in decisions on the introduction of technology or changes in layout. They should also be exposed to the machines before they are bought, through videos and site visits to the factories where the machines are operating.

e) The Union must be given twelve months notice before the introduction and buying of new technology.

Training:

f) Training must be given to workers before new processes are introduced. However, the training should not be restricted to showing workers how the machine works. It should also be theoretical, leading to a deepening of skills.

Work cycles:

g) The union must negotiate work cycles for each machine, i.e. the amount of time we are supposed to work in each minute. This will ensure that new machines or changes in plant layout do not make us work harder.

Health and safety:

h) Changes need to take into account workers' health and safety.

EXAMPLE 3: Extract from a model agreement developed by a European metal union

Aims of the agreement

The company and the union agree that the most effective methods and equipment should be utilised with the aim of increased job opportunities and higher rewards in working time for all present and future employees.

Procedures for the introduction of new technology

The introduction of new methods or equipment and any consequential changes in working conditions shall be the subject of mutual agreement between the company and the union.

Failing such agreement the status quo shall prevail.

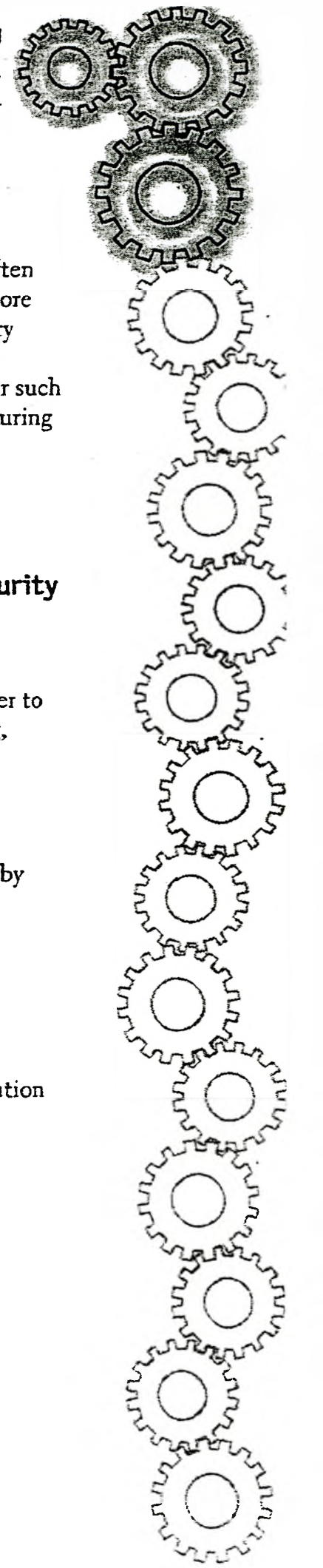
In order to achieve the aims itemised above, the company and the union undertake to negotiate on the basis of equality of information on all matters, including specifically:

- manpower and output planning
- wages and salaries paid to all levels of employees
- non-wage benefits received by all levels of employees
- conditions of employment enjoyed by all levels of employees
- job descriptions of all levels of employees

The company and the union reaffirm their commitment to promote equal opportunity for women at all levels, regardless of marital status.

Before the introduction of any specific new method or equipment, a detailed written agreement shall be reached and incorporated in this agreement as an appendix.

Nothing in such appendices shall contradict the general principles outlined in this agreement.



Negotiating job security and casualisation

If restructuring happens when the economy is performing poorly, jobs are often lost. Some unions have attempted to negotiate a job security agreement before they will agree to enter into negotiations around restructuring or productivity improvements. Restructuring often results in the development of a casual workforce who have very little income or job security. Therefore, lobbying for such an agreement can act as a safeguard for workers in a situation where restructuring is inevitable.

EXAMPLE 1: National Economic, Development and Labour Council (NEDLAC) Workplace Challenge Job Security model agreement

The parties acknowledge that restructuring could, in the long run, lead to a downscaling of the labour force employed at the workplace. However, in order to ensure a stable environment for negotiating and implementing restructuring, management undertake to:

- impose a moratorium on retrenchments for two years
- take all measures to re-allocate existing workers to new jobs supported by training programmes
- not to introduce contract labour to displace permanent workers
- achieve downscaling through natural attrition
- ensure that retrenchees obtain training and re-training subsidies, relocation subsidies and career guidance

EXAMPLE 2: Job security clauses contained in a restructuring framework agreement between a pharmaceutical company and a union

3. Purpose

The parties agree that this agreement has the following purpose:

3.1 To ensure job security for all employees and job creation

4. Guiding principles

The parties agree to the following guiding principles, which will form the basis for further collective procedural agreements which are to be regulated by this agreement:

4.1 The parties agree that there will be no job / employment loss as a consequence of restructuring / organisational change, but a commitment to create jobs. No existing employee's job will be downgraded in terms of their status or benefits

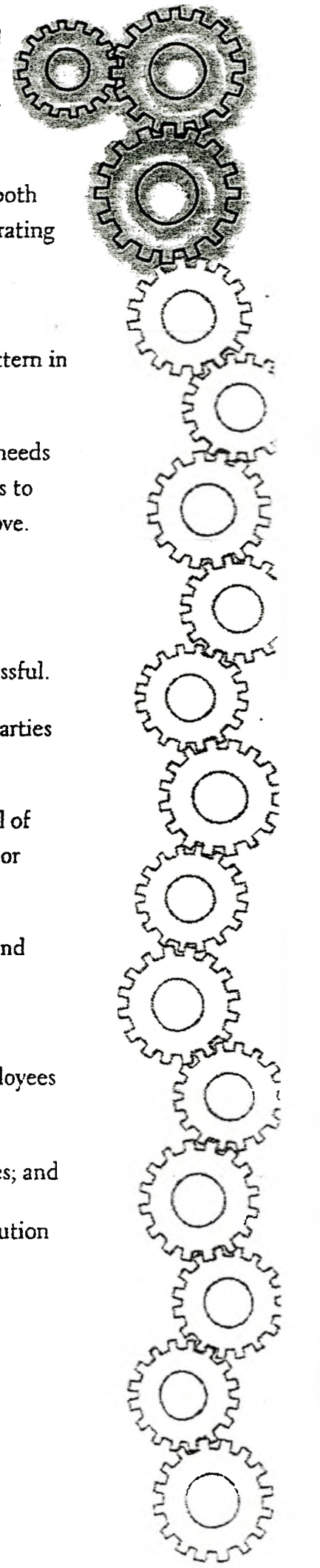
EXAMPLE 3: Extracts from agreement between a retail union and a supermarket chain

4. It is the objectives of the parties to this Agreement to mutually:-

4.1 Strive to protect the job security of all Employees covered by the scope of the Interim Recognition and Procedural Agreement or the Recognition and Procedural Agreement.

4.2 Agree as to the procedures, checks and balances needed to:-

4.2.1 Ensure the full and fair utilisation of Employees during their working time



4.2.2 Establish a fair and mutually acceptable procedure to be followed by both parties with regard to inter-department/division and/or inter-store operating unit transfer(s) of an Employee(s)

4.2.3 Establish the types of shift patterns needed and a fair and mutually acceptable procedure to temporarily or permanently change a shift pattern in a store/operating unit.

4.2.4 Ensure that the hours worked by Casual Employees meet the trading needs of a store/operating unit, bearing in mind the parties mutual objectives to strive to protect the job security of Employees in terms of clause 4 above.

5. The parties acknowledge and accept the following principles:

5.1 The goals of neither party will be achieved unless the business is successful.

5.2 The provisions of this Agreement must be fair and equitable to both parties and must address:

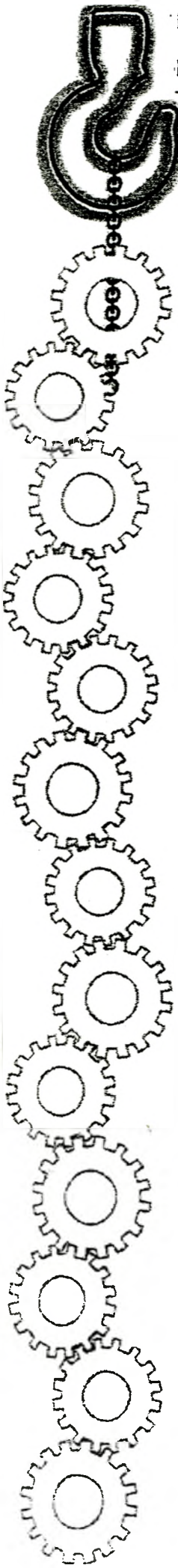
5.2.1 The need of the Union to ensure that Employees gain the highest level of job security achievable without being subjected to exploitation, abuse or victimisation; and

5.2.2 The need of the Company to ensure that the business can efficiently and cost effectively meet the ever changing trading patterns/volumes and expectations /aspirations of Customers.

5.3 The goals of the business and its stakeholders, which include the Employees and the Union, will not be achieved without:

5.3.1 The highest level of job security achievable being striven for at all times; and

5.3.2 Employees being fully and fairly utilised in the area of greatest contribution to the Company during their working time.



Working with management consultants

Trade unions in South Africa and internationally have been particularly wary of consultants because when companies use them it often leads to job losses.

Consultants need to be advisors to unions as much as they are advisors to management. The consultants should include union goals in their brief. This could involve commitment to job protection, goals around worker empowerment, training of workers and improved working conditions.

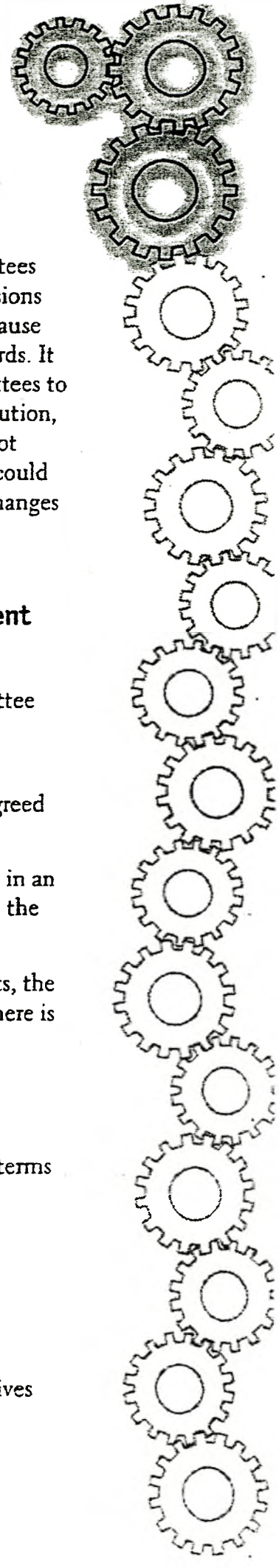
In addition, trade unions should be part of the consultative process with management. This will allow them to set the brief of the consultants and express their needs to consultants. This may involve training union representatives or ensuring that report-backs are in a form that trade unionists, who may not have technical training, can understand (for example, accounting or industrial engineering knowledge).

Here are some examples of how shop stewards have dealt with management consultants:

1. Become involved with the consultant at the outset: negotiate the consultant's brief with management and be involved in the selection of the consultant.

2. Have an independent meeting with the consultants and question them over the impact of their work in other companies: what was the focus of the work, which workers were affected by the work, what was the outcome for the company.

3. The consultant is only allowed to be an advisor or facilitator of change. Any implementation of change is to be negotiated between the company and the union.



Establishing worker/management committees

Often restructuring is overseen by a consultative committee. These committees can be dangerous for unions because they can find themselves party to decisions that have negative implications for workers. They can also be dangerous because they remove issues from negotiations between management and shop stewards. It is important that a constitution or agreement be concluded on such committees to prevent companies from using them to co-opt unions. With a strong constitution, such committees can be useful tools for trade unions. For workers who are not members of a trade union or a workplace forum, a constitution such as this could be used to define what issues will be dealt with as workplace restructuring changes and covered in the committee.

EXAMPLE 1: NEDLAC Workplace Challenge Worker/Management Committee Constitution

The parties agree to the establishment of a Workplace Consultative Committee (WCC).

The parties agree that the WCC will be the principal negotiating forum to negotiate, plan, co-ordinate and implement the areas of workplace change agreed on, and that all proposals are submitted to the WCC for its consideration.

The parties agree to participate and engage in the deliberations of the WCC in an open and constructive manner, aimed at achieving genuine improvements in the economic and social relations for and between both parties.

The parties reserve the right to invite outside assistance (i.e. from consultants, the union, union or business federation) to make input at a meeting, provided there is an agreement to this at the previous meeting.

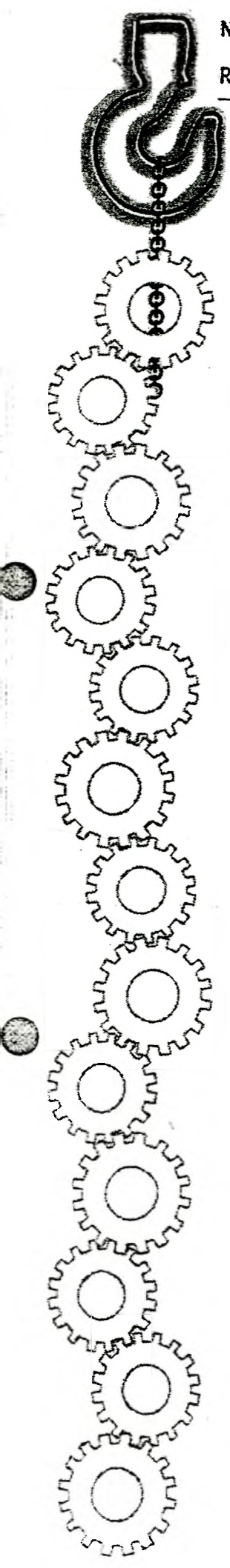
The management agrees not to seek to implement restructuring without the endorsement of the WCC.

The unions agree not to disrupt the restructuring, provided it is executed in terms of this agreement.

Agreement will be reached with a majority of 75% of parties.

The role and function of the WCC is to:

- meet once a month
- be comprised of equal numbers of management and union representatives
- ensure that the union group includes at least one union official
- appoint and monitor consultants



Negotiating gainsharing

Gainsharing is a vital component of restructuring, as it involves the distribution of income obtained through increases in productivity. In other words, it is about sharing the rewards of restructuring gains amongst the workforce as a whole. Some of the common characteristics of gainsharing are:

1. Performance improvement. The goal of gainsharing is to improve performance. This requires the use of accepted measures of performance.

2. Rewarding performance on past measures. The measures that are used should be consistent and recognised as relevant to the workplace. There should be a record of these measures to give an idea of the effect of the gainsharing.

3. Sharing with most or all employees. In most gainsharing systems, all employees are part of the incentive scheme.

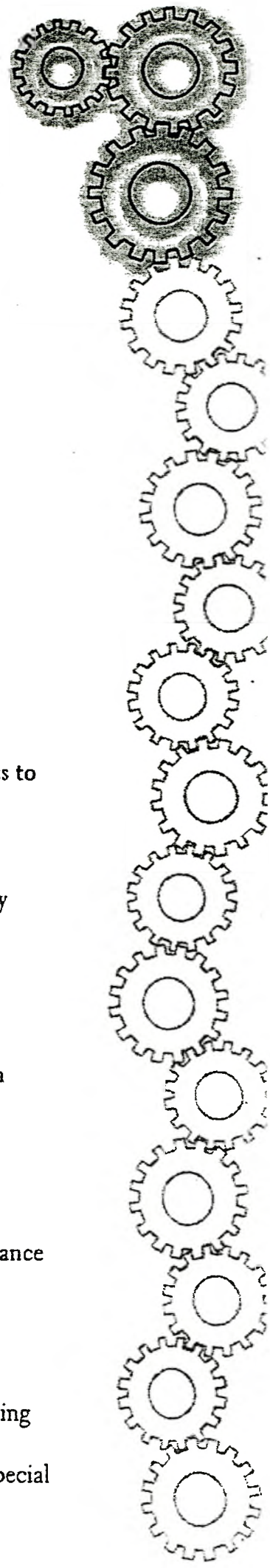
4. Includes employee involvement. Gainsharing is based on employee empowerment. It is about sharing information, setting and obtaining goals, and 'working smarter'.

5. Long-term oriented. The goals of gainsharing are long-term and not based on short-term gains.

6. Not individual oriented. Gainsharing is group-oriented. In addition, it is based on large groups, not small teams.

For the company, gainsharing can have the following potential benefits:

- Improved productivity
- Improved employee identification with the goals of the company
- High levels of problem identification and problem solving
- Links reward to improved performance
- Improved communications and co-operation
- Greater organisational flexibility
- Greater employee involvement
- Improved industrial relations



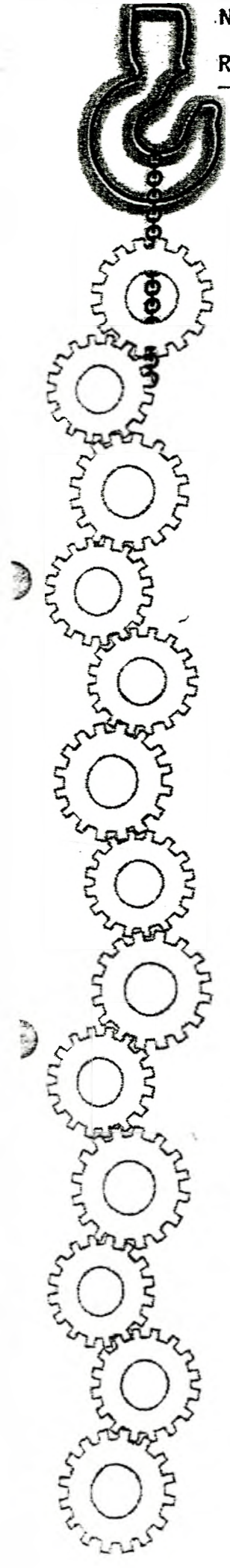
For workers, gainsharing can have the following potential benefits:

- Sharing in the benefits of productivity gains through rewards
- Job security through the enhanced performance of the company
- Higher levels of participation
- Greater recognition
- Greater information on the company and its performance

For gainsharing to succeed the following is required:

1. Commitment from management and unions
2. Belief in the need to change
3. Commitment to training of workers
4. Co-operation
5. Absence of any threat to job security
6. Adequate information on productivity and costs, and a willingness to share this information
7. Ability to agree on goals
8. Agreement on how these goals are to be measured, and a relatively simple and fair reward system based on these
9. It must be seen as fair by workers
10. It must be relevant and achieve the objectives of the organisation
11. It must be understandable, at least to key management and union representatives
12. It must be easy to administer
13. It must be flexible to changing needs
14. It must focus on relevant areas that will lead to increased performance and that are not peripheral to the functioning of the company

The question about how the gainsharing system is to be run is obviously an important one. Will the usual bargaining structures be used or will a gainsharing council be set up? If a gainsharing council is set up, its primary role will be to review the system, determine its effectiveness, review bonuses and perform special studies if they are required.



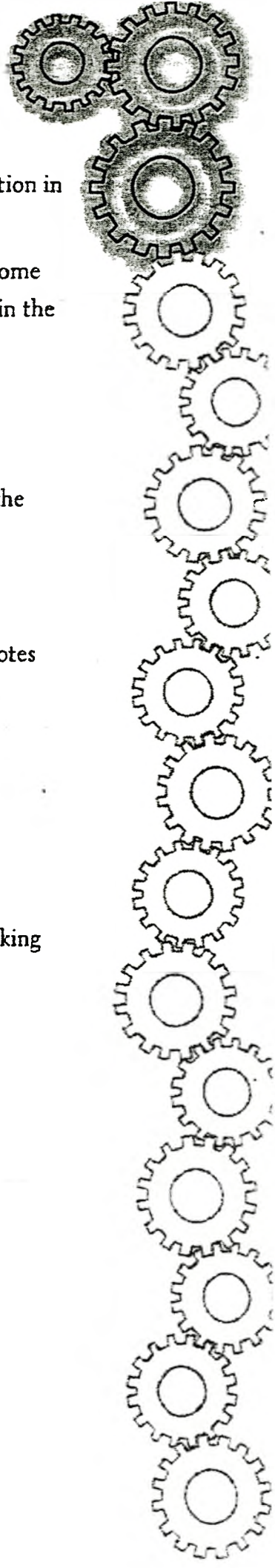
Negotiating Checklist

Restructuring agreements must

- guarantee to uphold health, safety and general working conditions
- capture an understanding of productivity that is not based on worker or labour productivity alone
- secure managements' commitment not to increase control and monitoring of workers and to allow workers more say in their work life
- explain how benefits from restructuring are to be divided amongst the workforce
- include the development of plant-wide training programmes and commitments to the upgrading of all workers' skills
- clarify team work: if there are to be teams, who is the team leader, how are they selected, and what is their relationship to supervisors?
- ensure that team leaders are not responsible for hiring and firing or discipline issues
- ensure employment security

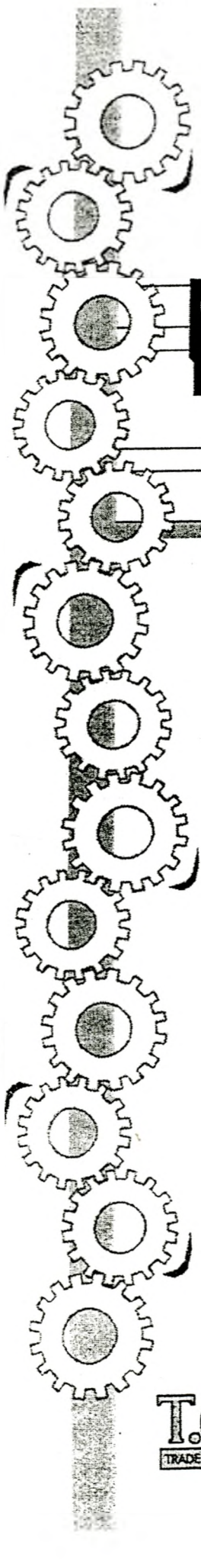
Some safeguards trade unions have used to ensure they are not bypassed by management in the negotiating process include:

- Insisting that it is the union that remains the representative of workers in any special committees set up to negotiate or propose restructuring
- Ensuring that the union representatives are provided with resources and information (and possibly even training) to be able to properly evaluate the proposals of management



Seeking a guarantee from management that changes will not lead to a reduction in the number of people employed within the organisation.

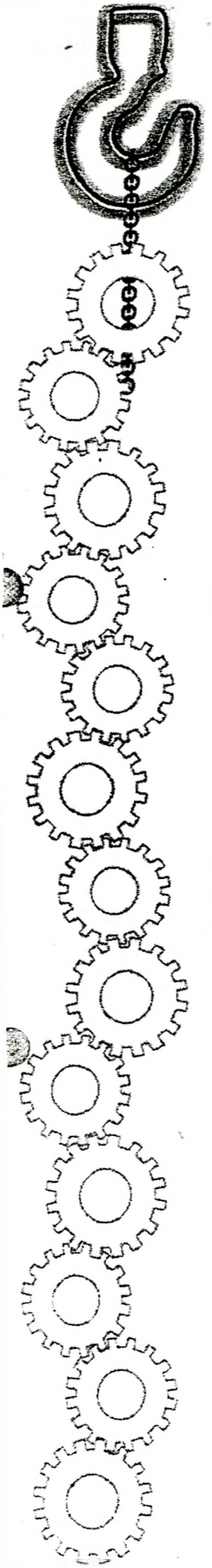
- Seeking a guarantee from managers that the workers in jobs which become redundant will be trained so that they will be able to assume new jobs in the organisation
- Safeguarding the working conditions, especially the health and safety standards, of members
- Ensuring that the union will have access to relevant information after the restructuring so as to be able to monitor the effects of change
- Ensuring that the training that workers receive leads to multi-skilling
- Ensuring that training is more than just the kind of training that promotes the company culture or restructuring programme
- Making consultants accountable to union representatives as well as to management
- Ensuring that mandates and union policies are utilised to determine positions
- Ensuring that new technology is part of a process of enhancing the working environment, in addition to being a means of improving performance



Restructuring information

T.U.R.P.
TRADE UNION RESEARCH PROJECT

KwaZulu-Natal
Benchmarking cc



Restructuring information

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Material prepared by Trade Union Research Project, KZN Benchmarking and Kabelo Reid

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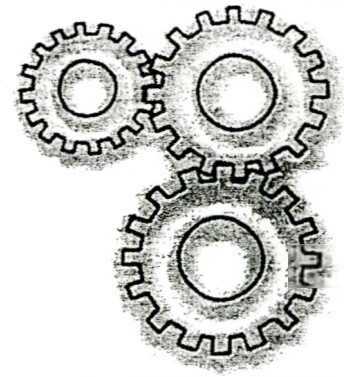


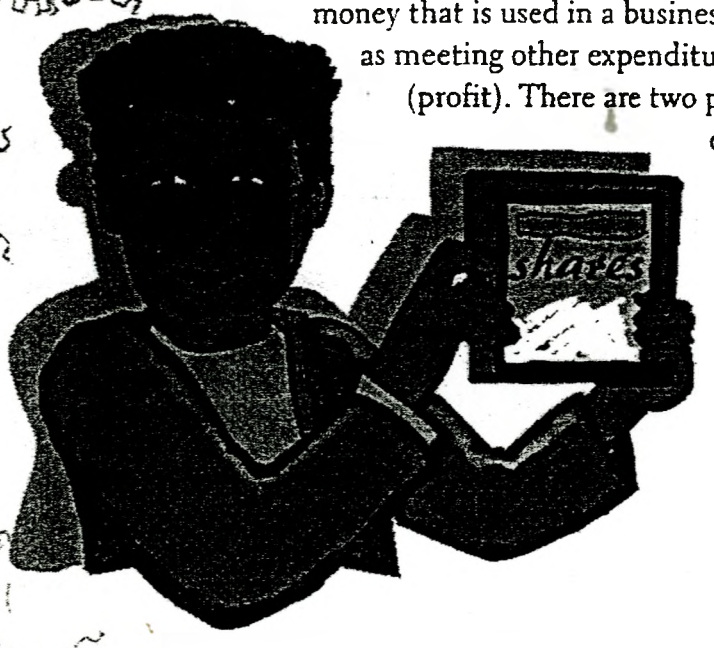
Contents

When a company is undergoing restructuring, it is important to have accurate and useful information. This booklet will explain where you can find information about the company's financial position and recent financial performance.

Company information: ownership, control and structure of companies

Ownership and control of companies through shares

To set up a business or company, the owner first needs capital. Capital is the money that is used in a business to buy machines, factories, tools, etc, as well as meeting other expenditure that will assist in the generation of income (profit). There are two principal sources or ways of raising capital in order to start a business.



One source of capital is a bank loan. Banks provide loans to businesses to assist them with their setting-up costs. The loan will have to be paid back within a specific time period (for example, five years). The business will have to pay interest on these loans.

The other source of capital is by asking people or other companies to put (invest) money into the company. They will then become the shareholders of the company.

In return for investing capital in the business, the shareholder will now own a portion of the business and will thus be entitled to a share of the profits made by the business.

The shareholders are the ultimate controllers of the company, and they appoint directors to make profits for the company and to control the company on their behalf. The directors are usually appointed at shareholder meetings, which are held at least once a year. At these meetings important decisions are made about the company.

Those with the most shares have the most votes. Any shareholder with 51 % of the shares can control a company because that shareholder would control 51% of the voting rights of the company.

Share Certificate

ENACT LTD

CAPITAL 100 000
in 100 000 shares of R1 each

This is to certify that _____
is the registered proprietor of 100 000 shares of
One Rand each, fully paid, numbered 1 to 100 000
inclusive, in ENACT LTD subject to the Memorandum and Articles of Association
of the said company.

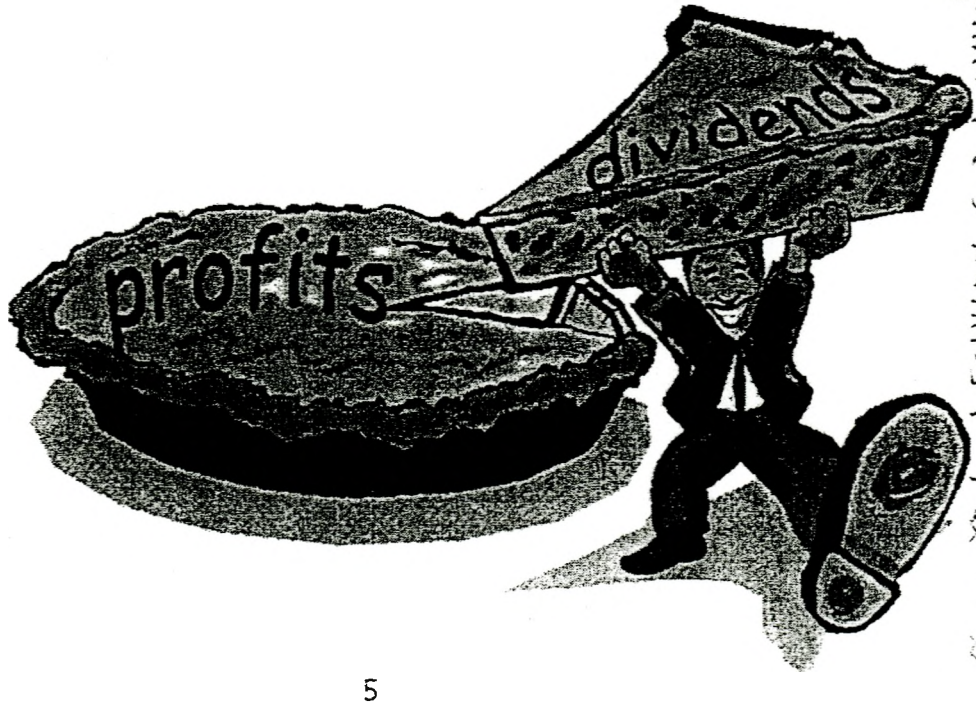
Given under the Common Seal of the Company
this 19 day of September 1998

R Mabaso
J Smith
Directors

How shares make money for people

Shareholders can make money from owning shares in two different ways; either through collecting DIVIDENDS on shares or through SELLING SHARES for more than they were bought for.

Each year some of the profits of a company are given out to the shareholders. An amount (called a dividend) is paid on each share. For example, shareholders may get 30c for each share they own. The more shares a person has, the more dividends or profits that person receives.



Types of companies and businesses

There are a number of different types of companies. Companies can be owned by a single person, by many people or by other companies.

Private company

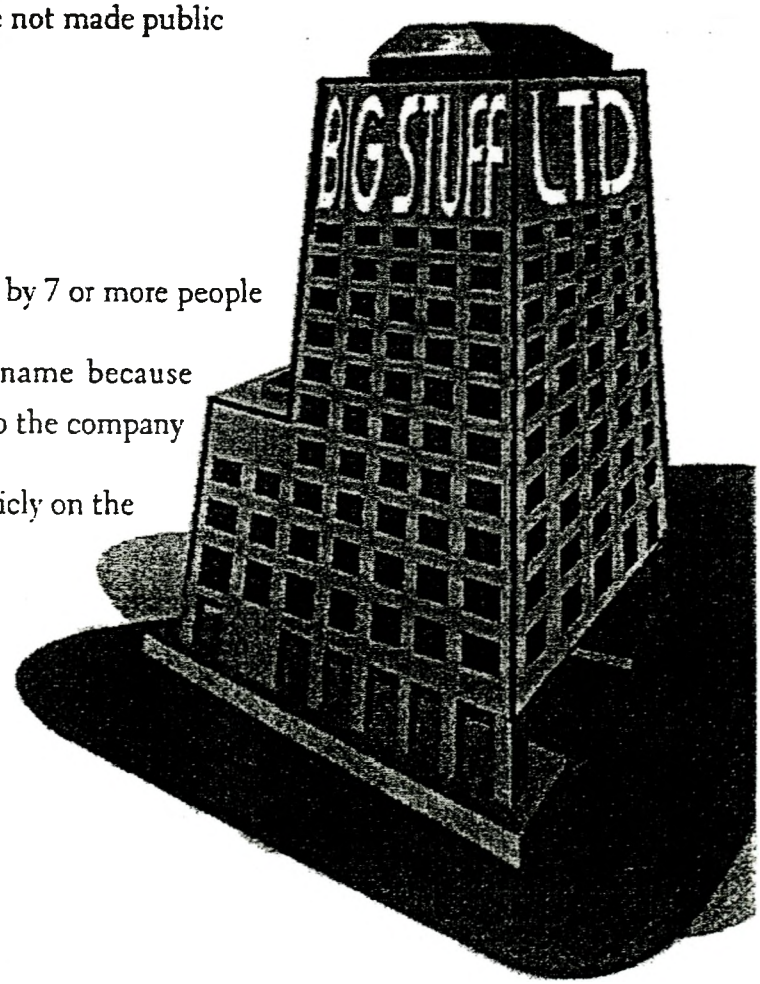
A private company:

- is a business owned by not more than 50 people.
- has PTY (meaning 'proprietary') after its name, because the shareholders decide who can buy shares in the company
- has LTD (meaning 'limited') after its name, because responsibility for paying debts is limited to the company and not the individual owners
- shares cannot be sold publicly
- financial reports are not made public

Public company

A public company:

- is a business owned by 7 or more people
- has LTD after its name because liability is limited to the company
- shares are sold publicly on the stock exchange
- financial reports are available to the public in the company's annual report



There are also other forms of businesses that are not considered to be companies. Examples are:

Sole trader

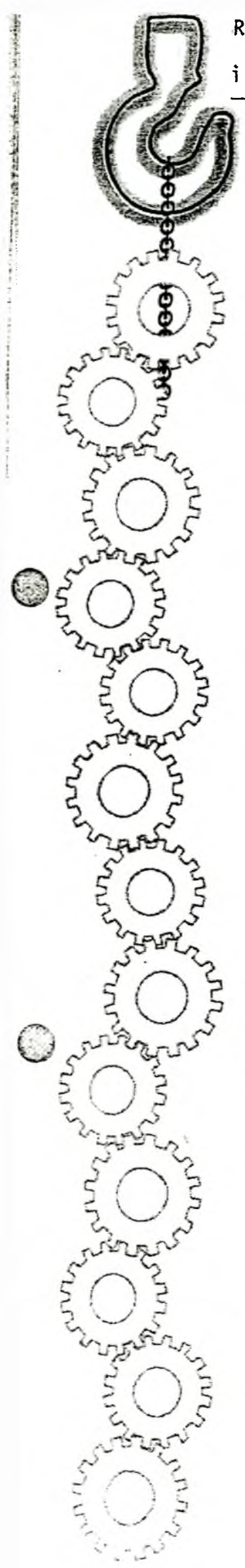
A sole trader is:

- a business owned by a single person such as a farmer who owns his own plot of land, a shopkeeper or a shoe repairer
- collects all the profits
- pays all the debts; in other words it has unlimited liability
- financial results are not made public

A partnership

A partnership is:

- a business owned by at least 2 but not more than 20 people
- unlimited liability
- financial results are not made public



Close corporation

A close corporation is:

- a business owned by not more than 10 people
- limited liability provided the company is run according to the Close Corporations Act
- not required to publish its financial statements
- has CC after its name

Co-operatives

Co-operatives are:

- formed by a group of people with the same aims, activities and interests, who set up an organisation that provides them with common services

For example, a group of small farmers may decide to form a farmers' co-operative that will collect what its members produce and transport it to the market where it bargains to get the highest price. Alternatively, it may buy supplies of seeds and fertilisers for its members and get them at a lower price because it is buying in bulk

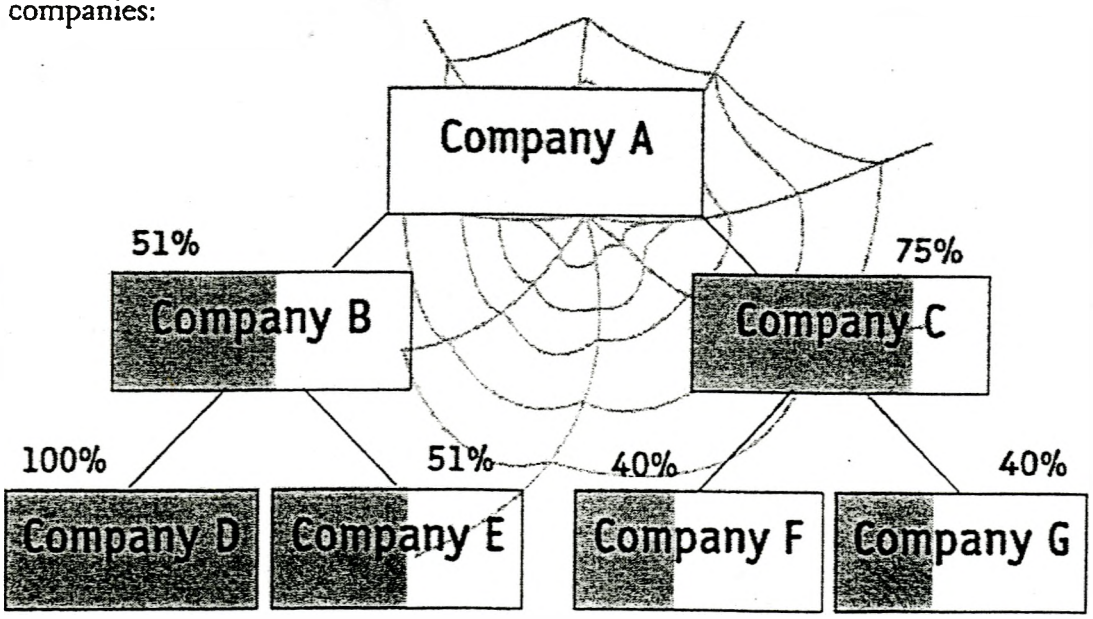
- owned by its members who buy shares to become members
- a company that engages in the same activities can also buy shares in a co-operative
- each member has one vote, irrespective of the number of shares he/she has
- there are many different types of co-operatives, including agricultural, trading and consumer co-operatives, etc.
- a 'workers co-operative' is another type of co-operative, which is organised and run by the workers. The Sarmcol Workers' Co-operative run by NUMSA is an example of a workers' co-operative

- the number of people who own a co-operative depends on the type of co-operative that is formed
- liability is limited or unlimited, depending on the decision of the group of people involved

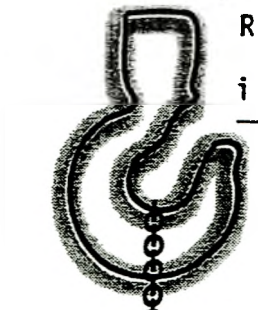
Companies that own other companies – the structure of a typical group of companies

- Shareholders control a company through the Board of Directors that they appoint at a shareholders' meeting.
- Shareholders with the most number of shares have the most votes at shareholders' meetings.
- Shareholders with the most votes will be able to choose the directors they want and influence the way the company is run.

There are several kinds of relationships between controlling and controlled companies. The diagram below shows the different kinds of relationships between companies:



Company A owns 51% of the shares in Company B.
Company B owns 100% of the shares in Company D.
Company B owns 51% of the shares in Company E.
Company A also owns 75% of the shares in Company C.
Company C owns 40% of the shares in Company F and Company G.



The above is called a **group** of companies. They are connected to one another because each company owns enough shares in the other to form a controlling relationship.

Company A is called a **holding** company. It is the controlling company in the group.

Company B and Company C are **subsidiaries** of Company A. Company D is a **wholly owned subsidiary** of Company B. A subsidiary is a company that is directly owned (more than 50 % of its shares) by another company.

Company F is an **associate** of Company C. An associate company is a company that has between 20 % and 49 % of its shares owned by another company.

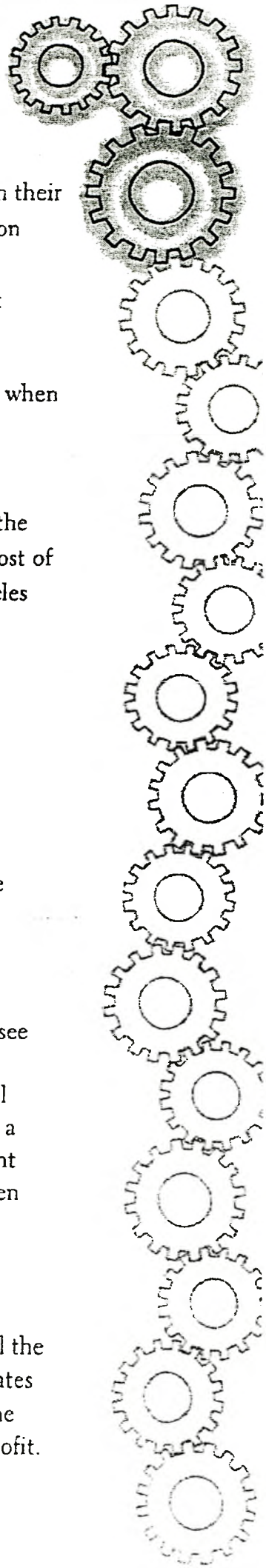
Where can we get information on companies?

1. As far as ownership of public companies that are listed on the JSE is concerned, the best place to look is in a book called 'Who Owns Whom'. This book, which is written by McGregor's Information Service, should be available at public libraries or at your local labour service organisation office.

2. If the company is a **public** company it will put out an annual report each year. Different companies have different financial year-ends, so these reports come out at different times. The annual report has a list of subsidiary companies at the back of the report. Annual reports can normally be obtained from the company or its registrar. The company will print a short version of the report in major newspapers on the day that it is released.

3. Not all public companies are listed on the JSE. A way of getting the annual financial statements of an unlisted public company is by writing to the Registrar of Companies, PO Box 429, Pretoria 0001. The Registrar cannot always provide the information on unlisted companies, because these companies have a right not to submit their financial information to the Registrar.

4. There is also a Registrar of Co-operatives that provides financial information on co-operatives. Their address is: Private Bag X237 Pretoria 0001.



5. Sole traders, partnerships and private companies do not have to publish their annual reports as public documents. It is very difficult to get information about these companies. However, if the company is a subsidiary or an associate company that is owned by a large, public company, the parent company's annual report may have some information about it.

6. The embassies of the different countries are also good places to consult when looking for information on multinationals.

7. Another good place to look for information about companies and multinationals is in business newspapers and magazines. Examples are the *Business Day* newspaper and the *Financial Mail* magazine. Although most of the information given is on public companies, there are sometimes articles on other companies.

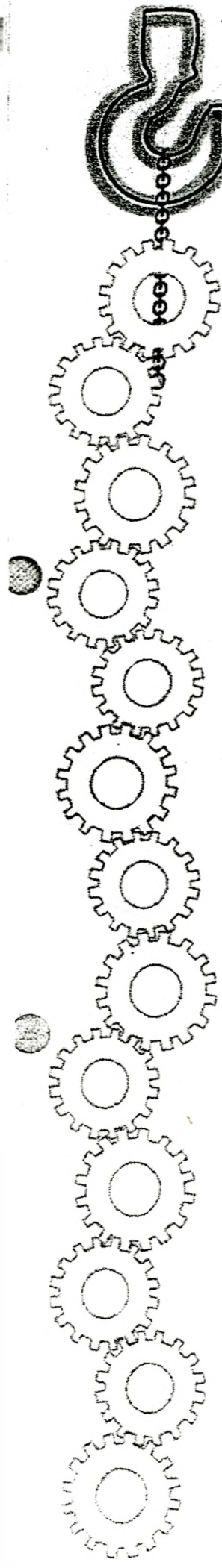
Understanding company reports

Can we trust the information in annual reports?

Annual reports are put out for two main reasons. Firstly, all companies that are listed on the Johannesburg Stock Exchange (JSE) are required to make their annual reports available to the public. Consequently, there is a legal duty to provide an annual report.

The second reason is so that the shareholders, or owners, of the company can see how their company is doing. The aim of the annual report is to satisfy the shareholders, and any prospective shareholders, that the company is doing well and is likely to do better in the future. In many cases, the annual report paints a more favourable picture than the actual situation in the company. Management usually does this in order to attract potential shareholders and maintain, or even increase, the price of their shares. The chairman's statement may warn the shareholders that times will be difficult, usually blaming the economy or the market, but seldom the management of the company.

The financial information that is available is quite limited. It does not show all the dealings that have taken place within the company. With the huge conglomerates that operate in the country, goods can be exchanged within the group and some companies can be made to show a loss when they may have actually made a profit.



Others that are in a bad financial situation can be made to look as though they are doing well. Sometimes, in the case of companies that give a lot of credit, management may say that the profits shown in the report are only 'on paper', because the money is still owed to the company.

While there are limitations to annual reports, companies are legally bound to publicly announce certain information about their financial performance. Further, the accounting practices adopted by companies are in line with accepted standards in the accounting profession. All companies are bound by these standards. Thus, there are some controls on the reporting of financial information for public companies.

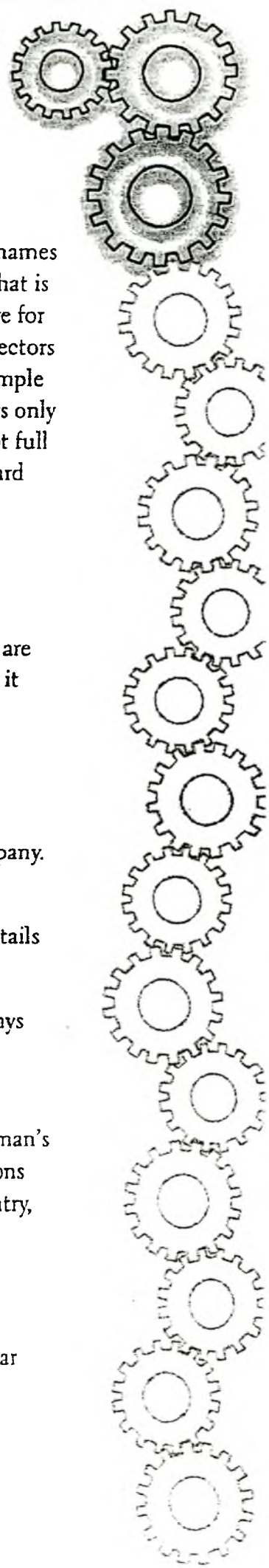
Therefore, financial information is of limited use and unions can only use what is given in the report, as they do not have any 'inside' information. If the company is projecting itself as a profitable company, then unions can make use of this. Similarly, if the company has spent lots of money on expansion or given its directors huge increases, then the union can use this information to argue for increased wages.

How to read a company report

Reading a company report can be quite easy if you know what to look for and where to find it. We have selected the parts of a report that we think will be most useful for wage negotiations.

These are:

1. The list of directors
2. The structure of the company
3. The chairman's report
4. The income statement (the profit and loss statement)
5. The interim statement
6. The balance sheet
7. Directors' pay



1. The list of directors

The list is usually found right at the beginning of the report. It includes the names of the executive and non-executive directors. The directors sit together on what is called the board of directors. It is useful to know how many directors there are for calculating the average payments to each director. Executive directors are directors that work for the company full-time. They hold 'executive' positions, for example Financial Director or Human Resources Director. The non-executive directors only attend directors' meetings, which are usually held once a month. They are not full time and are not paid a salary but rather an honorarium for attending the board meetings.

2. The structure of the company

Some annual reports contain diagrams of the structure of the company. They are very useful in giving an idea of how large the company is, how many divisions it has, and how many other companies it owns or has a share in.

3. The chairman's statement

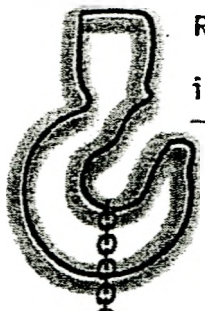
The chairman's report generally says something about the trading of the company. This is normally vague.

The statement normally explains why profits have fallen or risen, and gives details of expansion in the company.

Sometimes this information is useful for workers. If, for example, the report says that profit increases have been achieved due to increased efficiency and productivity, this can be used to support a demand for increased wages.

Other information usually contained in this report is a statement of the chairman's view of business developments in the country, the company's industrial relations principles (or problems), and statements on the political situation in the country, etc.

Another useful piece of information is the chairman's predictions of the company's future prospects. Here you may find information on whether the company is planning any restructuring or the timing of restructuring in the near future.



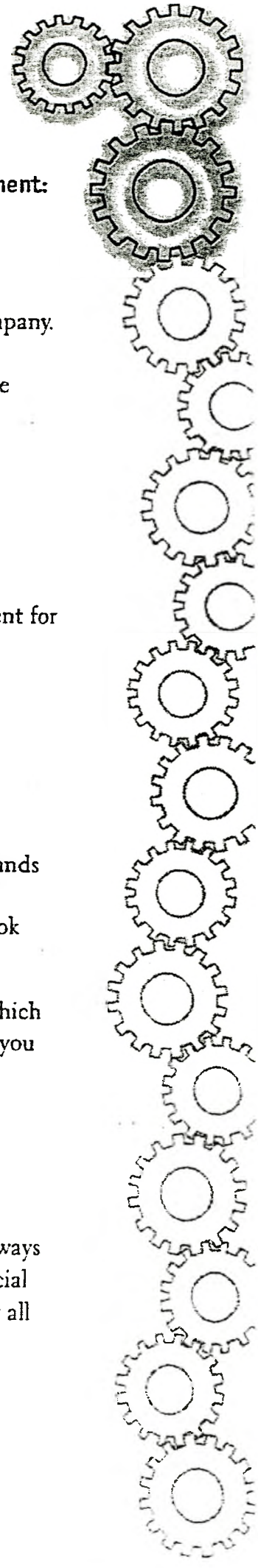
4. The income statement

The income statement is sometimes called the profit and loss account. The income statement contains lots of information that can be extremely useful to workers. In fact, the income statement is the most useful bit of information that can be extracted from the financial statement of a company. If you do a weekly or monthly household budget, you will have items such as your wages and other income as well as your expenses, such as rent, electricity, grocery bills, etc. The income statement is a record of the income and expense items of a company for the period of a year. This period is called a financial year.

INCOME STATEMENT

for the year ended 30 September 1999

	1999 Rm	1998 Rm
Turnover	755,3	707,5
Operating profit	70,8	58,0
Interest received	3,1	(0,8)
Profit before taxation	73,9	57,2
Taxation	26,4	22,5
Profit after taxation	47,5	34,7
Extraordinary items	3,0	2,5
Profit after extraordinary items	44,5	32,2
Retained profit at beginning of year	265,6	245,5
Available for appropriation	310,1	277,7
Dividends	145,7	13,1
Transfer from reserves	5,2	1,0
Retained profit at end of year	169,9	265,6
Earnings per share (cents)	192,0	140,4
Dividends per share (cents)	73,0	53,0



It is useful to note the following areas when reading the income statement:

i) The Year End

Under the heading 'Income Statements' you will see the year end of the company. In this case it is 30 September 1999. It is important to know this because sometimes the financial information may be out of date by the time the wage negotiations start. For example, if negotiations start in July, then the latest information will be September of the previous year. This means that the information will be 9 months out of date.

ii) Comparison with the previous year

You will see that the 1998 results have also been put into the income statement for 1999. This enables you to compare the two years.

Increases in profit or turnover over the previous year must be higher than the inflation rate for that period if the company is to show a real increase.

iii) Figures are expressed in millions or thousands

You will see that above the columns of figures is written Rm (which means Rands million). This means that all the figures below are in millions. For instance, turnover is R755.3 million. If this was to be written with all the 0s it would look like this: R755 300 000.

Some companies that operate with smaller amounts of money have R000s (which means thousands of Rands) at the top of the column. If this is the case, then you only have three numbers after the decimal point. For example R234.4 will be written out R234 400.

iv) Holding company or Group Figures

Some annual reports show group and holding company figures. You should always use the group figures. The figures for the holding company are only the financial figures for the company that controls the group. The group's figures represent all the business activities and the actual production of goods.

v) The Income Statement itself

The following are explanations of the most important items listed in the income statement.

Turnover: All the money brought into the company through sales of the goods that the company produces. It includes goods sold on credit.

Operating profit: This is sometimes called Trading Profit. It is the wealth left in the company after all operating expenses such as rent, wages, depreciation and other expenses have been paid.

Interest paid: The amount of money that the company has paid to banks as interest on the amount of money it has borrowed.

Taxation: The amount of money the company has paid to the government as taxes.

Profit after tax: It is the profit made by the company after interest payments and taxation. This is also called net profit or net income. Many companies use the word 'income' instead of profit.

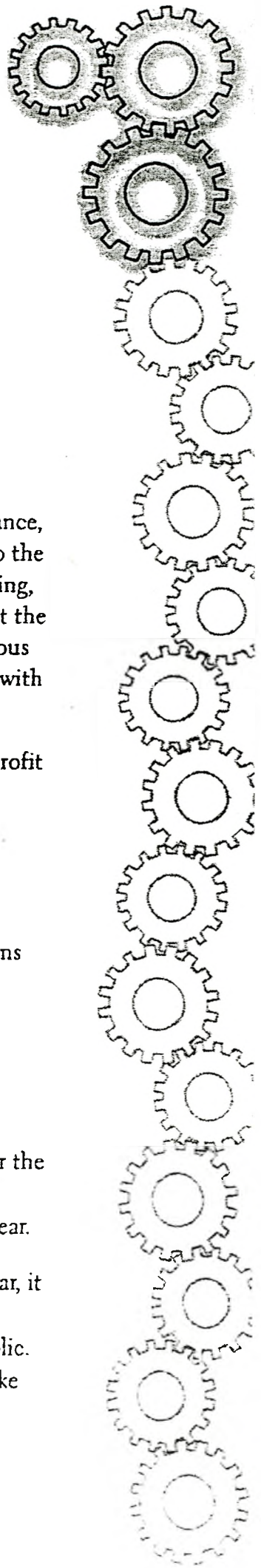
Dividends on ordinary shares: The total amount that was paid out to shareholders of the company as dividends.

Retained surplus: The amount of profit that has been retained (kept) by the company for use in the future. The profit that a company makes is used to pay wages and salaries to employees, dividends to shareholders and taxation to the government. The balance of profits after these 'commitments' have been met is retained in the company. This is Retained surplus. It is also called Retained Income or Retained Profits.

The above information would be found in almost any income statement. In addition, the following may be contained in some income statements, depending on the nature of the company:

Income from investments: The dividend the company received from any shares it owns in other companies.

Share of associate companies' retained profits: The company's share of the profits of associated companies.



Extraordinary items: Details of any extraordinary items. As the name suggests, an extraordinary item is one that is not part of the company's normal business operations.

We can also work out the following by using the information in the income statement:

vi) Profit margins

Profit margins give us some indication of the efficiency of the company's operations, as well as the profitability of the company. In some cases, for instance, companies make huge profits but their profit margins drop when compared to the year before. This would mean that although the company's profits are increasing, its profitability is decreasing. It is therefore useful to work out in advance what the profit margins are of a company and to compare them to the margins of previous years. In the case where profit margins have increased, the union is presented with a good argument for a high wage increase.

Profit margins express the profit as a percentage of the sales. In other words, profit margins tell us how much profit is made on every Rand of sales.

We can work this out in the following way:

PROFIT ÷ TURNOVER/SALES X 100

The answer we get will be written as a percentage. If the answer is 12%, it means that the company makes 12 cents on every Rand of goods that it sells.

5. The interim statement

All public companies publish an 'interim statement' after the first half of their financial year. The interim report tells us how the company has performed over the first half of the year compared to the first half of the previous year. It is an indication of how the company will be doing in the next half of the financial year.

When wage negotiations start long after the end of the company's financial year, it is useful to use the interim statement in addition to using the year end results. The interim results will be the latest financial information available to the public. The interim results are published in the business newspapers and magazines like *Business Day* and the *Financial Mail*.

6. The balance sheet

The balance sheet is a record of the wealth of a company at the end of the financial year. It could be viewed as a photograph of the company at year-end. Like the income statement, the balance sheet also has notes that explain and add to the information covered in the balance sheet itself. Also, the balance sheet gives comparative figures. This means that the current year's figures and the previous year's figures are shown side by side so that they can be compared.

The balance sheet has two 'sides', which are normally printed one below the other. One side of the balance sheet is shown under the heading 'Employment of Capital'. This side shows all the assets that the company owns. The other side shows how these assets have been financed (bought). This side is shown under the heading 'Capital Employed'.

Both sides of the balance sheet will always add up to the same total. This is because the assets of a business cannot be financed by anything other than the money put into the business.

A simple balance sheet is shown below.

ABC LIMITED Balance Sheet at 31 December 1999 All figures are in Rands

	1999	1998
CAPITAL EMPLOYED		
Share capital	2000	2000
Retained profits	2860	2350
Shareholders' funds	**4860**	**4350**
Long-term loans	2500	2600
	7360	6950
EMPLOYMENT OF CAP		
Fixed assets	4000	3500
Investments	1500	1500
Current assets		
Stock	1020	980
Debtors	1200	1100
Cash	890	900
Total	3110	2980
Current liabilities		
Creditors	750	600
Taxation	500	430
Total	**1250**	**1030**
Net current assets	1860	1950
Fixed assets	7360	6950

We would interpret the above balance sheet as follows:

The Capital employed side tells us that ABC Limited has three sources of capital (finance).

1. The share capital of R2000. This is the money that has been invested in the company by its shareholders.

2. Retained profit of R2860. This is the portion of profits that has not been distributed.

3. Long-term loans of R2500. This is money that has been borrowed on a long-term basis (more than one year).

The Employment of capital side tells us what the company owns. It tells us what the capital employed has been used for.

ABC Limited has used its capital to :

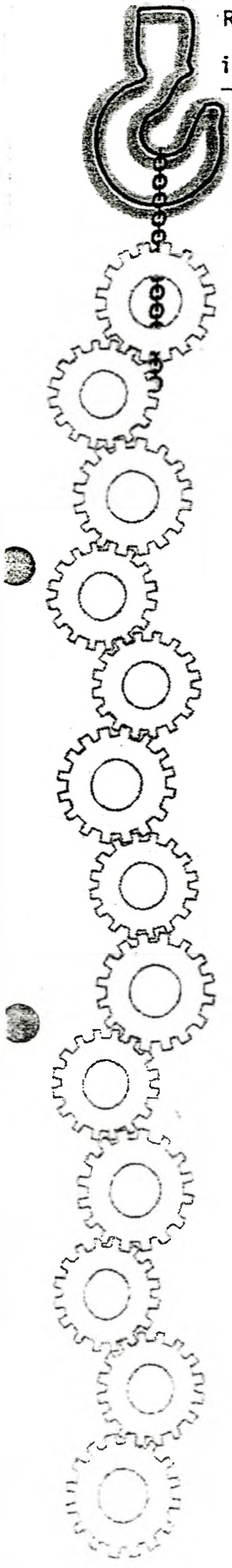
1. Buy fixed assets worth R4000.

2. Buy investments amounting to R1500. These could be shares in another company from which ABC Limited hopes to earn some income.

3. Buy current assets amounting to R3110. This is made up of stock comprising raw materials and finished goods amounting to R1020. ABC Limited has debtors totalling R1200. Debtors are people or companies that owe money to ABC Limited. The company also has R890 in cash (or in a bank account).

From these current assets we must deduct current liabilities. Current liabilities represent money which ABC Limited owe to other people or companies that will have to be paid in one year's time. Anything that will have to be paid over a longer period is called long term liabilities. ABC Limited's current liabilities amount to R1250. This is made up of creditors of R750 and taxation to be paid to the government of R500.

The difference between current assets and current liabilities is called net current assets. This is shown on the balance sheet. ABC Limited's net current assets are R1860.



The balance sheet is useful for the following reasons:

1. We can find out what the company owns.
2. We can find out the financial position of the company and its solvency, or how much cash it has available. We can examine whether the company is in a position to meet all its debts.
3. The balance sheet tells us how the company has been financed.
4. Together with the income statement, the balance sheet helps us to assess the company's profitability.

7. Directors' pay (emoluments)

Directors' emoluments refer to the fee or salary that is paid to the directors by the company. This item does not appear in the list of items in the income statement. It i: found in the notes to the income statement, usually in the note to the operating prof before interest.

The figure that is given is the total amount of money paid to the total number of directors. It is therefore possible to work out the average monthly salary of the directc in a company. We can do this by dividing the total figure by the number of directors and then divide by 12. In other words:

TOTAL DIRECTORS EMOLUMENTS ÷ NUMBER OF DIRECTORS ÷ 12 (MONTHS)

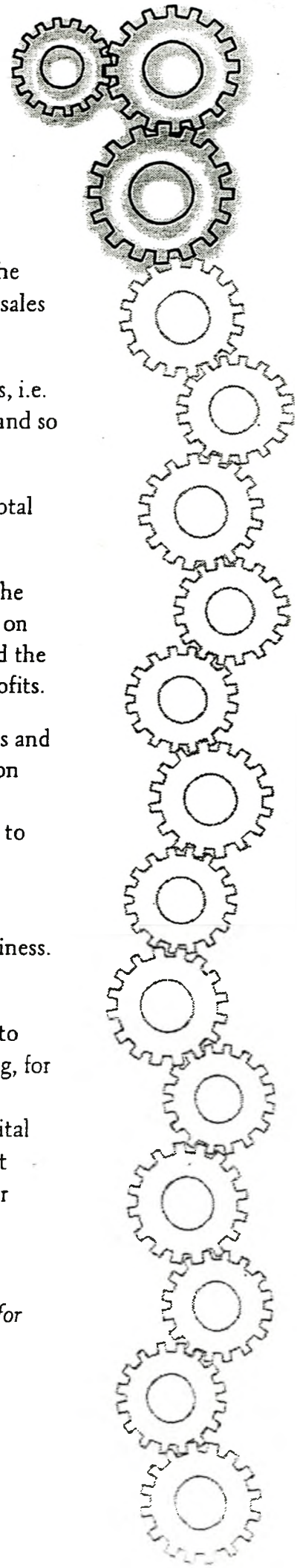
For example, the directors' emoluments of OK Bazaars in 1990 amounted to R2 979 000, and it has 15 directors ('alternate directors' are not included). In order to work o the average amount of money that each director gets every month:

R2 979 000 ÷ 15 ÷ 12

= R16 550

This figure is only an average figure. Executive directors usually earn more than the average and they earn more than non-executive directors.

Nevertheless, this information can be very useful for the union. The directors' salary can be used to show the very wide gap that exists between the workers' wages and tha of the directors, and it could possibly be argued that the directors should receive less and that the money could be used to boost the wages of the workers instead. It can also be used to compare the percentage increase in the directors' salaries with management's proposed wage increase for the workers. For instance, OK Bazaars paid out R2 509 000 to its directors in 1989 and R2 979 000 in 1990. As the number of directors did not change, this works out to an increase of 18.7% for the directors.



An explanation of the business cycle

The money received from customers for the sale of goods manufactured in the business is called turnover. Turnover is therefore the total money value of all sales made by the business.

A portion of turnover is used to pay costs incurred in the production of goods, i.e. production costs. This would involve costs like wages, water, electricity, rent and so on.

After production (and other administration) costs have been paid from the total sales, the funds that remain are called operating profits.

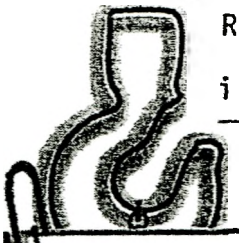
A portion of operating profits is used to pay finance costs. Finance costs are the costs of raising capital (from sources other than shareholders). Thus, interest on long-term loans is a finance costs. Depending on the value of loans taken, and the prevailing interest rate, finance charges could take up a sizeable portion of profits.

The portion of profits that is left once all production and administration costs and finance charges have been paid is called net profit before tax. Once taxation on profits has been paid to government, we have net profit after tax. In theory, companies are meant to pay 50% of profits as taxes. In practice, however, due to various tax allowances, companies hardly ever pay half their profits as taxes.

Net profit after tax is the portion of profit that 'belongs' to the owners of the business. A portion of this is paid out to the owners (shareholders) of the business. The portion that remains is called retained income.

Retained income is thus the portion of profit after tax that is not distributed to shareholders in the form of dividends. Companies have a policy of distributing, for example, one third of profits in the form of dividends and the rest in retained income. By retaining a portion of profits, the company is able to build up capital for future expansion. Retained income is thus another source of capital, and it allows the company to expand without having to raise capital through loans or through the issuing of shares.

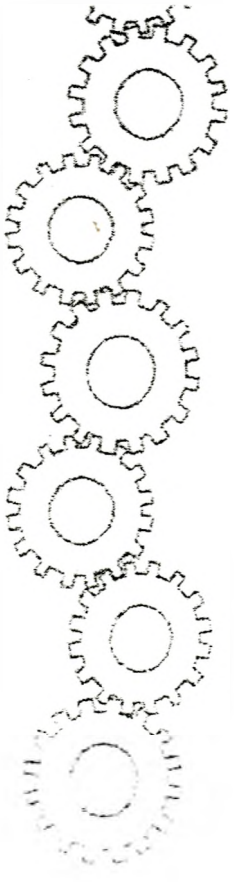
For more information around understanding information useful to wage negotiations, the TURP publication *Analysing Company Information: a book for trade unions* may be of use to you.



In South Africa, only companies that are listed on the Johannesburg Stock Exchange (JSE) sell shares to the general public. Someone who buys a share has a share of ownership in the company. Stockbrokers do the actual buying of shares on behalf of the owner. For this service they receive a commission. Shares are sometimes called stocks, securities or equities. For buying more shares in a company, a person will get more of a share of the company and more of a say in company decisions. A major shareholder will probably sit on the board of directors that governs the company.

The price of a share changes all the time. Sometimes the price goes up (normally if the company is doing well and making profits) and sometimes the price of the share goes down. People who buy shares are called investors or shareholders. Investors buy shares to make money. Investors can make money from shares in two ways. One way of making money from shares is to sell them when the price of the share has increased. Another way of making money from shares is to receive dividends. Dividends are a percentage of the company's profit for six months or a year divided amongst all the shares in the company.

Two terms you will often hear when there is talk about trends on the stock markets are **bear trends** and **bull trends**. What do these trends refer to? A bear trend is when the trend in the stock market is downward, i.e. when prices are generally falling on the stock exchange. A bull trend is the opposite of a bear trend, i.e. it is when the prices on a stock exchange are generally rising.



Getting information on your company from the financial pages of a newspaper

Information on share prices and some company performance measurements can be found in the JSE section of the financial pages of a newspaper.

The JSE section of the financial pages is normally divided into three sections:

- The first does not usually occur within the actual financial pages and is normally on the front page of the newspaper or the front page of the business supplement. This small section shows a few highlights from the financial pages
- The second includes general information and indices
- The third displays actual share prices

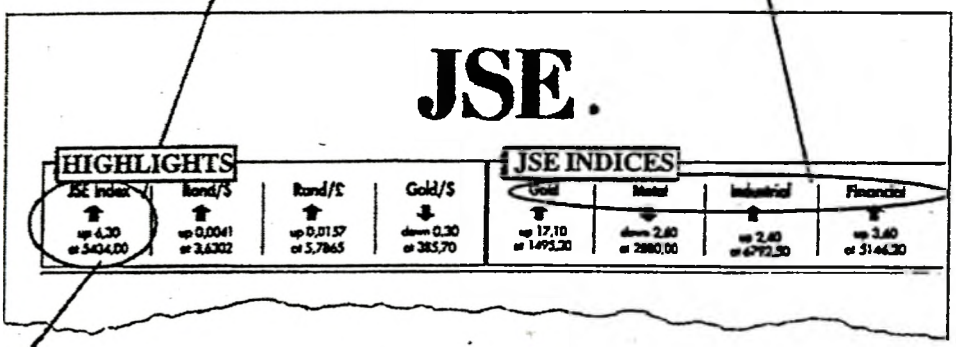
Each of these will be shown in turn below.

The highlights

The highlights show how markets have changed compared to the day before.

The JSE Index measures the value of all shares on the JSE.

These are indices of companies listed on the JSE that fall into these particular sectors.



The JSE Index increased by 630 points during the previous day and sits now at 5434.00 points.

Index: An index is a number that is used to show the change in the value of something over a number of years. When you have more than one, you call them indices.

General JSE information and indices

This section gives a summary of JSE activity. An example from the *Business Day* can be seen below.

The actual amount (volume) of shares traded.

147 mining companies' shares were bought or sold yesterday.

All the shares (mining & industrial) listed on the JSE.

56 Shares increased in value. 87 decreased and 573 stayed the same compared to the day before yesterday.

Mining companies' shares are listed separately.

The activity on the day before yesterday.

JOHANNESBURG STOCK EXCHANGE

	MINING		INDUSTRIAL		OVERALL MARKET	
	YESTERDAY	PREVIOUS	YESTERDAY	PREVIOUS	YESTERDAY	PREVIOUS
VOLUME	4904144	3818280	11402747	12038878	17080193	16586458
VALUE	11192899	59550284	129554108	141081907	241536213	200731886
TOTAL SHARES	147	147	550	549	717	716
UP	25	8	45	48	70	86
DOWN	28	41	49	45	78	87
UNCHANGED	94	98	456	458	569	573
SHARES ACTIVE	87	78	196	178	284	280

The value of the mining shares traded during the previous day. This figure is in cents and therefore amounts to R1119 289.99

Share prices

The current share price of the company you are interested in can be found on the share price page. Your company can be found under its particular sector heading.The sectors included range from motor to paper and packaging to mining or pharmaceuticals.

This is the sector

This is the industry

These three measurements give buyers and share owners an idea of the relationship between share prices and other performances indicators, namely earnings and dividends.

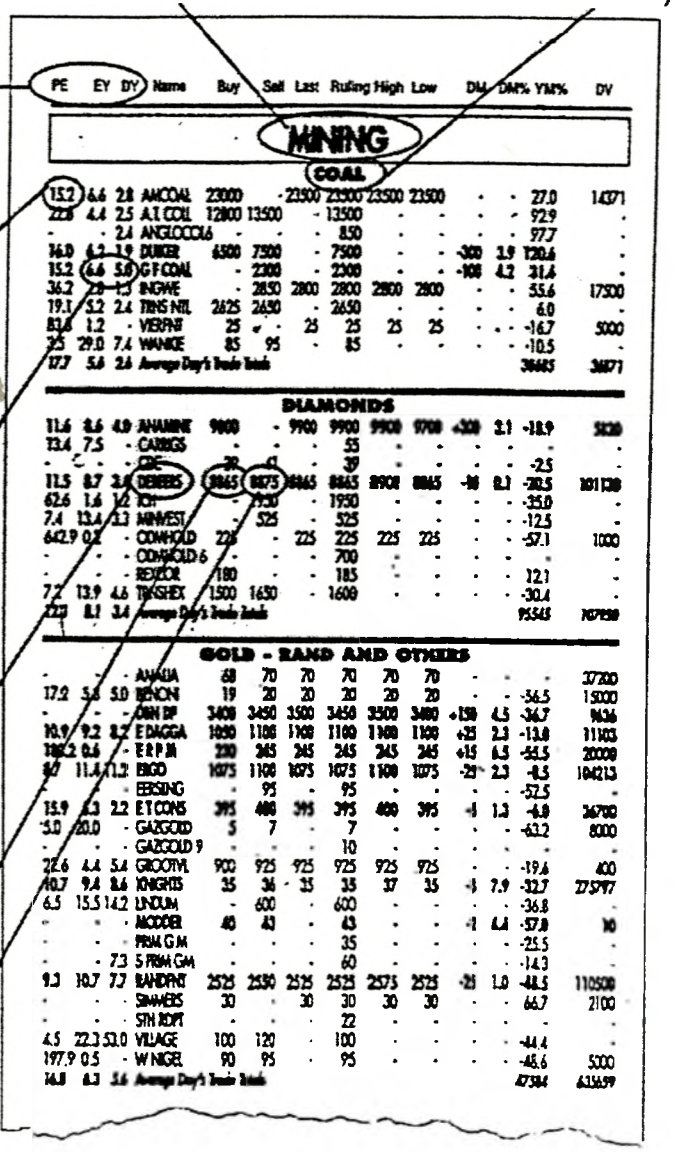
Price/earnings ratio (PE). This is a measurement that shareholders use to monitor the performance of their shares. It is calculated by dividing the price of the share by the company earnings (profit).

These movements are also used by investors to monitor their shares. Earnings yield (EY) divides profits by the current share price and dividends yield (DY) divides dividends by the current share price.

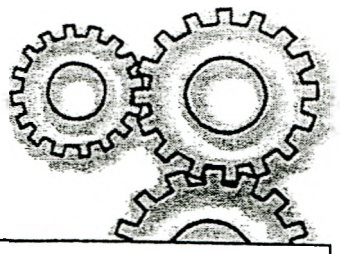
This is the company name. You can see it is a short version or abbreviation of the name of the company. The short name for your company can be obtained from Turp.

The price you would pay to buy a share in De Beers (8 865 cents or R88.65).

The price you would get if you sold a share in De Beers (R88.75). The difference in price is due to the service charges involved in transfering ownership of the share.



PE	EY	DY	Name	Buy	Sell	Last	Ruling	High	Low	DM	DM%	YM%	DV
			MINING										
			COAL										
15.2	6.6	2.8	AMCOAL	23000		23500	23500	23500	23500	-	-	27.0	14371
22.8	4.4	2.5	A.I. COL	12800	13500		13500	-	-	-	-	92.9	-
-	-	2.4	ANGLOCOL6	-	-		850	-	-	-	-	97.7	-
16.0	6.2	1.9	DURBER	6500	7500		7500	-	-	-300	3.9	120.6	-
15.2	6.6	5.0	G F COAL	-	2300		2300	-	-	-100	4.2	31.4	-
36.2	2.8	1.5	INGWE	-	2850	2800	2800	2800	2800	-	-	55.6	17500
19.1	5.2	2.4	TRANS NTL	2625	2650		2650	-	-	-	-	6.0	-
83.8	1.2	-	VIERFNT	25	-	25	25	25	25	-	-	-16.7	5000
7.5	29.0	7.4	WANKIE	85	95		85	-	-	-	-	-10.5	-
17.7	5.6	2.6	Average Day's Trade Totals									39445	36871
			DIAMONDS										
11.6	8.6	4.9	ANAMINE	9800	-	9900	9900	9900	9700	+200	2.1	-18.9	5820
13.4	7.5	-	CARBCS	-	-	-	55	-	-	-	-	-	-
-	-	-	CDE	38	41	-	39	-	-	-	-	-2.5	-
11.5	8.7	2.6	DEBEERS	8865	8875	8865	8865	8908	8865	-98	0.1	-20.5	101138
62.6	1.6	1.2	ICH	-	1950	-	1950	-	-	-	-	-35.0	-
7.4	13.4	2.3	MINVEST	-	525	-	525	-	-	-	-	-12.5	-
642.9	0.2	-	CONHOLD	225	-	225	225	225	225	-	-	-57.1	1000
-	-	-	CONHOLD 6	-	-	-	700	-	-	-	-	-	-
-	-	-	REMCOR	180	-	-	185	-	-	-	-	12.1	-
7.2	13.9	4.6	TRANSHEX	1500	1650	-	1600	-	-	-	-	-30.4	-
22.8	8.1	3.4	Average Day's Trade Totals									95545	107958
			GOLD - RAND AND OTHERS										
-	-	-	ANGLO	68	70	70	70	70	70	-	-	-	37200
17.2	5.8	5.0	BENCON	19	20	20	20	20	20	-	-	-36.5	15000
-	-	-	CONS DP	3400	3450	3500	3450	3500	3480	+150	4.5	-36.7	9436
10.9	9.2	8.2	E DAGGA	1080	1100	1100	1100	1100	1100	+25	2.3	-13.8	11103
188.2	0.6	-	E R P M	230	245	245	245	245	245	+15	6.5	-55.5	20000
8.7	11.4	11.2	ELGO	1075	1100	1075	1075	1100	1075	-25	2.3	-8.5	104213
-	-	-	EERSING	-	95	-	95	-	-	-	-	-52.5	-
15.9	6.3	2.2	ET CONS	395	400	395	395	400	395	-1	1.3	-6.8	36700
5.0	20.0	-	GAZGOLD	5	7	-	7	-	-	-	-	-63.2	8000
-	-	-	GAZGOLD 9	-	-	-	10	-	-	-	-	-	-
22.6	4.4	5.4	GROOTVL	900	925	925	925	925	925	-	-	-19.6	400
10.7	9.4	8.6	KNIGHTS	35	36	35	35	37	35	-1	7.9	-32.7	275977
6.5	15.5	14.2	LINDUM	-	600	-	600	-	-	-	-	-36.8	-
-	-	-	MODDER	40	43	-	43	-	-	-1	4.4	-57.8	10
-	-	-	PRIM G M	-	-	-	35	-	-	-	-	-25.5	-
-	-	7.3	S PRIM GM	-	-	-	60	-	-	-	-	-14.3	-
9.3	10.7	7.7	RANDPNT	2525	2530	2525	2525	2575	2525	-25	1.0	-48.5	110500
-	-	-	SIMMERS	30	-	30	30	30	30	-	-	66.7	2100
-	-	-	STH ROPT	-	-	-	22	-	-	-	-	-	-
4.5	22.3	53.0	VILLAGE	100	120	-	100	-	-	-	-	-44.4	-
197.9	0.5	-	W NIGEL	90	95	-	95	-	-	-	-	-48.6	5000
14.8	8.3	5.6	Average Day's Trade Totals									47384	633659



PE	EY	DY	Name	Buy	Sell	Last	Rolling	High	Low	DM	DM%	YM%	DV
MINING													
COAL													
15.2	6.6	2.8	AMCOAL	23000		23500	23500	23500	23500	-	-	27.0	1.4291
22.8	4.4	2.5	A.T. COL	12800	13500		13500	-	-	-	-	97.8	-
-	-	2.4	ANGLOCOL6	-	-		850	-	-	-	-	97.7	-
16.0	6.2	1.9	DURBH	6500	7500		7500	-	-	-300	3.9	128.6	-
15.2	6.6	5.0	G F COAL	-	2200		2900	-	-	-100	4.2	31.4	-
36.2	2.8	1.3	INGWE	-	2850	2800	2800	2800	2800	-	-	55.6	17500
19.1	5.2	2.4	ITNS NEL	2625	2650	-	2650	-	-	-	-	6.0	-
83.3	1.2	-	VEERNI	25	-	25	25	25	25	-	-	-16.7	5000
2.5	29.0	7.4	WANKIE	85	95	-	85	-	-	-	-	-10.5	-
17.7	5.6	2.6	Average Day's Trade Totals									38.65	36971
DIAMONDS													
11.6	8.6	4.0	ANAMINE	9000	-	9100	9100	9100	9700	+300	3.1	-18.9	5820
13.4	7.5	-	CARRIGS	-	-	-	55	-	-	-	-	-	-
-	-	-	CDC	39	41	-	39	-	-	-	-	-2.5	-
11.5	8.7	3.4	DEBEERS	8865	8875	8865	8865	8900	8865	-10	0.1	-20.5	101120
62.6	1.6	1.2	IDI	-	1950	-	1950	-	-	-	-	-35.0	-
7.4	13.4	3.3	MINVEST	-	525	-	525	-	-	-	-	-12.5	-
642.9	0.2	-	COMHOLD	225	-	225	225	225	225	-	-	-57.1	1000
-	-	-	COMHOLD 6	-	-	-	700	-	-	-	-	-	-
-	-	-	REXCOR	180	-	-	185	-	-	-	-	12.1	-
7.2	13.9	4.6	TINSHEX	1500	1650	-	1600	-	-	-	-	-30.4	-
12.8	8.1	3.4	Average Day's Trade Totals									95.65	107950
GOLD - RAND AND OTHERS													
-	-	-	AMALIA	68	70	70	70	70	70	-	-	-	37800
17.2	5.8	5.0	BENCON	19	20	20	20	20	20	-	-	-66.5	15000
-	-	-	DRN DP	3400	3450	3500	3458	3500	3400	+150	4.5	-34.7	9636
10.9	9.2	8.2	E DAGGA	1650	1100	1100	1100	1100	1700	+25	2.3	-12.0	11100
180.2	0.6	-	E E P M	220	245	245	245	245	245	+15	6.5	-33.5	20000
8.7	11.4	11.2	EBGO	1075	1100	1075	1075	1100	1075	-25	2.3	-8.5	104213
-	-	-	EERSING	-	95	-	95	-	-	-	-	-52.5	-
13.9	6.3	2.2	E T CONS	395	400	395	395	400	395	-5	1.3	-6.8	36700
5.0	20.0	-	GAZGOLD	5	7	-	7	-	-	-	-	-63.2	8000
-	-	-	GAZGOLD 9	-	-	-	10	-	-	-	-	-	-
22.6	4.4	5.4	GROOTVL	900	925	925	925	925	925	-	-	-19.6	400
16.7	9.4	8.6	KNIGHTS	35	36	35	35	39	35	-3	7.9	-32.7	372797
6.5	15.5	14.2	LINDUM	-	600	-	600	-	-	-	-	-36.8	-
-	-	-	MODDER	40	43	-	43	-	-	-2	4.4	-57.8	10
-	-	-	PRM G M	-	-	-	35	-	-	-	-	-25.5	-
-	-	7.3	S PRM GM	-	-	-	60	-	-	-	-	-14.3	-
9.3	10.7	7.7	RANDPNT	2525	2550	2525	2525	2575	2525	-25	1.0	-48.5	110500
-	-	-	SIMMERS	30	-	30	30	30	30	-	-	-66.7	2100
-	-	-	STH RDPT	-	-	-	22	-	-	-	-	-	-
4.5	22.3	53.0	VILLAGE	100	120	-	100	-	-	-	-	-44.4	
197.9	0.5	-	W NIGEL	90	95	-	95	-	-	-	-	-48.6	5000
16.9	6.3	3.6	Average Day's Trade Totals									47.84	613459

The day's volume (DV). This is the total number of shares traded during the day.

The last time a share was sold it was for R28.00. Once the cash is transferred this becomes the ruling price.

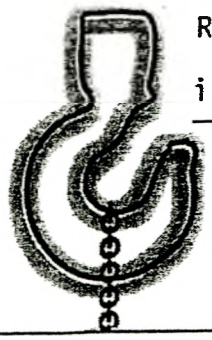
Yield move (YM%). Measured over twelve months. this share has increased in price by 6%

The daily movement (DM) of the share of a company. This share dropped by five cents from the opening to the close of the JSE on this day.

The daily movement as a percentage.

The highest and lowest amount that ET Cons (Eastern Transvaal Consolidated Miners Ltd) shares were sold for.

The last cash price that the share was bought for at the end of the day's trading



Restructuring information

Using this information

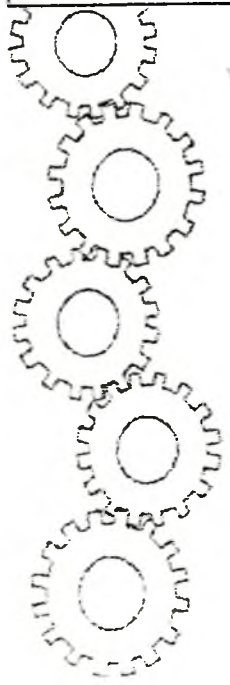
It is important to note the trend in share price of your company for a number of reasons:

- Share price is usually an indicator of how your company is viewed by investors and whether they think that the company is doing well or not.
- If, through Employee Ownership Participation Schemes (ESOPS), you or your union own shares in a company, you will want to know how the shares are performing.
- If the share price of your company drops sharply, it may be a signal that the company is in trouble and it may start to look at ways of cutting costs.
- Directors often own shares in their company. The number of shares they own is given in the annual report of a company.

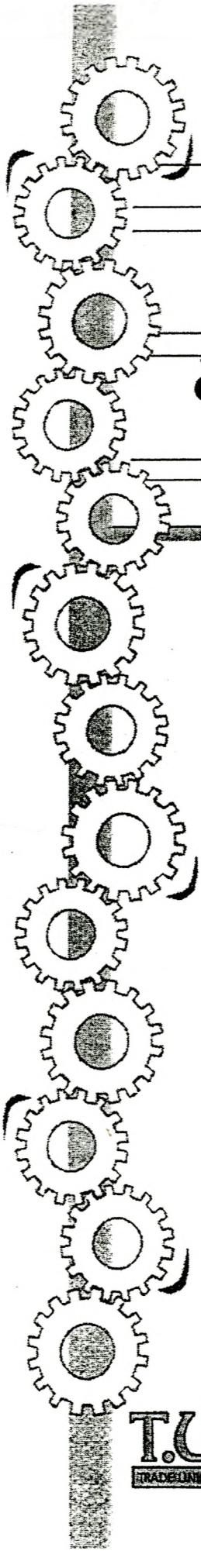
Use this table to monitor the share price of the company you work for.

month/year													
share price													%

% increase or decrease of share price over the year



Technology and workplace restructuring



T.U.R.P.
TRADE UNION RESEARCH PROJECT

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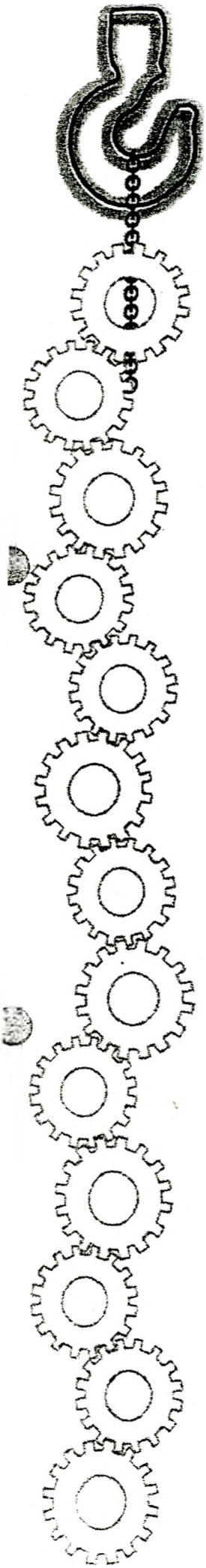

Technology and workplace restructuring

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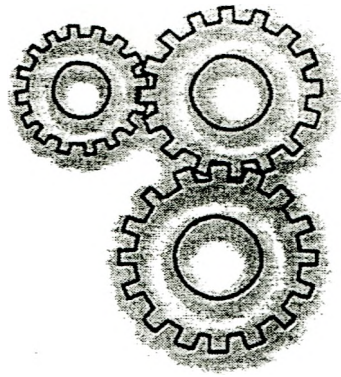

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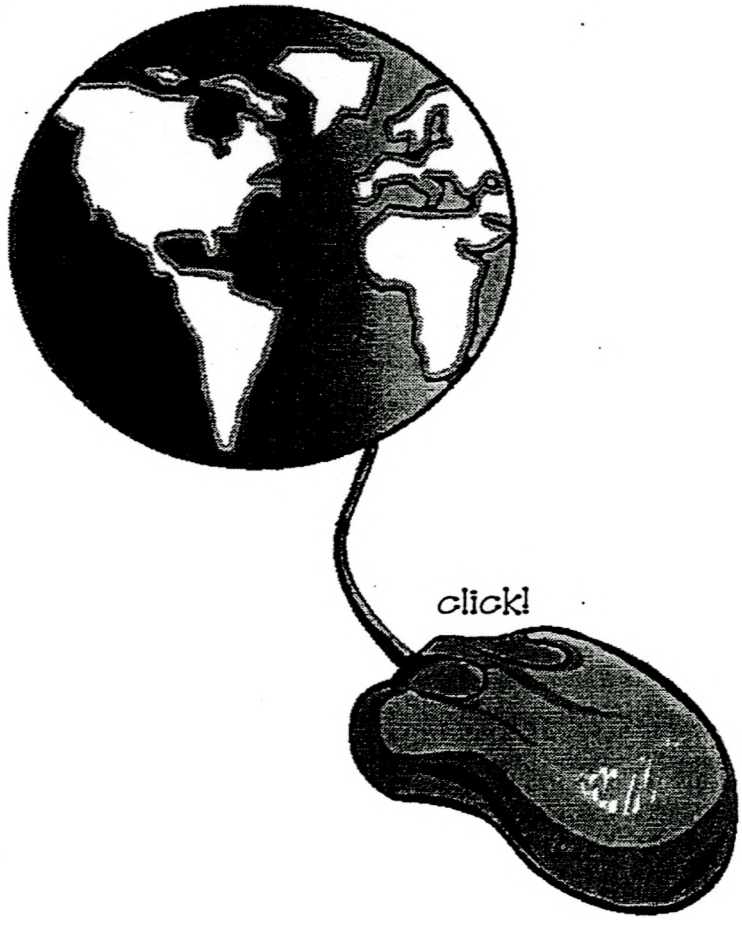
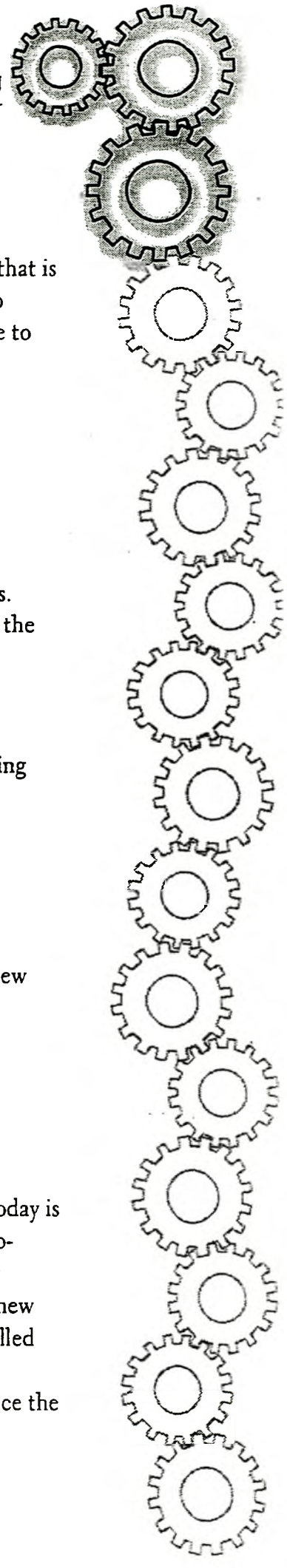
Technology is one of the 'buzz' words of the twentieth century. Micro-electronic technology has led to so much change that people now talk of a 'technological revolution'. The way in which work on the shop-floor is organised, and the working lives of millions of people, have been affected by this revolution.

Workers and unions around the world are fighting to ensure that workers' rights and lives are placed at the centre of this rapidly changing workplace. Technology should not only be used to increase profits, but also to improve wages, working conditions and skills, relieve workplace stress and monotony, and ensure employment security.

Micro-electronic technology can assist workplace restructuring, which is taking place across the world, and makes possible new forms of work organisation. In the hands of management, new technology is often what makes the use of flexible labour possible. This booklet will look at technology and its role. It is important to recognise, however, that workplace restructuring can occur without the introduction of technology.





What is technology?

The word 'technology' is generally used to refer to machinery or equipment that is used in the production of goods and services. But it is more than that. It also includes the ideas, skills, knowledge and organisation of work that contribute to the production of these machines and equipment.

Technological change

Technology has developed alongside the history of people. As people have researched and developed technology to suit their needs, so technology has changed. Technological change has been speeding up during the last 50 years. Technology is changing so quickly these days that writers say we are living in the 'age of technology'.

Technological change is driven by a number of factors:

- the desire to improve market competitiveness by cutting costs, improving quality and speeding up production
- consumer demand for new goods and wider choices
- investment in technological research and development

At the workplace, technological change involves both the introduction of a new machine or new material or equipment, and a change in the way that work is carried out.

New technology

'New technology' means a recent technological invention. New technology today is old technology tomorrow. These days most new technology is based on micro-electronics. You can read more about this in the information box below. New technology may refer to improvements to existing technology or to a totally new piece of technology. Computers, computer-controlled machine tools (also called 'CNCs'), computer networks and other micro-electronic equipment are all examples of new technology that has been introduced into the workplace since the 1970s.

Micro-electronic technology

When machinery is operated by a microchip, it is called 'micro-electronic technology'. This microchip controls the machine and gives it the commands necessary to carry out production tasks. Think of the example of a lift in a block of flats. All the passengers of a lift do is push a button for the floor they want to move to. The microchip tells the lift to close its doors and move to the floor to which it should go. Then it tells the doors to open. If the doors try to close when someone is in the way, the microchip tells the doors to open again.

Micro-electronics has led to the invention of new products and to the improvement of existing products. It is used to power computers and industrial robots and to control CNCs. It speeds up production by feeding commands to machines more quickly than a person can, and it can feed more instructions at one time than a person can. A microchip can also be used to set machines more accurately and faster than a machinist is able to. This increases productivity by reducing down-time and waste.

Much new micro-electronic technology is used to help speed up the passing of information from one source to another. E-mail (electronic mail), the Internet and the World Wide Web, computer networks and fax machines are all used for transferring information electronically. Information can be passed between companies in different parts of the world in a matter of seconds. It can also be passed from the shop-floor to managers without the workers' knowledge. These new inventions have had such a major impact on the nature of communication that people sometimes refer to the change as the 'information revolution'.

There has been increased demand for this new computer technology because:

- micro-electronics has got cheaper over the past 20 years
- new computers can store more information than ever before
- new computers can process information much faster than ever before
- computers make it cheaper to communicate around the world
- computer developments make design of tools and products easier and quicker
- new technology makes changes to work organisation very easy[1]

Low tech and high tech

The type of technology used in industry often depends on the nature of the industry. Lower levels of technology are normally used in **labour intensive** operations, where there are more workers than machines and the machinery does not require high levels of skill to operate. High levels of technology normally go with **capital intensive** work, where there are fewer workers, more machinery and higher skills are required to operate the machinery.

labour intensive: the production process uses a lot of people and few machines.
capital intensive: the production process uses a lot of machines compared to people.

The clothing and chemical industries are examples of these two extremes of labour and capital intensive industries. The average South African clothing manufacturer spends R2 400 on machines for every person employed, while in the chemical industry the ratio is one employee to every R219 000 spent on machines.[2]

What purpose does technology serve?

Scientists and engineers at research institutes are continually trying to invent new technology or improve existing technology. Some research institutes use this scientific knowledge to make new machines and new materials for production.

In industry, many employers believe that using the right technology helps to increase productivity, improve quality and lower costs. In this way it generates profits for companies. More and more, new technology is seen as a key to improving the competitiveness of a company.

Examples of how new technology is changing the face and pace of work

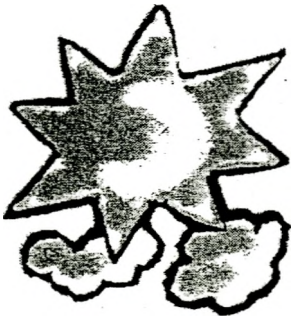
The following are just a few of thousands of possible examples of how new technology is affecting work and the workplace. These examples show that new technology can lead to:

- improved accuracy of information
- accurate monitoring of supplies
- work speed-up

- better communication between manufacturer and supplier
- ability to switch from manufacturing one product to another rapidly, depending on demand
- lower handling and storage costs

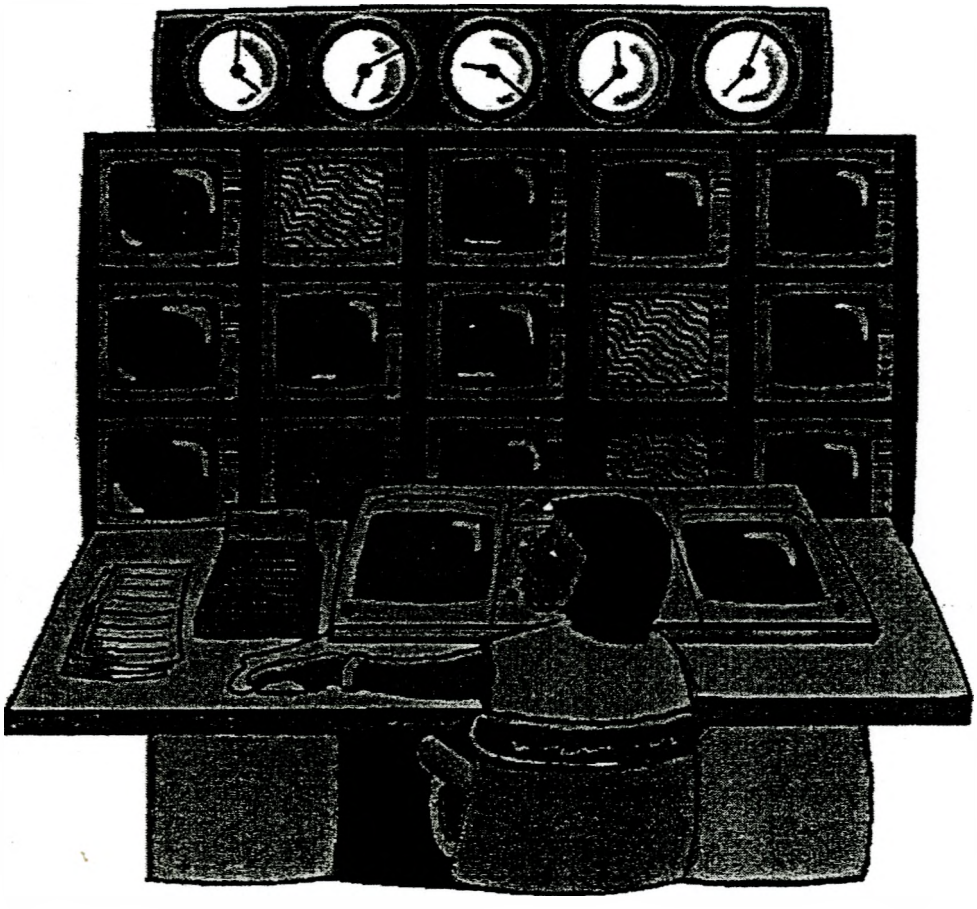
Designing cars around the world

Ford, the car manufacturer, has a 'follow the sun' design process whereby, as the sun rises on a working day in one part of the world, designers begin work on computers to design plans for new car models. As the sun sets there, these designs are electronically transferred via the Internet to another part of the world, where the design work is continued by workers who are just starting their day. In this way an uninterrupted cycle of design work is taking place



Indian workers watch English consumers

Security cameras in a large department store in the UK transmit their pictures to television screens watched by workers in India. The information technology system is so fast that if the workers in India detect anyone shoplifting, they can inform security in the UK store in time to catch the shoplifter before he or she leaves the store. By doing this, the company takes advantage of the lower wages paid to Indian workers.



Robots take over from metal workers

In the big workshops of industrialised countries, robots are being used to do welding, die-casting, injection moulding, assembling, handling and transporting. Robots are even being designed to be able, like humans, to avoid colliding with each other. Entire assembly lines at hi-tech companies are computer-controlled. Computers are now used to design products and then to pass the information on to other computers, which in turn, programme machines to cut parts for manufacture. The parts are then manufactured using computer aided technology.

Computer technology assists the retail sector

Almost all major retailers in South Africa have introduced computerised systems. These systems include the introduction of scanning machines, electronic point of sale (EPOS) and computerised credit systems. Scanning machines and EPOS fulfil a whole range of functions:

- They are extremely accurate in gathering information about sales and stocks from the shop-floor, which makes it much easier for retailers to monitor their entire business. For instance, computers can calculate, on a daily basis, how much profit a retailer makes in relation to the use of floor space.
- Computer systems bring about a closer relationship between manufacturing suppliers, retailers and wholesalers. They make it possible for information to be sent directly to the manufacturers. The manufacturers are then able to produce the goods that are selling the fastest. In this way, computerised systems control stock.
- Computer systems have also brought about a closer relationship between banks and retail stores. With the EPOS, customers can pay their grocery bills with their cashcards. Their banks then automatically deduct the amount from their account.
- Computer technology has also revolutionised the way warehouses are run, through the use of automated materials handling systems that help reduce the handling and storage costs of retail companies by utilising floor space efficiently.

Automation more accurate than human beings

The following example illustrates most of the points made earlier about technological change being seen as the best way of increasing productivity, quality, speed of production and international competitiveness.

The general manager of GEC Alsthom Electrical Machines explained that the laminations division of the company was changing to automation as operators could not keep pace using the manual operations. He said: "With the manual operators it is very difficult to duplicate set-ups accurately".

He said the advantages of automation would be to:

- 'enhance production efficiency and accelerate throughput rates';
- 'reduce machine-cycle time from 18 seconds to six seconds. This will improve our delivery capability and so greatly enhance our competitive position. It will also increase our production capacity';
- 'result in a marked reduction in set-up times as well as greater product consistency.'

The general manager concluded, "We are looking to increase our market share to 80% of the repair business this year".

Technology and work organisation: Implications for workers

It can be seen from the above examples that new technology has a major impact on production and leads to improvements in production. This section takes a look at the implications for workers of new technology, and the changes it brings to work organisation.

Workers can be greatly affected by the type of technology they use. Technology in production can affect employment levels, working conditions, health and safety, skill levels, workers' rights, and employment security. It may affect the employee needs of the company. It can make the skills of workers outdated and make new skills necessary. Worker participation in the introduction of new technology can help reduce retrenchments and the undermining of working conditions once restructuring is introduced.

How does technology impact on skills and working conditions?

The issue for workers is whether or not technology and the resulting changes in work organisation bring improvements to their working conditions. Does technology bring better wages? Shorter hours? More interesting work? Increased skills?

Research by the Organisation for Economic Co-operation and Development (OECD), which has, as its members, 24 of the most developed countries in the world, showed that new technology generally destroys lower-wage, lower-productivity jobs and creates more productive, high-skill and highly-paid jobs.[3] This means that skill requirements for jobs are getting higher.

New technology may require skills that some workers do not have. International research shows that, these days, jobs need more mental and problem-solving skills than physical skills.[4] Workers without these new skills require retraining, but, if retraining does not take place, employers may 'import' workers from other parts of the world instead. As you have seen in an earlier example, another option that avoids the need for retraining is to automate the jobs so that machines perform the work instead.

TURP conducted a survey of 145 Food and Allied Workers' Union (FAWU) shop stewards in Durban on their views of technology. Although it was clear that the introduction of new technology into the workplace led to uncertainty and insecurity, some of the shop stewards came out in favour of new technology.[5]

- 72.4% agreed that technological change opened up opportunities for developing more skills
- 75.9% said that new technology makes their work easier
- 71.2% of those workers who had been re-graded as a result of new technology in their workplace had been upgraded
- 86.3% said that new technology, introduced to help with the carrying of heavy material (in the form of lifting hoists, cranes and conveyor belts), had made their work easier

The dilemma of improved skills and easier work versus job insecurity was expressed by one shop steward who said, "As a worker I welcome technological change, but as a shop steward I fear job losses".

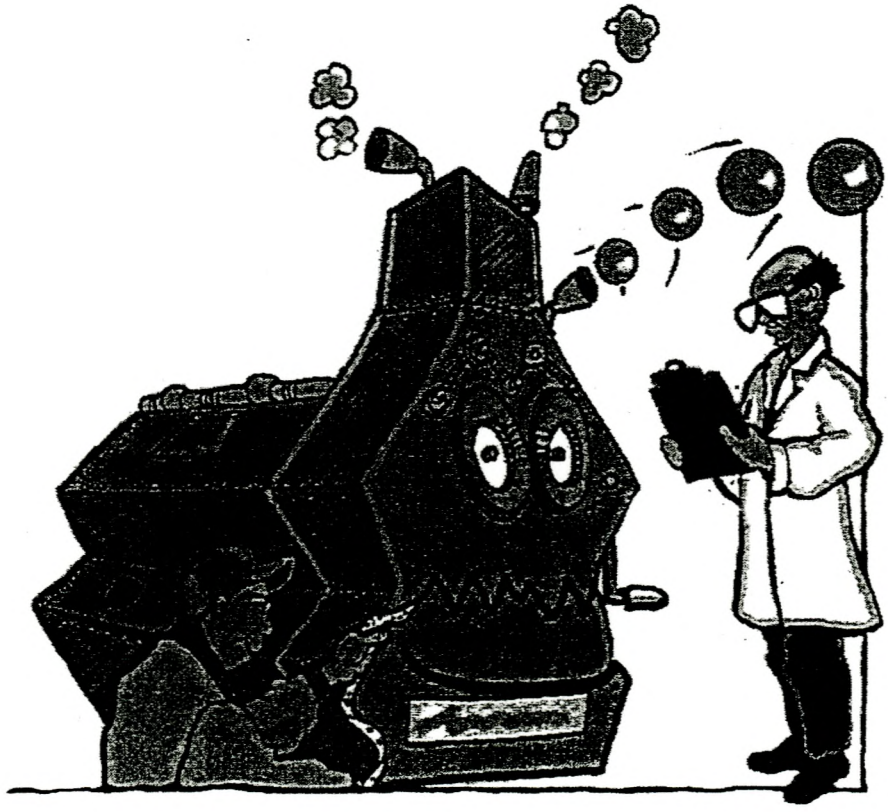
Reskilling or deskilling from micro-electronics?

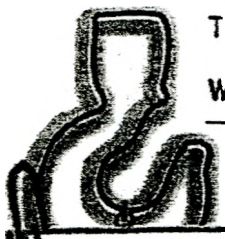
Some people argue that workers get access to new skills from micro-electronic technology (this is called 'reskilling'), while others argue that workers actually lose skills (this is referred to as 'deskilling').

To look at the way that changes in technology have affected the skills of workers, we can use the example of the change from 'valve technology' to 'micro-electronic technology' for a machine operator.

Before the microchip, machines used to be powered by glass valves filled with gas. There would be a number of valves within a machine. Different combinations of switching different valves on would make the machine do different tasks. Any machine which operates by using valve technology has three main functions:

- gathering the information which comes in (the 'inputs')
- processing the information in the 'central processing unit'
- using the processed information to instruct the machine (the 'outputs')





The inputs are instructions for what the machine must do. This includes information like 'start' and 'stop' or changes of settings. This information describes the task that the machine has to perform. Before micro-electronic technology, a machinist would process the information for the machine. The tasks were therefore defined for the machine.

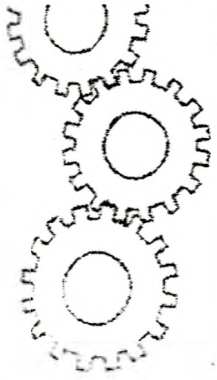
'Numerical control' technology was developed to improve valve-powered machines. Here, the information would be fed into the machine by a machine minder using a punched card. The machine would process this information using the valve technology in it and make changes to its tasks. The machine would complete certain tasks depending on the combination of holes punched into a card.

When the machine was started, the processed information would direct the tasks of the machine. The machine would not be able to remember the information entered into it from the punch card. Once the information was processed, it was gone. This information would have to be entered each time the machine minder wanted to instruct or set the machine.

With micro-electronics, this problem of memory was overcome. This is because micro-electronics has the ability to store the information processed. This memory would be programmed into the machine by a computer programmer who would be situated off the shop-floor. This meant that the only information that the machine minder would feed into the machine would be through pressing a button which would set the machine to what the programmer had set.

The machine minder's role was simply to monitor the machine by looking at a computer screen (called a VDU). In process industries such as chemical and food factories, fewer workers are needed to control the whole process of production. Also, micro-electronics allows quality to be monitored throughout the process.

In looking at this example, we can see that what has happened over the years is that workers' skills are more about operating machinery and less about the product they are making. With micro-electronics, the worker will leave the machine to do its job and only intervene when there is a problem. Some people say that new technology has meant that workers have been reskilled, but others say that they have lost their skills.



What is the impact of technology on jobs?

Some people argue that, in the long term, more jobs are created than are lost through new technology. One South African employer was quoted as saying that although technology sometimes took away jobs, "any job that fell away would be ultimately replaced by a new job along the line".[6] However, those workers who lose their jobs due to the introduction of new technology, may struggle to find new jobs because they do not have the skills required. The jobs that are created are often taken by other, more highly-skilled, workers.

Technology's effect on employment levels at the workplace will be influenced by four important factors:

- The reasons for the introduction of the technology
- The type of restructuring that technological change brings
- The economic conditions in the country at the time of introduction
- The type of technology introduced

The reasons for the introduction of the technology

When technology is introduced to develop new products, jobs are usually created. This is because a new product line with new workers will have to be started. However, if new technology is introduced to improve the production process or to cut costs and not to bring out new products, then jobs may be lost.[7]

Sometimes technology can be introduced to improve health and safety or the impact of the company on the environment. In chemical companies, which can be dangerous to work for, this can greatly assist workers and not necessarily threaten their employment.

Workers can argue that while technology will help companies to become more competitive, the real key to competitiveness lies in a skilled and empowered workforce. Therefore training and increased industrial democracy are important components of making the company as efficient and effective as it can be.

The type of restructuring that technological change brings

Research done on restructuring in the 1970s found that micro-electronics led to job losses if it caused major changes in:

- existing products
- the labour processes
- the services offered by the company[5]

When jobs are broken down into their simplest tasks, they are more easily automated through micro-electronics. In manufacturing in particular, low-skill tasks are being replaced by micro-electronic technology.

The economic conditions in the country at the time of introduction

Employers are influenced by national economic trends in a country. For instance, if the trend is towards 'restructuring' 'downsizing' and 'rationalisation' - as is the case with South Africa - employers tend to introduce technology that contributes towards these changes. Downsizing and rationalising always mean that jobs are in danger.

The type of technology introduced

Some forms of technology are designed to replace jobs. If this technology is introduced, workers will lose their jobs unless they can find other positions within the company.

Technology should be controlled not feared

Technological change cannot be stopped, and neither should it be, because technology brings wealth to an economy. The issue is how that wealth is shared. Workers can give their qualified support to technology; they can support it because it brings wealth and improvements, but they must be aware of the bad effects of technology and guard against these.

The Canadian Labour Congress views technological change in this way. They write that:

> *"Dealing with technology and its effects is not a simple matter of being for or against it. The real issue is how we are to share in the wealth it creates in the form of improved incomes, greater leisure, better working conditions and greater worker participation and control in the workplace."* [9]

Opportunities and threats in the introduction of new technology

It has already been pointed out that technology impacts on employment, skills, working conditions, job satisfaction, health and safety, and other important issues for workers. Whether this impact is negative or positive can depend on whether workers and their trade unions are sufficiently informed and organised to take some control over technology at their workplace, and to make the most of the opportunities offered by technology, while avoiding its dangers.

> *"Technology is not an untreatable disease. It is a product of human society that humans can and must control for the benefit of all."*[10]

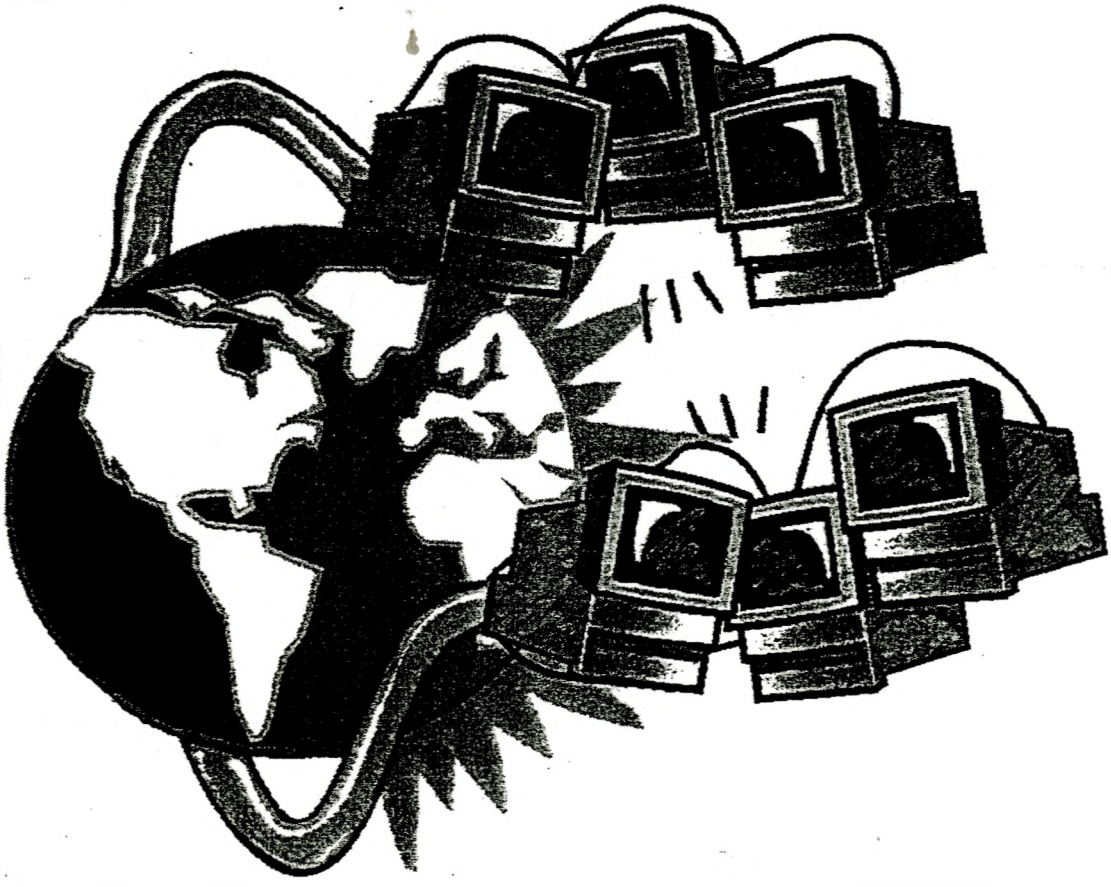
Opportunities versus threats

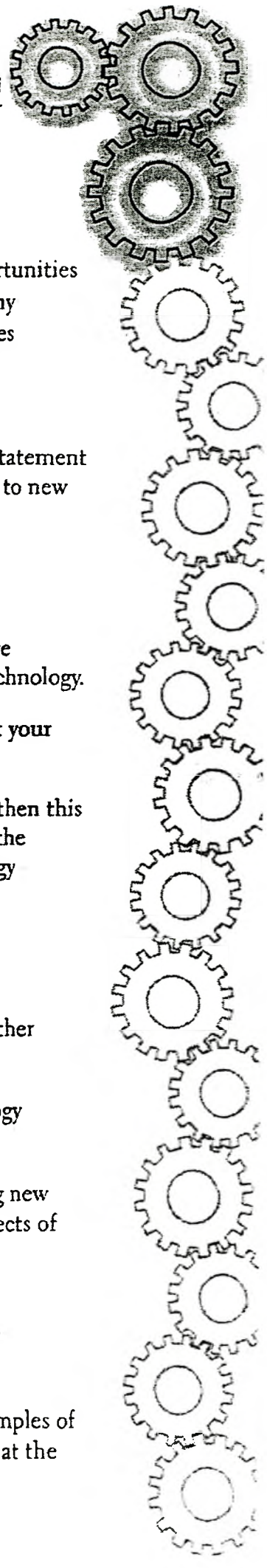
New technology and its introduction into the workplace can provide workers with opportunities to:

- ✔ create new technology-related jobs
- ✔ improve employment security through technology clauses in collective bargaining agreements
- ✔ ensure retraining and skills upgrading when new technology is introduced
- ✔ reduce physical dangers and workloads
- ✔ make the workplace more comfortable and less physically straining
- ✔ ensure fewer boring and repetitive jobs
- ✔ increase worker control and responsibility at the workplace

and threats of:

- ✗ job loss and worker insecurity
- ✗ deskilling and downgrading
- ✗ health and safety hazards
- ✗ increased work speed-up
- ✗ increased boredom and stress
- ✗ increased management control
- ✗ increased workload
- ✗ increased monitoring





Strategising about technology

Once completed, the following check list will provide insights into the opportunities and threats that exist at the workplace and should also help to ensure that any resolution or strategy that is to be developed covers the basic important issues relating to technology and workers.

1. **Does your union have a policy statement about new technology?**

   If you are a member of a union, your union may already have a policy statement on technology. This can provide broad guidelines around the approach to new technology in your industry.

2. **Does your union have a model technology agreement?**

   If you are a member of a union, the model agreement can be used as a guideline to negotiating the introduction of new technology. It will have guidelines on how to phrase clauses around the introduction of new technology.

3. **Is there a joint union-management technology committee or forum at your place of work?**

   If there is a forum that has been set up to deal with technology issues, then this is where negotiations should take place. If your company is unionised, the union should sit as the representative of the workers on these technology committees.

4. **Does your union have a technology committee?**

   If your union has a technology committee it could advise you on the implications in the workplace of new technology or experiences from other workplaces which have introduced similar technology.

5. **Do your collective bargaining agreements include clauses on technology rights?**

   These clauses may protect your rights in negotiating and implementing new technology and may set out rights in terms of training, whether the effects of the new technology will lead to grading adjustments, etc.

6. **Do workers have access to information about plans to introduce new technology?**

   How detailed is the information that has been provided? Are there examples of other factories where the same technology has been introduced and what the impact was there?

7. **Do unions participate in the decisions about the adoption of new technology and all other decisions that follow that?**

   There should be as much involvement in the processes as possible.

8. **Is there a guarantee that new technology will be used to increase production, not to replace jobs?**

   This should be negotiated upfront. Redundant workers should be trained or re-trained for jobs elsewhere in the workplace.

9. **Is there a guarantee that new technology will not affect workers' health and safety negatively?**

   This should be the first guarantee that should be negotiated. The Health and Safety Committee should look at the implications of the new technology being introduced to see if it poses any dangers. Booklet 3 on health and safety issues highlights some of the dangers that can arise during restructuring.

10. **Does retraining take place?**

    Is retraining required to ensure that workers are not left behind or retrenched as a result of the introduction of new technology.

11. **Are new technological skills rewarded?**

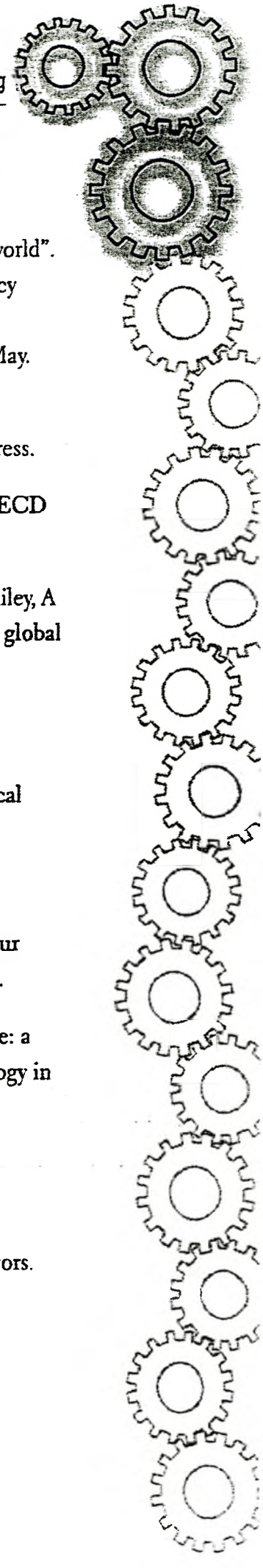
    What are the implications of the new technology on the grades of workers. If they obtain new skills will they be rewarded for this?

12. **Are benefits that are obtained from the new technology distributed across the workforce?**

    New technology should be used to enhance the working life of workers as well as to improve performance.

13. **Is there increased monitoring of workers because of new forms of technology?**

    Increased monitoring of workers is sometimes a negative result of the introduction of new technology.



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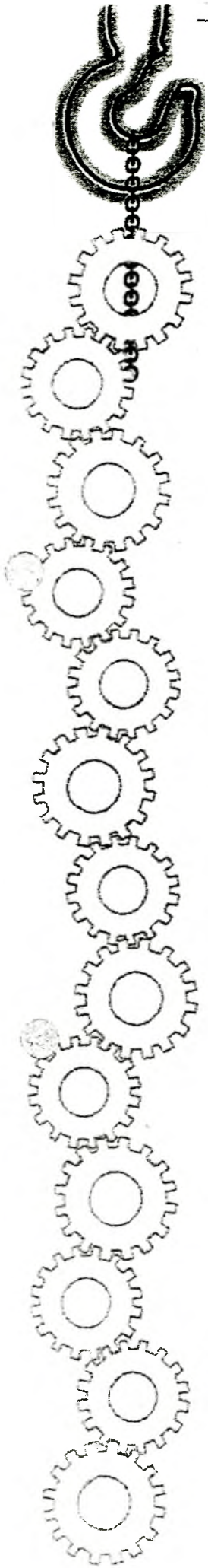

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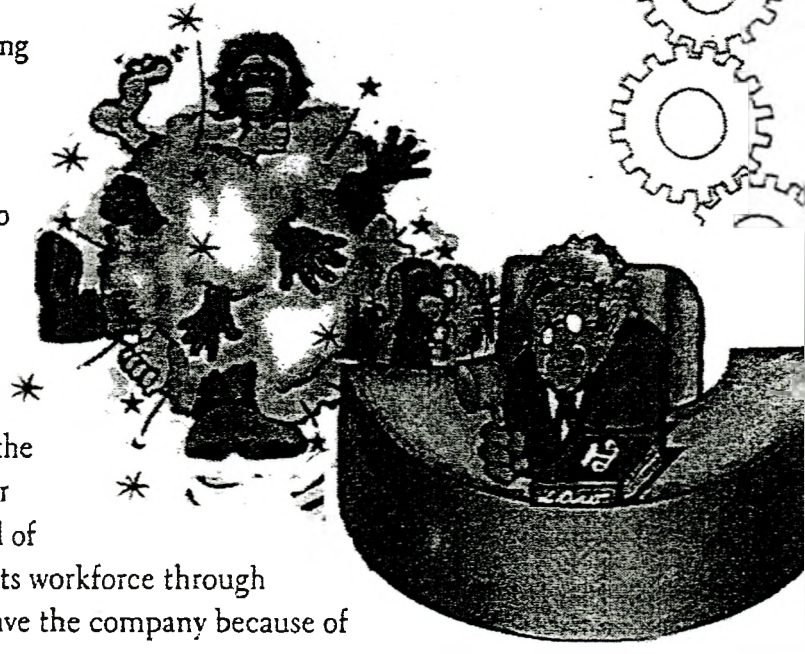
This glossary is a dictionary of words and terms that may be used during the course of restructuring. As a glossary it can be used to find out the definition of the words and gives examples to make the terms easier to understand. Some of the terms are Japanese terms for production techniques. This is because many common restructuring changes are based on Japanese manufacturing techniques.

Like a normal dictionary it is listed in alphabetical order. Look up the word or term just as you would in a normal dictionary. Some of the terms also have examples to explain them better.

Absenteeism: Absenteeism is the term used to describe workers being away from work without a valid reason. Absenteeism is usually used as one of the indicators in measuring labour productivity or the state of the relationship between workers and management. Employees who are on normal or sick leave are usually not taken to be absent. *Example:* A worker who does not provide any explanation for being away from work could be taken to have been absent.

Andon: *Andon* is a Japanese term that refers to a siren or indicator that allows workers to be aware that there is a fault in the production system.

Arbitration: Arbitration is a way of settling disputes or disagreements between management and labour. Arbitration normally takes place after the process of conciliation (where the parties attempt to reach agreement) has failed. Arbitration settles a dispute by making a legally binding decision.



Attrition: Attrition is a way of reducing the number of workers employed in a plant or company without retrenchments. Instead of retrenching workers, a company reduces its workforce through attrition by not replacing workers who leave the company because of death, resignation or retirement.

Benchmarking: Benchmarking is a way of comparing how one company performs against other companies. Benchmarking can focus on the companies' financial performance indicators, manufacturing processes, habits and practices. The objective is to find out better ways of producing goods or services and getting them to customers. *Example:* Some car makers in South Africa study car makers in the United States, Germany and Japan which they believe are very successful. This allows them to compare their own practices to those of successful companies. Once a benchmark is completed, South African companies can take note of how other companies differ from them. Based on the findings, the company will then make proposals on how to restructure the way in which they run their production.

Best Operating Practice (BOP): Best Operating Practice refers to those ways of doing things (practices) that are believed to be the best for producing particular goods or services. A plant that runs on Best Operating Practice produces goods in the best possible way. For workers this should also include a world-class working environment. *Example:* If it is important that the shop-floor should be kept clean to make things run more smoothly in the plant, a system should be set up to make sure that the best operating practice of a clean workplace and arranged tools is being followed. If it is best operating practice to empower workers with skills to perform their duties correctly then the required training should take place.

Big Hits: Big Hits refers to the opposite of continuous learning or continuous improvements. It is when improvements come as a result of a major or dramatic event, as opposed to a series of small improvements. *Example:* A consultant may come into a factory and set up a totally new work organisation rather than implement it bit by bit.

Buffer inventory: Buffer inventory is stocks that are held to guard against possible shortages in the supply of raw materials or other inputs into production. A buffer protects the manufacturer from possible shortages of any of the raw materials needed for production or to sell to customers. *Example:* Additional raw materials, finished goods or work-in-progress are held in a company to avoid a shortage of inventory.

Cellular layout: Cellular layout is a way of placing machinery on the shop-floor so that different parts of the manufacturing process are grouped together within the plant in 'cells'. Each cell will produce a different product or part of a product.

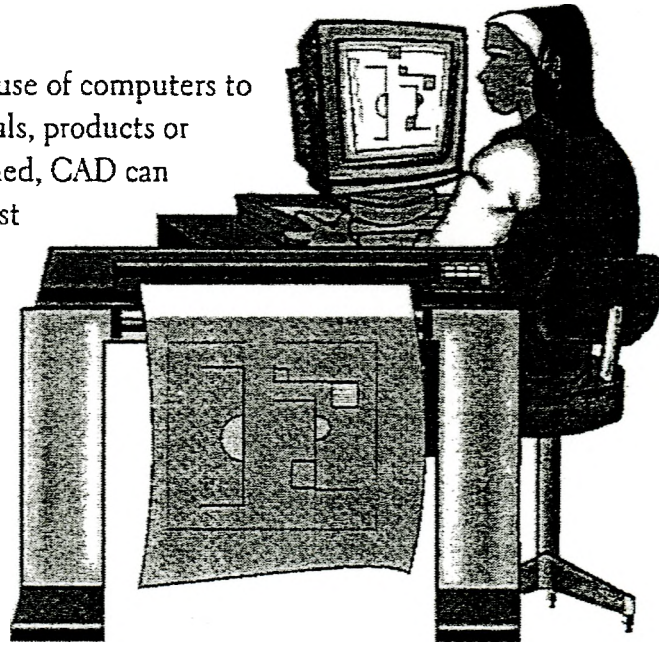
Companies that produce many kinds of products usually use this style of placing machinery on the shop-floor. The introduction of teamwork normally takes place at the same time as the introduction of cellular layout.

Changeover time: Changeover time is the time it takes to change the way that a machine works. This break usually happens when the machine has to stop making one product so that it can be set up to make a different one. This is an important measurement for seeing how efficiently machinery is being used in a plant (capital productivity) *Example:* If it takes 20 minutes to change the colour of paint in a painting gun, the changeover time is 20 minutes. If it takes 5 minutes to change a flat tyre on a car, the changeover time is 5 minutes.

Clustering: Clustering is when a group of companies making the same or similar products and/or making goods in the same area form links to work together for the benefit of the whole group. Clustering includes planning and setting up areas where similar firms can establish themselves and co-operate to become more profitable by sharing transport and other running costs. *Example:* Clustering in a number of sectors such as those producing shoes, handbags, tiles and musical instruments in Italy, has enabled similar companies to co-operate and compete against one another at the same time.

Computer Numerical Control (CNC) machinery: CNC machinery is machinery that uses a computer to store settings for machines. Changing settings (changeover time) is quick when a computer does it, and one of the major advantages of CNCs over manually set machines is the quick changeover times.

Computer-Aided Design (CAD): CAD refers to the use of computers to assist with the design or planned use of raw materials, products or even factories. When a new factory layout is designed, CAD can be used to help divide the available space in the best way. CAD can also help to show how parts or components should fit together or how material such as metal sheets or fabric can be cut. *Example:* Workers in a clothing factory could use CAD to reduce waste by working out the best way of cutting designs from material before beginning to work with the real material.

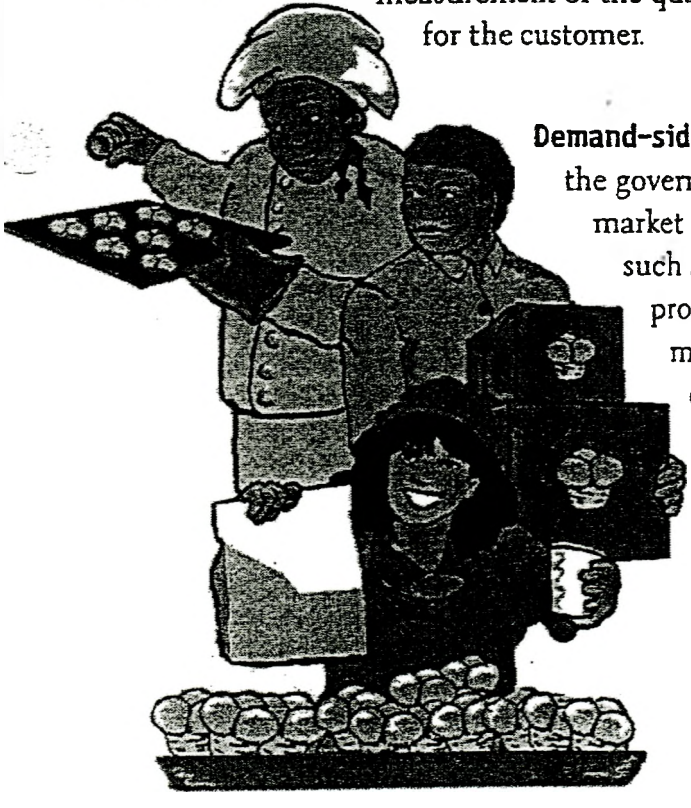


Computer-Aided Manufacturing (CAM): CAM refers to the use of computers to control all the different parts of a plant and the process of making goods. In this way, a plant can use a computer to ensure that the different parts of the plant work towards the same goal.

Currency deregulation: Currency deregulation is a process where the laws that control the movement of currency (money) in and out of a country are changed to make moving money easier. Sometimes these laws are referred to as exchange controls. These laws become very important when companies export goods or have to import machinery or raw materials from other countries.

Currency devaluation: Currency devaluation is when the price (exchange rate) of one country's currency (e.g. the Rand or Dollar) decreases (goes down) in relation to the currencies of other countries. Sometimes this can be done by governments or investors, or by activity in the economy. *Example:* When Rands are changed into Dollars, what is actually happening is that Rands are being used to buy Dollars. Therefore, if the Rand is devalued against the Dollar, it means that more Rands are needed to buy a Dollar.

Customer Return Rate (CRR): Customer Return Rate refers to the amounts of goods that are returned by a buyer (the customer) to the supplier. This usually happens when the customer is unhappy with the product. It is therefore a measurement of the quality and/or the accuracy of the order that was made for the customer.



Demand-side support: Demand-side support refers to support the government gives to ensure that local business has a market to sell its goods. *Example:* A demand-side measure such as an import tariff will make it expensive to import products into a country. This means that goods that are made locally will have less competition. Another example of demand-side support is when a government pays companies subsidies when they export (sell their products in other countries).

Division of Labour: Division of labour is the term that explains the fact that not everyone does the same job or work. This can be determined by many factors, such as age, gender, race or location on the shop-floor or in an economy.

Example: The division of labour on the shop-floor divides employees of a factory into drivers, operators, accountants, cleaners, sales representatives and so on.

Down time: Down time is the time when a plant or a machine is not working. It is usually taken as one of the measures of machine or capital productivity. *Example:* If a machine making part of a product is broken for 2 days, the down time is two days. Down time can also be caused by shift changes or when a worker is absent or sick. Other causes of down time can include material shortages, machine servicing and maintenance, and changeovers to new settings or new products.

EDI: Electronic Data Interchange (EDI) is the use of computers to keep contacts and exchange information. Companies can use EDI to ensure fast and accurate transfer of information. *Example:* A computer system can be used for the issuing of invoices and payments to suppliers, customers and banks without having to send paper copies.

Electronic Data Interchange: See EDI

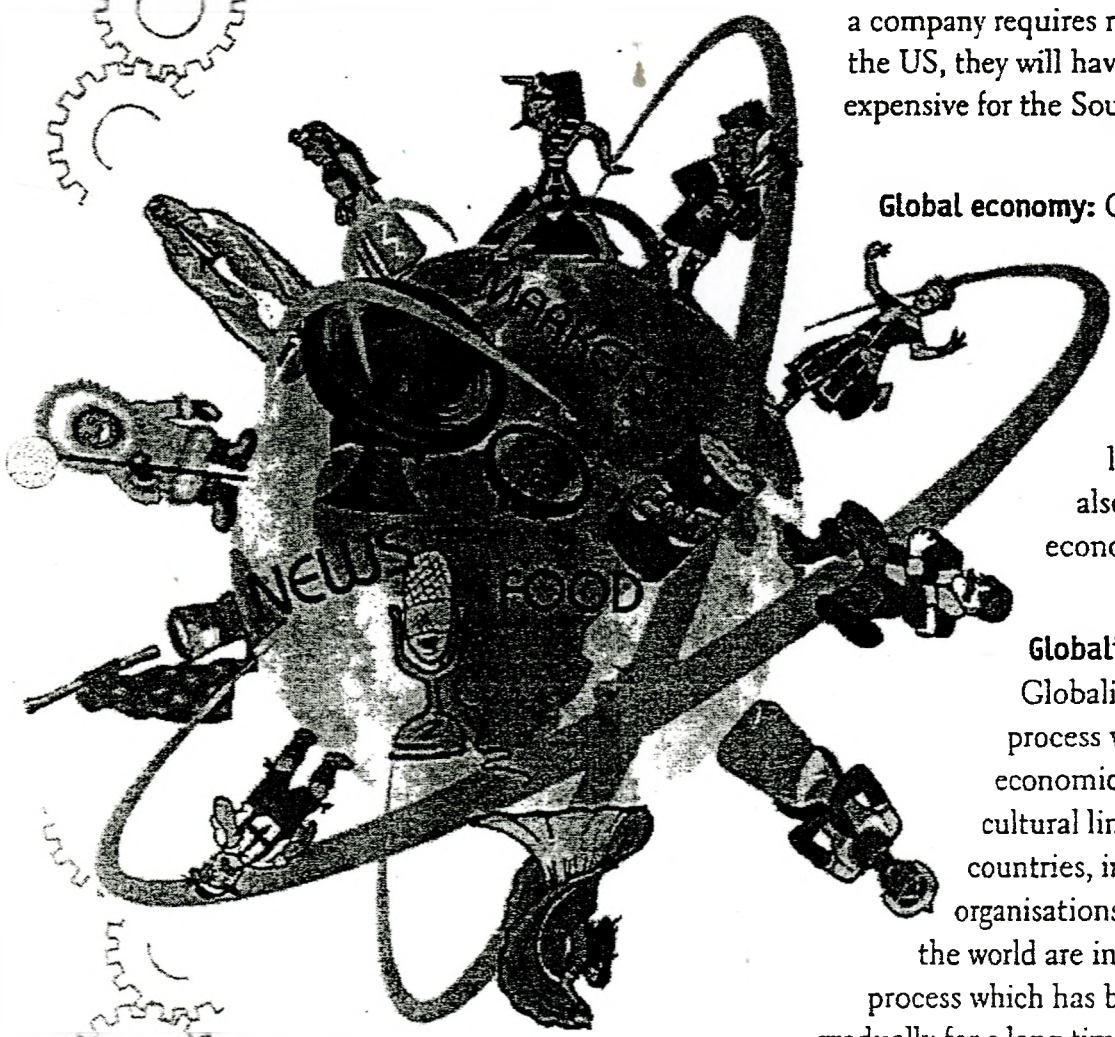
Employee turnover levels: Employee turnover levels refer to the total number of workers who join and/or leave a company in a certain period of time. Employee turnover rates show these levels in the form of percentages. A high turnover rate in a company should cause management concern as they are losing experienced workers. *Example:* If a company has five employees and in a given period five people leave a company and five new employees are hired, then the turnover level is 5 and the turnover rate is 100%. If only one person leaves and is replaced, then the turnover level is 1 and the turnover rate is 20%.

Finished goods: Finished goods are the products of the manufacturing process. These are products that customers can buy. *Example:* Piles of cloth, thread, buttons and zips are assembled to put together items of clothing. The clothing items are the finished goods.

First in /First out: The first in/first out system is a way of controlling inventory or stock. It simply means that materials should be used in the order the factory or plant receives them. If car components are received every day of the week, then components received on a Monday should be used before the components received on Tuesday; Tuesday's components should be used before Wednesday's components and so on.

Fordism: Fordism is a way of manufacturing that was dominant from the early 1900s until a few decades ago. Fordism is based on assembly line manufacturing with large batches made one at a time. Fordism relies heavily on the division of labour, in order simplify work so that workers need only have a minimal amount of skills and training. The pace of the work is controlled by the machine through the speed of the line rather than being under the control of individual workers. *Example:* Under this type of system, a car plant would only make one type of car at a time without changing the model. Car production is pushed through the factory with each worker assembling one part of the car at a time.

Foreign exchange rate: The foreign exchange rate is the price that a country's money is worth. The foreign exchange rate determines the ability of a company to buy parts, machinery and raw materials. It also determines how easy or difficult it is to sell products overseas. *Example:* The Rand recently lost value compared to the US dollar. This makes it easier for South African companies to export to the United States because the products are cheaper for the US customers. However, if a company requires raw materials from the US, they will have become more expensive for the South African company.



Global economy: Global economy refers to the economy that exists on a world-wide scale. Just as regions or countries have local economies there also exists a global economy.

Globalisation: Globalisation refers to the process whereby the economic, political, social and cultural links between different countries, industries, companies, organisations and individuals of the world are increasing. It is a process which has been happening gradually for a long time, but which has developed rapidly since the 1970s.

Green Areas: Green areas are areas on a shop-floor where workers and supervisors can gather to discuss work related issues and/or challenges. These areas are sometimes marked with green floor tape. The green areas may have a form of suggestion scheme linked to the discussions that take place there.

Heijunka: *Heijunka* is a Japanese word that means to even-out work or to keep it moving at an even pace. This pace is usually controlled by a schedule. *Example:* If a customer is known to order 25 pairs of shoes on a Monday, then 50 on Tuesday and finally 75 on a Wednesday, the production schedule for those three days should aim to produce 50 pairs of shoes per day in order to ensure that the flow of work is even.

Income: See profit.

Incremental change: Incremental change refers to a step-by-step process of change. *Example:* If a new method of management is adopted by a factory, changes in the factory will not happen all at one time but little by little over an extended period of time.

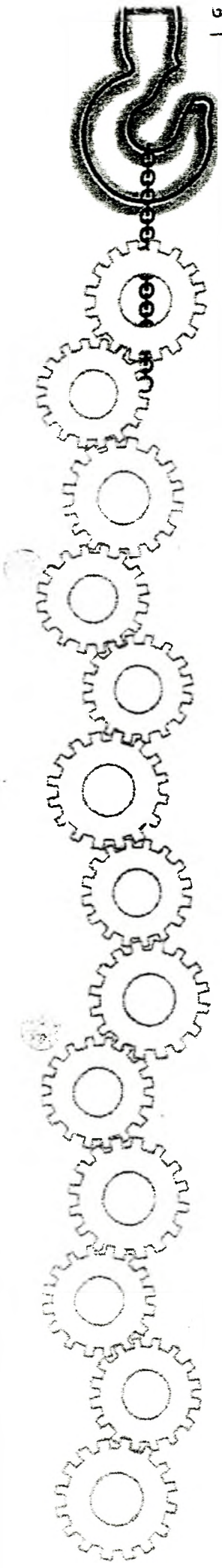
Induction training: Induction training is training for new workers in a company to introduce them to the way that things are done in the company (practices and procedures).

Inflation: Inflation refers to the increase in the price of products and services from one year to the next. *Example:* If a person has to pay R100 for a chair one year and the same chair costs R120 the next year, the *inflation* is R20 over one year or 20%.

Informal on-line training: Informal on-line training is training on the job that does not lead to formal qualification. A new worker will observe how a job is done by watching others at work and then practise the job.

Inventory: Inventory is finished goods, work in progress or raw materials that are still to be processed or waiting to be sold by a manufacturer. *Example:* A company that assembles motor cars will have inventory made up of stocks such as tyres and windscreens, partly assembled cars and finished cars waiting to be sold.

Inventory days: Inventory days refers to the amount of inventory or stock in a company when it is measured in days. *Example:* A company that makes leather



belts has 50 metres of leather strip in stock. The company uses 10 meters of leather strip a day. The company therefore has 5 inventory days of leather strip.

International Standards Organisation (ISO): ISO was founded in 1946 in Europe to standardise measurements and product standards for industrial, commercial and scientific purposes. Many of the ISO standards today are important as customers will only buy from a company that has been awarded a particular ISO standard.

Jidoka: *Jidoka* is a Japanese term that refers to a system of internal customer satisfaction. It can be either (a) an automatic system, which rejects faulty components or workmanship, or (b) workers in the plant who can stop a line or process if there is a fault. This is a way to ensure quality.

Job shop: A job shop is a small manufacturing facility that generally makes small numbers of a wide variety of different parts for various customers. *Example:* An engineering job shop may repair machinery or produce parts that are not easy to buy or are no longer made by the original manufacturers.

Joint procurement: Joint procurement refers to agreements between two or more companies to order the same parts or products from a supplier. Companies can get these parts or products cheaper by placing orders in this way because they can buy bigger amounts and get better prices as well as save on administration and transport costs. *Example:* Electrical appliance manufacturers may come together to jointly procure (or buy) plugs from a plug manufacturer.

Just In Time (JIT): Just-in-time refers to a way of organising production so that all inventories are kept at the lowest low level possible. This means that parts, work-in-progress and finished goods are only ordered when needed and not kept in large inventories. By reducing stocks the firm streamlines the production process and can respond to customer demand more quickly. Also, by cutting down stocks and work in progress, the company can cut costs. *Example:* A company making wood tables would only keep the materials needed to fill customer orders. They would not stock large quantities of different wood just in case it was required. The wood would have to be stored, which costs money and uses money that could have been used to buy the actual wood required for a later order.

Kaizen: *Kaizen* is a Japanese word that means 'continuous improvement'. This refers to improvement of the process of manufacturing and improvement of the

products that are made by the company. There are two kinds of *Kaizen*; the first are *Kaizen* groups which are meetings to allow workers time to discuss the production processes; the second are *Kaizen* suggestion boxes, which are placed throughout the plant so that workers can formally write suggestions to management.

Kanban: *Kanban* is a Japanese word for a system such as a card or other indicator. A *Kanban* system is important for the implementation of JIT production. In a factory, the *Kanban* is a signal that lets each worker know when the next section is ready to receive the next batch of units. The *Kanban* system limits the build up of materials and allows production to be pulled rather than pushed through a plant. This helps workers control the speed of the work that they do. *Example:* In a factory, a worker is alerted to forward more parts to the next stage in the manufacturing process by a flashing light. Other types of alerting systems could also be used, such as bells, sirens, or lights.

Kiken: *Kiken* is a Japanese term meaning 'dangerous'.

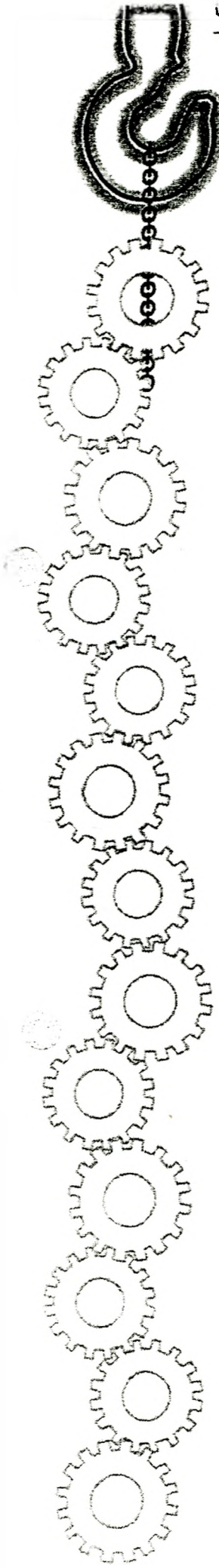
Kitanai: *Kitanai* is a Japanese term meaning 'dirty'.

Kitsui: *Kitsui* is a Japanese term meaning 'strain'.

Labour turnover: Labour turnover refers to the rate at which people who work along the production line are hired, fired or resign from a company in a specified period of time. Labour turnover is different from employee turnover because it excludes managerial staff.

Lead-time: Lead-time is the time it takes to fill a customer's order from the moment that the customer places the order. *Example:* If a customer wants 200 objects in 2 weeks' time, the lead-time is 2 weeks.

Machine utilisation levels: Machine utilisation levels measure the amount of time that machines are in use or not in use during a particular period of time. *Example:* During a shift a knitting machine may have to be stopped while it receives a service, while the operator goes on breaks or while it awaits a change of materials. All this time can be added up and subtracted from the total time of the shift; the time left over will give the machine utilisation level.



Macroeconomic policy: Macroeconomic policy is Government policy that is focussed on the whole economy. Macroeconomic policies usually try to promote stability, full employment and growth in the economy. Example: The South African government's Growth, Employment and Redistribution Strategy (GEAR) is a macroeconomic policy that has been adopted in an attempt to increase employment and develop the economy of South Africa in line with the government's approach to the economy.

Management turnover: Management turnover refers to the percentage of management personnel who are hired, fired or resign from a company in a specified period of time. (See labour turnover and employee turnover).

Manufacturing: Manufacturing is a value adding process that alters a raw material or product to form a new product. Example: A car consists of many manufactured parts that have had value added to them. Once all of the parts have been assembled during the manufacturing process, the result is a car.

Materials Requirement Programme (MRP): MRP refers to a range of computer programmes that help firms to order materials and organise stock for the purpose of managing the production of goods. This provides closer links with suppliers and customers and assists JIT production.

Manufacturing Resource Planning (MRPP2) : MRPP2 refers to a method of planning the use of a company's inputs in manufacturing. In this instance, all the inputs such as materials, labour and machines are considered. This method can help to improve the ordering of supplies and equipment as well as the organisation of production inside a factory.

Muda: *Muda* is a Japanese term that means 'waste'. According to this theory there are seven types of waste. These are overproduction, motion, correction, conveyance, inventory, waiting and processing.

Multiple management: Multiple management is a term that is sometimes used by management to refer to worker participation. In particular it refers to the practice of involving workers in the management of a company by helping in the development and implementation of some new policy.

Multi-skilling: Multi-skilling refers to building a number of different new skills through either basic training or more involved education. Multi-skilling involves

workers gaining a number of new skills that they are required to use on the shop-floor and could involve upskilling and/or cross-skilling. *Example:* A worker may learn skills beyond operating machinery, for example in quality control or maintenance.

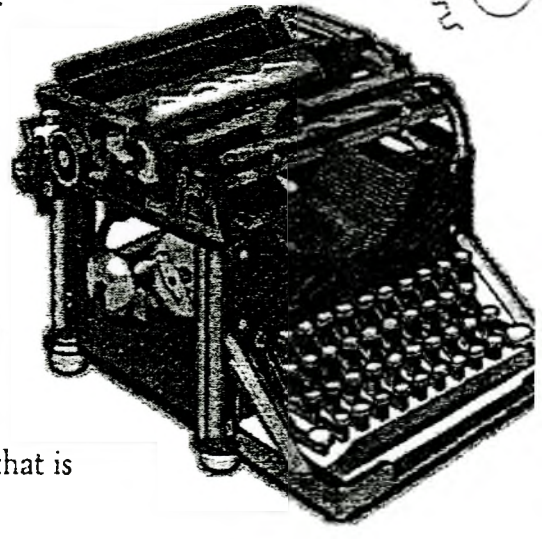
Multi-tasking: Multi-tasking is different to multi-skilling. Multi-tasking involves job rotation where workers move around the shop-floor performing different tasks that utilise the skills that they already have.

Mura: *Mura* is a Japanese term that refers to unevenness. This occurs when a production system is not running smoothly. *Example:* A line may have bottlenecks where the progress of the product is held up or slowed down.

Muri: *Muri* is a Japanese term that means 'overburdened'. This occurs when a system is producing above its capacity.

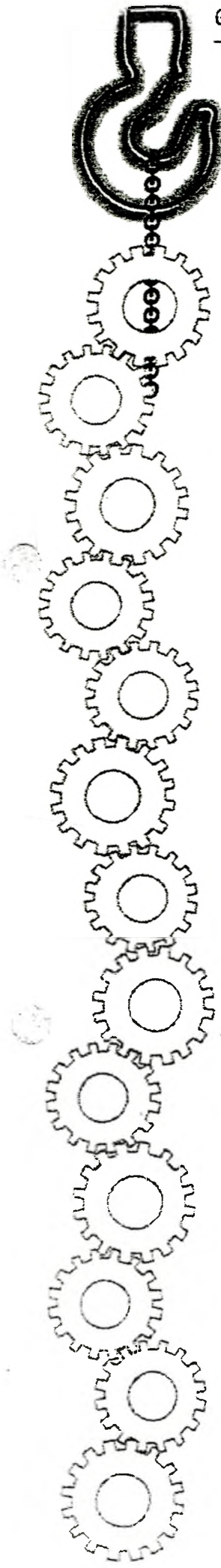
Nagara: *Nagara* is a Japanese term which refers to a process or machine that allows more than one operation to be undertaken at one time. This allows more than one part being made at the same time.

National Qualification Framework (NQF): NQF is a standardised national system that sets up a framework for lifelong learning. The NQF has eight learning levels that allow people to learn regardless of their age, circumstance and level of education. In industry, each sector will set up a Sector Education and Training Authority (SETA). For a training course to be accepted as a national qualification, the SETA must recognise the course. *Example:* For a training course in the hospitality industry to be recognised as a National Certificate III (Hospitality), the SETA for the Hospitality Sector must approve the course.



Obsolete stock: Obsolete stock refers to supplies or inventory that are old and can no longer be used in the manufacturing process. *Example:* Some companies producing typewriters realised that personal computers were taking over the role of typewriters while others did not. Those factories that continued manufacturing typewriters could not sell these as they were obsolete stock.

Off-the-job training: Off-the-job training refers to training that is organised away from the shop-floor.



On-line: On-line is a computer term referring to information which is accessible from different computers within a company or from the Internet.

Order-sharing: Order-sharing involves an agreement between two or more companies to divide a customer's order. *Example:* A customer orders 500 tables from a factory. The factory, however, can only supply 250 tables in time. The factory can order-share by approaching another factory to supply the other 250 tables to ensure that the order is filled for the customer.

Output per employee: Output per employee refers to the amount of work each employee performs in his/her respective job. This is a way of measuring how much each worker can produce. However, problems can arise with the abuse of this measure. For instance, if the output per employee measure is used to encourage retrenchments or work speed-up without measuring the effect of the many other activities in a plant that affect the output levels of workers.

Piecemeal work: Piecemeal work is a type of contracting where workers or companies are paid according to what they produce. This type of contract is usually found in the garment industry or where each worker or sub-contractor is producing a finished product. Some workers working piecemeal may not get benefits such as pension or medical cover and may not get paid at all if there is no work. *Example:* Some workers in clothing factories are not paid by the hour but according to how many pieces of clothing they complete.

Poka-yoke: *Poka-yoke* a Japanese term that means mistake proofing or fool proofing. This system helps to prevent mistakes that are sometimes made on the plant floor or when taking customer orders. It also involves the design of components or tools which eliminate any possibility of mistakes being made. *Example:* If the lights in a factory are supposed to remain on and workers sometimes make the mistake of turning them off before leaving, the *poka-yoke* solution would be to remove the light switch. Another example of *poka-yoke* is when a worker uses a stencil to cut material in a clothing factory. The stencil sets out the pattern to be followed and limits the possibility of making costly mistakes.

Process: A process is the sum of the operations performed within a particular workstation or plant.

Process control: Process control refers to a way of continually monitoring, reassessing and correcting a manufacturing process. *Example:* The process

control centres of many manufacturers house computer terminals which show all the information needed to ensure that the manufacturing process runs according to schedule.

Process innovation: Process innovation is a way of rearranging an organisation to include radical but basic changes in the way the organisation functions. Labour will often refer to process innovation as 'restructuring' or 'workplace change'. According to management and consultants, process innovation attempts to make organisations more efficient in what they do and how they do it.

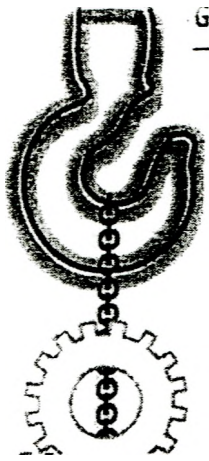
Products: Products are the goods that result from the manufacturing or value-adding process. *Example:* A car is a product. A steering wheel is a product. A bottle of purified water is a product.

Productivity: When a workplace has high productivity it is said to be productive. A productive workplace is one that is efficient and effective in its management of resources and inputs (such as raw material, labour or machinery) and achieves its output goals (such as finished goods or services) with a minimum of waste and at a high quality.

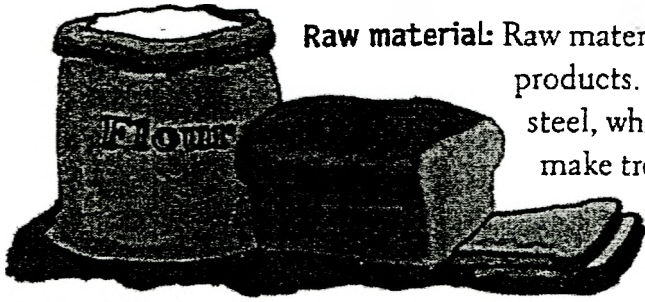
Productivity levels: Productivity levels are used to measure how productive different parts or the whole of a plant or department are. These levels can concentrate on factors such as management, labour or machinery or may look at many factors (called Total Factor Productivity). Although measuring productivity is a useful process it is important to reach agreement on what is being measured and why. Productivity can be measured over time to see whether it has improved, remained the same or gone down or it can be measured and compared to another department or plant doing the same work with the same processes (benchmarking).

Profit sharing agreement: Profit sharing agreement is an agreement between management and workers which allows a percentage of the profits (above a certain level) to be shared with workers.

Profit: Profit refers to the difference between what is spent to make a product (the cost) and the price that the product is sold for (revenue). *Example:* Buying all of the materials (wood, glue, tools, etc) to build a table and putting the table together costs R100. If the table is sold for R150, the profit is R150 – R100 = R50. The profit is therefore R50.



Quality at source: 'Quality at source' is a way of ensuring that quality is ensured at every stage of the production process. This is different from traditional quality control which waits until the product is completed to check for quality. *Example:* The quality of a car going through the manufacturing process is maintained by checking for mistakes at many stages during production on the line.



Raw material: Raw materials are the components necessary to produce products. *Example:* Iron ore is the raw material used to produce steel, which is used to make cars. Cotton is a raw material used to make trousers. Flour is the raw material used in making bread.

Redundancy: Redundancy occurs when work performed by an employee is no longer required because a machine has replaced his or her job or the job is no longer required at all. Redundancy can also happen when restructuring leads the removal of certain tasks from the production process.

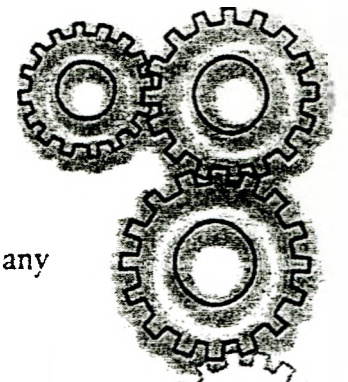
Re-engineering: Re-engineering happens when the way in which a product is made is rethought and rebuilt or redesigned to work more efficiently by focussing on and fine tuning the processes involved.

Rejects: Rejects are products, or parts of a product, that are flawed (broken or defective) and are below the required quality. Rejects could be returned to the company for reworking, or even scrapped or sold at a lower price as flawed goods (seconds).

Research and Development (R&D): R&D refers to the process of investigating and conducting the necessary research for the purpose of designing new production processes or products.

Retrenchment: Retrenchment occurs when an employer no longer sees the need, or does not have work available, for an employee and therefore wishes to terminate the employee's contract. Reasons for retrenchment vary from case to case; sometimes an employee is retrenched because of the introduction of new technology or because the company is having financial difficulties.

Reworks: Reworks are products that are found to be defective or flawed and are in the process of being adjusted or fixed to correct the defect. If these products cannot be reworked they will either be sold as flawed goods at a lower price or scrapped.



Sales: Sales is the total amount of money that a company has earned before any costs or expenses.

Scrap: Scrap is the leftover parts of materials used during the manufacturing process. Scraps can be thrown out or recycled (used again).

Seikatu: *Seikatu* is a Japanese term that means 'spick and span' or 'clean'.

Seiri: *Seiri* is a Japanese term that means 'sifting'.

Seiso: *Seiso* is a Japanese term that means 'sweeping'.

Seiton: *Seiton* is a Japanese term that means 'sorting'.

Sector Education Training Authority (SETA): A SETA is a body or association of similar industries responsible for determining the training needs of workers and developing and approving training programmes.

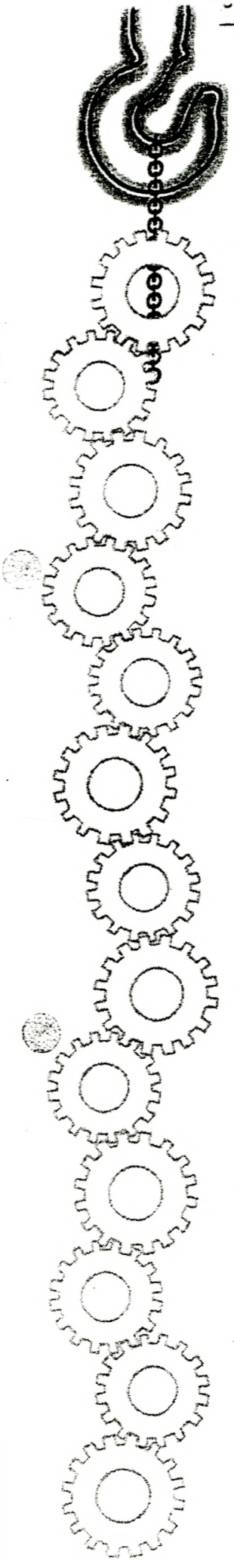
Shojika: *Shojika* is a Japanese term that refers to a layout that makes the best use of labour within a machine or an automatic work cycle.

Single Minute Exchange of Die (SMED): SMED is a system aimed at reducing the time it takes to change a machine's settings, thus making machine changeover times as short as possible.

Skill: Skills enable workers to do the work that they do. Skills differ from tasks, which are the actual duties that make up a job.

Statistical Process Control (SPC): SPC refers to a system of checking the quality of products when they are being produced in a factory. Certain amounts of the product being produced are tested to see if the product conforms to already-known specifications.

Specifications: Specifications are the requirements that a customer sets on a product. These are usually outlined in a customer's order. *Example:* A customer orders thirty large, blue, short-sleeved shirts, thirty medium, red, long-sleeved shirts and forty small, green, short-sleeved shirts. The specifications are the number, size, colour and type of shirts.



Stock turns: Stock turns calculate the levels of inventory in a company against the amount of sales. This calculation helps determine if a company has too much or too little inventory.

Stock evaluation: Stock evaluation refers to assessing the value of inventory of a company at the end of the accounting year to be able to get a figure needed to complete the balance sheets.

Suggestion schemes: Suggestion schemes refer to the different ways which allow workers to make suggestions about how work is carried out in a company to help it operate better. This could be done through *Kaizen* boxes.

Supplier defect rates: Supplier defect rates refer to the amount of damaged, deficient or non-usable goods received by a supplier against the number of usable materials supplied.

Supply chain: A supply chain is a system of linked stages in a supply network along which a number of different goods or services flow. *Example:* A company that manufactures fast food will have two important supply chains; one will be the supply of food (raw materials) and the other will be the packaging that is used when selling the food.

Supply chain management: Supply chain management refers to the management of the links between a company and its supplier and customers to achieve an advantage over other competitors. It could involve the physical distribution system, logistics, purchasing and information flow management.

Supply-side chain group: A supply-side chain group is a group of individual companies that supply components that together form an assembly. *Example:* A computer is made up of many different parts that may be produced by different companies. Each company produces one or more parts and once all the parts are assembled, the finished product is a computer.

Supply-side support: Supply-side support involves government aid in the promotion of programmes aimed at providing strategic support for industry. This supply-side support could take the form of training and education programmes and/or infrastructure improvement.

Tak-time: *Tak-time* is a concept originating in Germany that refers to a rhythm (like a heartbeat or clock ticking) of producing goods. The customer sets the rhythm. The rhythm is the pace at which the factory produces products. *Tak-time* is calculated by dividing the time it takes to make a product by the speed that the customer wants the product. *Example:* If customers want 5 cars per week and the factory is open 5 days a week, one car will have to be manufactured each day.

Tariff: A tariff is tax that is charged by the government on goods imported into the country.

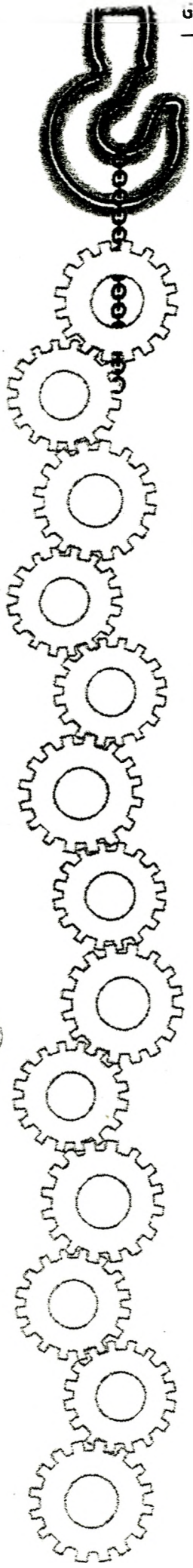
Tariff protection: Tariff protection is when governments use tariffs to stop foreign goods from coming into local markets. A tariff is imposed on foreign goods so that local producers are able to compete with cheaper goods from foreign countries.

Throughput time: Throughput time is the time that the production process takes, starting with raw materials entering the plant to the finished product exiting the plant. *Example:* A furniture factory starts producing a chair at 10h00 and it is complete by 16h00. The throughput time is therefore 6 hours.

Throughput distance: Throughput distance is the total distance covered by goods within the plant during production. The throughput distance would thus be the distance from the point where raw materials enter the plant to the point that dispatches finished goods. The objective of measuring this distance is to work on ways of decreasing it to the shortest possible distance.

Total preventative maintenance: Total preventative maintenance refers to the idea that preventative regular maintenance of machinery is useful in avoiding costly failures or breakdowns.

Total Quality Control (TQC); Total Quality Management (TQM): TQM and TQC mean almost the same thing. TQM/TQC is a process that ensures the quality of the product at each stage of the manufacturing process. This is different from checking for quality after the product is made, because it verifies the quality of a product at each stage of the manufacturing process. *Example:* Workers continually check to make sure that the manufacturing process is making a high quality product.



Training board: Training boards are the bodies that have been established to help industrial associations with their training needs. However, under the Skills Development Act these are due to be replaced by SETAs.

Turnover: See **Sales**.

Value adding chain: 'Value adding chain' refers to the manufacturing process. The chain could be within a factory or between suppliers and manufacturers. The idea is that each manufacturer adds value to a product. Each manufacturer adds components to the product and this raises its usefulness to consumers.
Example: In plant one (in the United States) raw cotton is processed into a fabric. In plant two (in Canada) the cotton fabric is dyed different colours. In plant three (in the United States) the coloured cotton is cut into certain shapes and sizes. In plant four (in Mexico) the cotton is sewn to make jeans. The finished goods (jeans) are sold in different markets throughout the world.

Value stream: The set of activities required to design and provide products from the time the product is thought of to the time the product is launched, and from the time the product is ordered to the time the product is delivered.

Warranty: A warranty is a manufacturer's written promise to repair or replace a product if it is faulty. This promise is only good for a certain time after the product has been purchased.

Waste purging: Waste purging is the act of getting rid of processes and behaviours that cause waste. An example of a waste purging system would be the concept of identifying *Mudas*.

Working capital: Working capital is the money available to companies for a variety of investments or company needs. *Example:* Working capital can be used to pay worker's salaries or for the purchasing of materials.

Work-in-progress (WIP): Work-in-progress is the work that is being done on an unfinished product. *Example:* A half-made car in a car manufacturing plant is a work-in-progress. Leather which has not been sewn together to make a pair of shoes is also a work-in-progress.