# STRATEGIC OUTSOURCING AND THE DEGREE TO WHICH IT MAY SUPPORT THE SUCCESSFUL GROWTH OF THE ZAMBIAN COPPER MINING INDUSTRY

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## **ABSTRACT**

In 1991 the Government of the Republic of Zambia passed legislation providing for the privatisation of Zambia Consolidated Copper Mines Limited (ZCCM). The newly formed Mining Companies, established after nearly a decade of difficult and protracted negotiations on such matters as, cash at close; retained percentage interest by ZCCM; equity investment; future investment commitment and tax concessions, were faced with great internal challenges and a harsh external environment. There was a convergence of a number of negative forces that had and will continue to have an impact on the mining environment in Zambia. The most crucial of these being, the competitive pressures of the global economy, fluctuating copper price and the prevailing HIV/AIDS pandemic. In the short period after privatisation, the Industry has seen the collapse of Binani Industries (Luanshya Mine), the withdrawal of Anglo America Corporation from Konkola Copper Mines Plc and the disposal of Chambishi Cobalt and Acid Plants by Anglovaal Mining Ltd.

The objective of this paper is to provide a theoretical and practically researched foundation, which may be used to assist Zambian Mining Companies in making informed decisions on the issue of Strategic Outsourcing and the degree to which this may support the successful and sustainable growth of the Zambian Copper Mining Industry.

If judiciously implemented, Strategic Outsourcing has the potential to generate a practical business valuation and process to assist Mine Management in the achievement of their business goals and consequently the return on investment to their Shareholders.

## 1. INTRODUCTION

Since the decision to privatise the Zambian Copper Mining Industry in 1991, the global environment in which the Copper Mines operate has undergone major changes. Many of the pressures on businesses are contradictory and to achieve success, Management, needs to maintain a healthy balance between the diverse needs of the different stakeholders.

Over the past twenty years world copper production has increased from 8 million tonnes to 14.5 million tonnes per annum and continues to grow. Chile realised the most exceptional growth rate from 1.4 million tonnes to an estimated 5.4 million tonnes per annum in 2004. In contrast, Zambia's copper production has decreased over the same period. Zambian copper production reached a peak of 755,000 tonnes in 1969 (12% of

world production) and by 2004 this contribution had dropped to below 3%. The economic reforms implemented by the Government of then President Dr FTJ Chiluba, brought an improved performance with output recovering to 432,200 tonnes in 1992. However, output continued to declined until 2000, the tonnage in that year being 240,000. In the past four years a year-on-year increase has been recorded with an estimated output of 400,000 tonnes for 2004.

A plethora of management tools, techniques and methodologies such as value engineering, change management, best practice, business process re-engineering, total quality management, to name a few, have been developed to assist Mine Management in the improvement of their companies' performance. Management is constantly, confronted with the question, "How do we become more competitive and increase our Market share?". The question begs a return in focus, to the issue of core functions and core competencies. Strategic outsourcing, previously a business "buzz word", is now an established management practice, and presents an issue for further investigation.

This paper aims to provide a theoretical and practically researched foundation, which may be used to assist Zambian Mining Companies in making informed decisions on the issue of Strategic Outsourcing.

# 2. THE DEVELOPMENT OF OUTSOURCING

The term "Outsourcing" has become part of everyday business terminology and has been freely applied to a variety of relationships in the business environment. Outsourcing, in the broadest terms, means the transferring of the responsibility for an area of service, its objective and activities, from management to a second party. A clear example of an outsourced activity in Mining, is that of shaft sinking. A mining operation does not have an on-going requirement for shaft sinking and therefore cannot justify the retention, in-house, of the specialist personnel and equipment required. The function is usually, therefore, contracted out to specialist contractors with the experience and expertise to handle such an activity safely and efficiently.

In the 1990's, some management theorists argued that the important factor in maintaining competitiveness was the differentiation between core and non-core functions. Concluding with the transfer of non-core functions to a specialist in that field. As discussions on the subject increased and evolved, the concept of the virtual organisation was born. The theory behind the virtual organisation is that any function that is not core should be transferred to an external specialist. In addition, however, it is argued that there are sure to be organisations that may possibly perform your core function better than you do – so why not transfer those as well? (Heywood, 2001)

The virtual organisation concept may be very new, but externalising functions to outside specialists has been practiced for many years under various names, contract manufacturing, facilities management, outsourcing and insourcing. Many major firms of accountants will freely admit that even at the beginning of the twentieth century they

had clients for whom they did the 'books' rather than just the audit, and this situation remains true today. (Johnson, 1997)

The outsourcing of IT functions began to occur on a significant scale in the 1970's and the reason then, was prohibitive cost of processing power. This situation saw organisations large and small, moving towards sourcing some, if not all of their computer solutions from computer bureaus. It was the rapid improvement in Computer science and technology, and the associated expense in constantly upgrading in the endeavour to remain competitive, that was a defining factor in the shift towards outsourcing.

The outsourcing boom was therefore born on the back of the IT epoch and the unique circumstances present in IT. In those early days of outsourcing, the Client and the IT service provider both anticipated that a specialist would be able to provide, at least, a comparable level of service to that which existed before the transfer.

Equally it was accepted that the service provider could do this profitably whilst producing a saving for the client. It is interesting to note that most providers initially estimated that the likely savings would be in the order of 20%, but gradually began to realise that even when apparently efficient IT departments were being transferred, the saving could be as much as 40%.

When the outsourcing of financial departments first became a reality, the newly created service providers imagined that the total savings might be in the order of 15 - 20%. Although actual results vary enormously, total savings of 30 - 35% have been recorded.

Many of the early outsourcing deals were disasters for one or both parties, and for a while it appeared that the legal fraternity would be the greatest beneficiary. However, when the successful deals started to attract publicity, it became apparent that there were significant savings to be shared by both parties, provided both were sufficiently motivated and committed to the endeavour. Once this was understood, it became clear that outsourcing could not be ignored as a business principle.

Consequently, outsourcing became a dominant feature of business in the 1990's with functions other than IT being outsourced. As the globalisation of business increased and the World Wide Web began to evolve, the growth rate of externalisation to outside specialist industries followed suit, increasing radically. A situation now exists where the majority of all business functions within a Company are being outsourced and the diversification contract focus wide-ranging.

# 2.1 OUTSOURCING DEFINITIONS

One of the most complete definitions of the outsourcing concept is given by Heywood (2001):

"...The transferring of an internal business function or functions, plus any associated assets, to an external supplier or service provider who offers a defined service for a specified period of time, at an agreed but probably qualified price.

It must be understood that the control of the function in question will thus reside with the service provider. This outside organisation, as a specialist in its field, will usually be in a position to add value not normally obtainable in a non-core function retained in house."

In this respect, outsourcing involves the passing of a lot more than just the responsibility for services, it includes risk, a level of involvement in the strategic direction of the company, a high degree of trust, a focus on the value created and not just the costs saved. In essence, outsourcing is significantly more than a service contract.

"...Outsourcing is the provision of some aspect of an organisation's ongoing activities to an outside contractor." (Source: Published report by the Deloitte & Touché Consulting Group, 2000)

The saying used to be "if you want something done right – you should do it yourself." These days it is more likely to be, "if you want something done right – give it to an expert."

- "...Outsourcing provides a win-win situation for both the consultant and the client...while the client is able to concentrate on core activities, it provides graduate and diploma engineers in the employ of consulting firms with career growth opportunities." (Martin Creamer's Mining Weekly, 2002). This definition submits that individuals with the necessary skills to bring about the best result are accessible through specialist organisations who by virtue of their speciality(s) are exposed to a variety of situations, the experience of which can be drawn on and where necessary applied or adapted to the Clients situation. Such organisations offer access on a "needs" basis to up-to-date technology and methods.
- "...Although it is now widely acknowledged that outsourcing holds inherent risks, businesses often do not have a choice in that finances are limited and/or skilled personnel difficult to find." (Source: Alexander Forbes Risk Services HR Future, September 2002)

For non-core functions to remain cost-effective in most business situations, operating and overheads costs need to be maintained at minimal levels. All to often this is over emphasised and the non-core entity rather than being constructively supportive becomes a financial drain, not only in the demand of technology but of skills which need to be up-graded and improved if the function is to remain viable.

"Outsourcing" is often used as an umbrella term for a variety of different relationships, not all of which involve adding value or the permanent transfer of personnel. To provide the reader with clarification of the different "Outsourcing Relationship Terms" most commonly used, these are defined here under.

#### 2.2 OUTSOURCING TERMS

## 2.2.1 Facilities Management

Where the term 'outsourcing' is normally associated with adding value, a 'facilities management' agreement simply transfers responsibility for the management of existing staff, property and equipment. (Rosenberg et al, 1993)

# 2.2.2 Full or Total Outsourcing

This term is used to indicate that the staff and possibly assets relating to the whole of a major business area (in practice about 90%) such as IT, finance or human resources, are transferred to the service provider for the period of the contract.

## 2.2.3 Part or Selective Outsourcing

Under this type of agreement, a significant part of the function is retained in-house.

# 2.2.4 Transitional Outsourcing

Examples of this are normally found with the outsourcing of IT functions. An organisation transfers control of its legacy systems/platforms to a third party in the belief that its own internal IT staff have the abilities necessary for the development of new systems. Any organisation becoming involved in transitional outsourcing would be demonstrating an unusually high level of confidence in the development capabilities of its internal staff.

## 2.2.5 Transformational Outsourcing

An organisation brings in a service provider to completely re-engineer the work of the function, probably developing new systems and building up a reliable skill base for the client. Transformational outsourcing differs from full outsourcing only in that the transfer of people and assets is not permanent – at the end of the project the client regains full control and responsibility. There is a very fine line between transformational outsourcing and a straight consultancy assignment.

## 2.2.6 Joint Venture Outsourcing

A joint venture agreement involves the setting up a new company to exploit a perceived business opportunity.

The client's staff and assets are transferred to this joint venture company rather than to the service provider. The aim is not only to improve the transferred service but more importantly, to develop new products and services that can be sold to a third party. Client and service provider then share in the profits.

# 2.2.7 Benefits-Based Relationship

Similar to joint venture outsourcing, the benefits-based relationship is a long-term relationship based on both parties making an up-front investment in the relationship and sharing the benefits as they accrue according a pre-agreed formula. In this way both parties take a risk and both share in the reward. If the benefits of the relationship do not

materialise, then the external supplier is not guaranteed any recompense for effort or input.

# 2.2.8 Equity Stakes

Some outsourcing relationships have been strengthened through the taking of an equity stake in either the organisation or the service provider by the second party. Where it is the service provider taking this step, it may be seen as a demonstration of their commitment to the Client. On the contrary, when it is the organisation that takes up an equity stake in the provider, this is seen as a form of collateral security.

# 2.2.9 Insourcing

An alternative approach to securing productivity gains, is by improving the operation of an area so that work from other businesses can be undertaken. In this way skills can be retained and assets exploited, resulting in low unit costs for the insourcing business. While this does not free up management time, it does provide a way of making a viable business unit out of an activity that may be too small on its own but is too important or difficult to outsource, for whatever reason.

## 2.2.10 Co-sourcing

This terminology has been used in the literature to describe outsourcing arrangements involving multiple service providers.

#### 2.3 MAIN REASONS FOR OUTSOURCING

The findings in the different literature appraised are very similar and the reasons for outsourcing can be summarised in three basic points:

- > The desire to concentrate on core activities.
- ➤ The need to improve the service or result of the endeavour.
- > The need to reduce costs.

Virtually all the initial approaches to service provider concentrate on these three points and yet receive little in-depth attention unless comprehensively understood and explained by the Client. (Gay et al, 2000)

"Core Competencies, Definition of Core and non-core business, are the terms most used in the literature regarding outsourcing and it is essential that there is an comprehensive understanding of their meaning as these are the foundation stones on which any decision to outsource is based.

# 2.3.1 Fundamentals of Core Competencies

Core competencies have been defined as those activities and/or resources whether tangible or intangible, that an organisation possesses and utilises to establish a competitive advantage and sustainable success. They are the foundation stones of existing businesses, without which the organisation will fall apart or regress into

obscurity. These competencies would be expected to generate greater access to a variety of markets, improve the product image as perceived by the customer, and should be difficult for competitors to copy.

Hamel and Prahalad (1990) defined core competence in the Harvard Business Review as "...an area of specialised expertise that is the result of harmonising complex streams of technology and work activities...".

Core competencies have four attributes:

- ➤ It is the collective learning within the organisation able to coordinate diverse production skills and integrate multiple streams of technologies.
- ➤ It is the organisation of work, a shared understanding of the customer needs and technological possibilities, and the delivery of value.
- ➤ It is communication, involvement and deep commitment to work across organisational boundaries, thereby involving many levels of people and all functions.
- It does not diminish with use, but rather, is enhanced as it is applied and shared. It still needs to be nurtured and protected since the essence of the competence may fade with time if not used.

For core competence to have any value the organisation must clearly define and understand the competence in order to maximise its advantage. Competencies are associated with attitudes and behaviours of people within the organisation, its products and quality. The image of the organisation as depicted by its investments in assets, the structure and shared value, is in essence the perceived value that the customer places on the entire organisation. (Peters et al, 1982)

As a general guideline, most Companies are not in favour of outsourcing or losing core competencies to outside suppliers during cost cutting or unbundling exercises. The development of core competencies takes time and is a long and tedious process, losing such a competence normally creates a severe restrictive barrier to re-entry into that market/function.

Core competencies must link to the end products of the organisation through core products, and are those elements actually contributing to the value of the end product. Control over the core products enables an organisation to dictate or mould the end products.

# 2.4 POTENTIAL DRIVERS OF OUTSOURCING

# 2.4.1 Improved Cash Flow

Relief is achieved in most cases through the provider's obligation to pay for assets and take-over of the client's staff.

#### 2.4.2 The Need to Relocate

One of the primary drivers for outsourcing has been the need to relocate functions as a result of rapid expansion. An example of this would be an IT department where substantial increases in staffing levels to meet a skills demand and the associated drain on resources and capital, outstrips the financial capability to provide for the Company as a whole.

# 2.4.3 Non-Competitive Systems

In the latter part of 1990, the technology boom that brought with it access to proven increased efficiency levels, the need to overhaul and upgrade functions became essential. The cost and disruption caused by such changes led many Companies to consider outsourcing as an alternative option.

## 2.4.4 Consolidate the Latest Improvements

Whatever the perceived level of success, the completion of a performance improvement project will normally mean that the function concerned is unlikely to be considered a prime target for outsourcing in the short term. However, a number of organisations have taken the opposite view. Their reasoning is as follows:

- ➤ What we have just achieved is the best we can do. Therefore it is the right time to consider outsourcing, as we know what it costs us to provide a given level of service now.
- ➤ We are unlikely to keep this function continually up to date and therefore in perhaps just a few short months the system will become less efficient and less productive.

## 2.4.5 Release Scarce Resources for Other Areas of Business

Often in a world of increasing competition, diversifying markets and constantly changing technology, Management spends an inordinate amount of time focused on issues unrelated to the achievement of their goals. The constructive outsourcing of such tasks should free much of management's time for more creative work.

#### > Strategic reasons

Some organisations have made the strategic decision to concentrate all or most of its resources available on core functions.

## ➤ Risk reduction

The accelerating rate of change means that each and every investment an organisation makes becomes ever more risky. Competitive activity, technology and legislation can all but change overnight. The outsourcing service provider is subject to the same risk but this can be significantly reduced when the investment is made for and spread over the work carried out for a range of clients.

These are the reasons that need to exist and need to be expressly agreed before embarking on an outsourcing process. Outsourcing as opposed to service contracting, should be a strategic initiative for long-term change as opposed to tactical short-term gains. Tactical short-term gains include cost cutting, capital expenditure deferral, cash injection, retrenchment or stoppage of training. (Heywood, 2001)

#### 2.5 ADVANTAGES AND DISADVANTAGES OF OUTSOURCING

## 2.5.1 Advantages

Potential advantages of outsourcing, as described by The Deloitte & Touché Consulting Group are as follows: (Source: Achieving Results through Outsourcing, Deloitte & Touché, June 2000)

## 2.5.1.1 Financial

- > Cost savings through economics of scale.
- > Cash-flow relief.
- Predictable costs either through fixed or usage based price agreements.
- > Costs are known as an invoice is paid and includes all costs, avoiding the traps of appropriate or non-existent internal cost allocation.
- ➤ Rebates or liquidating damages for non performance of agreed service levels.

# 2.5.1.2 Flexibility

- ➤ Catalyst for organisational change behaviour, restructuring, rationalisation.
- > Shifting of expenditure from the capital to the operating budget, which is usually less rigid.
- > Remove inflexible work practice mandated by legislation and unions.
- > Access to leading edge, specialised skills.
- > Shorter lead time to take advantage of new technology and ideas.
- Economic of scope (the variety of services able to be produced).
- Access to technology without capital investment.

## 2.5.1.3 Efficiency and effectiveness

Predetermined service levels – parties are forced to define and/or agree to what is expected:

- ➤ With pay for performance, service providers are more responsive to performance complaints as it affects profitability.
- > Centralised support with one point of call the service provider.
- > Enables technology catching up or leapfrogging.
- ➤ Efficiency motivation by converting internal cost centre to a service provider profit centre.
- ➤ More frugal use of IT resources when paying "real" money, users change their behaviour.

# 2.5.2 Disadvantages

The potential disadvantages of outsourcing as described by the Deloitte & Touché Consulting Group, 2000 are as follows: (Source: Achieving Results through Outsourcing, Deloitte & Touché, June 2000)

- ➤ Unexpected costs for those that are not explicitly in the scope of the agreement.
- ➤ Higher per unit of service costs if usage projections are above or below those agreed upon.
- Cost of additional skills and resources required in managing the relationship.

- ➤ Leakage of confidential information resulting in competitive disadvantage or legal cases.
- ➤ High exit barriers and irreversibility reduced cost-effective options if arrangement fails.
- Service provider's inflexibility to economically meet changing requirements on a timely basis.
- Exposure to service provider's financial strength and profit motive.
- ➤ Supply restrictions into a single supply source.
- Exposure to service provider's lack of commitment they may focus their attention on larger or more strategic customers.
- > Loss of in house expertise.

The definition of a "failure" is always open to debate. Nevertheless, the research unquestionably raises important concerns about the success of outsourcing. "Unsuccessful deals shared certain characteristics. Virtually all the facilities sought primarily cost reduction. The organisations were in financial trouble and saw total information technology outsourcing as a financial package to improve company position rather than as a way of leveraging IT for business value and keeping control of their IT destiny." (Gay et al, 2000)

#### 2.6 KEY FOR SUCCESS

Heywood (2001), The Outsourcing Institute (2002) and others, have common thoughts in that a clear understanding of the original and underlining driver/s to outsource is paramount and must be agreed upon between the organisation and the service provider. As much as it is important that the internal situation is clearly identified, it is essential for the organisation to draw up a profile of the ideal service provider before contacting anyone.

The organisation should consider the following factors in descending order of priority when creating a short list of potential service providers: (Heywood, 2001)

- Credibility how much experience does the service provider have i.e. how many existing clients?
- ➤ Reliability does the provider satisfy its client's needs?
- ➤ Flexibility is the provider flexible enough to match the organisation's needs in the short term and be able to adjust in future if the business grows substantially or declines?
- ➤ Skill base does the provider have the skills for now and future possible demands?
- ➤ Potential savings will this provider be able to offer greater or lesser savings than others?
- ➤ Service how will this provider's service compare with what the organisation currently enjoys or what others may provide?
- ➤ Management skills if the organisation's business grows or contracts does the provider have the management time, skills and desire to support the newly established needs?
- ➤ Personnel policy what is the provider's personnel policy and how will this affect the organisation's employees?

- ➤ Transition skills how effective have they been in bringing about past transitions: have they met the required timescales and what has been the effect on previously transferred staff?
- ➤ Contract questions will the provider use its greater experience and tie the organisation down under a tight contract, or will it allow a partnership arrangement?
- ➤ In-house expertise and control will the provider make sure that the organisation does not lose the expertise and control necessary to maintain and develop the business?

The abovementioned list will form the basis and will be used in the performance evaluation of Zambian service providers at a later stage in this paper.

The next question to be answered is: how many potential service providers should be considered for the tender process? The dealing with two or more service providers involves a great deal of work but does create a competitive environment amongst potential service providers. Advantages and reasons given in the literature by Unisys as to a sole sourcing approach are:

- > Shortening of the procurement cycle.
- > Reducing the procurement cycle cost.
- ➤ Increasing the control an organisation has over the outsourcing process, thus presenting the opportunity to add value.
- > Sensitive information is only given to one service provider.
- Any unnecessary delays might upset the present staff even further.
- > Some substantial outsourcing arrangements have started on a small scale and then graduated to a full-blown outsourcing contract as a natural progression.

The Author is of the opinion that using the sole sourcing route for the reasons of saving time and money is short sighted and the wrong approach to the implementation of an outsourcing strategy. The advantages in inviting tenders from more than one party are seen as:

- Ensures that criteria to be applied in the selection of the Service Provider is adequately identified.
- > Creates a competitive environment for potential service providers.
- ➤ Compels the Organisation to compile a detailed Tender Specification which should ensure detailed research and discussion of potential drivers to outsource.
- ➤ Ensures that the correct level of information is being given to the potential service providers.
- Ensures that all relevant information is available in-house.
- ➤ Establishing a realistic time frame with closing date for the submission of responses.

## 2.6.1 Manpower Issues

The most emotive issue to be addressed in the Outsourcing process is that of Manpower. The arrangements under which many people work have undergone radical transformation. Indeed, it is contended that the conventional view of work – in the form of a permanent full time job with a formalised work organisation – is no longer relevant

for many working people. Firms are becoming increasingly reliant on the outsourcing of labour functions in an attempt to effectively manage the supply of skills when required and the cost of labour, whilst focusing on their own "core" activities. Downsizing, outsourcing and contracting-out are leading to situations where more diverse skills are in demand and for shorter periods.

The role of competition as impetus for contracting out appears ambiguous. On the one hand, Companies in less competitive industries defined by the number of competitors are believed more likely to use contractors. On the other, Companies most exposed to international competition in the export sector have most rapidly expanded their use of contractors. Successful, internationally competitive Companies need to be in the lowest quartile of the production cost curve if they are to be a secure participant in the industry. Access to good quality resources is no longer a sufficient advantage in itself. Being increasingly efficient and cost-effective means having access to the latest knowledge and specialised skills and equipment. In many cases it is not possible for a company to have that expertise within, alternatively the required economies of scale for the cost-efficient exercise may preclude a Company from maintaining the function inhouse.

The terms "outsourcing" and "contracting out" were used interchangeably throughout the literature read concerning labour issues relative to this study. According to VandenHeuvel et al (1999), "in common law the difference between contractors and employers is that the former involves contracts <u>for</u> service, whereas the latter involves contracts of service".

By externalising the employment relationship, the contracting body shifts responsibility for award/enterprise bargaining agreement entitlements (e.g. leave entitlement, wages, grievance procedures) and common law rights between an employer and an employee (e.g. the provision of a safe working environment, training, the contractual obligations of an employer to an employee) to the contractor. Such strategies are claimed to provide economic advantage through improved service delivery and labour cost savings (e.g. pension, medical aid payments, workers compensation coverage). (Spriggs 1998; Benson et al 1995; Gordon et al 1997).

Heywood (2001) states that outsourcing the human resources department is not that different from outsourcing any other function in terms of the problems to be faced. However, there is one factor that makes it difficult for most organisations to contemplate such an action. The HR department is involved with issues that are critical to the well-being of the entire workforce and to outsource those responsibilities will normally be seen as a strong indication to all concerned that the management does not rate these issues highly. In addition, it is important to consider the effect on the employees being transferred.

An important factor when considering Outsourcing, is the timing of the announcement of this to the organisation's staff. As the process especially that involving larger

business functions is of a complex nature, the negotiations can take between nine to eighteen months. In many cases it is not even clear at the beginning if this strategy will actually be implemented. Although it may be morally correct for an organisation to inform its employees of major changes as soon as negotiations commence, this ought to be balanced against the uncertainty and dissatisfaction that a long period of waiting for a confirmed result may create.

One point is clear from the moment that outsourcing becomes the preferred option, the organisation should immediately start working on the details necessary to inform staff and bring about a smooth transition. In any outsourcing process the attitude of the staff, both those to be retained and those to be transferred, is of paramount importance to the success. The main objective must be to maintain goodwill between the two groups, therefore it is essential to keep the time of uncertainty to an absolute minimum. Management need to address this aspect decisively and with consistency, having prepared the criteria to be applied in the selection of those staff members to be retrenched, finalized redundancy offers and final packages, prior to any announcement being made.

## 2.6.2 Contractual Issues

As much as it is important that each step of the transfer is carefully planned, a detailed contract covering all eventualities is of utmost importance to successful outsourcing. During the pre-planning stage the following areas should be addressed:

# 2.6.2.1 Service level agreements

These agreements are the link between the specifications laid down in the contract and the delivery of the service. In essence they provide the basis of the legal framework under which the performance of the provider is measured.

# 2.6.2.2 Service performance measurements

It is important that initially the organisation details its own service reporting needs and requirements in respect of service performance indicators. Each activity presented in the service level agreement must have its own target and it is essential that all quality assessments and performance targets can be measured. The performance indicators can be measured in terms of quality, quantity, time elapsed, availability, utilisation or any other measure jointly agreed as important by both parties. At the same time serious consideration must be given to penalties if targets are not met and rewards and sharing of savings if they are significantly bettered. It is essential that the performance indicators be defined as clearly as possible to avoid any alternative interpretation. Independent quality assessments might also form part of the agreement. In this scenario a third-party consultant is employed at agreed intervals to do benchmarking studies.

# 2.6.2.3 Continuous improvement programmes

Of equal importance is to agree upon the service performance indicators and the establishment of an environment conducive to continuous improvement programmes. Short-term changes will concentrate on improvements in reliability, speed and quality

of the existing service of the business function while at the same time long-term objectives, like cost reduction and rationalisation opportunities, must be investigated. Many added value success stories in outsourcing have only realised this because of continuous improvement programmes created sometime after the contract got under way, due to the right risk/reward sharing environment for the service provider to work in. As much as a clear demarcation of scope of work is necessary, an analysis at an early stage is critical for future possible inter-departmental outsourcing projects.

## 2.6.2.4 Management of the contract

According to JB Heywood (2001): "Over the last few years a certain degree of standardisation has developed in the way that the outsourcing contract is managed." A management team is established as a Joint Review or Steering Committee consisting of equal representation from both parties and meets on a regular basis during the life of the contract. The overall responsibilities of this Team are:

- > To ensure that the existing service is sufficient and meets the organisation's needs.
- ➤ To provide a forum in which the continual analysis and review of service performance indicators can be undertaken.
- > To approve the appointment or dismissal of key staff.
- ➤ To ratify and approve any deviations from contractual obligations.
- ➤ Work on improving all aspects of the relationship.
- ➤ Manage the overall performance of the contract.

Bergquist et al (1995) states that as a result of globalisation "there is gradual erosion of hierarchies and the emergence of more collaborative, partnership-driven structures". The literature provides several examples of factors that make partnerships successful, such as "90% of partnering skills are hinged on communications" and "partnerships are not based on selling, but on mutually beneficial customer and supplier activities" (Moody, 1993).

The corporate and cultural fit between partnering companies is also important. This is supported by statements such as "It is essential that there is a high degree of fit between each of the seven elements of Mc Kinsey 7S model and that they are aligned in the same direction in which the industry environment will be moving in the future". (Henley Management College, 1999).

Perhaps it is Harry S. Truman who provides the essential element necessary for the successful management of an outsourcing contract, "You can accomplish anything in life, provided that you do not mind who gets the credit".

It is imperative that both parties see their joint effort to succeed as the effort of one team, with one aim, and their collaboration brings together the essential synergies needed.

#### 2.6.3 The Elements of the Contract

It is vital that enough time and discussion is dedicated to the crafting of the contract between the organisation and the service provider. Guidelines as to essential elements are mentioned below: (Heywood, 2001)

- Precise description of those areas of the organisation to which the outsourcing agreement relates.
- ➤ Guidelines and, where applicable, rules for the management of the transferred service along with a description of the responsibilities of each of the key managers.
- > Service and other areas which require performance measurement.
- A detailed description with full technical explanations of all services affected by the agreement, both those being transferred and those retained.
- > Details of any agreement to share the risks and/or rewards.
- An anticipation of outside factors, such as changes in legislation that might affect the contract and a framework for dealing with any problems that might arise as a result.
- ➤ An explanation of any indemnity enjoyed by both the service provider and the organisation.
- ➤ Details of any arrangement for the organisation to benchmark the service and the date by which this is to be carried out.
- Management disagreements between the parties should be anticipated and a framework should be set out for dealing with such situations.
- A detailed explanation of any specially negotiated exit clauses along with any midcontract termination periods agreed in advance.
- ➤ The date by which renewal discussions must have commenced before the end of the contract period.

## 2.7 CONCLUSION

In today's business world of "becoming and remaining competitive in all business processes" Outsourcing is only one possible solution to the problem and a strategy practised by many management teams. Outsourcing cannot be considered in isolation. It has to be seen together with other management techniques developed to improve performance such as value engineering, change management, best practice, business process re-engineering and total quality management, to name a few. These management techniques can also be referred to as the internal solutions.

Of paramount importance is the re-evaluation by Organisations of their Core Competencies, Core and Non-Core Business functions. These are dynamic and change over time; they are affected by in-house developments and far-reaching external pressures, markets, availability of manpower and skills, economic and political pressures, etc.

When the decision to outsource has been made, it is essential that organisation analyses the potential drivers of this decision and identifies the aim and objectives to be achieved. The What, the Why, the When, the How and the Who questions need to be fleshed out in detail and reviewed persistently to ensure that the answers link successfully back with the aim and objectives set. Detailed examination of the sources for value enhancement from outsourcing is of more than academic interest. By understanding where the value will come from, companies can make better decisions

about whether outsourcing is a necessary or even appropriate way forward, and if it is, what sort of supplier would be best able to generate the value. Without an understanding of where the value is derived from, companies succumb to spurious suppliers who cannot deliver what they have promised which as a result, cause delays and the associated negative financial implications.

A jointly negotiated and comprehensive contract between the organisation and service provider is critical to the start and development of the relationship. It is vital to ensure that a future service in the short- and long-term poses minimum risk to the organisation at a reasonable cost.

In conclusion, communication with all Stakeholders is of paramount importance to the success of the decision to outsource.

## 3. THE ZAMBIAN COPPER MINING INDUSTRY

## 3.1 HISTORY OF PRIVATISATION AND ORGANISATIONS

Major Government policy changes initiated by the Government of the Republic of Zambia (GRZ) and the enactment of legislation providing for the privatisation of the parastatal sector in 1991 led to discussions on the future of the Copper Mines with international investors. In mid-1996 the Board of Zambia Consolidated Copper Mines Limited (ZCCM) adopted the recommendations made by its advisor, N M Rothschild & Sons Limited that the privatisation of the Mines be done in two phases.

During the first phase majority interests in all of ZCCM's major operating and development assets were to be offered as separate packages to investors. The intention being that ZCCM would retain a minority shareholding. In the second phase the Government intended to dispose of all or a substantial part of its shareholding in ZCCM. These shares were to be offered to Zambian financial institutions, the Zambian public and preferred overseas investment partners.

The performance of ZCCM was vital to the health of the economy as it accounted for approximately 45% of Zambia's GDP and 90% of its export earnings in the early '90s (CRU International Ltd, 1996). However, in 1995/96 ZCCM's finished copper production fell for the fourth successive year to only 307,100 tonnes. The significance of this production figure can be understood when in 1969 Zambian finished copper production reached a peak of 755,000 tonnes.

During the next four years numerous discussions and meetings were held by GRZ/ZCCM Privatisation Negotiating Team with potential investors and consortiums; in most instances Memoranda of Understanding were finalised and signed. The largest interest group being the "Kafue" Consortium, made up of the following organisations:

Avmin Limited South Africa.
 Noranda Mining and Exploration Inc Canada.
 Phelps Dodge Corporation USA.
 Commonwealth Development Corporation UK.

Other companies actively involved in the privatisation discussions were:

Anglo American Corporation
 Gencor Limited
 Falconbridge Limited
 Western Mining Corporation
 South Africa.
 Canada.
 Australia.

However, the falling copper price and the deterioration of the assets overshadowed negotiations which were protracted, as agreements on such matters as cash at close, retained percentage interest by ZCCM, equity investment, future investment commitment and tax concessions proved difficult.

Final agreements were concluded and the Zambian Copper Mines and their assets were originally transferred as shown in Table 3.1.

Table 3.1 Zambian Copper Mines, New Owners & Foreign Shareholders

Mine's Name	Date	Initial Foreign Shareholder	Foreign Shareholder as per 2005	Operating Name
Kansanshi Mine	January 1997	Cyprus Amax Minerals Company, USA	First Quantum Minerals	Kansanshi
Chibuluma Mine	October 1997	Crew Development Corp, Canada; Genbel Limited; Metorex (Pty) Ltd, Noranda Mines Ltd, all South Africa	Metorex (Pty) Ltd	Chibuluma Mines Plc
Luanshya Mine	October 1997	Binani Industries Limited, India	J&W Holding AG, Switzerland	Luanshya Mine
Chambishi Mine	June 1998	China Non Ferrous Metal Industries Foreign Engineering Construction Corpoation, China	No change	NFC Africa Mining Plc
Chambishi Cobalt and Acid Plants & Nkana Slag Dumps	September 1998	Avmin Limited, South Africa	J&W Holding AG, Switzerland	Chambishi Metals Plc

Mine's Name	Date	Initial Foreign Shareholder	Foreign Shareholder as per 2005	Operating Name
Bwana Mkuba	1998	First Quantum Minerals Limited, Canada	No Change	Bwana Mkuba Mine
Mufulira Mine and Nkana Mine	April 2000	Glencore International AG, Switzerland and First Quantum Minerals Limited, Canada	No Change	Mopani Copper Mines Plc
Konkola Mine, Nchanga Open Pit & Underground Mine and Nampundwe Mine	April 2000	Anglo American Plc, International Finance Corporation and Commenwealth Development Corp	Vedanta Resources Plc	Konkola Copper Mines Plc
Lumwana Copper		Equinox Resources Ltd., Australia and Phelps Dodge Corp	Equinox Resources Ltd, Australia	Lumwana Copper Project

Roan Antelope Mining Corporation of Zambia Plc under new ownership of Binani Industries Limited went into liquidation at the end of 2001 and the mines were put on care and maintenance. In 2003 negotiations between the GRZ/ZCCM Privatisation Negotiating Team and J&W Holding AG of Switzerland were successfully concluded and operations at the Baluba and Luanshya Mines recommenced. The agreement included the Muiashi copper and cobalt deposit.

Konkola Copper Mines Plc (KCM) in particular, looked set to improve operations of its mines, Nchanga, Konkola and Nampundwe with a commitment of over US\$ 300 million for rehabilitation and improvement of safety. However, Anglo American's decision to pull out of the mining industry at the beginning of 2002, two years after taking over these mines, dealt the industry a severe blow. 'The decision by Anglo American to withdraw has put Zambia and the lives of its people at risk,' conceded the then newly elected Zambian president Levy Mwanawasa.

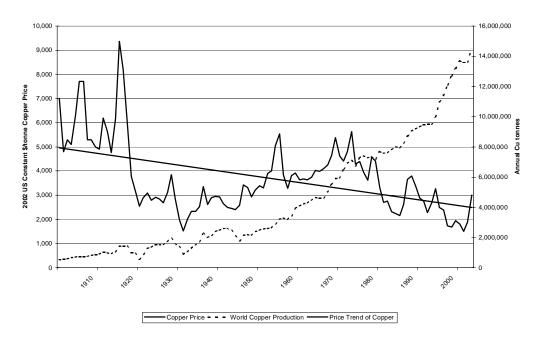
# 3.1.1 Further Important Background Information

# 3.1.1.1 Global copper price and production

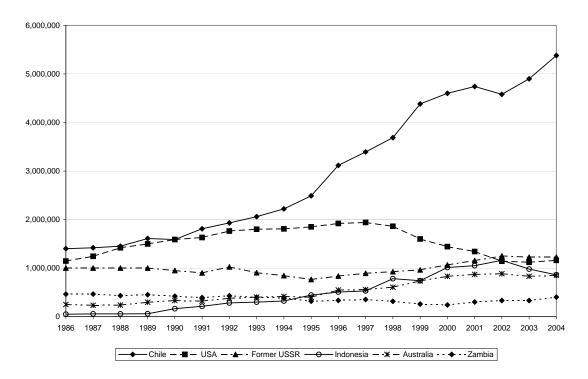
Price indexes developed by the US Geological Survey indicate that the long-term constant dollar price of key mineral raw materials has declined over the last century, even though the need for mineral raw materials increased during the same period

(Sullivan et al, 2000). Technologies and reduced production costs have allowed mineral production to remain profitable. Figure 3.1 illustrates how the price of copper in constant 2002 US\$ terms has decreased over the course of the last century, by approximately US\$5,000 per tonne. Figure 3.2 shows the Copper Production by individual countries including Zambia for the last twenty years and shows the increase in production whilst highlighting the decrease in the Zambian contribution.

# COPPER PRICE vs GLOBAL PRODUCTION & TECHNOLOGY 1901 - 2004 Figure 3.1







# 3.1.1.2 The AIDS pandemic

Cognisance has been taken of the ever-increasing AIDS pandemic and the disastrous impact on the labour force and management. The latest report from the World Health Organisation and UNAIDS states that HIV/AIDS is now a leading cause of death in Africa; over two-thirds (28.1 million) of all the people now living with HIV in the world, live in sub-Saharan Africa.

According a Zambian Ministry of Health report: 'Zambia has one of the worst HIV/AIDS pandemics in the world, with an estimated 20% of the adult population HIV positive'. By the end of 1999 UNAIDS reports indicated the following:

- A prevalence rate of 19.95% amongst adults (aged 15 to 49).
- A total of 870,000 infected people (adults and children).
- ➤ 650,000 children have already been orphaned since the beginning of the epidemic.

The UN Population Division indicate that Zambia is among eight countries where life expectancy by 2005 will have dropped by at least 17 years. The Zambian Ministry of Health confirmed these statistics with a drop in life expectancy from an average 54 years to 37 years. (Ministry of Health Report, 2001)

Although all businesses have and will continue to be hit hard by HIV/AIDS, the mining industry, soldiers and truckers are amongst those most at risk. The Mining Industry in Zambia is concentrated in the Copperbelt, which has one of the highest HIV/AIDS prevalence rates of 26.3% among adults.

#### 3.2 THE ZAMBIAN RESEARCH RESULTS

In 2003 detailed research was undertaken and completed in Zambia on "Strategic Outsourcing and the degree to which it may support the successful growth in the Zambian Copper Mining Industry". Based on a 70% response rate across the different mining companies and associated organisations, the information acquired was collated and is presented here as being representative of the opinion and situation in the Zambian Copper Mining Industry in 2003.

Table 3.2 records the business functions then outsourced by the different Mining Companies according to priority.

Table 3.2 Schedule of Outsourced Business Functions

PRIORITY	BUSINESS FUNCTION
1	Underground equipment (Loaders and Hydraulic drill rigs) repair and maintenance
2	Underground equipment refurbishment and rebuilt
3	Development
4	Light vehicle maintenance
5	Raise boring
6	Diamond drilling (Underground exploration drilling)
7	Cleaning of offices
8	Rolling stock repair and maintenance (Granby cars, locos, axels, etc.)
9	Transport of employees and ore
10	Security
11	Horticultural maintenance (Parks and gardens)

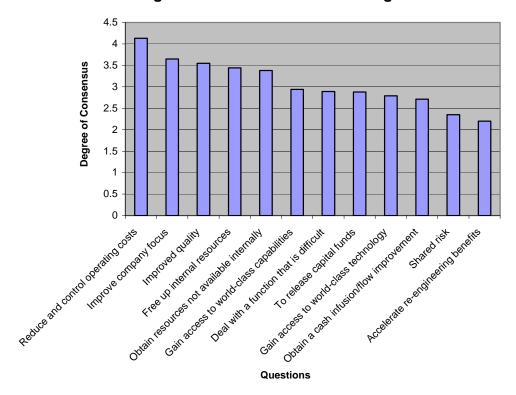
The participants were very consistent that only functions deemed as non-core functions are outsourced with one exception, development. Development was declared as core function by most of the participants but then repeatedly reported as having been outsourced.

Although in its totality, development is an ongoing process, it can be a discontinuous function. It is also one function where cutbacks are quickly implemented when cashflow problems or similar financial situations occur. This would give some explanation why development has been outsourced in most cases.

The three important factors taken into consideration when deciding to outsource were:

- ➤ Reduce and control operating costs.
- > Improve company focus.
- > Improved quality.

Twelve factors had to be ranked on a scale of One to Five, One being not important and Five very important.



**Figure 3.3 Factors for Outsourcing Decision** 

Factors contributing to the decision to outsource by some of the participants under "Others" were:

- ➤ Improved availability.
- > Reduce labour and interlinked responsibilities and liabilities.
- Reduce theft.
- ➤ Reduce internal stock holding without impacting on availability.
- Lack of skills.

Figure 3.4 shows the results of the ranking of the criteria applied in the selection of an external supplier or service provider:

- Reliability.
- Credibility past experience and track record.
- > Type and range of specialist skills.

The same method of ranking as per the previous question has been applied to.

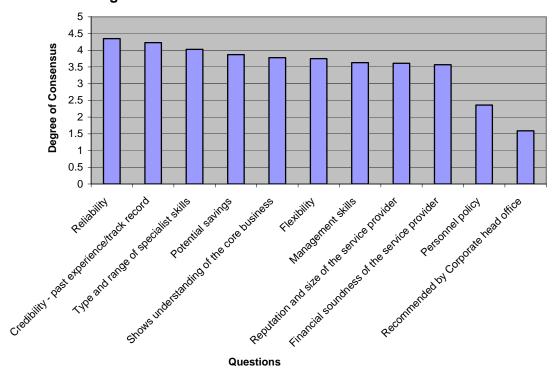


Figure 3.4 Criteria for the Selection of the Service Provider

As to the success of outsourcing these business functions the response given indicated:

- Sixty Six percent "Yes".
- > Fourteen percent "No".
- ➤ Twenty percent "Too Early To Say".

However on the length of contract signed with the service provider:

Sixty One percent
Thirty Nine percent
Nil
6 months to 1 year.
1 year to 3 years and.
more than 3 years.

These results seen together with the low ranking of the factor of "Shared risk" in the decision to outsource (Figure 3.3) strengthens the view that companies used outsourcing as a tactical and reactive management tool rather than strategic and long-term policy.

A relatively even result was obtained to the question; "Was the potential loss and/or skills from the company's employees base a concern when considering the outsourcing of certain business functions?"

Forty Six percentFifty Four percentNo.

Interestingly 83% of all the participants did not expect any major obstacles during the outsourcing process through Union intervention. The remaining 17% stipulated their experience and perceived Union problems/concerns were:

- A general mistrust by the Union towards management.
- Resistance to change.
- > Reduction of Union membership and therefore erosion of power base.
- ➤ Unions perceived responsibility to protect the employment of its members.
- Loss of benefits by members.
- Fear of inferior employment conditions with the external supplier.
- ➤ Former employees have taken Mining Companies to court over unfair dismissal claims and actual won some cases.

Sixty Seven percent of the participants, perceived outsourcing as a management tool in assisting their companies to meet their obligations in respect of their own Human Resources policies and costs in view of the existing AIDS pandemic.

Fifty Two percent of the participants envisaged the opportunity to outsource internal business functions to present employees. Examples of present outsourced activities to former employees were given as follows:

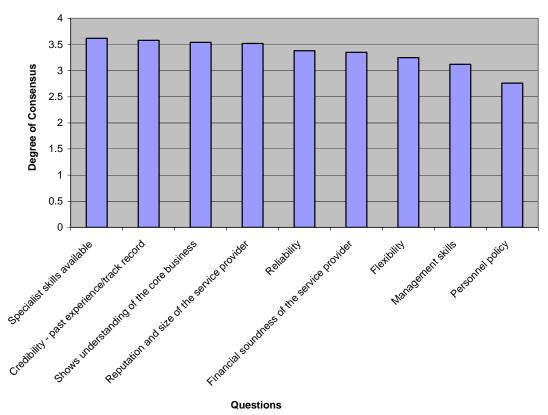
- Creation of Small Mining Enterprises supply of low value stores items and fabrication of small components.
- ➤ Konkola Ex-Miners Company.
- > Carpentry workshop.
- > Training centre, Trade school.
- Labour Hire for specific projects.
- Light vehicle repair and maintenance.
- ➤ Horticultural services.
- Welfare services.

A Ninety Seven percent result indicated that the participants were presently dealing with Zambian companies as outsourcing service providers. The term Zambian company was accepted and included in its definition:

- > Zambian registered company.
- > Zambian wholly owned company.
- > Zambian Agent acting for a foreign company.

Of the remaining three percent all acknowledged that there were Zambian companies that could fulfil the role of a service provider.

Participants were requested to rank these Zambian companies according to nine prescribed performance criteria as shown in Figure 3.5.



**Figure 3.5 Performance Criteria of Zambian Service Providers** 

The three performance criteria with the highest rating were:

- > Specialist skills available (3.62).
- > Credibility past experience and track record (3.58).
- The service provider has an understanding of your core business (3.54).

All the ratings including the top three were measured just above average with the criterion "Personnel Policy" rated lowest (2.76).

Fifty four percent of all the participants required that the service providers have an office on company premises and that a Representative reported to management on a daily basis. All contracts need to be administered closely and many of them on a daily basis.

Sixty One percent of the answers indicated that the Mining Companies are presently dealing with service providers whose Corporate Head Office was based outside of Zambia. Table 3.3 lists the different countries in which these Head Offices were located. Included is a percentage that indicates how often these countries were mentioned.

Table 3.3 Head Office Location of Foreign Service Providers

COUNTRY	DISTRIBUTION PERCENTAGE
South Africa	40%
Other African Country: Zimbabwe, Kenya	9%
Australia	11%
Europe: United Kingdom, Finland, Sweden, Germany	25%
USA	6%
Other: South America, Japan, China, India	9%

# 4. DISCUSSIONS, FINDINGS AND RECOMMENDATIONS

Outsourcing is a topical subject and an accepted short-term management tool in the Zambian Copper Mining Industry.

- ➤ Identification of Core and Non-core Business for the Mining Industry.
- Factors that contributed to the decision to outsource.
- > Criteria applied in the selection of the service provider.
- ➤ Other issues including AIDS, training and the Unions.

## 4.1 CORE AND NON-CORE BUSINESS FUNCTIONS

Where the debate starts is "How to identify these core functions?" Hamel and Prahalad (1990) believe it starts with the identification of Core Competencies "...the collective learning in an organisation, especially how to coordinate diverse production skills and integrate multiple streams of technology".

Stacey (1999) on the other hand recommends that there are only two core competencies in a Mining/Minerals Company, "...managing and financing".

It becomes apparent that the concept of core competence is based upon skills, knowledge and learning, and their effective integration. The tangible resources of the Mining Companies on the Copperbelt can be described as their assets in the form of underground shaft systems, concentrator, smelter and refinery. Of equal if not more importance, are the intangible activities and resources including people, extensions or attributes of the attitude, ethos, commitment etc., by individuals within a company. These factors are developed through the company's own efforts and do not just comprise "inherited" assets. Nor does it incorporate the value chain activities or their execution. The competence comes from the individual's ability to do the activity better or more efficiently than his counterpart and therefore be more successful.

Answers given in response to the question on defining core and non-core business in essence fell into two categories. The participants who used a "broad" interpretation of core and non-core business intimated that:

A core function has to have a direct impact on the mining and processing flow of the copper ore from the underground production area to a saleable product; it should be of a continuous nature.

The answers from participants who described core and non-core functions in detail, specified individual functions and these are highlighted below:

## 4.1.1 Core Business Functions

- ➤ Mining: Development, Production (Stope drilling, Blasting, Lashing), Tramming, Hoisting, Pumping, Supply Services.
- ➤ Mining Technical Services: Geology, Rock Mechanics, Planning, Ventilation, Survey.
- > Processing: Crushing, Smelting, Refinery.
- > Manufacturing.

## 4.1.2 Non-core Business Functions

- Mining: Special projects like Raise boring, Diamond drilling, Shaft maintenance.
- > Equipment maintenance (Loaders and Hydraulic drill rigs).
- > Equipment rehabilitation, Fabrication.
- Services Water and Sewage, Security, Transport.

The definitions of core business elicited were not unexpected but reflect an insufficient understanding of the term core business.

To assist in defining core competencies, some questions that Mine Management should ask and which may provide relevant answers are:

- ➤ What do we do better than anyone else?
- ➤ What do we do so well that we could sell our products or services on the open market?
- ➤ Where do we achieve "Best in Class" status?
- ➤ Where are we not adding significant value to the production process?

## 4.1.3 Core Competencies

Although core competencies as such was not a direct question addressed in the research, the answers given by two recipients to core business conceptually characterise the literary point of view:

- ➤ Core business should be something that we are good at i.e. have all necessary skills.
- ➤ To produce copper competitively and economically and make money for the shareholders. To ensure the workforce is competent to carry out their functions through effective training programmes that raises the employees' competence to par or better than international standards.

Stacey's (1999) argument that perhaps in the mining industry there are only two core competencies required "financing and managing", becomes clear when it is explained that the methodology and technology used in mining and its associated processing is

generally common throughout the world. Functions specified as core business do not represent functions that are difficult to copy. In fact, they are actually very similar or identical from one mining company to another. However the application of the methodology and technology may be unique which reverts back to the abovementioned questions that should be answered by the Mine management when identifying core functions.

The functions nominated as core business are illustrative of mining roles which have existed in a structure that has been accepted as the standard for past decades.

Examples of outsourcing at several mines in Australia and now more common in the South African Mining Industry include:

- ➤ Mine planning services, particularly for smaller mining companies.
- > Tailings dam design and operation.
- > Shaft sinking and underground development.
- > Tunnel support installation, stope support installation and management.
- ➤ Various aspects of environmental management and design.
- Mining and backfilling operations.
- Environmental planning particularly in respect to the rehabilitation of mine dumps.

# 4.2 FACTORS THAT CONTRIBUTE TO THE DECISION TO OUTSOURCE

It has been established that there are three basic reasons for outsourcing:

- > Reduce and control operating costs.
- > Improve company focus.
- > Improved quality and service.

These results principally the first "Reduce and control operating costs" do not come as a surprise. Companies can have only two sources of competitive advantage, namely low cost or differentiation. These two sources can either be applied industry-wide or in a single segment. Therefore, in total, there are three generic strategies namely, cost leadership, differentiation and focus. The minerals industry in general, because it is a commodity based industry, has little other option than to adopt a cost leadership strategy. This is also confirmed by analysing several of the Mission and Objective statements of the Mining Companies in the Copperbelt that have a similar statement built in "Achievement of unit costs for copper in the second lowest quartile on the international cost of production curve".

The ranking of the remaining factors of the outsourcing decision are very much in line with the top ten reasons why companies outsource as established by The Outsourcing Institute (2002). However, what is needed if the industry is to achieve any real benefit from Outsourcing:

- Contracts should move from a more tactical nature to a rather strategic one.
- ➤ The management of the contracts to be changed from an adversarial style to a more cooperative one to obtain the full benefits.

The right risk/reward-sharing environment will create the opportunity for added value through continuous improvement programmes.

Indications that the majority of all outsourcing contracts in the Zambian Copper Mining Industry are more of a tactical nature are provided below:

- Low ranking factor of "Shared risk".
- ➤ Short contract period between 6 months and 1 year.
- Lack of Company blue print of strategic outsourcing.
- The type of present business functions that are outsourced.
- > General comments of low trust.

In this respect Mine Management needs to determine how closely integrated the operations between the mine and the service provider should be – that is, the type of relationship they want to develop in terms of the Outsourcing spectrum. A decision matrix shown in Table 4.1 could act as a guideline in this process. It is important to remember that there is no standard "right" or "wrong" relationship in this spectrum. The type of relationship that the mining company decides to pursue should be based on the goals it intends to achieve.

Table 4.1 Decision Matrix for Outsourcing Relationships

	Major Stage Differentiator				
	Transaction-Based		Relationship-Based		
	Stage 1: Transaction Oriented Outsourcing	Stage 2: Co- sourcing Partner Relationships	Stage 3: Strategic Sourcing Strategic Relationships	Stage 4: Value-Chain Networking Shared Asset Relationships	Stage 5: Entrepreneurial Venturing/Hybrid Spin-off Relationships
Motive for Outsourcing	Fix immediate problem	Leverage resources, technology	Positioning vehicle for the future	Co-creating future value, focus on asset influence/ pooling	Capture of specific breakthrough bypass business opportunity
Provider Selection	Vendor procurement based	Negotiated partner selection	Strategic Alliance, Architecture- based	Strategic Alliance, Architecture- based	Strategic Alliance, Architecture-based
Measures	Better, cheaper, faster	Productivity leverage Best- in-class Value-added projects	ROI/balanced measures, System integration, Trust measures	ROI/balanced measures, System integration, Trust measures	ROI/balanced measures, System integration, Trust measures
Strategic Orientation	Short-term	Medium - to long-term	Long-term	Long-term, open ended	Long-term, open ended

Structure	Transactional	Hybrid of transactional/ relational	Relational	Completely relationship based	Primarily relational leading to stand-alone entity
Pricing Framework	Low-bidder	Cost-cognisant but not dominant	Win-win, shared risk/reward	Win-win, shared risk/reward	Win-win, shared risk/reward
Strategic Planning	Little or none	Significant resources for decision	Extensive planning and due diligence	Intimately linked to corporate vision	Driven from distinct new venture plan
Formal Control	High	Low level collaborative mechanisms	Based on shared outcomes/ objectives	Control exercised through collaboration	Medium to low
Integration Level	Very Little or none	Loose integration	Very substantial	Very high	Very high
Trust	Low	Based on partnering	High levels of mutual trust	Highest degree of mutual trust based on performance	Highest degree of mutual trust based on performance, Joint expansion of opportunity

There is no doubt that traditional vendor-style outsourcing arrangements have their place in the outsourcing spectrum. The costs in terms of analytical effort and relationship building simply are not justified for low-value-added processes. In this respect the present relationships are appropriate when analysing the type of business functions that are outsourced in the Zambian Copper Mining Industry.

The importance and key in this matter is that companies understand the full decision matrix and do not automatically move to a transaction-based arrangement, thereby missing opportunities or underestimating the potential of the more collaborative-type relationships.

At the same time the companies will have to analyse and understand their own organisation's suitability as a partner. It is vital to have a process for crafting successful relationships. Mangers responsible for implementing new outsourcing relationships must have an understanding of the key factors for success.

Table 4.2 shows the differences between a traditional organisation and a network organisation. The network organisation would be more conducive to a strategic and integrated relationship.

Table 4.2 Traditional Organisation versus the Network Organisation

TRADITIONAL ORGANISATION	NETWORK ORGANISATION
Everything is done in-house and focus is on "How to do Things"	Do what has to be done and the focus is on "What to do" and ensuring that these are right things to do.
Focus is largely on cost	Focus is on value creation as perceived by the market place
Resources are of paramount importance (acquisition and allocation of resources)	There is an obsessive focus on results

# 4.3 STRATEGIC OUTSOURCING PLANNING PROCESS.

The following Strategic Outsourcing Planning Process is proposed as a guideline to accomplish the abovementioned and ensure consistency in the outsourcing approach.

# **Company Strategy**



MOST analysis

External and Internal analysis resulting in Key Issues

Compare Current Company Strategy to Key Issues

# Strategic Gap

Gap analysis



What are our Core competencies?

Which business functions should be considered for outsourcing?

What are the barriers raised by the company strategy?

Can we improve internally before we consider outsourcing?

# **Develop Options**



Use a Methodical Approach

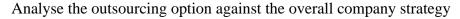
What are the goals we want to achieve from outsourcing?

What kind of relationship with a service provider is most appropriate?

How do we deal with the people issues?

# **Strategic Choice**

Evaluate options



Short- or long-term orientation

Assess company's readiness

Analyse the effects on the rest of the company

Critical risk assessment

# **Implement Strategy**

Negotiate a sound contract

Include effective performance measures

Establish clear communication mechanisms

Develop a clear contingency plan and exit strategy

## **Monitor Performance**

The intention of the abovementioned decision tree is to act as a guideline. As with every management decision intangible and soft issues as well as common sense have to be brought into the equation.

## 4.4 CRITERIA APPLIED IN THE SELECTION OF THE SERVICE PROVIDER

The most successful outsourcers have strong relationships with their service providers, hold high-level strategic reviews, and have an effective process for "continual improvement" that is underpinned by performance measures and end user satisfaction measures. When organisations follow these steps, they achieve higher levels of benefit and greater cost savings that those who follow a more traditional approach.

Guidelines for the management of a successful relationship management are outlined below:

- > Create a shared vision for the outsourcing. Reflect this vision in the contractual arrangements.
- ➤ Include effective performance measures that motivate the service provider to ensure that its actions serve the client's business objectives.
- > Establish clear communication mechanisms.
- Develop a clear contingency plan and exit strategy.

Participants were requested to rank Zambian service providers according to nine performance criteria (see Figure 3.5). These performance criteria results were then compared against the criteria used in the selection of the service providers.

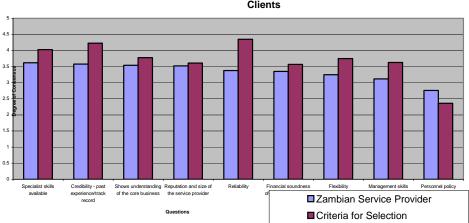


Figure 4.1 Performance Criteria of Zambian Service Providers vs Expectations from Clients

The gap analysis shows that the levels of expectation of all the criteria given were higher than the present performance levels of the Zambian service providers, with one exception of the criterion "Personnel Policy". Of importance is the disparity between the demand for Reliability, Credibility and Specialist skills and the performance ability of the Zambian Service Provider in these categories.

It is essential that these issues be thoroughly explored and confirmed during any future outsourcing negotiations between the Mining Companies and potential service providers. These issues should be comprehensively addressed in the final Contract and the service performance indicators agreed upon should regularly be measured during the life of the agreement.

Zambian service providers will have to improve in all areas, but particularly in the areas of Reliability, Credibility and Specialist Skills if they wish to continue to be competitive and regarded as a preferred outsourcing partner in the market place.

## 4.5 HUMAN RESOURCES ISSUES

## 4.5.1 Manpower

What is not taken into consideration by the Authors of the literature on labour as reviewed in the literary section, is the application of or relevance of new Labour concepts to the Third World Countries.

The majority of the raw materials required by the First World are sourced from the poorer nations. Many labour norms in those countries are either inherited from or imposed by the First World. It is essential then, that cognisance be paid by the Mining Industry as to the perceived understanding by Governments and Unions in poorer countries and the barriers which aggravate the implementation of First World thought, in this instance, Outsourcing.

Third World Governments are under considerable pressure to improve employment opportunities; to empower the indigenous peoples who in the majority remain the unskilled and semi-skilled faced with the AIDS pandemic, corruption and an inability to compete with training facilities and curriculum that addresses the diversity of skills required. The reasons behind the pressure on Governments and Unions are many and wide-ranging and are not discussed in this paper. In the context of the Zambian Mining Industry, Unions, Training and the empowerment of indigenous people and AIDS are fundamental issues.

## 4.5.2 Trade Unions

Although eighty three percent of all participants in the questionnaire survey did not expect any major obstacles during the outsourcing process through Union intervention, it is essential to see the Union as a dynamic entity. In its infancy in respect of influence, it will mature quickly particularly if those it represents become threatened.

The National Union of Mineworkers of South Africa (NUMSA) although not directly involved in Zambia, is a very powerful organisation in the Southern African Region and is becoming more vocal and influential on matters relating to countries in this zone, articulated its viewpoint at a "Supply Partnerships in Mining" conference as:

"...The subcontracting and outsourcing of mine activities pose a challenge for the industry and the Union. Workers are the victims rather than the beneficiaries of these restructuring processes. The business models adopted are at odds with the kind of an industry we would like to create. We have a responsibility to recruit and organise subcontractors into the Union and educate our workers on the threat posed by subcontracting and outsourcing to their jobs and conditions of employment. It is the strength of our organisation that will transform the industry from being a 'rocks and dollar' industry into being a people centred industry. Our view is that subcontracting and outsourcing do not only weaken Unions but also go against our campaign for Decent Work, Decent Pay and Decent Quality of Life, as subcontracted workers have poor conditions of employment and paid half the wages that are paid in the mining, construction and energy sectors." (Magida, 2003)

One of the participants expressed his opinion about the Mineworkers Union of Zambia (MUZ) and the author concurs "...The Union is basically pragmatic – and agreeable to well prepared and articulated arguments. However they have in their leadership those who are less so and more 'traditional = rhetoric' members. If they would take over the top, it would swing dramatically."

Trade unions can act as an effective conduit between the workforce and management. As a collective organisation the union can provide effective feedback on what the sentiments of the workforce are, and can distil ideas and trends which will not be articulated by any member of the workforce on their own. In this manner trade unions can provide early warning of problems that other result in cruder signals being given, high absenteeism, high employment turnover and poor equipment performance etc. Most importantly, trade unions provide a two-way flow of information; they are not management intermediaries, regardless of how good the working relationship is.

The essence is that Trade Unions act as a collectively based "Stakeholder" in the enterprise. It is often a more active stakeholder than Shareholders, as it can directly facilitate and implement workplace change. Management should therefore seek to address its interest as a "Stakeholder" when matters such as outsourcing are addressed.

# 4.5.3 Training and Expatriate Labour

Loss of in-house expertise was one of the disadvantages of outsourcing. The Southern African Mining Industry in general, and the Zambian Mining Industry in particular, have a chronic and almost continuous shortage of suitable skilled staff, exacerbated by the present lack of training facilities, and more over a training curriculum which addresses the needs and standards of excellence demanded by the industry today. Training is required at all levels but of particular concern are the semi-skilled.

In 1997 a month before the academic year started, the Zambian Government withdrew all subsidies and bursaries in respect of mining disciplines. The curriculum and qualification of these courses was to Diploma Level and the syllabus was covered in a three-year period. With effect from 1998 the syllabus was changed to a five year Degree course and students with few exceptions were self-sponsored. (Source: Head of the Mining Department, University of the Copperbelt, Kitwe – Mr B Chulu).

Figure 4.2 shows the number of students at the University of the Copperbelt who have qualified over the past nine years and an estimate of those expected to qualify by 2005.

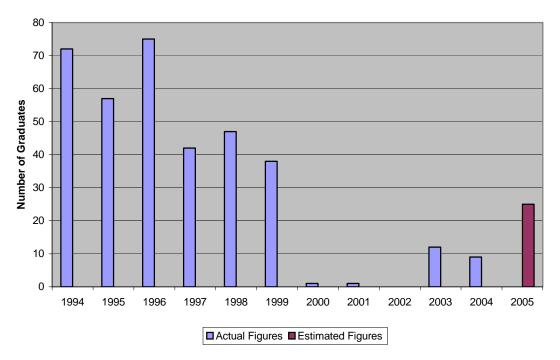


Figure 4.2 Graduates of the University of the Copperbelt

The graph indicates a rapid decline in number of students qualified. What has not been taken into consideration and no information is available on this aspect, is the number of Diploma students who have taken up employment in the Zambian Copper Mining Industry. In Metallurgy the first Degree qualified students will graduate in 2003, and in Mining 2005.

After completion of the University academic training, students entering the Zambian Mining Industry will be expected to undergo a five-year in-house training period before promotion to a junior management position. These indicators suggest that perhaps only in 2010 would these students reach a level of competency that could constructively contribute to the Labour pool available to the Mining Industry.

The rapid promotion during the ZCCM time which in many instances disregarded levels of competency, has left a legacy of unqualified people in positions that now in the new era of privatisation, demand competency and are results driven. This inherent weakness and the lack of up-to-date training has encouraged several new owners to rely on expatriate labour at a relatively low level.

The expatriate situation was addressed by the Government through the review of all work permits issued countrywide and the refusal to issue or renew permits for employees in certain disciplines. Whilst the position taken by the Government is understandable particularly with the pressure to ensure new employment opportunities,

it is very much a matter of putting the cart before the horse. A constructive and consistent approach to training is essential and long overdue.

Outsourcing on its own will not overcome the problem of the shortage of skills in the Industry. It will take a concerted effort by all stakeholders, Mining Companies, Chamber of Mines, Chamber of Commerce, Universities and Technical Training Colleges, Government Ministries and the Private Sector to resolve this issue.

As the Mining Houses have a vested interest in the creation of a suitably trained manpower pool from which to draw, the initiative to address the lack of training should come from the Commercial Sector and it will be incumbent on this Sector to drive the initiative to a successful conclusion.

## 4.5.4 The AIDS Pandemic

Analysis of the response to the question "In view of the existing AIDS pandemic in Southern Africa do you perceive that outsourcing could be of assistance in helping the Company to meet its obligation in respect of its own Human Resources Policy and Costs?" can be categorised in two ways. Subjectively, participants considered the activities which are and will be required to address the AIDS pandemic (e.g. Employee education and counselling, Clinics and hospitals, funeral benefits and medical aid) and can be outsourced. Alternatively, the realisation of "Shared Risk", in that the Aids pandemic has already become extremely costly, by outsourcing functions and the associated labour, the cost of dealing with the pandemic are shared, less costly, less cumbersome to manage, and in the present financial situation, less onerous on the Company.

AIDS will cause a significant loss in profits for many African businesses. In one study of Kenyan businesses it has been estimated that AIDS-related costs accounted for 1.7% of profits in 1994, and could be has high as 4% by 2005. Depending on the labour-intensity of the company (Zambian Mining Industry is very labour-intensive) and the costs of benefits offered to workers, individual companies could experience AIDS-related costs of up to 15% of its annual profits.

The HIV/AIDS pandemic in Africa can be said to have three distinct phases, namely:

- ➤ The HIV phase: when the epidemic is growing, new infections are increasing rapidly, but very few people have progressed to illness.
- ➤ The AIDS phase: when large proportions of people living with HIV become ill and die.
- ➤ The socio-economic phase: when the socio-economic consequences such as the impact on the economy, government expenditure and family structures start manifesting.

Zambia is currently in the AIDS phase of the epidemic.

Companies are already feeling the impact of AIDS, the loss of skilled labour, high labour turnover and decreased performance and productivity. It has long been believed that most losses will occur among unskilled workers who are easy to replace, particularly in an economy with high unemployment. Several African employers and the Zambian Mining Industry however, have learnt that the epidemic has also adversely affected skilled and semi-skilled workers. Whilst in terms of numbers the percentage may be lower, the economic knock-on effect is greater.

In the next five-year period, AIDS could increase the cost of employment by more than 54%. Cost pressures on benefits will become a significant driver of company costs as part of the annual wage negotiations.

## 5. CONCLUSION

Outsourcing is an accepted management tool in the Zambian Copper Mining Industry. Although the approach of the Industry to outsourcing is in the initial stage which is tactical rather than strategic by nature, there is potential for progress.

Outsourcing is one of many management tools available and its implementation must be done thoroughly, systematically and with explicit goals. Outsourcing takes time to implement yet the benefits begin to emerge almost immediately, though it may take several years for all the benefits to become obvious. Marriage provides a useful analogy. Like marriage, outsourcing is much easier to consummate (improperly) than it is to terminate and recover from, if done poorly.

The newly formed Mining Companies, established after nearly a decade of privatisation negotiations with the Government of the Republic of Zambia are faced with great internal challenges and a harsh external environment. There is a convergence of a number of forces that had and will continue to have an impact on the mining environment in Zambia. The most crucial of these being the competitive pressures of the global economy; fluctuating copper price; the demand of overseas investors for focused management; and the delivery of financial results and the prevailing HIV/AIDS pandemic.

Management will permanently have to ask and find answers to the question: "How can we become competitive and remain competitive over all our business processes?" As a result management teams cannot allow factors of production (including people, facilities, equipment, technologies, capital, etc.) to be neglected or under-utilised. If they do, like a losing sports coach, they are quickly replaced. Management will need to be more open to change and use transformation tools that can provide higher benefit/lower risk results.

For the concept of outsourcing to find its permanent place within the Mining Industry, it will be necessary for Companies to turn inwards and define their Core Competencies, Core and Non-Core business functions and to re-evaluate the same as the environment

changes. The Company strategists need to address the internal strategies and the culture of the Company deciding whether these are appropriate in the prevailing internal and external environment. The logic behind strategies being there must be some competitive advantage to the Company and the rationale of the chosen strategy must reflect the advantage and the synergy of the interaction.

An outsourcing strategy should be an outgrowth of the Mining Company's overall strategic plan and be directly aligned with the company's aims and goals. It is important that Managers who are responsible for implementing the Outsourcing plan have a clear understanding of the overall strategy and the part outsourcing is to play in it.

Over and above the theoretical and practical results of this paper, it is very apparent that Management teams involved in the Industry are open to change and quick to assimilate concepts, albeit at present driven by an overriding desire to achieve immediate financial results.

The author believes that Outsourcing has a place in the Zambian Copper Mining Industry Management Tool Kit. If implemented judiciously, Strategic Outsourcing has the potential to generate a practical business valuation and process to assist even further with the successful and sustainable growth of the industry and resultant return on investment.

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