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# The concept of Value Based Management and its application in developing value maximizing strategies at Anglo Platinum

L. VAN WYK\* and G.L. SMITH\*  
\*Anglo Platinum Limited

Value based management is a philosophy/concept/methodology that is currently being embraced throughout the Anglo American plc Group. It has recently been introduced into Anglo Platinum to help maximize value by ensuring that the most attractive strategic options across the business are identified, prioritized, resourced and implemented.

The technique helps to define value maximizing business strategies by using a systematic three-step process designed:

- To build a deep understanding of the sources and drivers of value in the markets
- To evaluate options for the largest value improvements and
- To commit to a clear implementation plan.

This paper expands on the concept of value based management and its application in developing value maximization strategies within the organization.

## Introduction

'Of all those expensive and uncertain projects, however, which bring bankruptcy upon the greater part of the people who engage in them, there is none perhaps more ruinous than the search after new mines...Projects of mining, instead of replacing the capital employed in them...commonly absorb both capital and profit.' (Adam Smith, *The Wealth of Nations*, 1776, p. 562)

Central to the success of any mining company is the ability to effectively manage capital investment so as to ensure acceptable stakeholder returns within an overall strategic context. Critical to this process is the effective selection and implementation of a strategically aligned project portfolio that enables optimal resource exploitation whilst operating within mandated bounds and identified constraints. Typically a mining company investment portfolio would encompass options ranging from geological exploration through to market development. A key challenge is thus to ensure the alignment of investment with strategic intent whilst ensuring that the day to day viability of operations is not compromised.

Owing to the depleting nature of the mineral resource asset it is necessary to continuously reinvest to sustain production, let alone expand. Capital investment is thus the lifeblood of minerals companies. Within this context there are often many competing investment 'imperatives' that can divert funding from critical projects. Alignment of capital investment with strategic intent can be readily achieved through structured planning processes based on optimization (value maximization) of underlying exploitation units and subsequent structured competition for financial resources (Smith *et al.*, 2006).

Within this context Anglo Platinum has a vision to increase its lead as the world's number one platinum organization. The vision is supported by three strategic pillars:

- To develop the market for platinum group metals
- To expand production into that opportunity; and
- To conduct business safely, cost-effectively and competitively.

The implementation of the Anglo Platinum vision and strategy is subject to adjustment in the light of a changing market and general economic circumstances. To this end the nature of the Group's resources, in particular the number, variety and output capacity of existing production sites and potential projects available to it, enable it to respond flexibly to any major changes.

Value Based Management (VBM™) provides the basis for optimal allocation of capital for developing and optimizing the company's mineral resources and associated business opportunities through the value chain.

## So what is VBM all about?

Value Based Management is not just another economic profit metric used to measure performance. *Investopedia* or any good management magazine can tell you that it is a discounted cash flow variant that considers the profit generated after the cost of capital had been taken into account. So why then would it change the way you do business?

VBM defines the business model and sets out management and strategic agendas using three steps (Figure 1).

## The fact base

The first step is the development of a fact base that aims to build a deep understanding of the sources and drivers of value in the markets. The fact base must address two questions:

- How attractive is the market today and in the future?
- What are the sources and drivers of competitive position in that market?

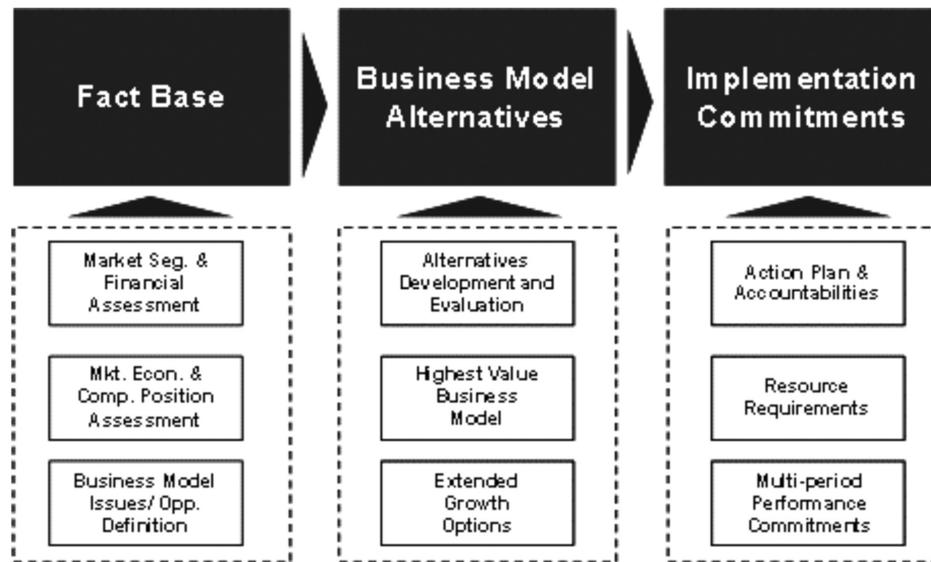


Figure 1. Value Based Management—three fundamental steps

### How attractive is the market today and in the future?

Answering this question for the platinum industry, where most players mine polymetallic orebodies (platinum, palladium, rhodium, gold, ruthenium, iridium, nickel, copper and cobalt) requires a significant investment of time and resources to understand the overall market, market segments, end users, value chains and other commercial side structures that determine the market space.

This market analysis covers the key customers, end-users and market segments by investigating key sources and drivers of profitability for each segment and player in the segment. Historical performance and reporting, as well as anticipated future trends (Smith *et al.*, 2008) per market segment are reviewed and analysed, and understanding of key drivers developed.

The market segment and associated financial assessment therefore address key questions about the profitability of specific outlets and customers in order to prioritize customers and segments and drive marketing strategy. Within the market for platinum specifically, contracts are usually long-term in nature, and therefore using VBM™ to identify and target specific segments or customers could provide competitive advantage in a market where little or no differentiation between final product exists.

### What are the sources and drivers of competition in the market?

The second question requires that an economic profitability analysis and understanding of mineral economics and market economics to identify drivers of competitive advantage be conducted. Sources of competitive advantage are:

- Pricing position
- Offering position
- Cost position.

Importantly, size, that is, being ‘bigger’ than other players, is a comparative advantage and not a competitive advantage.

Again, VBM™ utilizes economic profitability analysis to evaluate the different players in the market and identify sources of advantage. Anglo Platinum is aggressively pursuing VBM™ to satisfy our vision of being the world’s leading platinum producer, and thereby creating a

competitive advantage based on much more than just our comparative advantage of having the largest PGM resource under our management.

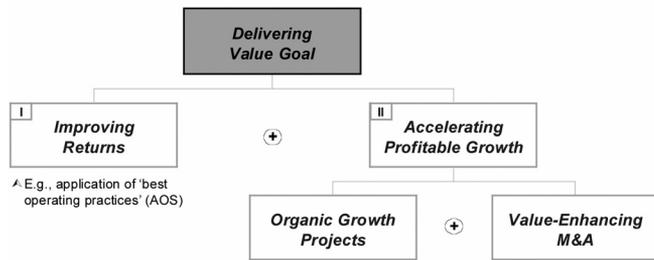
Both pricing and offering have been consistent between industry players during the past few years of rapid growth. Cost position for all players is becoming more important, even though metal prices are presently outpacing costs. The current conditions of market deficit for precious metals, and prices rising faster than costs, are creating the perfect environment for the management conundrum of ‘nothing fails like success’.

Anglo Platinum has mining operations on all major southern African PGM orebodies and operates nineteen concentrators, three smelters, one converter and one refinery complex (base and precious metals). In this complex portfolio environment, VBM provides the ideal tool for evaluating individual assets against each other and against competitors’ assets for competitive advantage. Additional insight, beyond the classic industry cost curve, is provided in that the economic profitability measure allows differences in earnings from difference in metal baskets, differences in capital expenditure and cost differentials to be crystallized and understood in depth.

The final activity in the fact base definition utilizes information on market segmentation and competitive positioning to identify potential opportunities and issues for the organization. This is where full agreement on the facts that drive decision making, becomes useful. Establishing executive agreement on the market analysis and competitive positioning allows rapid consensus on strategic issues and opportunities. Having an agreed fact base to drive strategic decision making has intrinsic value in that it aligns everyone’s view on the ‘playing field’ and ‘rules of the game’ by contextualizing the industry and the role of the business within the greater system.

### Business model alternatives

The second phase involves identification of business alternatives, both at the strategic level and the operational level, evaluation of the alternatives and decision making on the maximum value alternative for the organization. Maximum value is defined as the model that will maximize total shareholder value. Finally, extended growth options are defined based on the preceding analysis.



**Figure 2. Value Based Management—core sources of long-term value**

Within a business such as Anglo Platinum this presents the most challenging part of applying VBM. If one considers that the fact base is a collation of information, transformed into knowledge and insight of the industry, then this second phase of VBM is where wisdom has to be applied. No formula can assist in identifying business alternatives. However, economic profitability measures are used to evaluate, rank and prioritize the business model alternatives identified.

Combining metal demand forecasts, segment profitability and competitive positioning with the Anglo Platinum diverse range of operations and ore grades creates many possible business alternatives. Using scenario planning tools, the business alternatives can meaningfully be grouped and analysed for robustness under changing circumstances (Smith *et al.*, 2008).

#### Implementation commitments

VBM is designed to provide the basis for decision making, and the final phase addresses the implementation plans and commitments required to achieve the desired outcome. However, in line with VBM implementation at other world leading companies, the final component is the linking of implementation to multi-period individual and company performance commitments.

Common wisdom holds that companies who make explicit commitments to value improvement targets are as likely to be more effective in implementation. Therefore, a key component of the implementation is the very public commitment to improving shareholder value and stating the actual 'value goal'. Logically, CEOs will be willing to do so only if they understand how the goal is to be achieved and by whom, when.

Implementing VBM requires the training of top management in the system principles and logic of critical metrics. On this basis personal development plans for

senior management focusing on key leadership attributes are developed and managers are expected to commit to the VBM philosophy at all levels of the organization. Simply adopting economic profit, as embodied in the VBM framework, as a value measure will not result in the value creation for shareholders.

The core sources of sustainable long value accretion are indicated in Figure 2, specifically improving returns on existing assets and accelerating profitable growth. The key question that VBM answers in this process is 'what is profitable growth, now and in a possible future world view and which of the options should be prioritized?'

#### Conclusion

The logic inherent in Value Based Management is not new to business or the mining industry and has been practised in a variety of forms for several years. What is different, however, is the organizationwide adoption of the logic and application to all aspects of the business of Anglo Platinum.

The organizationwide implementation of VBM ensures alignment of objectives and establishes a common language, standards, and processes to align decisions and actions. Additionally, there is a common approach to setting goals, identifying and prioritizing issues and opportunities, evaluating options, making decisions, allocating resources and taking action whilst applying a common set of tools and approaches to understand sources and drivers of value.

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#### Gordon Leslie Smith

*Head: Strategic Long Term Planning, Anglo Platinum Limited*

Gordon is a registered Professional Engineer, a Fellow and Council member of the Southern African Institute of Mining and Metallurgy and holds a range of industry technical and managerial qualifications. Gordon holds appointments as a director of companies, trustee of a private trust and of the Anglo Platinum Retirement Fund.

Gordon is married and has a 21-year-old son who is currently studying Electrical Engineering at Wits. Rest and recreation are centred on travel and the outdoors, with regular excursions into Southern Africa to explore remote areas and pursue his passion for fly-fishing.

