

# Planning and Measuring for Value — Integrated Planning Techniques for Changing Business Environments

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## INTRODUCTION

The mining industry is changing – globalisation of markets, consolidation of companies, new technology for exploration and processing are all driving radical disruptions to company plans and forecasts. Stock market analysts are also pressuring resource companies to lift their performance and improve the creation of value for shareholders.

Many chief executives are concerned that their company is unprepared for these challenges and will be too slow to adapt, thus may fall into the hands of more nimble competitors.

These executives are aware of innovative planning techniques to focus on customers, improving shareholder value and introducing balanced performance reporting, but in their own company the take up has been slow. Executives are worried that mine planners and operations managers still continue with historically based planning, assuming the future will be much the same as the past. They go through the same old ‘business as usual’ annual planning cycles as though nothing is going to change.

The question is how can senior executives provide the leadership to implement the innovative planning processes they know are essential for company survival in today’s dynamic business environment. How should the innovative, but somewhat abstract and academic planning techniques be applied to guide the future of company.

PricewaterhouseCoopers has been working with leading mining and metals companies world wide to invigorate their planning processes to focus on creating shareholder value. We

have been able to assist companies to adapt to changing business environments, simulate alternative business strategies, and implement performance measures that link strategy to daily operating decision making in a practical way. This paper outlines our approach to planning and measuring for value and illustrates some of the concepts and techniques employed.

## PLANNING AND MEASURING FOR VALUE

In essence strategy is about achieving the best fit between the business environment and the company. Typically this is achieved by asking questions and testing hypotheses. Along with perennial questions around sales, cost and profit, in the current changing environment, new questions have to be addressed, these include:

- are we creating value?
- what is happening out there?
- what will the future look like?
- what will happen if...?
- how are we going?

### Are we creating value?

Planning for shareholder value is becoming increasingly important in today’s sophisticated investment environment. A recent PricewaterhouseCoopers survey found that institutional investors were holding an increasing proportion of share market capitalisation. These investors employ skilled analysts and sophisticated techniques to evaluate company performance. Consequently traditional measures of profit and earning per share are becoming less important. The analyst’s view that profit is just an ‘opinion’ where as cash flow is ‘real’, is very strong in today’s investment community. Refer Figure 1.

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## Planning for Value requires an understanding of the value drivers

You need to look in more detail at the factors that would drive a valuation:

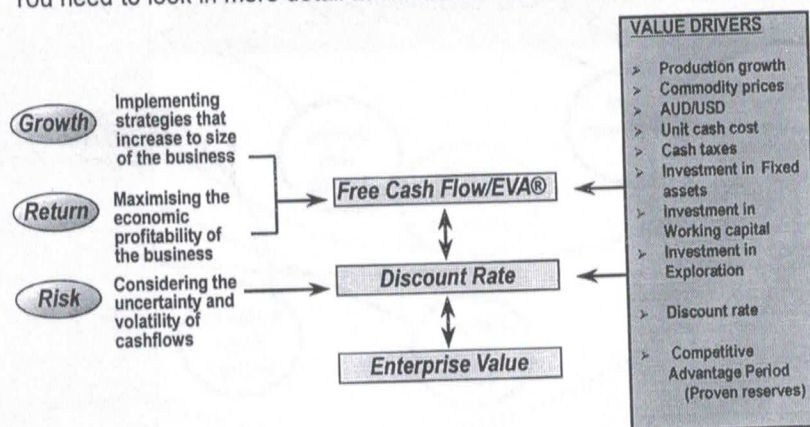


FIG 1 - Planning for value.

Analysts are evaluating companies to determine the free operating cash flow generated by the business and the likelihood of deterioration of the share price. Consequently the impact of non-cash items such as depreciation, tend to be ignored while the weighted cost of capital and the return on investment are becoming more important performance measures.

**Value analysis**

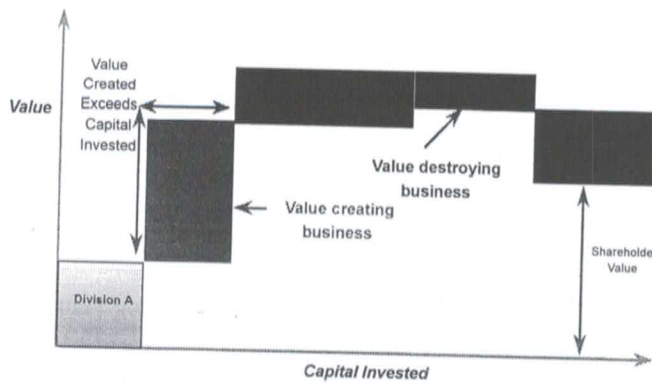
Planning for value must start with an evaluation of the company's current operations to identify which parts of the business are providing positive cash flow returns above the average weighted cost of capital, and those parts which are not. For the parts of the business that are not providing the positive returns, that are in fact destroying value, careful evaluation

should be undertaken to determine if performance can be improved or alternatively whether the operation should be shut down or disposed of. Refer Figure 2.

Many companies in the mining sector hit by low commodity prices have struggled to sustain positive cashflows and deliver what the market considers are reasonable returns. These companies have seen their market capitalisation slip below the perceived asset value and have experienced difficulty in raising new investment funds. Their aim must be to develop and implement strategies to increase the creation of shareholder value to win back investor support.

Planning for value begins by identifying the key value drivers then focusing activities and investment where they will produce the best return. Refer Figure 3.

**Analyzing for Value is identifying which parts of the business are creating or destroying value**



*Value maps compare the value created by entities with the historical capital invested in those entities.*

FIG 2 - Analysing for value.

**Planning for value - ensure strategy is linked to the most sensitive value drivers across the value chain**

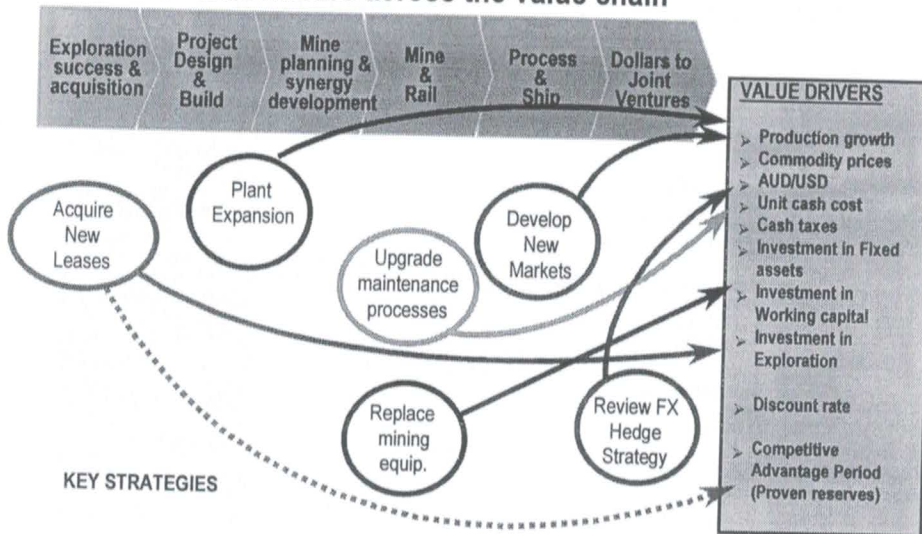


FIG 3 - Planning for value.

## WHAT IS HAPPENING OUT THERE?

Understanding the business environment has always been part of strategic planning, so market research and competitive benchmarking techniques are well understood. However, in today's changing environment where new technologies inflict discontinuous change and globalisation is reshaping competitors, more in-depth analysis is required.

### Change driver assessment

Understanding the underlying forces which are driving change is necessary to predict the new challenges which will confront the business. These change drivers may have their origins in economic factors or new technology, but increasingly businesses are also having to respond to political and social change.

For example, most annual reports now include a section on environmental management. Many companies are also claiming to be 'good corporate citizens' in response to the greater scrutiny company behaviour now receives. These changes in expectations are driving companies towards 'Triple Bottom Line' reporting, the three 'P's' of :

- Profit – financial performance;
- Planet – environment management; and
- People – social responsibility.

Analysing these change drivers, identifying key stakeholders, then responding to their expectations increases both opportunities and chances for sustained success.

### Stakeholder analysis

Techniques to understand and respond to the expectations of stakeholders are also becoming more prominent. The stakeholders in company include shareholders, management and employees, and increasingly the customers, suppliers and those external groups which are impacted by company operations and in turn can influence a company's activities.

Clearly customers are key stakeholders and delivering their expectations is essential for business survival, while maintaining good relationships with the investment community will enhance the share price and provide access to investment capital. Well managed investor relations are built not only on successful performance but clear articulation of future strategy and performance targets. Refer Figure 4.

Increasingly, social expectations are exerting influence, either directly or through Government regulation to prescribe limitations or set standards of acceptable company performance. For example the Native title debate and environmental legislation is a major concern for mining companies trying to understand what is happening out there.

The identification of key stakeholders and understanding their expectations is a first step. Identifying the underlying forces that will drive change is the second step. Finally presenting a positive image of an industry and presenting individual company conduct in a favourable way to shape the expectations of stakeholders can divert the forces of change towards a more tolerable or agreeable outcome.

## WHAT WILL THE FUTURE LOOK LIKE?

Predicting the future is difficult, how many planners can honestly say that their plans invariably produce the expected outcomes. The interaction of so many variables can produce many permutations of possible futures and outcomes, but predicting which one is more likely to be achieved is challenging. This is why PricewaterhouseCoopers advises clients to envision alternative scenarios, a set of different futures which have a reasonable probability of coming to pass.

### Scenario envisioning

By considering stakeholders expectations and flexing the change drivers identified, different future business environment conditions can be projected. Some of these alternative scenarios maybe discarded as improbable, but a short list can be compiled of those with a reasonable expectation of predicting a possible future.

## Understand and respond to stakeholder expectations

*Effective stakeholder management and value reporting requires a two-way flow of information and can have significant benefits*

...

- ◆ increased credibility for management
- ◆ access to new capital
- ◆ increased number of long term investors
- ◆ increased share value
- ◆ improved labor relations
- ◆ improved company image
- ◆ wider public support

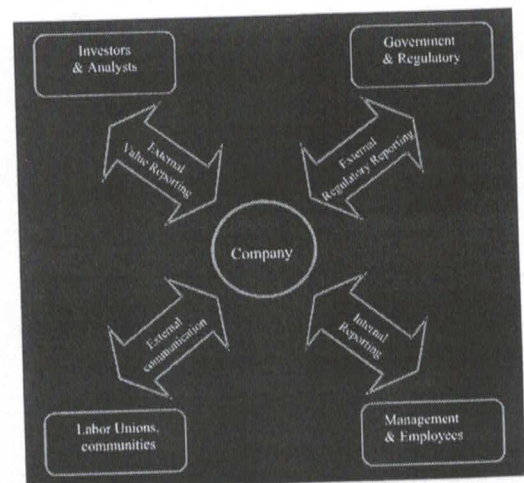


FIG 4 - Understanding and responding to stakeholders expectations.

Rather than choosing just one future scenario from the short list, it is more prudent to plan for maybe two or three of the most likely scenarios. Planning for alternative futures not only lessen the risk of basing the company's future on one set of predictions, but also produces contingency plans ready for a possible change in circumstances. Our clients also report that working through a number of planning scenarios prepares management to deal with different situations, and produces a more robust strategy. Having senior management consider changed business conditions and evaluate alternative strategies also practices the arguments they will present at investment community briefings. Refer Figure 5.

In recent planning assignments for mining and metals companies, our consultants have been building scenarios to envision future demand of products and changes in the business environment. Examples include the increased use of plastics and the ultra light weight autobody on the steel industry, and the consequences of China entering the world trade organisation on global shipments of aluminium. Developing scenarios like these have assisted clients to test their strategies and evaluate the likely variation in their performance in different future business conditions.

### WHAT HAPPENS IF...?

Having envisioned possible future scenarios and developed alternative strategic options, planners must calculate and compare the outcomes of these alternatives. This is where business modelling is a particularly useful technique.

#### Business modelling

Building business models to calculate the cash flow and the shareholder value created allows comparison and refinement of strategic options. In addition, business modelling allows the strategies and outcomes to be tested for sensitivity to changes in product prices, production costs, and financial variables such as exchange and interest rates. Building business models to forecast the value created by alternative strategies, and testing the sensitivity to changing market conditions is an effective means of improving the chances of developing a successful strategy for today's dynamic business environment.

Clearly when planning new investments, the potential to create value for shareholders is a key consideration. Business modelling and cash flow forecasting are being applied to analyse investments and evaluate value created by alternative investment options. Determining the cost of capital, forecasting the impact on future cashflows and calculating the potential to deliver increased shareholder value are important steps in this investment appraisal process. In today's dynamic business environment, these calculations need to be tested for sensitivity to changes in key economic factors such as exchange rate differentials, taxing regimes in addition to the normal commodity price, customer demand and production cost variables. Refer Figure 6.

The type of business models used for scenario envisioning and other examples of 'what if' analysis range from simple linear spreadsheets to forecast future cashflows and net present values; through dynamic models to explore physical relationships and the impacts of limited change; to complex whole of business models incorporating resource strategies and investment decisions. A recent example of dynamic business modelling carried out by PricewaterhouseCoopers evaluated the potential impact of e-business on-line metals trading on customer relationships, profit margins, and the influence of new electronic marketing companies on traditional wholesalers, distributors and agents.

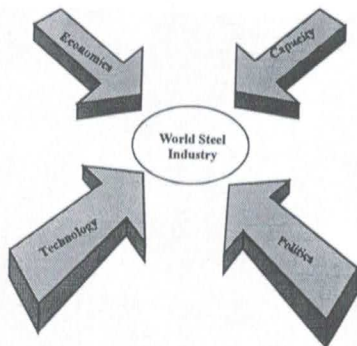
### HOW ARE WE GOING?

One of the most commonly criticised shortcomings of planning is that plans are never implemented. A great deal of time and effort is expended on analysis, forecasting, and producing a plan, which once read is shelved until the next round of the planning cycle. Translating strategy into action and focusing day to day management decisions on maximising the creation of shareholder value is the current challenge.

PricewaterhouseCoopers believe a well-chosen set of performance measures is the best means of operationalising strategy and focusing management's attention on achievement of corporate goals and department targets. Performance measures derived from business objectives can align activities across the organisation and ensure resources are devoted to maximising shareholder value. Refer Figure 7.

## Project Change Drivers to Envision Future Scenarios

### 1. Assess Impact of Change Drivers



### 2. Develop Future Industry Scenarios

Future Scenarios	
1. "Cyber World"	Rapid take-up of Business to Business e-commerce
2. "Global Marketplace"	Asia continues to recover from crisis, consumption grows
3. "Open Borders"	Tariff and quotas lifted around world

FIG 5 - Project change drivers to envisage future scenarios.

## Assess the value created by investment opportunities

The Value created by all new investments and their impact on the overall corporate shareholder value can be assessed:

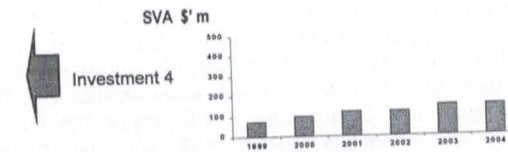
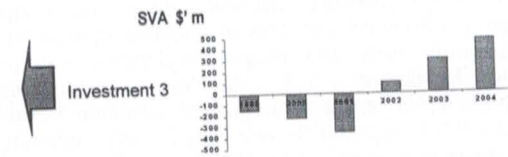
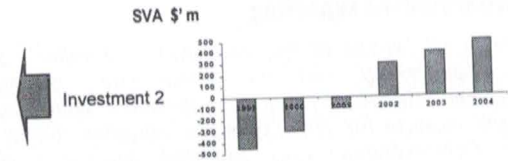
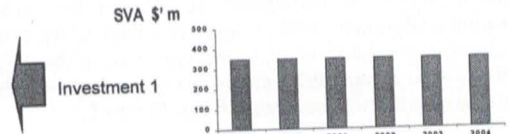
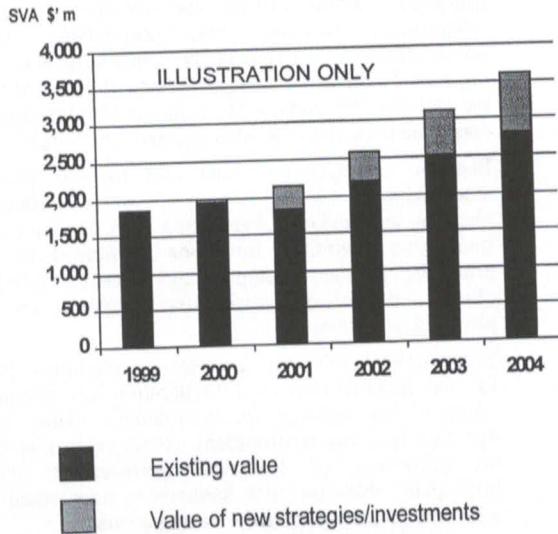


FIG 6 - Assess the value created by investment opportunities.

## Measuring For Value - Select Performance Measures Related to Key Value Drivers

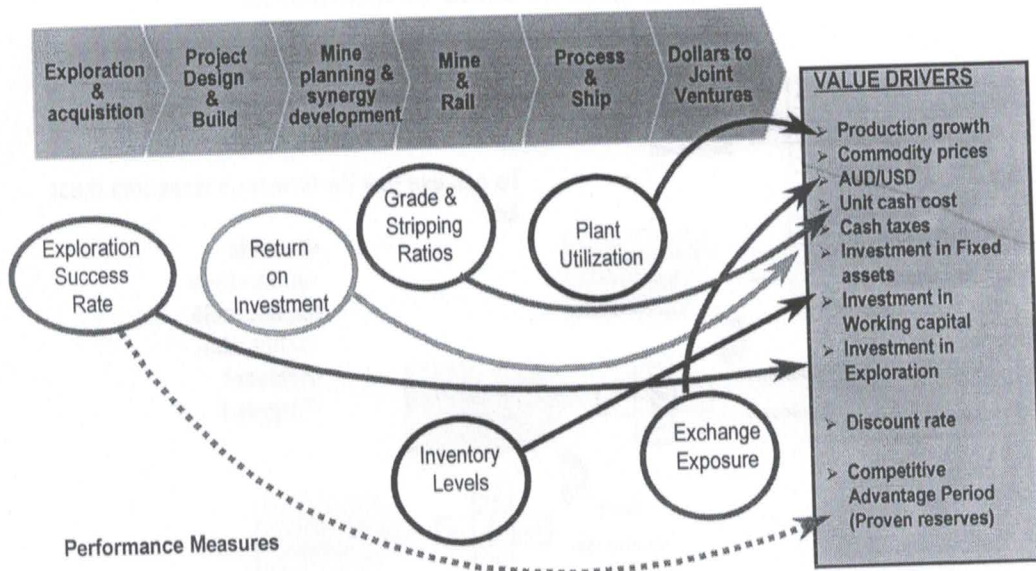


FIG 7 - Measuring for value - select performance measures related to value.

### Top down target setting

To be effective, performance measures should be relevant to a manager's responsibility and capable of being influenced by resources under their control. Targets should be clear, specific, measurable, and achievable to be credible and accepted. Following this criteria, usually develops a hierarchy of measures assigned to levels of managerial responsibilities across the organisation. Alignment with strategy is achieved by cascading and expanding the detail of measures down from the corporate, to business unit, to operating centre, to team, and to individual levels in the organisation structure. Refer Figure 8.

### Balance scorecard reporting

To monitor all aspects of the company's performance and to ensure sustainability over the longer term, performance measurement should include non-financial indicators. To effectively measure for value, financial indicators should focus on cash flow economic value and total shareholder returns. Balancing these financial indicators should be a suite of measures on customers and customer relationships, production and production costs, and people development and process innovation. In addition, certain industries require monitoring of legislative compliance and environmental regulation. Instituting a balanced set of measures is one way of demonstrating that various stakeholder groups expectations are being addressed.

The format of performance measure reports is important to promoting understanding and acceptance within the organisation. We believe reports should graphically illustrate current performance against both historical achievements and future targets. A summary of supporting data should be presented with an area for text comments to interpret the data and explain the causes for any variances from targets.

Clearly the more promptly reports are released, the more time is available for management action to exploit opportunities and correct under-achievement. Advances in computer systems, data warehousing and graphical user interfaces are enabling on-line, almost real time reporting of performance to managers desktops.

For example, a recent PricewaterhouseCoopers assignment for a mining industry client integrated production plant, DCS data with financial system cost data to provide key indicators of dollar per tonne performance to managers via the company intranet.

### IMPLEMENTATION APPROACH

The PricewaterhouseCoopers approach to implementing, managing and measuring for shareholder value has five principal components:

- **Framework** – developing a planning and reporting framework which reflects the company business units, organisation structure and particularly management accountabilities. The aim of the framework is to ensure that the total business is focused on one strategic direction and the activities throughout the organisation are aligned on the corporate objectives and shareholder value targets.
- **Process** – engineering one end to end process from assessment of the business environment through strategy planning and financial forecasting to performance reporting. Integrating activities into one comprehensive process, promotes efficient planning and prevents duplication of efforts and confusion arising from isolated, uncoordinated planning activities.
- **Techniques** – adopting innovative techniques, particularly for the identification and preparation for change and to evaluate and manage for shareholder value. In today's dynamic business environment, steady state planning based on projection of historical performance will prove inadequate, therefore new methods to understand and cope with change are essential for business success.
- **Teamwork** – wider involvement of line managers and specialist staff in the planning process. Involving a broader cross section of staff in planning activities improves communication and understanding of strategy and also builds stronger ownership and commitment to objectives and targets.

## Top Down Target Setting - Involve staff in developing measures and setting targets to build commitment

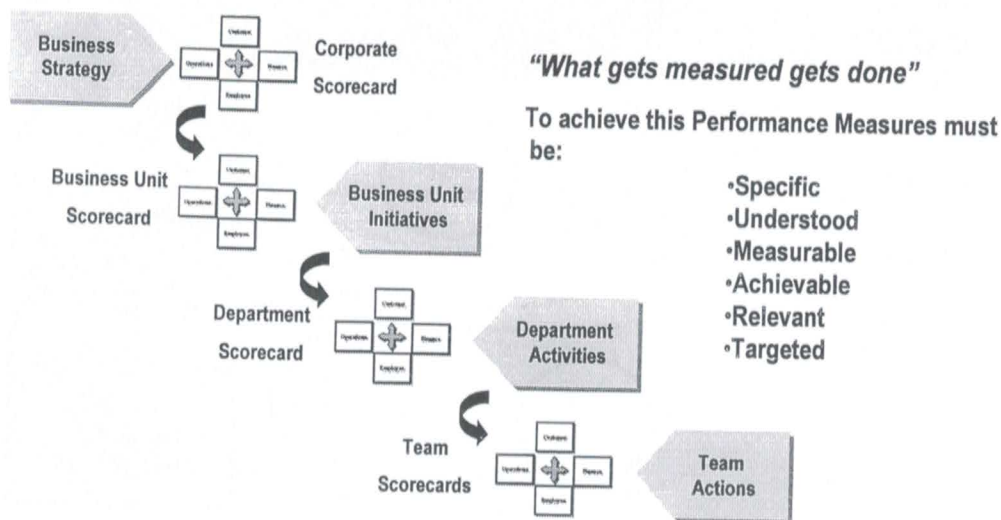


FIG 8 - Top down target setting.

## Planning and Measuring for value - Adopt a Rolling Planning Cycle with Innovative Techniques to Adapt to Change and Focus on Creating Shareholder Value



**Accept the future will be different from the Past**

FIG 9 - Planning and measuring for value.

- **Technology** – selecting an appropriate computer software to capture data, calculate performance and display indicators is an important consideration. Modern easy to use packages with graphical interfaces and the ability to 'drill down' to greater levels of detail promote the understanding and acceptance of new performance measures.

When implementing this approach consideration must be given to the dynamics of the industry as this affects planning horizons and the frequency of planning cycles to update strategies, objectives and targets. Another consideration when determining planning horizons are product development times and the duration for investment decisions to become fully productive. PricewaterhouseCoopers recommends companies to move away from fixed planning periods based on the annual budget rounds, towards rolling planning cycles updated either yearly or each quarter dependant upon the dynamics of the client's industry.

### •BUSINESS ENVIRONMENT ANALYSIS

- Analyze Change

### •VALUE ANALYSIS

- Create Shareholder Value

### •SCENARIO ENVISIONING

- Predict the future

### •BUSINESS MODELING

- Simulate Outcomes

### •TOP DOWN TARGET SETTING

- Integrate Planning

### •BALANCE SCORECARD

- Measure Performance

## CONCLUSION

So in summary, we believe companies can adapt to change and improve the returns to shareholders. This managing and measuring for value approach can be achieved by implementing an integrated business planning process which incorporates innovative techniques to monitor and adapt to change and focusing on creation of shareholder value.

To be successful, this implementation approach needs to address the planning and reporting framework, engineer an end to end process which incorporates planning, forecasting and reporting. This process should incorporate techniques for the identification of changed drivers and to envision future scenarios, and importantly involve a wider cross section of line managers and specialist staff in the planning process.

Planning and measuring for value also requires a change to the planners mind set. There needs to be acceptance that the future is going to be different from the past. This change requires a shift away from purely projecting historical performance, and the necessity to embrace new techniques for planning success in a dynamic business environment.

