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How do you know if you lead or follow?

Mining Benchmarking Insights Report

July 2014

Foreword

Ben Gargett
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"How do we compare to other mining companies?"

This is a question many businesses in this sector ask and our inaugural mining benchmarking survey endeavours to answer it.

We surveyed 28 mining organisations across Australia, including those with operating mines and exploration companies.

Our questions spanned reserves and resources, funding and expenditure, sustainability and safety reporting, and governance. We also asked questions about finance and reporting issues – such as budgeting, forecasting and planning, data gathering and analysis, financial reporting and spreadsheet governance – and examined the optimum cost of the finance function.

We then looked at human capital concerns such as remuneration, workforce profiles, resignations, terminations, gender diversity, and labour and capital alignment, before finishing with questions about translating strategy to execution.

And what did we find?

We found that front runners typically increase their reserves despite difficult market conditions; provide timely and relevant information to support board and management decision-making; adapt their workforce policies to their specific needs; and publically release sustainability as well as safety reports. They have aligned their strategies with operational and management decisions, processes, people, capital, organisational structure and technology.

Based on the survey results, leading organisations:
- maintained the cost of the finance function at 0.41% of revenue or better
- initiated and finalised the annual budgeting process within 30 days
- initiated and finalised the financial forecasting process within 10 days.

If that doesn't sound like your organisation, our report can help you build a compelling business case for change. If it does sound like your business, our study can serve as a useful benchmark.

If you would like to discuss any of the issues in more detail, please speak to your PwC representative or one of the experts listed in our contacts section.

Ben Gargett
Mining Benchmarking Project Leader
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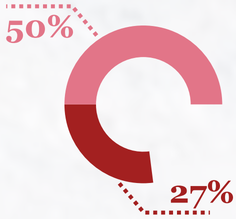
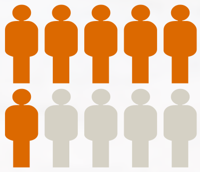
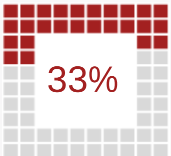
Highlights



Despite commodity prices generally moderating over the period, 50% of companies reported increased reserves in the year ending December 2013. Only 27% showed a decline.

63% of companies surveyed continued to use an internal resource as the 'competent person' under the JORC (Joint Ore Reserves Committee) code. With the new JORC rules now in place we will monitor whether this changes in 2014.



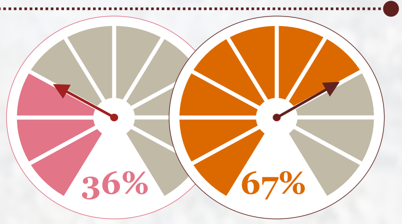


33% of companies surveyed announced a redundancy program in 2013, as declining commodity prices and a drive towards efficiency and productivity put pressure on headcount.

Respondents in the top quartile of the mining industry maintained their finance functions at 0.41% of total revenue.

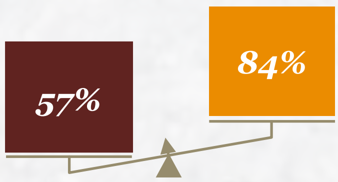
Diversity remains a challenge for the industry, with only 12.5% of organisations surveyed having female representation on the executive team and just 17% of management roles filled by women.

Only 36% of companies produced a sustainability report, while 67% released a safety report.



26% of mining industry respondents took more than 121 days to complete their budget.

Only 57% of explorers agreed that they were successfully executing their strategy, compared to 84% of companies with operating mines.



Contents

Methodology

PwC is pleased to release its inaugural Mining Benchmarking Insights Report.

To develop this report, PwC has drawn on its extensive experience within the mining industry, and in developing, delivering and analysing business process surveys across multiple industries.

Our PwC Analytics team compiled, collated and analysed participant data, while PwC industry experts provided meaningful insights to help mining companies improve their businesses. PwC surveyed 28 mining organisations – a combination of operational mining and exploration companies – to prepare this report.

We have detailed below the process we used to develop customised Benchmarking Insights Reports for the survey respondents.

How PwC produced these customised reports:

Survey and data collection

- The mining benchmarking survey was open to all PwC mining clients.
- The survey comprised quantitative and qualitative data elements.
- The survey began in December 2013 and PwC collected data over a three month period.
- Throughout the process, each client's identity and information was kept confidential via the use of PwC's secure web-based platform.

Analysis

- Once the data collection period finished, PwC began its analysis of the data set.
- PwC subject-matter experts guided the interpretive analysis stage. This involved commenting on the spread of the survey results and providing insights from the local market and the global PwC network.

Reporting

- The survey results reflect the data collected from 28 mining companies.
- PwC issues each survey participant with a customised insights report comparing their business performance with that of other mining organisations surveyed, across a range of areas.
- The reports are presented in a non-identifiable way; survey participants only see their results in relation to the total population.
- Participants should view this insights report as a starting point for further discussions, rather than a conclusive assessment of particular areas.

Disclaimer:
PricewaterhouseCoopers has not verified, validated or audited the data used to prepare this benchmarking report. PricewaterhouseCoopers makes no representations or warranties with respect to the adequacy of the information, and disclaims all liability for loss of any kind suffered by any party as a result of the use of this benchmarking report.

Population

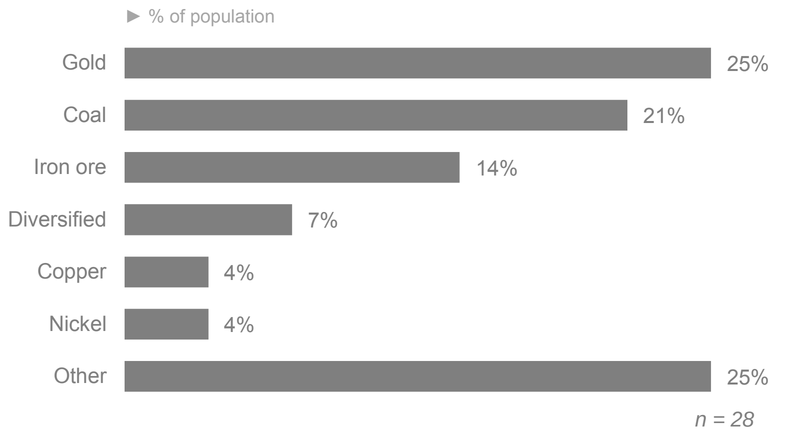
PwC's Benchmarking Insights Report contains data from 28 mining organisations based in Australia.

The average annual revenue of survey respondents was $684 million. The average number of employees for survey participants was 970. Data was collected between December 2013 and March 2014.

Respondent breakdown by revenue

Revenue ($AUD)	No. of respondents	% of total respondents
$0 - $50M	9	32%
$50M - $500M	8	29%
$500M - $1B	8	29%
> $1B	3	10%
Total	28	100%

Respondent breakdown by key commodity



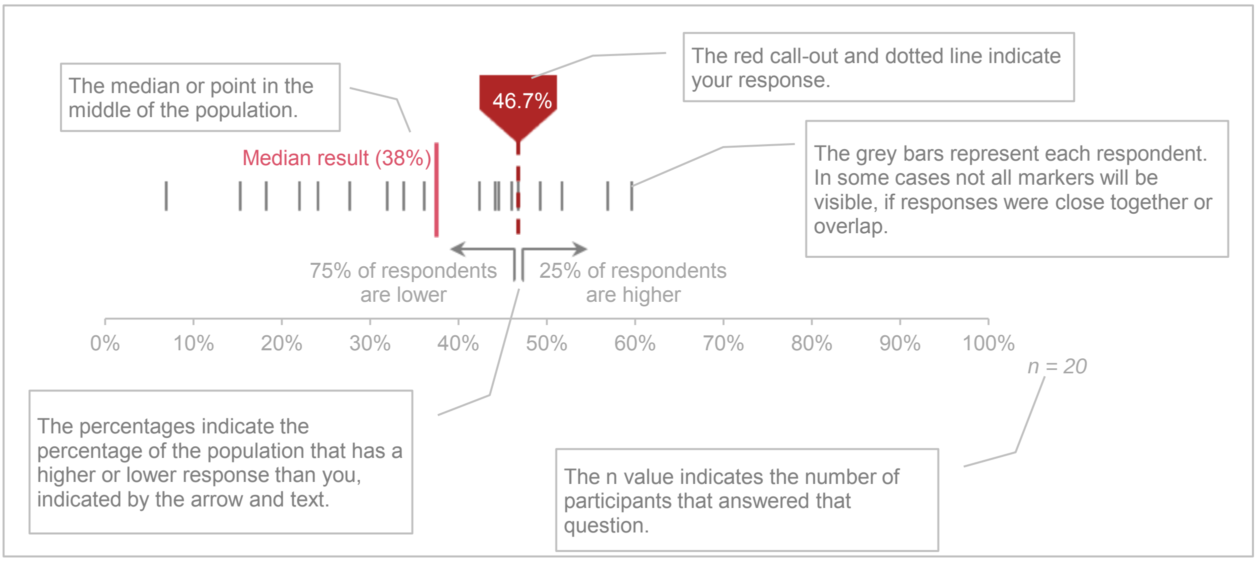
Understanding this report

PwC's Mining Benchmarking Insights Report is customised for individual survey participants. All charts within the report represent the individual participant's results relative to the total population that responded to that particular question.

The commentary provided in the report has been prepared for the overall study and while it does not change for each organisation, it should provide relevant information to help you understand the context of your result.

To assist you in reading and interpreting the results of this survey please note that for each response to a question, your organisation's input is displayed in **red (indicated via the legend).** If no input was recorded, this red indicator will be missing from the charts and the result for the overall population will be displayed.

A distribution chart features in sections of the report. This chart conveys a great deal of information, as explained below:



The **benefits** to participating in this type of survey should allow organisations to:

- evaluate their own practices to understand current operational and management performance
- identify areas of focus when striving to optimise operational excellence
- understand how other mining businesses and in some cases international business performs in the area of workforce, operations and finance using results from similar surveys conducted by PwC both in Australia and globally

The Mining Benchmarking Insights Report provides insights into the following areas:

Mining

Leaders increase reserves while companies retain in-house JORC expertise

Reserves and Joint Ore Reserves Committee (JORC) expertise

Despite 2013 being a challenging year for many mining companies, 50% of our surveyed population reported an increase in their reserves compared to the previous financial year.

Depletion through production was the major contributor to the outcome for companies who experienced a decrease in reserves. Depletion through production which was not replaced by new reserves affected 71% of those companies. After depletion, a decline in commodity prices - highlighted by the sharp correction in the gold price in the first half of 2013 - was also a major contributor.

Declining commodity prices – in particular the downward revision of longer-term forecast prices by many companies and analysts – has forced cut-off grades to be increased to meet JORC resource and reserve classifications in the current price settings.

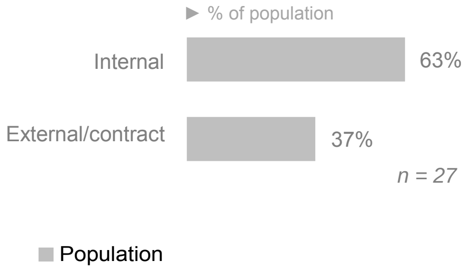
For example, PwC's Global Gold, Silver and Copper Price Survey[1] identified that gold companies reduced their long-term gold price estimate from around US$1,400 in December 2012 to an average of US$1,369 in December 2013.

Encouragingly, for most companies who increased resources, any reduction associated with mining depletion or changed price assumptions were balanced by resource conversion (85%). In a market where funding for exploration is hard to find and justify, this success rate is notable and reflects the high quality of resource exploration in Australia.

Interestingly, 63% of companies surveyed continue to use internal expertise to sign off on reserve and resource statements under the JORC 'competent person' requirement. This demonstrates the strong in-house technical expertise many organisations maintain, particularly with relevance to their own ore bodies.

With the recent revisions to the JORC code now in place and operational, we will monitor whether this has any impact on companies' ability to continue using their internal resources, or whether they will need to engage external advisors more frequently.

Type of competent person used to sign off on reserves and resources statement under JORC



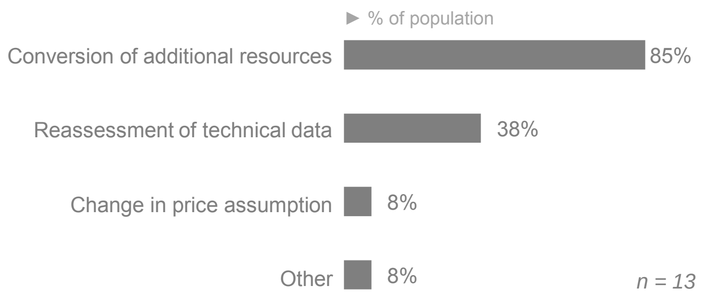
Increased reserves

Decreased reserves

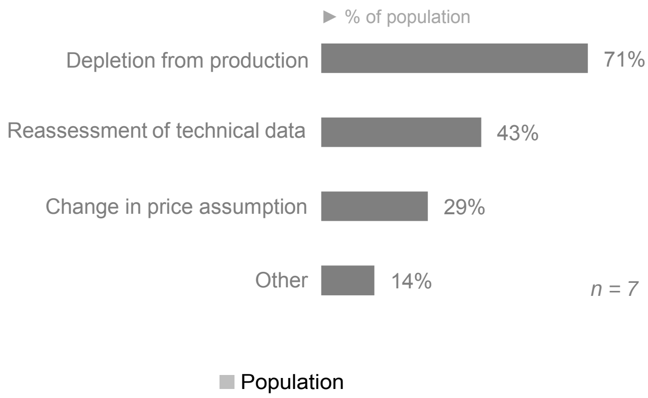
Key considerations

- How will your company continue to replace resources in a challenging price environment?
- What strategies did your company employ to mitigate the impact of declining commodity prices on its performance?
- Has your organisation considered outsourcing the task of signing off on reserve and resource statements as required by the JORC 'competent person' provisions?

Reasons for increase in reserves



Reasons for decrease in reserves



[1] PwC, 'Metals mired in global uncertainty: Gold, silver and copper price report', 2014.

Equity tops funding sources despite poor market conditions, but creative capital solutions are needed

Sources of funding and expenditure on exploration

2013 has been characterised by market commentators as a year where equity capital raisings and M&A transactions were effectively dead. The market was not conducive to capital raisings for all but the best projects, so companies had to look for alternative means of finance, or batten down the hatches until market conditions improved.

Surprisingly, our survey participants rated new equity raisings as the most common funding source during 2013. This was closely followed by new debt issues, with the cost of debt making it attractive to the industry, despite debt funding typically being less prevalent that in other sectors due to the cyclical nature of the industry.

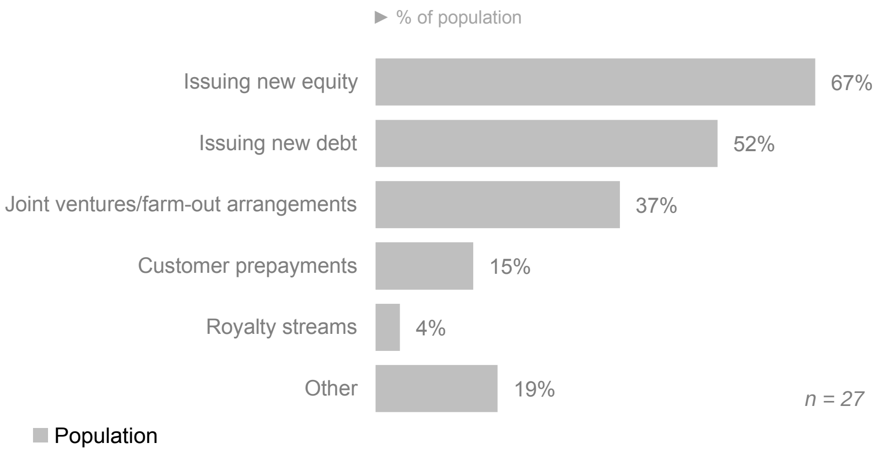
Companies did seek a number of alternative financing structures and models in 2013. These included new joint venture or farm-in arrangements, customer prepayments and the sale of royalty streams. Looking forward, we expect the industry will need to continue finding creative sources of capital to sustain and grow operations.

We noted previously that 50% of companies surveyed increased their resources during 2013, even after accounting for mining depletion. This is a remarkable achievement in a year when funding – particularly equity funding for exploration companies – was almost impossible to obtain, budget cuts occurred across the board and frugality was required in all areas of expenditure.

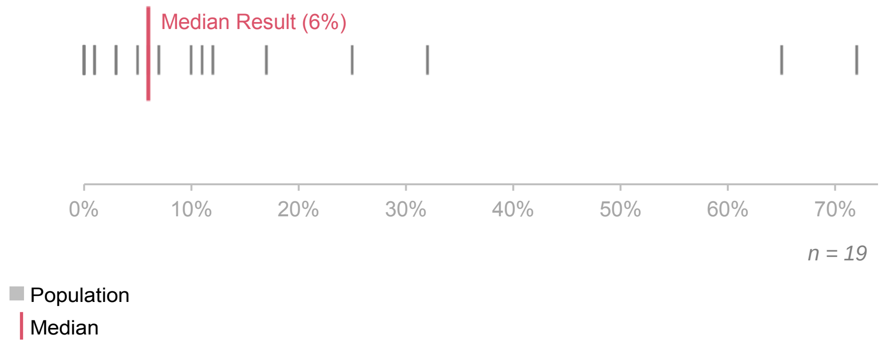
In 2013, exploration expenditure accounted for a median of just 6% of total capital spent, as companies focused on completing existing capital development projects and necessary sustaining capital initiatives. Any expenditure deemed to be discretionary was cut. For many this included exploration budgets.

Against this backdrop, the current-year increase in resources may be masking a bigger issue for mining companies. With shareholders demanding greater returns and capital discipline from the majors, funding still hard to find for everyone else and exploration spending continuing to decline, the question is: **where are the next mines going to come from?**

What sources of funding were considered?



Total expenditure on exploration activities as a percentage of total capex (companies with operations in production only)



This in turn, begs the question: over the medium term, will the industry be able to produce the minerals needed by the world's developing economies as they continue along the development path?

Something will need to give. We believe this 'something' will be commodity prices, as they yet again increase in the face of demand outstripping supply. In turn this will encourage companies and shareholders alike to recommence capital projects and increase exploration expenditure. The factors present in the current market may just be the settings needed to kick-off the next 'boom' in commodity prices, later in this decade.

Key considerations

- Did you consider or employ alternative financing models or structures to raise funds during 2013? Have you sufficiently challenged your company to consider all options?
- Do you agree that commodity prices will rise and encourage mining companies to recommence capital projects and expenditure? Why?
- What alternative scenarios do you see as possible over the next decade?

Operating in a sustainable manner is key – but who is reporting?

Sustainability reporting

Just 36% of respondents produced a sustainability report in 2013. Those that did primarily included information about the company's strategic focus on sustainability; performance indicators and actual performance; industry-wide benchmarks and mandatory reportable items.

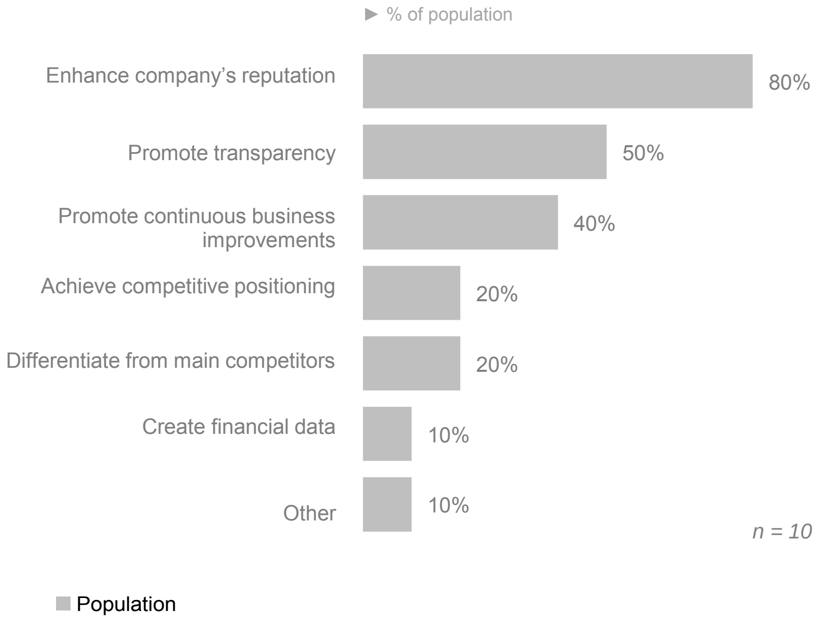
Sustainability is a critical issue for the mining sector and is clearly linked to a company's licence to operate. With sustainable operations being such a key driver, coupled with the reputation enhancement available through transparency, it is interesting to note that two of every three companies did not publicly report their performance across key sustainability measures.

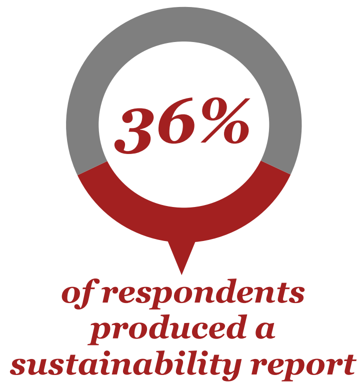
This lack of formal sustainability reporting is particularly prevalent among exploration companies. These businesses see such reporting as a 'nice to have' rather than a 'need to have', particularly in a market where funding is difficult to obtain and every dollar possible needs to be put into drilling or other exploration activities.

Key considerations

- Has your business produced a sustainability report? If not, why not?
- How important is a sustainability report in enhancing your reputation and maintaining your social licence to operate? Why?
- What would make you change your mind to publish or not publish a sustainability report?

What are your key reasons for producing a sustainability report?





Safety tops sustainability as a reporting priority, but is it time to establish industry-wide measures to enhance comparability?

Safety performance and reporting

In contrast to sustainability reporting, 67% of companies reported their safety performance to the market. Like sustainability, reporting safety outcomes enhances the transparency of a company and their performance and therefore contributes to maintaining a social licence to operate.

Of course, actual underlying safety performance is the most critical factor and typically first on the agenda for most mining companies. It is pleasing to see the reported improvement in 2013, with only 12% of companies reported a negative outcome (ie. increase) for their key safety performance measure.

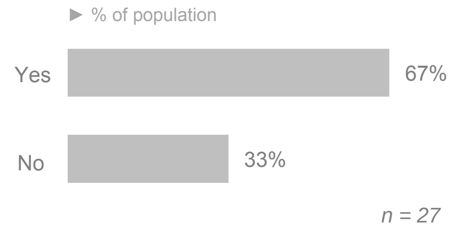
The divergence in capturing, measuring and reporting safety statistics continues to present a challenge for the industry. Each company tends to have their own basis for measuring and reporting performance with inconsistencies across the board. Using consistent performance measures within an organisation over time is crucial to identifying and responding to trends. However, these varying approaches by companies and a lack of comparability make it difficult to benchmark relative performance.

Perhaps it is time for an industry-wide definition and standard measure of safety performance.

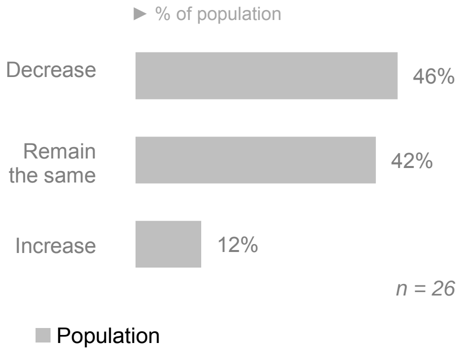
Key considerations

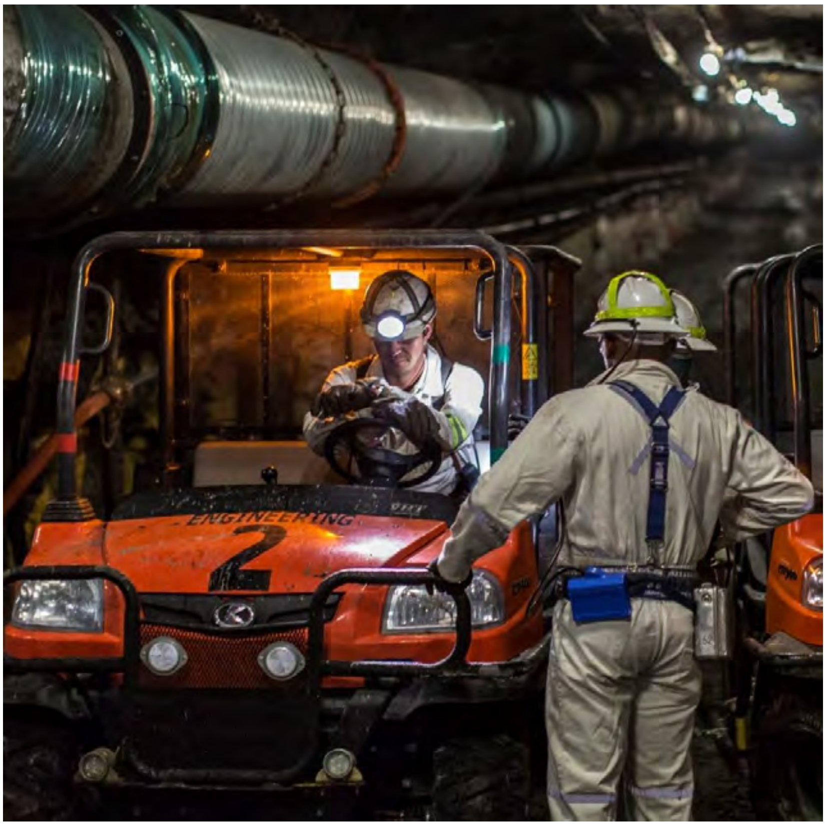
- How important is safety to your business? Is it truly the priority?
- Why would your business choose not to publish a safety report?
- Would your business support industry-wide safety definitions and measures? Would you change your measures to come into line?

Do you report safety performance to the market?



Did your key safety performance measure increase, decrease or stay the same?





Shift to austerity drives redundancy programs

Redundancy

We have seen a shift in sentiment in the mining industry in 2013. Declining commodity prices, combined with shareholder demands for capital discipline and greater returns, have changed companies' mindsets from growth at any cost to austerity and cost reduction.

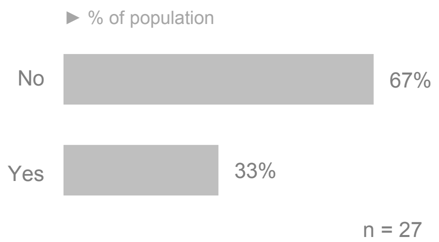
This explains why 33% of companies surveyed announced and implemented redundancy programs during 2013. These programs spanned businesses in different commodity groups and occurred among producers and explorers.

People employed to drive growth, seek new assets or target companies and explore for near-mine expansions or greenfields targets were natural casualties of the shift in focus from growth to productivity. Exploration budgets have been decimated by many. However, many companies went further by taking the opportunity to review headcount levels and trim any fat that had crept in over a decade of chasing growth.

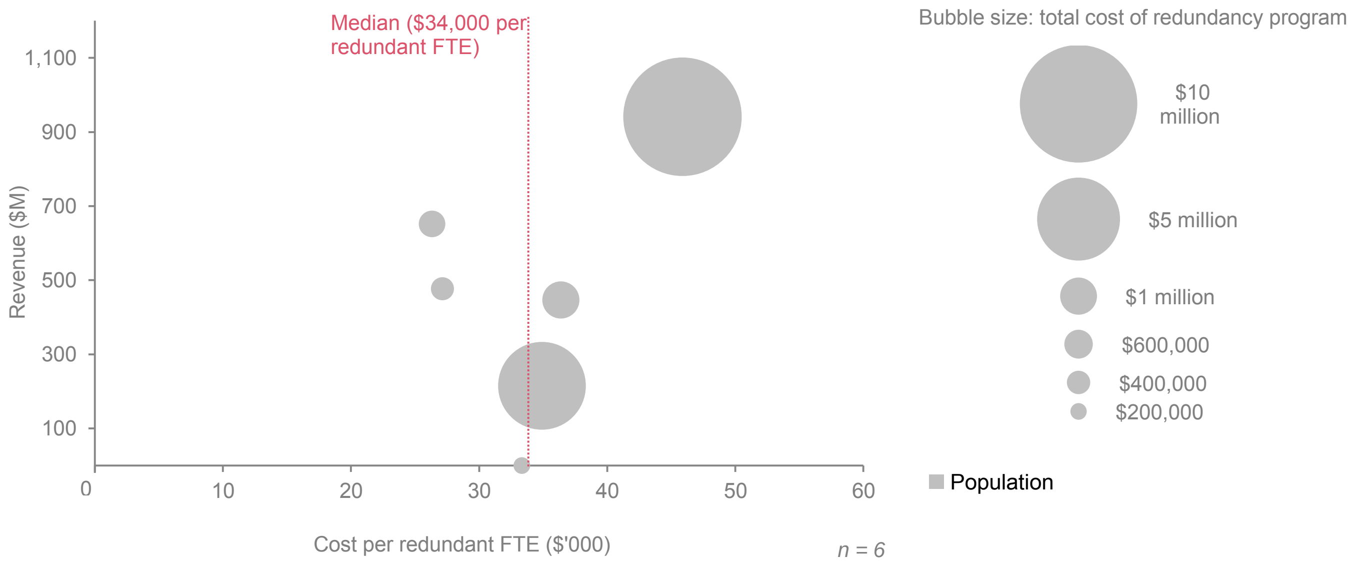
Key considerations

- Did your business implement a redundancy program in 2013? If so, what drove this decision?
- If not, have you challenged the efficiency of your operation and ensured you are lean?
- What have you learnt from this experience for the next commodity cycle?
- Has your company retained sufficient talent and ability to support growth when better conditions return?

Have you announced a redundancy program in the last financial year?



Cost per redundant FTE and total cost of redundancy program



Business efficiency

A balancing act: do you report the right information at the right time to operate the business?

Board governance

Today's complex business environment highlights the importance of reporting timely and insightful management information. High quality information is critical to delivering the best possible basis for decision making, particularly for the CEO and board members.

A good board report contains the right amount of information needed to facilitate effective decision making at the board level. It should be comprehensive and informative, yet concise enough to allow the board to properly review and analyse the contents. We have noted that many organisations are tempted to present too much information for fear of omitting something relevant. In many cases, reports become so lengthy and detailed that they become difficult and time-consuming for board members to review to an appropriate standard.

The challenge for many companies is maintaining the balance between information quality and quantity. In this year's survey, we asked our mining respondents how many pages they included in a typical month-end finance report presented to the board. The median response of 20 pages was higher than the cross-industry median from the previous year (16 pages)[2]. The highest quartile companies produced finance reports that were 12 pages long, four pages more than last year's cross-industry highest quartile result (eight pages)[3]. Therefore we can conclude that mining companies generally err on the side of providing a higher quantity of information, relative to other industries.

These results present organisations with opportunities to assess the effectiveness of their board reporting. Streamlining to reduce repetitive or non-crucial information and analysis could deliver a more comprehensive and useful board report. To achieve this, companies need to align their key performance measures with their strategies and focus on these in the report. This alignment is critical in linking day-to-day data and information to the overall vision for the company.

Companies can also explore ways of improving or enhancing board report presentation. Increasing their use of Business Intelligence (BI) tools and interactive reporting platforms enables businesses to find new ways to format and organise information. Executed correctly, they can provide relevant summaries tied to more detailed support in an interactive manner. This gives board members the ability to interact with and use the information at the level and depth they require. Tablet applications such as BoardPad[4] and Directors Desk[5] demonstrate the potential of providing secure yet increasingly accessible information to board members.

Pleasingly, 100% of the survey respondents indicated that they review the content and format of the board report at least annually. This is critical in ensuring the report remains relevant and reliable in a changing world.

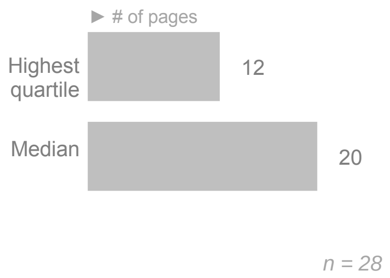
Key considerations

- Is the information provided to your board accurate, relevant and timely so that the organisation can respond to changes in its operating environment?
- Are your board reports and overall business performance measures aligned with the most current business strategy?
- Are information and reports presented in a way that is clear and easy to understand?
- Does the finance function have the ability to act as the information provider (scorekeeper) and also the strategic advisor (business partner) to provide valuable insights to the board?

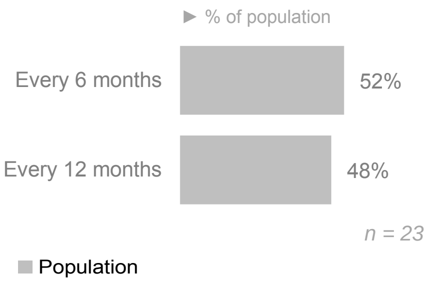
"The challenge for management is to bring together complex information and a multitude of data in a clear and concise fashion, which illustrates the key messages, without over simplifying the analysis."

Ben Gargett – Assurance Partner, PwC Australia

How many pages exist within a typical month-end finance report presented to the board?



How often do you review your board report in terms of format and content to ensure it aligns with the strategic business initiatives or plan?



[2] PwC, 'How do you know if you lead or follow?', Benchmarking Insights Report, 2012 study, published early 2013.
[3] ibid
[4] www.boardpad.com.
[5] www.directorsdesk.com.

Are you leveraging technology to create real time insights?

Days to close / report, and manual journals

Escalating market and industry regulation requires businesses to capture increasing amounts of data. This is placing pressure on financial reporting teams and making it more difficult to achieve efficient and effective reporting processes.

The more time teams spend on the close-to-report process means a greater investment in preparing information rather than understanding, analysing and providing insights on the information to the business.

Businesses that use technology to streamline the reporting process will gain an advantage by reducing costs, basing decisions on more timely information, and gaining more time to analyse data and provide business insights.

The median mining company in this year's survey completed the close-to-report cycle in 12 business days while organisations in the top quartile took just over half that time at seven business days.

This compares to last year's cross-industry survey[6], which had a median of 10 business days, and global best practice of five business days.[7] So what is it that separates best practice organisations from other survey respondents?

The answer is a focus on streamlined month-end procedures, the use of estimates and accruals, effective use of technology, compliance with standardised reporting and a strong control environment. A more streamlined and efficient close-to-report process can have its challenges in the mining industry, given the layers of reporting and interdependencies between site staff, site management, financial reporting teams and executive management. Tyranny of distance and remote sites also present challenges.

Leading organisations are tackling these challenges by increasing their use of technology. BI tools designed to retrieve, analyse and report data at the click of a button are becoming a defining factor for successful members of the industry.

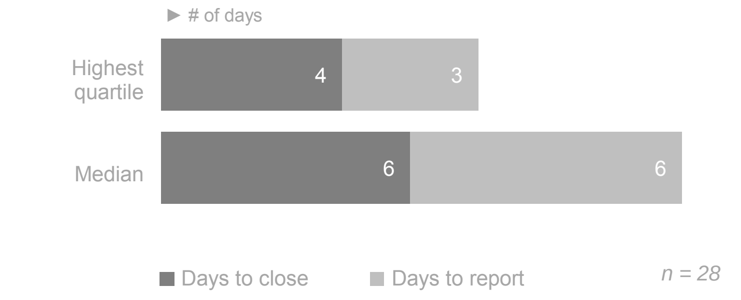
Using BI tools to create a more efficient and effective close-to-report cycle is a crucial part of the process. However, some organisations are moving to the next level by using these tools to create real-time dashboards and effective data presentation for senior management. This reduces and streamlines the data reported each month and allows management to proactively analyse information rather than just responding reactively.

A key measure of how effectively an organisation uses technology in its close process is how many manual journals the finance team still needs to process. Many leading companies have automated processes around receipting, invoicing, payments and payroll to save time and reduce complexity during month-end. The survey indicates that a substantial percentage of organisations still process a significant number of manual journals, with 33% processing more than 1,000 journals annually.

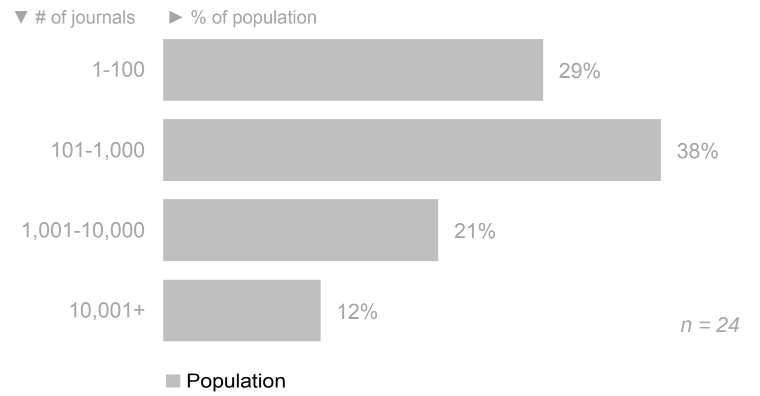
Key considerations

- Are you effectively leveraging technology in your reporting process?
- Does your management team feel it has the information it needs to be proactive in making decisions about the business?
- Have you considered investing in real-time data and real-time reporting technology to improve insights and streamline the reporting process?

How many days were required for month-end close and reporting?



How many manual journals were processed in the most recent financial year?



[6] PwC, 'How do you know if you lead or follow?', Benchmarking Insights Report, 2012 study, published early 2013.
[7] PwC's Global Best Practices 2012.

Considering an integrated budgeting and forecasting process

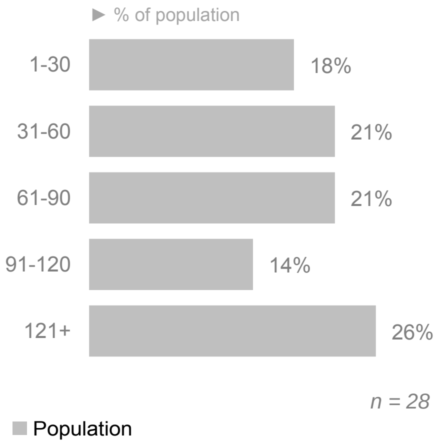
The budgeting process

The time taken to finalise a budget or prepare a forecast varies between industries and companies. However, it is widely acknowledged that companies spend considerable time and effort preparing, consolidating, summarising, communicating, explaining and reviewing the information they use for financial planning.

The mining industry is no different. This year's results are very similar to the cross-industry outcomes for the past two years, indicating that the process remains largely unchanged. More than 60% of respondents spend more than 60 days on the budgeting process, from initiation to final approval, while 26% take more than four months.

28% of respondents have more than four iterations of their budgets, which highlights the time and effort invested in this process as well as potential inefficiencies. In fact, budgeting is considered one of the more costly activities within finance, as it is typically carried out by senior finance team members.

How long was the budgeting process in elapsed days from initiation until final approval?



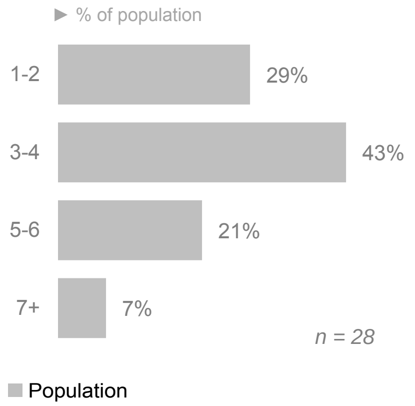
One of the consequences of such long cycles is that final budgets tend to fall out of step with quickly evolving business conditions. By the time the final version of a budget is approved, it may already be out dated. This could also result in companies being less agile in responding to market uncertainty or volatility. For the mining industry this impact could be critical since businesses rely heavily on variables such as commodity prices and exchange rates. These variables can fluctuate significantly and often and can make budgets outdated very quickly.

The follow-on effect drags the focus of analysis from value drivers that can affect the business, such as operating costs and efficiency measures, to explaining external price variations against assumptions contained in the budget.

Why then do organisations acknowledge the time-consuming nature of budget processes yet achieve minimal impact in reducing their budget cycle times? Some executives recognise that overhauling the budgeting process is a major undertaking that needs a strong case for change. Making improvements requires a significant amount of additional time and resources and careful consideration of a company's structure and culture. Also, many companies find the process of negotiating the budget a valuable undertaking in itself, despite the long cycle time, because executives can deliver key messages when responding to budget requests.

Unfortunately, many companies wish they had more time to spend on developing insights as part of the budget process, as opposed to just gathering information. They continue to spend an overwhelming amount of time and effort completing processes such as collecting, consolidating and reconciling data, undertaking analysis, and finalising budget review and approval.

How many budget iterations were performed before the budget was approved?



Considering an integrated budgeting and forecasting process (cont.)

The forecasting process

Most organisations use forecasting as a mechanism to manage future performance. The primary point of this process is to gain insights into the future and to refresh budgets that were finalised so long ago they are no longer relevant for comparison.

In this year's results, 50% of respondents took more than 20 days to finalise their forecasts and 19% of respondents spent more than 30 days between initiation and final approval.

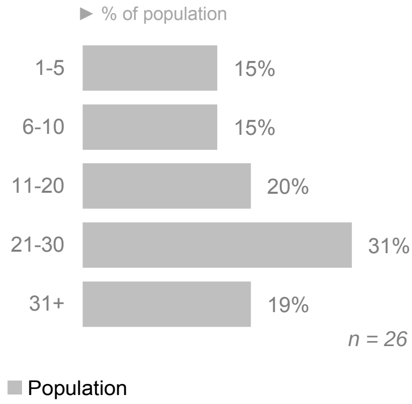
This lengthy forecast cycle highlights the complexity of the interrelated functions in the industry that contribute to this process. For a mining company, forecasting will typically require updating at least the short-term mining plan and potentially remodelling of scenarios for its mines. While these steps are necessary, they are also time-consuming.

The industry also depends heavily on commodity prices and exchange rates. These factors have a high degree of uncertainty, yet are an important part of the reforecasting process as if not updated from the time a budget, analysis can be focussed on the impact of movements in the commodity prices on performance, rather than analysing the underlying business performance itself.

Because mining companies are exposed to changing markets, they need to be agile and accurate throughout the forecasting process.

Increasing the accuracy of forecasts is also top of mind for many companies, as rolling predictions become more important than static budgets – developed up to a year previously – when it comes to understanding performance and assessing future direction.

How long is the forecasting process in elapsed days from initiation to final approval?



Considering an integrated budgeting and forecasting process (cont.)

Better integration of the planning, budgeting and forecasting processes

What can companies do to be more efficient? A global PwC report indicates that leading companies focus attention on simplifying the overall planning process.[8] This includes identifying key business drivers and seeking the right level of detail for reporting. Setting performance of the process at the right level allows companies to focus on the real business drivers that significantly impact their performance. It also reduces the time spent on managing detailed accounts and products that have minimal impact on decision making, and allows the right level of data to be reviewed at the appropriate management levels.

By simplifying the planning process, companies can enable planners and managers to drill down into the detail and explain variances. In addition, having performance against key drivers analysed at strategic level, allows finance teams to focus on providing insights and ensures that outputs are pitched at the right level for management to make decisions.

In addition to simplification, technology can play a key role in streamlining the planning process. A recent global PwC finance effectiveness benchmark study credits incremental improvements in technology and automation for reducing budgeting and forecasting cycle times.[9]

Globally, median budget reporting times have fallen from 120 days in 2011–12 to 103 days in 2012–13.[10] Median forecast cycle days have also dropped from 19 days in 2011–12 to 17 days in 2012–13.

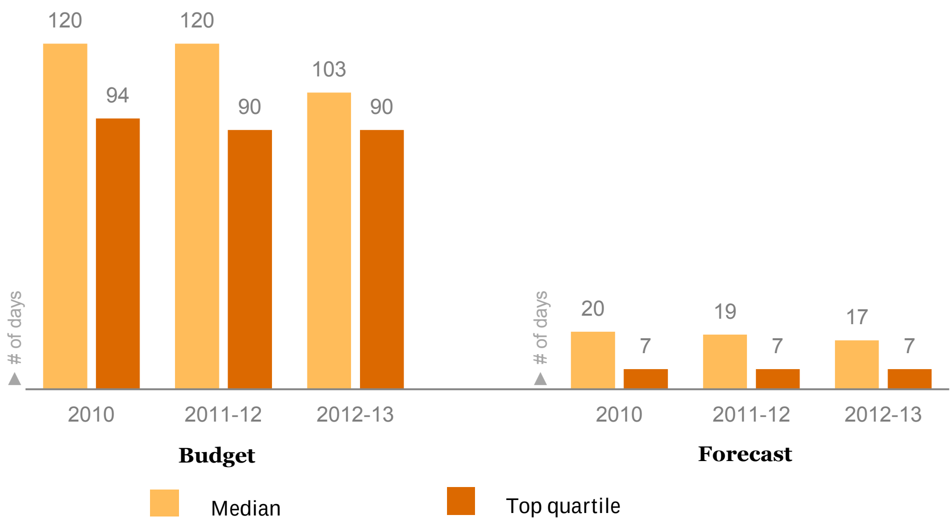
Poor alignment between business functions such as sales and marketing or finance and a miner's operations team is a major contributor to lengthy planning processes. Businesses may have to reconcile information from various sources – often manually using a spreadsheet – and even implement improvement initiatives within specific functions without considering the end-to-end process or impact on the wider operations.

Establishing an integrated business planning framework will help address this misalignment. The framework should link interdependent process components across various business functions, so that cross-functional alignment and collaboration can flourish. The result is greater confidence in the information and insights delivered to the business.

Key considerations

- How can your organisation more effectively complete forecasts and bring together valuable information on the key drivers of the business?
- In which areas of the planning, budgeting and forecasting process can you realise benefits by improving automation?
- As you reforecast and make changes to reports, have you considered how the information will be fed back into the short, medium and long-term mine plans?
- As you reforecast during the year, have you considered future changes and applied them to next year's budget?

Global budget and forecast cycle (days) [10]



[8] PwC, 'Financial planning: realising the value of budgeting and forecasting', 2011.
[9] PwC, 'Unlocking potential: Finance effectiveness benchmark study', 2013.
[10] ibid

Finance effectiveness

Finding the right mix between information gathering, business insights and risk

Data gathering versus analysis, financial reporting and spreadsheet governance

Internal customers, in many cases, see the finance team as a gatherer of data, but generally not as a team that provides consistent sources of insights and business opportunities. The median result from the survey shows that business analysts in a mining company typically spend 70% of their time gathering information. On this basis, it isn't hard to understand why internal customers have this perception about the role of finance.

PwC's cross-industry benchmarking survey 2012[11] indicated non-mining business analysts spend 50% of time on data gathering and 50% on analysis. This begs the question as to what is causing the differential in the mining industry which shows business analysts spending 70% of their time gathering versus 30% analysing?

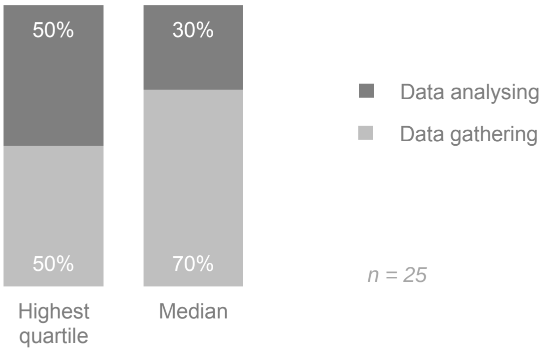
What we see in practice is the extensive use of spreadsheets and manual manipulation of data in the mining industry, resulting in significant time spent gathering and formatting information. It isn't uncommon to see data presented in a spreadsheet for reporting at the mine site level, changed and placed into another spreadsheet for financial reporting, then formatted into a table or graph for board reporting.

Further compounding this issue, the survey result noted that 52% of respondents had limited or no spreadsheet governance rules in place. One study showed that on average 88%[12] of spreadsheets have errors, which makes this issue one of data integrity not just efficiency.

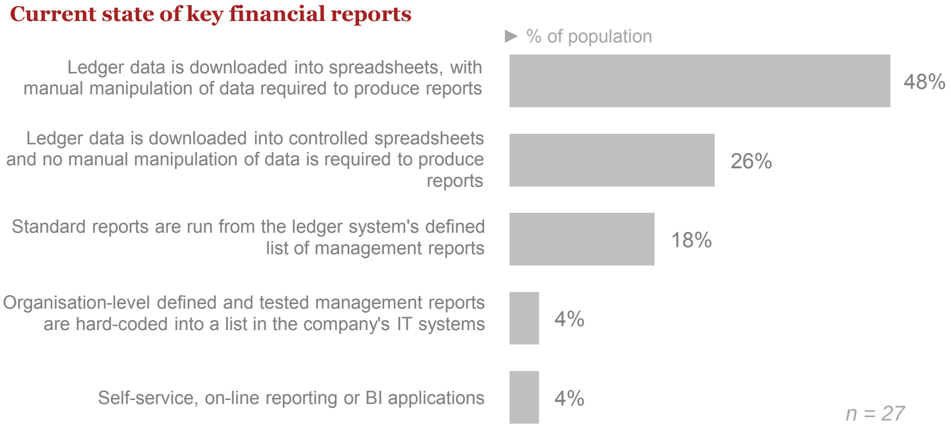
Fixing this issue requires a threefold approach:

- Reduce reliance on spreadsheets by using systems and automation – including BI tools and integrated reporting systems.
- Create a spreadsheet inventory and ensure finance team members have appropriate training, controls and review procedures. This should include an initial baseline integrity check of existing key spreadsheets.
- Focus on end-to-end information management; even if a company moves to automated systems its inputs must be complete and accurate to ensure the integrity of its outputs.

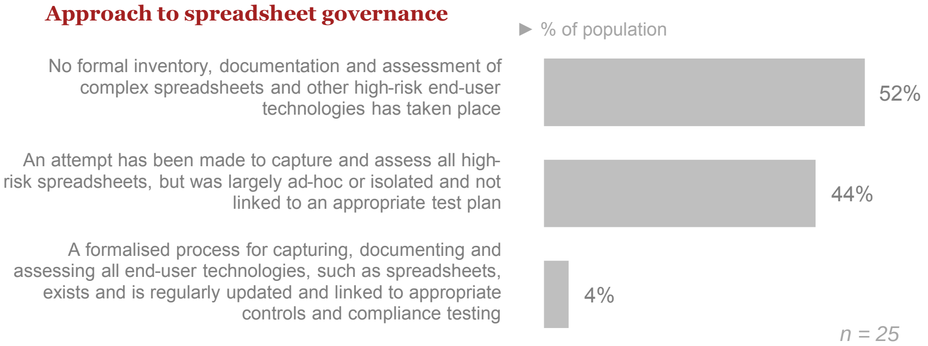
What percentage of time is spent on data gathering versus analysis?



Current state of key financial reports



Approach to spreadsheet governance



Key considerations

- Are you aware of which spreadsheets are used in your reporting processes and are you comfortable with their integrity?
- Have you considered using technology to automate the reporting process further and reduce manual intervention?
- What additional insight and value could be uncovered if your business spent less time gathering information and more time analysing?

[11] PwC, 'How do you know if you lead or follow?', Benchmarking Insights Report, 2012 study, published early 2013.
[12] Panko, L. 'What we know about spreadsheet errors', 2008.

Finance costs in an era of outsourcing and downsizing

Finance cost

The finance function is consistently evolving. This is particularly the case in the mining industry, where we have observed a trend over the last few years towards outsourcing and downsizing the finance team as cost pressures bite.

The first question mining companies should ask is: what is finance really costing us? The next question should be: 'how does this compare to the value created by that team?'

The survey results show that the median cost of a finance function is 0.61% of revenue. However, it should be highlighted that this benchmark is subject to change given the link between revenue, commodity prices and foreign exchange rates within the mining industry.

However, even with the downturn in many commodity prices during the year, this median is towards the lower end of the spectrum. Global data shows the median across all industries is 0.96%.[13] While the finance function makes up a small portion of total costs, it is often one of the first targets for reducing costs and headcount.

This leaves the team with the problem of juggling compliance burdens and an internal customer base that wants greater insights to be produced from fewer resources.

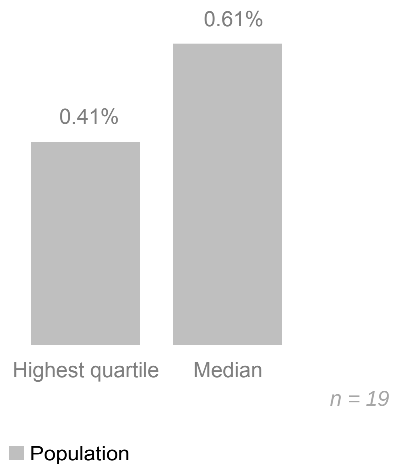
The solution is different for each mining business. However a key consideration for each organisation should be whether it is lowering the headcount in finance due to reduced workload and output as a result of improved streamlining of information, use of technology or outsourcing.

If the answer is no, then the company is asking the finance function to do the same work with fewer people. This can lead to errors not being identified, lower quality of supervision and review, staff dissatisfaction and ultimately higher turnover, and less time for finance professionals to generate insights and add value to the business.

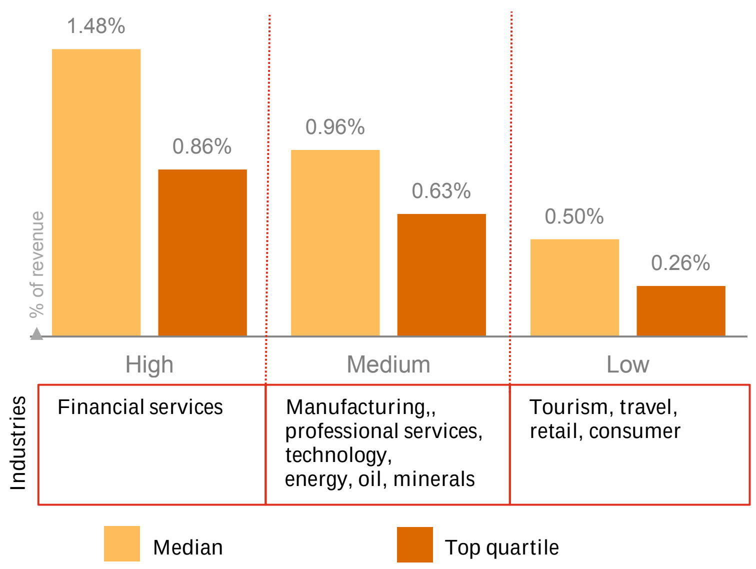
The key focus areas for gaining cost efficiencies within the finance function without comprimising quality or value are:

- rationalising management information to ensure data is aligned with internal and external reporting requirements
- investing in technology to support better analysis and less reliance on manual processes
- outsourcing transactional activities to lower-cost locations or providers
- reviewing labour-intensive processes throughout the finance function – such as budgeting and forecasting – to ensure these processes are efficient and adding value to the business
- redirecting any capacity savings from increased use of technology and outsourcing to value-adding functions and business insights, rather than putting these savings into further data gathering or transactional activities.

Total finance function cost as a percentage of revenue



Global finance cost as a percentage of revenue [13]



[13] PwC, 'Unlocking potential: Finance effectiveness benchmark study', 2013.

Workforce

Investing in people: measuring the 'workforce asset'

Remuneration

Remuneration – comprising employee pay and benefits – is one of the largest expenses across most organisations. Despite the mining sector typically having higher non-employee operating expenses, these businesses reported a 17% median figure for remuneration as a percentage of revenue. This is similar to the cross-sector median of 18%, illustrated in the PwC benchmarking survey in 2012.[14]

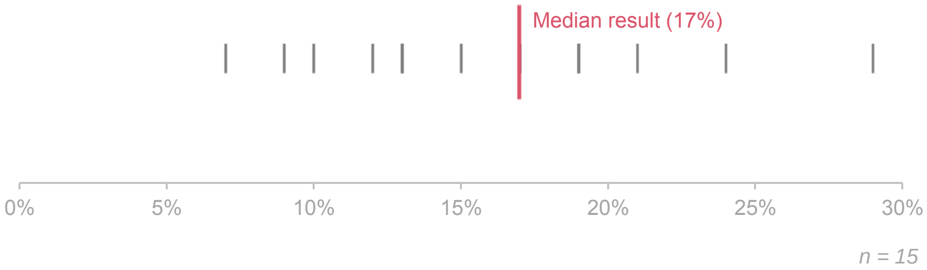
Australian Bureau of Statistics (ABS) data shows that labour productivity in the mining sector has been decreasing over the last 10 years, making interpreting metrics such as 'remuneration as a percentage of revenue' critical for each mining organisation.[15] A return to improved productivity levels will further reduce this percentage.

Maintaining a well-managed investment in total remuneration, alongside the cost of the contractor and outsource population, will drive up profitability over time.

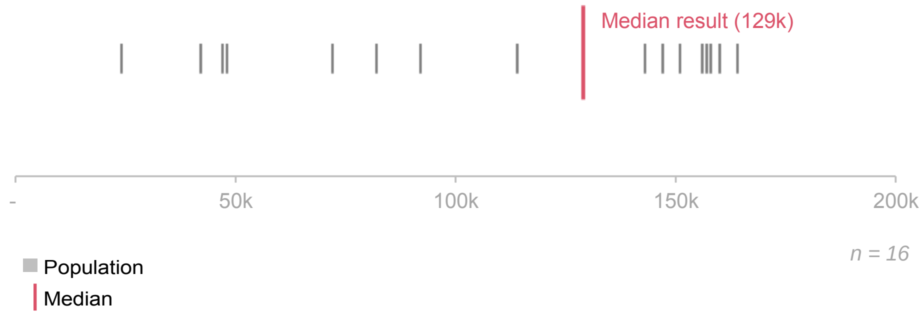
The balancing act for miners involves ensuring that the remuneration levels are competitive, while maintaining a high financial return per employee. The median remuneration level of employees in operating mining companies surveyed was $129,000. However, high employee costs are prevalent in the industry – a third of the survey population reported an average remuneration figure of $155,000 or more.

Interestingly, mining companies that report higher levels of average remuneration also experience marginally higher levels of productivity. In these cases, the total revenue generated per full-time equivalent (FTE) employee is sufficient to compensate for the higher costs. This is an example of organisations using remuneration to drive value rather than it becoming a limiting factor in improving productivity.

Remuneration as a percentage of revenue
(Companies with operations in production only)



Average remuneration
(Companies with operations in production only)



The mining industry has focused on improved productivity over the past year as commodity prices have fallen. Strategies have included downsizing some workforces and negotiating with unions to lower pay in return for better job security. If organisations leverage these initiatives as part of an effective workforce management strategy, they will see tangible improvements to key productivity indicators over time.

Key considerations

- How is remuneration as a percentage of revenue trending over time for your organisation?
- Is workforce productivity an issue, and if so, what are the drivers? Is it a strategic issue or related to workforce management?
- Do you use workforce analytics to manage a workforce profile that is both productive and sustainable?

[14] PwC, 'How do you know if you lead or follow?'. Benchmarking Insights Report, 2012 study, published early 2013
[15] Australian Bureau of Statistics, www.abs.gov.au

Organisation design principles are key to having a best practice workforce profile

Span of control and rookie ratio

The survey reveals the core workforce of the mining industry has a high proportion of employees with a managerial responsibility. The 'span of control' median in mining of 3.1 employees for every one manager is considerably lower than most industries. While a good practice span of control will vary by workforce type, PwC Saratoga data suggests that even in the most specialised technical industries a ratio of 6:1 is still achievable.

Meanwhile the rookie ratio – with a sample median of 27% and an upper quartile of 53% – reveals that a very high number of mining employees have less than two years' experience.

These two metrics combined suggest that many mining employees in management positions are in a transient role and as a result companies face high costs of turnover as people in senior positions move on. A possible lack of experience in the management of each organisation could also be a driver for the high proportion of management employees.

Those organisations with workforce profile metrics that don't compare well to best practices should question whether their current model is ideal for their operations. Poorly organised teams, functions and businesses can limit the effectiveness of workforce initiatives to improve productivity.

However, companies should not make structural decisions too abruptly. Pressure created by a changing market – and the short-term decision making that can result – could further impact the effectiveness of the workforce model. Regular change in model or organisation can lead to loss of productivity and disengagement by the workforce.

An important technique to mitigate risk is the development of organisation design principles. These help to focus workforce restructuring on the strategic intent of the business. They then need to align governance and leadership strategies to ensure change is sustainable, and the unnecessary complexities of an inefficient workforce model do not return.

Key considerations

- Are there significant variations in 'span of control' metrics, organisation layers and workforce grades across your company's business units?
- What is the right organisation design for your current business model, and how does this translate to an optimal span of control?
- What strategies are you able to employ to reduce turnover and maintain the right level of experience and leadership?

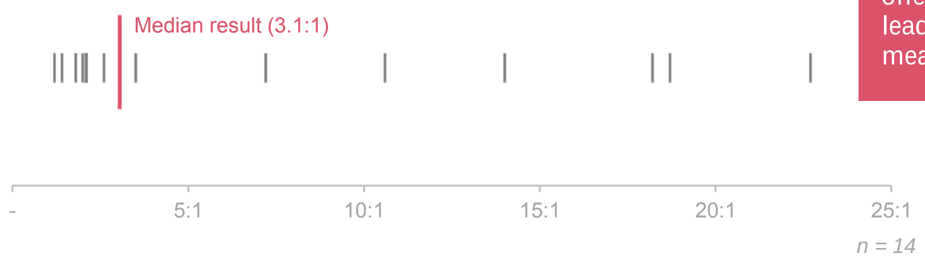
Definitions

Span of control: Total number of employees as a ratio to management.

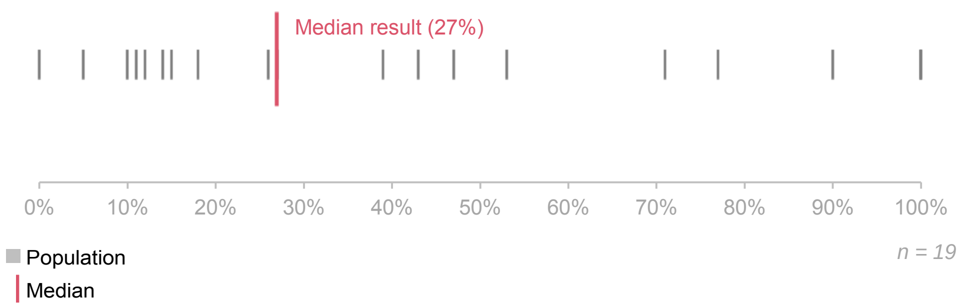
Rookie ratio: Proportion of staff that have commenced in the last two years.

PwC Saratoga: a PwC service offering, recognised as global leader in human capital measurement, analytics and

Span of control



Rookie ratio



Setting expectations, building a strong culture and providing leadership minimises staff departures

Resignations and terminations

The survey results show that on average, about one in eight mining employees leave their organisation each year by resigning or through involuntary termination.

The median termination rate of 13% is similar to cross-industry norms. This is interesting given the expectation that a more transient workforce and high levels of fly-in fly-out (FIFO) workers would lead to higher turnover levels among mining companies.

When combined with results such as a high rookie ratio, we could conclude that although the more senior levels of each organisation are stable, turnover is high within the lower grades.

This conclusion is supported when we investigate turnover in more depth. One of the particular challenges for the mining industry is the high proportion of employees who resign in their first year of employment.

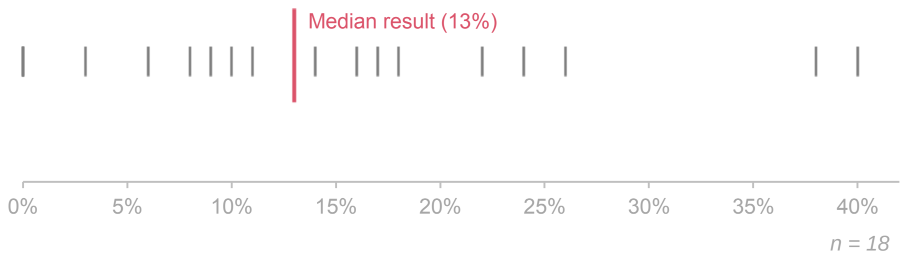
This often indicates variances in an organisation's external and internal employer brands – what was promised versus the actual culture of the organisation or job role. The median result of 19% turnover in the first year of employment for miners suggests that mining employees do not see employers meeting their expectations in their first year of work.

Clearly one of the major challenges is the FIFO model used to deliver employees to remote mining locations. Finding employees best suited to the lifestyle change and making the employment proposition clear and compelling are two very important factors in retaining key talent. Offering reward and travel benefits is a starting point, but intangibles such as strong employee culture and leadership are required to make a lasting difference.

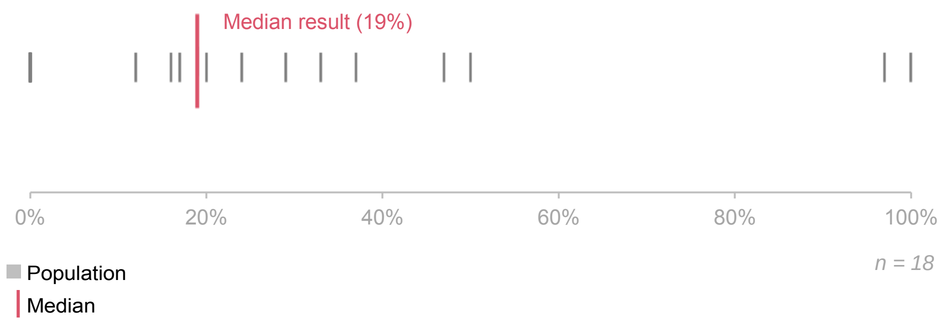
Key considerations

- What are the key drivers of retention in your organisation?
- Which employee groups have lower levels of engagement?
- Is your internal brand aligned with your external employer brand? Have you consulted with your employees to validate this?

Termination rate



Proportion of leavers who were with the organisation for less than one year



Gender diversity: a critical need to change

Gender diversity

Improving gender diversity has received a lot of attention recently across most industries and the mining sector is no exception, given its historically low level of female representation. Our survey figures reflect the challenge the sector faces with women filling just 17% of management roles and only 12.5% of organisations having female representation on the executive team.

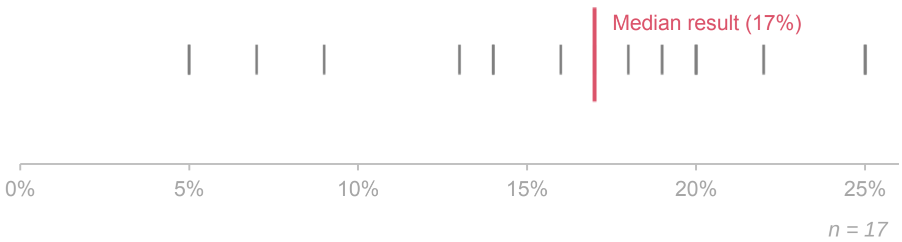
Mining does have some unique characteristics that impact diversity levels. These include the low proportion of female graduates in engineering, geology and other mining-related degrees. The key for any diversity program is to provide fair balance, supported by a culture that does not prevent the progression of female employees.

While the headline data shows significant room for improvement in most mining companies, there is some evidence of a positive trend. We collected data on promotion rates to show the level of change in female management, and the median of 33% of female management promotions is higher than the current level of 17%. This result is a credit to the industry and reflects the significant focus in this area over recent years.

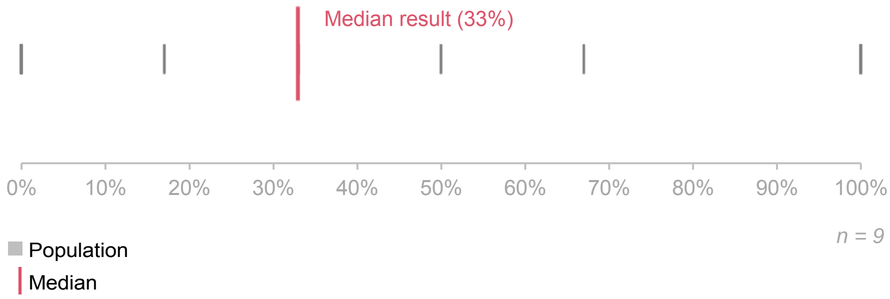
Given the gradual nature of cultural change, real improvement in diversity can take time. New policies need to be in place for some time before they affect employee resourcing and promotion decisions.

To deliver a sustainable outcome, diversity strategies should be broad and focus on key career catalysts including initial employment, middle-management progression, senior management appointment and promotion to senior executive level. In addition, there needs to be clear accountability within the senior executive team in terms of who is responsible for achieving gender diversity targets.

Proportion of female managers



Proportion of female manager promotions



Key considerations

- Are you leveraging the value of diversity in your organisation?
- What is your organisation's strategy for improving diversity and is the senior management team accountable for this?
- When will the senior management team next raise diversity as an agenda item?

Performance alignment

Performance alignment: how to compete?

Labour and capital productivity

Recent history shows that mining is particularly subject to fluctuations from the external environment. These changing factors include global indices, commodity price booms and busts, fluctuating global supply and demand and unforseen economic conditions.

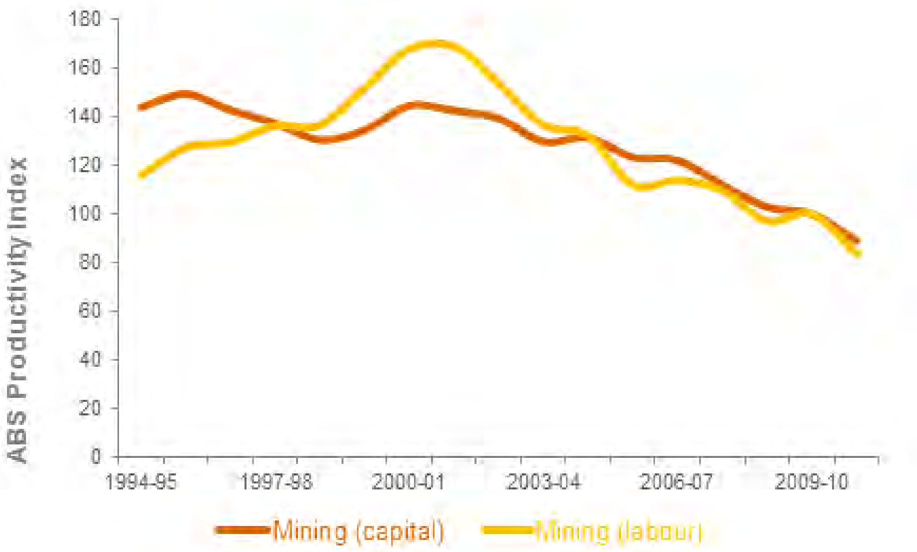
Indeed, when we asked mining companies what was the primary factor preventing them from reaching their full potential, most (59%) cited external factors such as market sentiment, external economic factors, the gold price, and government regulation uncertainty. In addition, the decline in capital and labour productivity over the last decade has placed substantial stress on mining companies. As shown in the graph below, the ABS estimates that the mining industry is achieving 56% less output per hour of work employed, and 44% less output in terms of capital employed than in the 1990s. Committed capital investment in Australian resources projects is down 40% since 2003.

With so much external environment and internal productivity pressure, the questions are: how can mining companies compete with local and international rivals? How can they differentiate their strategies in this environment? What can they control to earn a competitive edge?

Our research and experience reveals a clear answer: it's all about mining companies' abilities to execute, align capital and resource allocations, make sound decisions and implement the operating models required by their strategies.

In other words, mining companies need to rewire themselves to reflect their strategies, and then execute in order to win or sustain any competitive advantage.

Labour and capital productivity in the mining sector has declined for more than a decade[16]



* Labour productivity is defined as output generated per hour of work undertaken
** Capital productivity is defined as output (gross value added) per unit of capital services

[16] Australian Bureau of Statistics, www.abs.gov.au

Mixed views between exploration and operating mining companies on successful strategy execution

Alignment of strategy to execution

Operating and exploration phase mining companies varied considerably in their responses to whether they had the right strategic intent – that is, the 'right' purpose, vision and ambitions. About nine in 10 (89%) of those organisations with operating mines agreed they did so, compared to only 43% of explorers.

We believe operating mining companies have had a clearer strategic intent to improve productivity and efficiency in recent years. In our experience this strategy is well communicated across the organisation. In contrast, exploration companies have a mixed view on where their business is heading due to the uncertainties associated with this stage of the life cycle.

How do mining companies' view their degree of alignment to strategy, the critical factor for successful strategy execution? Only 57% of exploration respondents agreed that they were executing well on their strategy, compared to 83% of operational miners. Our experience shows that greater misalignment between strategy, capital and resource allocation, decision making and operations from explorers is typically associated with significant gaps between strategy expectations and execution.

We asked respondents the extent to which they felt their organisation's capital and resource allocations, decision making, and operating models mirrored their strategic intent. Our data suggests that mining organisations have room to improve their execution by better aligning their decisions and their strategies.

Most operational mining respondents agreed that both capital and resource allocations and the operating model of their organisation were aligned with their strategies (89%). However, almost one in four (22%) indicated that decisions were not strategically aligned.

Decision processes can become misaligned with strategy in several ways, varying from company to company.

For example, it may be unclear who is authorised to make a decision, or information needed to make key decisions may be untimely or of low quality.

Pinpointing the source of decision misalignment and implementing a targeted solution – which could be as simple as using operational dashboards that directly reflect a company's strategy – will help correct this problem.

When we analysed the data further, explorers had greater alignment issues than companies with operating mines. In each of the three areas of execution – capital and resource allocation, decision making and operating model – explorers were weaker than operating miners. Only 57% of exploration respondents agreed that decisions were made in line with strategy versus 78% of the comparative cohort from operating miners.

Ultimately, having the right strategic intent is important, but will not ensure successful execution. Ensuring strategy is executed will be both a source of competitive advantage and a differentiator. Strategic alignment is critical in companies' ability to execute their chosen strategy. A well-aligned company will have operational and management decisions, processes, people, capital and organisational structure, and technology in lockstep with what the strategy demands. This sort of alignment starts at the top, with the organisation's leaders. How well positioned is your company to execute its strategy?

Key considerations

- Are your organisation's decisions consistently in line with its strategy? Why or why not?
- Has your organisation considered implementing an operational dashboard that directly reflects its strategy?
- What are your company's leaders doing to ensure your organisation is properly aligned across operational and management decisions, processes, people, capital and structure?

Note: Results for Performance Alignment have not been benchmarked for respondents. Only aggregate results are displayed.

Alignment to strategy by operating and exploration mining companies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Special thanks to the following people who contributed to the production of this report: Edina Ente, Marcus Goddard, Michelle Kam, Laurence Basell, Michael Wood, Craig Downs, Keith Bishop, Stephen Ye, Michaela Gregova, Sindy Ma, Richard Alessi.

Mining Excellence at PwC

Delivering local solutions to global challenges

The mining sector is facing a range of competing trends and a rapidly changing global business environment. Against the backdrop of commodity price fluctuations, miners need to balance shareholder dividend expectations whilst maintaining an investment pipeline in the midst of increasing operating costs. Safety, environmental and community principles also continue to shape the industry as miners look to achieve their licence to operate and deliver on corporate responsibilities.

Mining Excellence at PwC has been designed to mobilise and leverage PwC's collective global knowledge and connections to deliver an exceptional and tailored client experience, helping our clients navigate the complex industry landscape and meet their growth aspirations. Our team of specialists is exclusively focused on the sector and brings an industry-based approach to deliver value for you and your organisation.

"The positive story for miners is that the long-term growth fundamentals remain intact. But, mining companies are facing significant downward pressure. As an industry, we need to fully address the confidence crisis, before we are able to move on to the next phase of the cycle."

John Gravelle, PwC Global Mining Leader

Mining Excellence at PwC provides our clients:

leading edge ***knowledge*** *and insight*

With significant investment in the research behind our mining publications and a comprehensive industry learning and development program, our professionals can share both industry and technical insight with our clients, such as:

- A library of industry publications designed to help challenge "conventional" thinking and delve into topical industry issues. This includes:
  - flagship publications including *Mine* and *Mining Deals*
  - The *Insight Series* focuses on specific issues most important to miners

- An extensive industry development program for our people and clients. This features our annual university-style courses:
  - *Hard Hat: The Mining Experience* (Australia)
  - *Americas School of Mines* (North America)
  - *London School of Mines* (United Kingdom)
  - *Asia School of Mines*

connections *to our vast network of mining experts and global client portfolio*

We have the widest network of industry experts who work out of strategic mining hubs across the globe to help better connect you to vital mining markets.

Our connections provide:

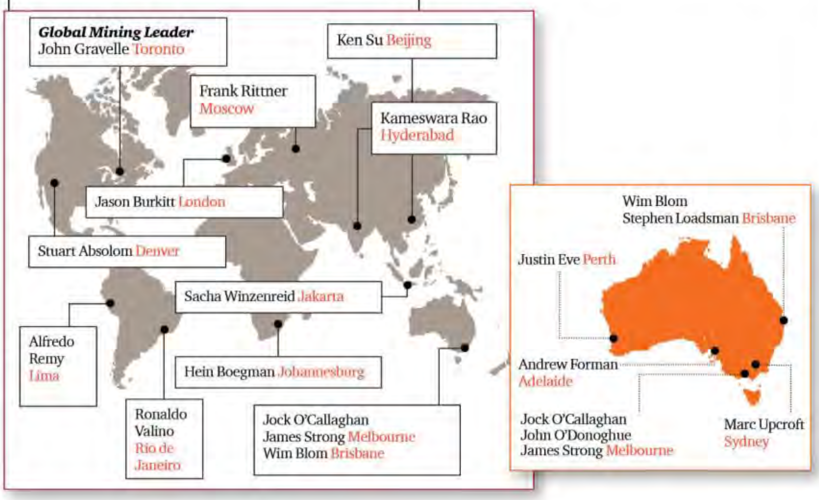
- seamless client service delivered with collaborative cross-border account management
- maximised deal potential through a well-connected global community of mining leaders
- a well-connected and mobile workforce to ensure effective service delivery in even the most remote mining locations.

the ***delivery*** *of an experience that meets our clients' definition of 'value'*

With mining experts working around Australia our award winning teams are helping clients deliver on specific projects and organisational productivity and growth aspirations. We offer operational consulting, deals, tax and audit services to global corporations and locally listed companies.

Mining Excellence at PwC complements this with:

- a suite of niche mining consulting capabilities focused on optimising value across mining operations and effectively managing risk to help our clients grow their business and deliver shareholder value
- a comprehensive client feedback program to ensure we are always improving and delivering on individual client needs.



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