It is only a ceasefire – the war for talent will continue

Productivity in labor: mining and metals
Our publication *Productivity in Mining: a case for broad transformation* noted that productivity, on both a volume and cost basis has been declining significantly in the mining industry since 2000. This has been a conscious choice by industry participants to pursue production growth and headline revenue during an unprecedented boom in commodity prices. As a result of this choice, many miners adopted a “hire-at-any-cost” approach. The end of the mining boom has reversed this trend, with many feeling this has led to a victory in the war for talent. But is it as simple as a supply demand equation?

If the sector singularly focuses on responding to the impacts across the economic cycle – as it has done in recent times – and loses its focus on the war for, and supply of, talent, it will expose itself to the risks presented by more enduring trends.

World metal prices have fallen 28% since the peak in 2011 and while some volatility is expected, the general expectation is that prices will stay low for a period until excess supply is removed. In response, the mining sector has implemented a series of cost-cutting exercises or point solutions in an attempt to arrest a decade-long decline in productivity.
The mining sector’s workforce has not been spared from these cost-cutting exercises. As a result, the demand for mining occupations has declined and skills shortages in mining occupations have abated. The Canadian mining sector reported that overall there were 5.8% less jobs and the hiring of mining engineers was down 38% during June to August 2014 as compared to last year. In Australia, there has been an increase in the number of suitable applicants per vacancy across several mining occupations (including engineers, earth scientists and mining production managers).

In our business risks ranking, the skills shortage risk has moved from the EY’s number one business risk in mining and metals in 2008 to ninth place in 2014.

However, this is not to say that the risk is not still substantial. It is now a more complex risk and we believe the loss of focus on talent poses two significant risks to the sector:

1. It is likely to result in shortages of the wise, senior and experienced people critical to delivering the productivity and efficiency improvements that are so essential in a downturn.

2. It is likely to result in a significant skills shortage when the next cyclical upturn inevitably begins. A report from the South African Institute of Mining and Metallurgy found that while the South African unemployment rate is high, the mining sector faces a skills shortage in many disciplines necessary for its long-term sustainability. Projections in Chile also show that there will be an increased shortage of qualified workers in the near future. An additional 20,000 to 44,000 operators, professionals and maintenance staff will be recruited to support new mining investment in the period to 2020.

Source: Oxford Economics, EY analysis

![World metals price, aggregate (2005=100)](image)

Retaining the right people will be a key competitive advantage. While emerging talent and new ways of thinking will continue to be critical to a sector which is adapting to the productivity imperative, this will not be a substitute for the deep experience of those that have traversed the sector over many years. It is these senior professionals who are best positioned to provide the skills, knowledge and “safe pair of hands” to lead the sector through this period of turbulence.

Senior, experienced people from the mining sector are best placed to deliver the change needed because they have the following:

- **The right skills**: They have the skills required to realize productivity and efficiency gains, including project management, change management and process improvement.

- **Deep knowledge of the mine and the sector**: As senior leaders with long tenures, they have developed deep sector knowledge over time, and are comfortable switching between strategic and operational thinking.

- **Seen it all before**: They were in the sector before the boom, and therefore have the experience of a leaner, more efficient operational model, culture and mindset.
As a result, the demand for this experienced and senior subset of talent is growing. The abatement of skills shortages currently being observed more broadly across mining occupations applies more to unskilled workers and to those whose roles may be replaced in the future by mining automation, and is less likely to apply.

While demand for this subset of the labor market is increasing, supply is decreasing, as many seasoned operators reach retirement age, take early retirement, or make a career change to another sector. Once lost to the sector, it is very hard to attract them back. In the United States, about half of the geoscience workforce is just 10 to 15 years away from retirement and, despite an increase in student numbers, the American Geosciences Institute is still projecting a shortage of around 135,000 geoscientists by the end of the decade.

During the boom, miners displayed significant creativity in hiring and retaining more workers who were female, older and indigenous. Quite often this requires innovation in shift rosters to accommodate more flexible working arrangements (FWAs) or requires additional basic skills development. It seems when cost reduction is paramount, that these innovations have often been the first to go and job losses have fallen disproportionately on this group. Paradoxically, EY research tells us that female workers on FWAs are 3.5% more productive than their full-time peers. This legacy will be a problem in attracting these groups to FWAs in the future.

As mining companies reduce costs and make headcount reductions, the supply of available talent in the traditional mining occupations of engineering, earth sciences and trades has increased, creating a perception that the war for talent is over. But the war to retain and attract the senior, wise talent best positioned to help the sector respond to the productivity challenges of today is only set to intensify. Furthermore the decrease in opportunities, if not addressed, will result in a decrease in supply as undergraduates become disenchanted with the opportunities in the mining industry.

What can be done?

Mining companies need to have clear strategies in place to ensure they have the capability to survive this down-cycle while building capability to support the inevitable upswing. In our view, there are two responses available to a mining organization to compete most effectively and ensure the organization has the talent needed to remain profitable, and both need to be occurring simultaneously:

1. Win the existing talent war for the wise, senior talent

To retain the right people, miners need to be able to clearly identify the wise, senior talent with the capability to navigate the down-cycle, and put in place clear strategies to ensure these people remain at the organization. Retention strategies might include offering:

- Secure flexible working arrangements (e.g., part-time, job sharing)
- Productivity-based performance incentives
- Leveraging technology to minimize the need for FIFO
- Mentoring or coaching roles
- Personalized support to transition to retirement
- Tailored rewards programs to meet personal requirements
- Rotation of people across mine sites within the organization's portfolio

In addition, similar strategies could be used to attract those seasoned employees as they exit competitor organizations.

2. Develop, grow and align new talent

While developing and growing talent has a lag time, it will be important to develop and grow the capabilities and skills needed in project management, change management and process improvement over time, by having senior and experienced people mentor newer staff. This would address concerns found in the sector on the barriers to intergenerational transfer of corporate and specialist knowledge. Training and L&D can also play a part in developing these critical skills.

We believe an investment in talent will be as critical to the future success of mining companies as investment in exploration.

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Ensuring future supply of talent for the opportunities of tomorrow

Inexorable trends will continue to reshape talent and labor supply.

A focus on driving productivity in the post-boom period is not sufficient for sustainable performance. Mining companies also need to consider the “long play” to address underlying trends and circuit-break the costly pattern of talent procurement that mirrors the commodity price cycle (i.e., hire rapidly in upswing and shed excess resources in a downturn).

Four trends that are set to influence the future supply of talent are the ageing workforce, globalization, greater collaboration and disruptive technology.

1. The ageing workforce poses a strong risk to mining leadership

Insufficient attention has been given to understanding how an ageing workforce will impact the mining sector. Roughly 15% of the senior technical experts (e.g., mining engineers and geologists) and seasoned tradespeople are fast approaching retirement in Australia (see chart below). This trend poses a threat to supply of key skill sets, but can be countered with innovative retention and succession planning efforts. Similarly in Canada, a recent Mining Industry
Human Resources Council report shows retirement to be the most significant contributor to the Canadian mining sector’s future hiring needs. Canadian mining employers indicated that roughly 20% of their workforce was eligible to retire in the next three to five years and 6% of workers were currently eligible to retire. These retirements impact operational continuity and lead to a great loss of organizational know-how and operational experience for mining companies.

2. Globalization adds real complexity to how companies monitor and manage their talent position

While globalization has meant access to a wider global talent pool, it has also resulted in increased competition for talent on a global stage. There is increased complexity both in how companies attract across borders and how companies maintain a sense of their talent position.

3. Greater collaboration and fewer silos

Increasing size and complexity of modern mining operations is challenging the scalability of the traditional mine organizational structure. The creation of functional silos at mines in an attempt to cope with this complexity, combined with the technical bias of most of the functions, has led to excessive silo-based behaviour and resulted in diseconomies of scale.

Mines are having to breakdown their silo mentality to encourage greater collaboration around problem-solving, innovation and performance improvement. Many of the technical professions represented at the mine site are renowned for their fierce autonomy and independent work styles. An increase in diversity at mine sites, that not only better reflects the globalized nature of companies, will assist with accelerating cultural change. This includes breaking down the “alpha male” culture and promoting greater teamwork and collaboration across the functions.

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4. Disruptive technology is changing the skills mix required

Disruptive technology in mining (e.g., remotely operated vehicles such as autonomous equipment) has yielded important efficiencies in mining, without necessarily reducing headcount. Driverless trucks, for example, have been piloted across the sector in recent years at multiple global mining organizations with the following results:

- Changed the skills profile from heavy licence drivers to controllers, schedulers and employees with data processing and technical planning capability
- Altered the location of work from mine site to remote operations centers in metropolitan centers
- Fundamentally changed sources of future labor supply

There are clear risks associated with ignoring or inadequately responding to these trends, including:

- Supply shortages of senior, experienced professional, technical and trades-based employees as a generation retires or leaves the sector
- Delays rebuilding sufficient talent supply for future demand growth subsequent to current downsizing trends and retrenchment activities
- Exposure to poaching of key talent from global competitors
- Mismatches between newly employed technologies and the changing skill profile required

15. Ibid.
What can be done?

How do companies strategically downsize while retaining talent? In a period of downsizing, companies need to pay particular attention to retention risk associated with key segments of their workforce, coupled with productivity gains, to be made removing less efficient employee groups across an organization.

Organizations need to understand the economic cycle, accurately forecast their labor needs at each stage, and devise clear strategies for cyclical scaling human resources up or down accordingly to preserve long-term value.

Companies will be employing elements of the following:

- **Talent mapping**: Rigorously map talent as it exists internally and externally
  - Identify talent in critical roles at all points in the commodity price cycle and review and respond to factors contributing to retention risk
  - Map talent externally in competitors and organizations in aligned industries, both locally and in the sector globally

- **Opening up flexibility options**: Employ a more comprehensive options set to reduce total labor force cost including implementing a policy of reduced hours, increasing part-time arrangements, and working with employees to activate long service leave and leave without pay. Some of these options challenge the sector’s approach to rostering and FIFO arrangements. They may also require significant cultural shifts in organizations, such as introduction of part time workforces in a sector composed of 97% full-time employees  
  
- **Future needs**: Assess future skills needed beyond technical skills - collaborative, innovative, system-thinkers who can manage complexity and see improvements across the value chain.

- **Redeployment**: Move employee groups from one product group to another where complementary skill sets are used. A more facilitated migration approach may reduce leakage of key talent

- **Keeping critical skills**: Maintain an oversupply of critical skilled workers (e.g., geologists, engineers, electrical/mechanical tradespeople) throughout the downturn to be better positioned to meet increased demand ahead of the economic curve

- **Investing in staff development**: Invest in learning and development programs to support faster training and deployment of existing (oversupply) staff to new or emerging (undersupply) roles

- **Rewarding staff**: Revise performance management and reward systems to make them more flexible and aligned to the need to attract new skills, retain senior talent, and operate in a nimble global environment. Traditional ways of managing and rewarding employees won’t work!

- **Staying ahead of skills trends**: Promote your brand and attract skilled people slightly ahead of the economic curve. Take steps to anticipate demand upswings rather than reacting in real-time with hiring activity

- **Standing out**: Differentiate your company in the market, particularly around your total reward strategy. Package remuneration and benefits as a collective, differentiated offer to entice prospective employees

- **Tailoring approach**: Be prepared to tailor reward packages to key talent, for example, use tax-effective benefits for employees, especially if relocating, coming from overseas or working in remote locations to reduce the cost and compliance impacts of immigration and tax

- **Structuring mobility programs**: Support employee retention by structuring programs which minimize family disruption. This can have the knock-on effect of improving the mental health of employees

- **Labor-sharing**: Smaller organizations with single product focus may consider labor-sharing arrangements with non-competing industry partners, in response to fluctuations in demand for product

By exploring these and other actions, organizations will be able to respond swiftly to – if not anticipate – upswings in demand, and activate a trained workforce without incurring significant lost time to re-hiring.

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Conclusion

A singular focus on adjusting labor needs to the commodity price cycle will leave companies exposed to clear risks. This includes shortages of critical skills to raise productivity in the downturn or an inability to procure talent to meet future demand upturns.

Like many organizations, mining companies often respond reactively to changing economic conditions, making headcount reductions in downturns, and re-hiring to meet demand growth.

A more sophisticated response considers the skillset needed to suit the current context. Right now, the challenge is intensifying to attract and retain wise, senior, experienced individuals with deep expertise improving operational efficiency. But the most successful mining companies will also adopt the strategic “long play,” paying attention to shifts in demographics, technology and globalization. The companies that win will be those that view economic conditions through a longer-term lens, with a deep understanding of the cyclical nature of production demand. They take steps to sustain a flexible labor force that can swiftly respond to demand changes ahead of the tide.
How can EY help?

The EY talent management team help with productivity and profitability challenges in mining and metals organizations with the following services:

- **Strategic workforce alignment:** Matching the labor supply and demand with the commercial direction of your organization.
- **Business sustainability:** Analysis and identification, attraction, retention and succession of talent in your organization to help ensure medium and long-term financial targets can be achieved.
- **Cost optimization:** Analysis of labor costs to determine whether operational costs are acceptable and fall within best practice ranges.
- **Labor productivity:** Development of labor scheduling, deployment strategies and financial model models to help maximize productivity.

**Value and differentiation**
- Strategic alliances with institutions and communities
- Job redesign
- Detailed understanding of mining sector
- Significant insight to global labor environment

**Labor mobility**
- Global mobility and assignment programs
- Workforce deployment models

**Pay and reward**
- Flexible remuneration and salary packing
- Performance improvement

**Talent management**

Labor should be seen as an important asset to mining and metals companies rather than a cost. Talent management is a rigorous, metric-driven approach to sourcing, attracting, developing, deploying and retaining the best talent, optimizing productivity and maximizing performance. It bases human resources decisions on bottom-line outcomes by measuring an employee's return on people investment, allowing organizations to build best-practice sourcing and deployment strategies. Taking an analytical approach to such strategies allows organizations to create a competitive advantage by ensuring that any investment in people will support and help to deliver on corporate objectives.

**Forecasting and strategic planning**
- Talent supply forecasting models
- Workload demand forecasting models
- Proactive sourcing strategies
- Reengineering recruitment programs
- Next-generation workforce diagnostic models

**Process**
- Process redesign
- Reengineering sourcing strategies
- Reengineering workforce diagnostics

**Culture**
- Culture assessment
- Employee development planning
- Employee retention programs
How EY’s Global Mining & Metals Network can help your business

With increasingly positive sentiment in the sector, miners are focused on restoring balance sheet strength and liquidity in preparation for growth. The sector’s key opportunity is still productivity. Although many have made productivity improvements, the critical next wave of gains needs a strong focus on loss elimination, with digital being a key enabler.

EY has significant experience in assisting companies to evaluate and implement strategic initiatives, with deep sector knowledge to support you on finance initiatives, such as portfolio optimization and capital planning, and through to operational improvement programs, such as productivity and digital enablement.

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