Quality assurance programs for management excellence. Are they relevant to the coal industry?

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QUALITY ASSURANCE PROGRAMS FOR MANAGEMENT EXCELLENCE. ARE THEY RELEVANT TO THE COAL INDUSTRY?

Allison Golsby

ABSTRACT: Quality assurance programs were introduced into industry in 1973. Over time these systems have evolved to what is available to management today. How can quality assurance programs be used to ensure management excellence and are they relevant to the Coal Mining Industry?

INTRODUCTION

The term ‘Mine Manager’ is often all about ‘mining’ and too little about ‘management’. The technical demands of mining needed to safely extract resources demand personnel with the appropriate level of education and training. The requirements for statutory roles such as Ventilation Officer, Deputies, Undermanagers and Mine Managers include the assessment of their competencies, where their technical skills and expertise are benchmarked against standards. Quality Assurance is the name for the gap analysis that measures the degree of compliance with the standards for management excellence.

The benefits of utilising management excellence in an organisation include:

- Effective prioritisation of improvement efforts to deliver maximum benefits;
- Process efficiency and effectiveness through reduced waste and variation;
- Empowered and motivated workforce with increased retention;
- Increased productivity and reduced operational costs;
- Focus on customer service delivering superior perception of value;
- Sustainable performance by increasing stakeholder value.

WHAT IS QUALITY ASSURANCE? AND WHAT DOES MANAGEMENT EXCELLENCE MEAN?

‘There is an old saying that demonstrates the importance of systems and structures: “What is important, gets measured - what is measured, gets rewarded - what is rewarded, gets done!” Of course, people and companies that get things done get ahead’ (Dowling, 2001).

There is an Australian Standard Quality Assurance Program for Management Excellence that benchmarks management systems. The Australian Business Excellence Framework (GB.002-2011) was developed with the objective of describing the principles and practices that create high performing organisations. The criteria can be used by organisations to assess their performance and drive continuous and sustainable improvement in their leadership and management systems. Excellence in management is achieved when management systems measure up to, or exceed the standard. Too often management systems fall short, but too few in mining are even doing that gap analysis.

Excellence in management is not just about designing efficient systems for driving the management process. It is not just about ensuring that a Permit or Authority to Mine is available when mining is due to commence in an area and that it has been signed off by all those needing to do so. In that case, excellence in management is about ensuring that the management process to generate the Permit or Authority to Mine was commenced in time, proceeded through the management chain in a smooth manner and arrived fully completed where and when it was needed. Moreover its path through all of

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the various steps in the chain of command needs to be smooth, not accompanied by any last minute, just in time, pushing and shoving.

People skills are an integral part of management excellence. The paper, or at the more technically advanced mines, the emails and electronic reports need to be processed as efficiently as the resource, if mining is to achieve its goal of optimising resources. But people need to be managed just as effectively as the paper, the emails or the physical resource. Therefore, a leadership competency framework like the one shown in Figure 1, is needed as bases for ensuring managers have these minimum required skills.

![Leadership competency framework](image)

**Figure 1 - Leadership competency framework, for business excellence (ACELG 2011)**

Many mine managers hearing the expression ‘optimising resources’ may feel that means getting more coal out of the ground more quickly. However, if the people, many of whom work in the back office are not managed effectively, the coal will not be cut because:

- the Special Mining Vehicles (SMV) Driftrunner is not operative;
- it’s raining and there are no pumps;
- the transformer was moved and no one was told;
- the roof bolts were delivered to outbye;
- the resins were left outside in the weather and have gone off;
- the bolting dollies were not purchased;
- the mesh sheets are the wrong size;
- the bucket for the loader has gone missing;
- the spare cable in the panel has been removed;
- the roof bolts are too short;
• the cable winder is missing;
• the belt rubber is too wide for the conveyer frame;
• only miner cables, but no shuttle car cables are available;
• the stone dust was stored in a puddle of water;
• the emergency pod has been moved and no one was told;
• the miner is ready to flit and the ventilation stoppings are not ready;
• the scheduled belt move did not happen;
• the deputy for this shift is not on duty;
• there is no ticketed miner driver;
• the scheduled survey was not completed;
• that drill hole is full of water;
• a sequence plan is not on site; and
• ventilation has stopped.

The Mining Industry has historically promoted the highly technically adept personnel into management roles, as they ‘do such a good job on the tools’. From this promotion, personnel are moved out of their area of technical expertise into an area they know nothing about. Figure 5 shows the utilisation of a technical person’s time. New to the role and without the appropriate management tools, managers are left to struggle through the people management aspects (Figure 3) without any support via technical skills. The industry has recognised this issue. There is now more of a succession planning process in place to prepare personnel for the leap into management. There are now credible courses such as the ‘Frontline Management Framework’ aimed at assisting these very technically adept personnel to develop management skills.

The Frontline Management qualification reflects the role of individuals who take the first line of management in a wide range of organisational and industry contexts. They may have existing qualifications and technical skills in any given vocation or profession, yet require skills or recognition in supervisory functions. Typically they would report to a manager. At this level frontline managers provide leadership and guidance to others and take responsibility for the effective functioning and performance of the team and its work outcomes.

The next step is to develop the supervisors into a more people oriented role. Figure 2 shows the utilisation of a manager’s time. Management skills have not readily been accepted as a necessary skill at the mine manager level.

![Manager's Time](image)

Figure 2 - Utilisation of a manager’s time (Golsby, 2011)
IS COAL MINE MANAGEMENT TOO REACTIVE, RATHER THAN PROACTIVE?  
CAN WE DO IT BETTER?

One Mine Manager might define their people skills as, ‘I don’t have to be polite and talk to the employees. I have surrounded myself with good HR people so I can behave anyway I like, and if anyone doesn’t like to hear me carry on then they don’t need to talk to me’. Is this an effective Manager? Will this Manager be able to resolve their people management issues in a timely and effective manner if they are not interested in their own projection of themselves?

**Supervisor’s Time**

![Supervisor's Time Diagram]

Yet, the benefits of using business excellence, far outweighs the investment in developing and administering business excellence systems.

The Australian Business Excellence Framework aims to create an environment of continuous improvement, by:

- Providing the foundation with which to develop the organisation’s focus on sustainable performance;
- Offering a solid structure for integrating all improvement initiatives and organisational decision-making;
- Helping to achieve organisational goals and deliver increasing customer and stakeholder perception of value;
- Providing a performance benchmarking program;
- Identification and communication of priority areas for attention and action to improve organisational performance;
- A regular and systematic process of information, analysis and comparison of performance against agreed organisation performance criteria.

The other noticeable benefits include improved safety performance and increased returns to the bottom line (Table 1).

**Table 1 - 1990-2006 Australian Business Excellence Award Winners vs. Standard and Poor’s Accumulated Index (SAI Global 2007)**

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<tbody>
<tr>
<td>Award recipients</td>
<td>$12,192</td>
<td>$44,113</td>
<td>$118,477</td>
<td>168.58%</td>
<td>871.76%</td>
</tr>
<tr>
<td>Standard and Poor’s All Ordinaries</td>
<td>$12,192</td>
<td>$21,251</td>
<td>$45,197</td>
<td>112.68%</td>
<td>270.71%</td>
</tr>
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</table>
The Australian Business Excellence Awards Winners (as shown in Table 1) outperformed the All Ordinary Index, 3.5 to 1.

Leading Australian based organisations use the business excellence framework to:

- Improve management and leadership practices;
- Assess the performance of their leadership and management systems;
- Build those results into strategic planning processes; and
- Benchmark where their organisation stands in terms of the marketplace and competitors.

The business excellence framework provides to the industry, an umbrella under which a number of business initiatives can be integrated to form one coherent, cohesive organisational systems model.

**HOW CAN QUALITY ASSURANCE PROGRAMS BE USED TO ENSURE MANAGEMENT EXCELLENCE? ARE THEY RELEVANT TO THE COAL MINING INDUSTRY?**

There has been a change in thinking over time, from a customer only focus in the previous Australian Business Excellence Framework (SAI, 2007) category of ‘Customer & Market Focus’ to ‘Customers & Other Stakeholders’ (in GB.002-2011 as shown in Figure 4), broadening the category to include all stakeholders.

![Figure 4 - The structure of the Australian Business Excellence Framework (SAI Global, 2011)](image)

‘Corporate culture can work for you or against you. A major role of management within any company is to lead change within the organisation. It is those individuals and companies who embrace change and can lead change by moulding their corporate culture to the changing business circumstance that will survive and prosper. By coupling a cultural influence strategy to a cultural strategy, change can be a very positive and rewarding experience. With experience and positive results, these organisations obtain a special capability to react quickly to their customers and create extraordinary value. On the other hand, those organisations or individuals that cannot adapt or lead change will, over a period of time, fail, and others will capture their resources and inherent value’ (Dowling, 2001).

Without striving for continuous improvement and without using quality assurance programs, management excellence cannot be achieved. Some of the quality assurance programs used in conjunction with business excellence, are:

- ISO 9000 series;
- Six Sigma;
- Balanced Scorecard;
• Enterprise Resource Planning;
• Triple Bottom Line reporting;
• Corporate Governance; and
• Risk Management.

These systems are recognised in industry. As with any system, they are only as good as the practitioners, standards, procedures, competency of all participants, documentation, communication and record management in play.

Risk management as a quality assurance program referenced in legislation, has a suite of Australian Standards (ISO31000, ISO9000, ISO14001 and AS/NZS4804) to guide users. There is also nationally accredited training for facilitation and the use of risk management tools and the risk management assessments are audited by regulatory groups. All of these measures continue to encourage improvement in the use of and the outcomes of each risk management system.

**Figure 5 - Utilisation of a technical personnel's time (Golsby 2011)**

WE ARE ALL PARTICIPANTS IN THE MINING INDUSTRY. WE ARE PROUD OF WHAT WE PRODUCE. WE ALL KNOW THE TERMS ‘FIT FOR PURPOSE’ AND ‘RIGHT FIRST TIME’.

One of our fine members of the mining profession once had the honour of becoming the President of the United States of America. His name was Herbert Hoover. He was given credit for making a very profound statement as the keynote speaker at one of the American Institute of Mining Engineers’ annual meetings during the 1950s. Allegedly, he said “our mining industry manages to survive in spite of ourselves”! (Riggs, 2001).

Management Excellence is a path of continuous improvement. Questions that can help with organisational continuous improvement include:

• How do we define, recognise, assess and promote it?
• How might the business excellence framework need to change?
• What other tools are out there?
• What can other sectors teach the mining industry about excellence?
• What are typical elements of the organisation’s continuous improvement program?
• What are the legislative frameworks that jurisdictions use to promote it?
• How can the business excellence framework work in more efficiently with existing legislative requirements?
• Is there a conflict between quality control and innovation?
Do concepts of public and customer value differ from those of Business Excellence?

How can issues of governance and community be incorporated into the business excellence framework?

How do we best support and advance excellence in the industry?

The goal for coal mining is to make Mine Managers as effective at ‘management’ as they may be at ‘mining’.

REFERENCES


