

## Interview: Engaging your workforce to make Business Improvement work

An Interview with Cameron Clark, Business Improvement Manager of Lihir Gold Limited's Lihir Island operation.

Lihir Gold Limited's (LGL) Lihir Island operation has achieved record gold production for each of the last 4 years while staying in the lowest cost quartile of gold producers. In 2009 they embarked on a business improvement program to consolidate and further enhance their performance.

Cameron Clark, the Business Improvement Manager of LGL's Lihir Island operation, talks to Marchment Hill Consulting about the journey to date.

*Lihir Gold Limited (LGL) is a major global gold producer with operations in Papua New Guinea, West Africa and Australia.*

*In 2009, LGL produced 1.12 million ounces of gold with a record 853,000 ounces coming from its flagship mine in Lihir Island.*

*The Lihir open pit mine has a workforce in excess of 4,000 people, six shovels, 36 trucks and is scheduled to continue mining until 2021.*

### Jason Ashford: What were the challenges at LGL?

Cameron Clark: In late 2005 the LGL Board appointed its first independent CEO. This gave the business an incredible sense of urgency and focus that translated to results.

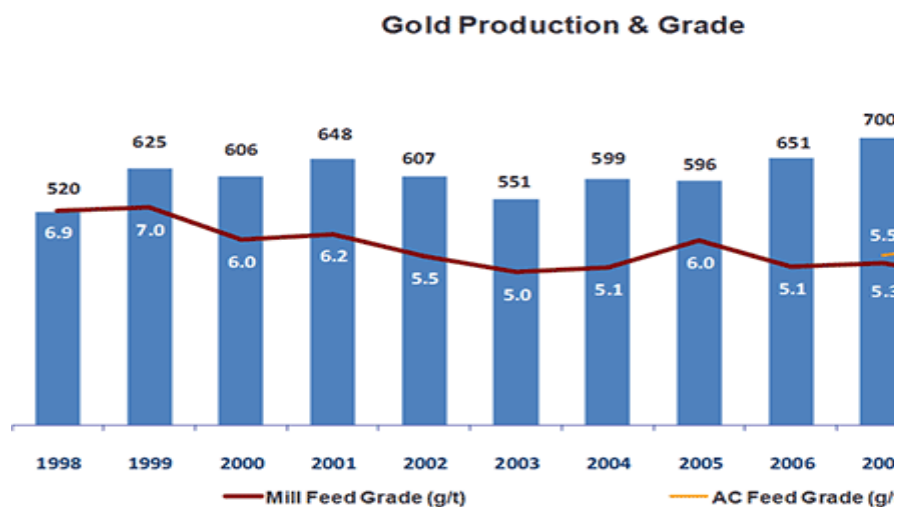


Figure 1: This chart shows the annual gold production steadily rising since 2005 at a time when the average gold content in the ore processed – the red line – had been falling. The yellow line shows the benefit to autoclave feed grade resulting from the addition of a flotation processing stage in

2007.

By late 2008 LGL had 'matured', expanded to several operating mines, and the Lihir operation was ready for the next step.

Broadly there were three main challenges – or opportunities as we liked to think of it.

The first was that we were generally 'busy' and needed to ensure we were concentrating our efforts on the right things – the things that aligned with our strategic and tactical plans, the things that drove value.

The second was that we didn't necessarily undertake projects in a systematic way. There was a tendency to move quickly to implementation mode. Ensuring that we fully understood the 'problem' and properly considered the options available to us was an opportunity we saw.

Finally there was an opportunity to strengthen project governance. We thought this was a key element to consistently delivering project benefits.

**JA: So what did you do?**

CC: The first thing we did was agree as a site leadership team that it was time to take a more consistent approach to our improvement activities. The fact that this was not something imposed on us, but viewed as a natural next step, meant we had the key ingredient to success from day one.

We set some clear criteria. Beyond agreeing that leadership from the management team was critical, our approach was to 'keep it simple'. Through observation and our collective experience we wanted to avoid the trap of strangling ourselves in bureaucracy. We decided that wouldn't work for us – we needed an improvement methodology that would work at Lihir.

We decided we would run a pilot program and use that as a way to practically develop the method and introduce tools. That way if something didn't work we could change it. We wanted to test the concept to demonstrate we could be successful.

We also recognised that we didn't have the full range of specialist Business Improvement (BI) skills - and needed external help. We were particularly careful in terms of the style of support we engaged.

Our overall goal was to prove the 'simple' approach through results, and develop our internal capability to make BI part of the way we do business.

**JA: What did this achieve?**

CC: By keeping the approach low key – ‘a pilot’ – we were able to selectively hone in on our key issues and focus our efforts. At that stage gold production was solid and our Million Ounce Plant Upgrade (MOPU) project was addressing a number of plant constraints. Our key issue was that we weren’t hitting our mine production targets and there were two parts to the problem – mine productivities and equipment availabilities. We intentionally tackled the productivities first because there was significant value to be had, and there was a good team in place to work through.

We didn’t over-complicate things, and by putting together the right support team we were able to win the trust of the leadership and their teams and this allowed us to get traction.

We avoided intimidating people with fancy BI vernacular as people had to be comfortable using our approach, particularly where they have had no previous BI exposure. Therefore, keeping the approach practical and introducing improvement tools on the job meant we reduced the chance this was just the latest management fad to be survived.

**JA: Why did this approach succeed at LGL?**

CC: I guess the first point I’d make is that success is a transitory thing so I will answer you with that caveat. But yes I can say we were successful in tackling a key area and demonstrating fundamental improvement within 6 months.

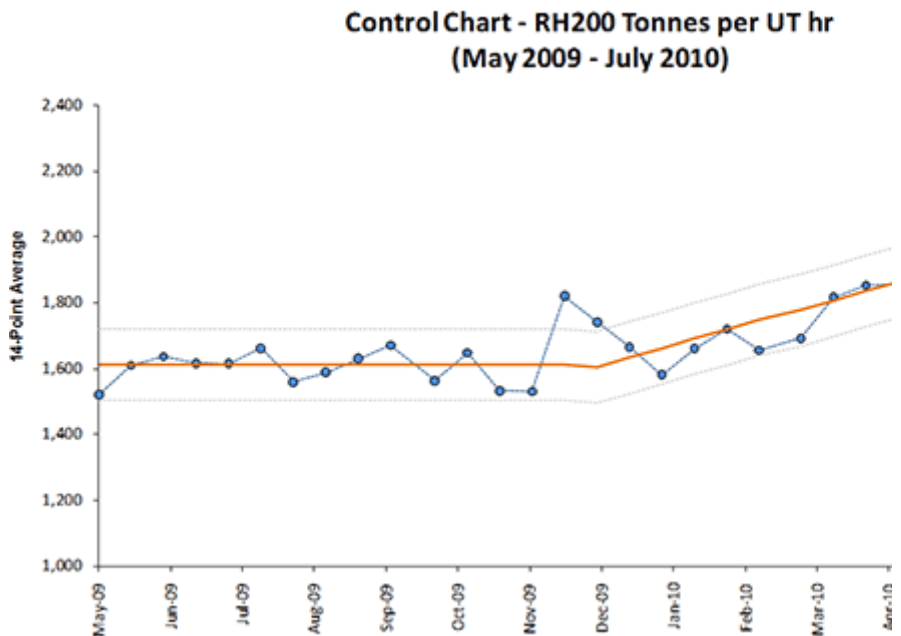


Figure 2: This chart is a key productivity measure – showing how many tonnes per operating hour an RH200 shovel can load.

So in that context there were three key ingredients.

Firstly, it was simple – our methodology and approach was usable and effective.

Secondly we had strong leadership – in this particular case our mine manager was 100% committed. The third was that we picked the right support team (both internal and external) – people with the right mindset to keep driving things forward.

We didn't waste unnecessary effort designing every aspect of the methodology before we started. We mapped the skeleton and stayed true to the 'fit for purpose' principle. Instead we put our initial efforts into the people side of things identifying who would help us make this happen and who might be the blockers we needed to manage.

**JA: What were the biggest challenges or difficulties?**

CC: In broad terms we were effectively trying to make two key changes in mindset.

The first was to encourage people to not necessarily try and address all the things they could see needed improving and to instil a confidence that it was ok to prioritise their efforts to focus on the things that matter.

The second was to work a little harder on making sure we understood the problem and the range of possible solutions before starting to solve it. At the same time we also had to demonstrate that the approach could be effective - and we needed to do so quickly enough to create a broader sense of confidence.

“We agreed that leadership from the management team was critical and that we needed to ‘keep it simple’.”

**JA: What would you say were the critical moments for business improvement at LGL?**

CC: Undoubtedly, these would be the times when we had to maintain the support and confidence of our leadership - particularly during times of change. The period between identifying the issues and demonstrating the improvement is where resolve is tested. Once we had delivered clear, significant, and unambiguous improvements, we were on our way.

**JA: Now that BI program has been in place for a little over one year, what is the focus now?**

CC: A year and a bit down the track we have been able to establish confidence in the approach – and the benefits are pretty straightforward to see. That said we have transferred a heavy focus to our equipment availabilities and success here is critical to retaining confidence.

In terms of the BI strategy itself, our main objective in 2010 is transitioning from pilot or 'proof of concept' into 'the way we do business'. The key here is that we work through our broader leadership and their teams (ensuring there is capability within the teams), making sure they are comfortable with applying the methodology and the tools to their parts of the business.

**JA: For you personally as BI Manager, what have you learnt from the last 18 months?**

CC: The number one lesson is that BI is much more about people than the technical approach. The key skills are to earn trust and respect, form good relationships, know when to listen, and know when to push.

It has also reinforced my personal belief that business performance (whether that is a department or a section) is generally a function of the quality of leadership.

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