Supervisory competencies, its impact now, and in future
About OIM

- Proven track record since 1985
- Partners with several blue-chip companies throughout Southern and Central Africa
- Business performance specialists in three key areas
- Integrated approach with an emphasis on sustainability
- Services relate directly to mining industry

OIM’S SUPERVISORY EXPERTISE

- Thought leaders in supervisory development
- Developed a proven performance coaching framework
- More than 1000 supervisors have benefitted from our programme
Mechanisation vs Modernisation
Mechanisation | Automation | Digitisation

- **Current industry focus:** All mining houses are focused on greater efficiencies through mechanisation | automation | digitisation

- The two core focus areas are:
  - New equipment and technology
  - Big data

- **The benefits are clear**
  - The production of more safer tons through advances in equipment and technology
  - The use of real-time data and analytics for trend analysis and better decision making

The combination will fundamentally change how we work
Mechanisation | Automation | Digitisation

- **The ideal:** Fully autonomous mines in the long term
  Realistically in the near future: Most mines will be a mixture of manual, semi and fully autonomous

- **Technology vs culture and skills**
  The truth is – technology is easy; culture and skills are more difficult
  Most “failures” are caused by an engrained culture which cannot be changed overnight

- Most companies understand that both of the above need to be addressed and will:
  - Retrain the relevant employees in the technical skills needed or employ relevant skills
  - Launch a staff awareness campaign and culture change project
Modernisation: Culture, People, Operations

THE RIGHT CULTURE
- Trust, tolerance and teamwork
- Sound decisions and ability to execute
- Urgency
- Low resistance to change – agility

IMPROVED MINDSET
that is built on a foundation of

Holistic Understanding
of people, business, global political, economic and other realities

Effective Leadership
Qualities that build trust
Style that mobilises talents
Techniques that achieve goals

Effective Systems
Organisational and operational
All integrated & aligned
Cost avoidance and intangible benefits
Right people
Right roles
Right structure
Right time

Intangible benefits
Improved culture, behaviour and labour stability

Tangible benefits
Measurable ROI
Efficiency
Structure, roles, competencies
Employee & stakeholder engagement
Efficiency
Front-line leader skills
Improved skillsets and efficiencies

Sustainability
• Mindsets
• Skillsets
• Toolsets

Modular (integrated vs stand alone) | Flexible (sequence) | Now and then (short- and long-term benefits)
The effective execution of any business plan heavily relies on supervisory effectiveness yet very little effort is placed on changing how the frontline/supervisor leads and manages.
The current state of supervisors
Comparative pre-assessment results

<table>
<thead>
<tr>
<th>COMPETENCE</th>
<th>Assertiveness</th>
<th>Communication Skills</th>
<th>Interpersonal Sensitivity</th>
<th>Analysis &amp; Problem Solving</th>
<th>Leading &amp; developing others</th>
<th>Planning &amp; Organising</th>
<th>Overall</th>
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<td>2.55</td>
<td>2.19</td>
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</table>

- Engineering
- Mining
- Plant

Bar chart showing comparative pre-assessment results for Engineering, Mining, and Plant.
The current state of supervisory competencies

- Competent in role: 12%
- Not competent in role: 6%
- Partially competent in role: 82%
- * Exceeds requirements of role: 0%
The current state of supervisors

Average score per day element – mining

<table>
<thead>
<tr>
<th>Element</th>
<th>Score</th>
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<tbody>
<tr>
<td>Start of Shift</td>
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<tr>
<td>Team Meetings</td>
<td>1.58</td>
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<tr>
<td>Shift Execution Day Elements</td>
<td>1.68</td>
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<tr>
<td>End of Shift</td>
<td>1.63</td>
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<tr>
<td>Average</td>
<td>1.63</td>
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Learning potential

The scores of test battery may be integrated to derive an overall evaluation of learning potential on a 7-point scale.

For the supervisory group a total of 17 (24%) employees had a “rather limited” score indicating severe limitations in developing and training these employees.

APIL assessment – learning potential by department (n = 79)

15% lower average:
Some potential in development & training
24% limited or poor
Severe limitations in development & training

The required level:
15% lower average: Some potential in development & training
24% limited or poor
Severe limitations in development & training
# Mine overseer’s confidence level in supervisors

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<thead>
<tr>
<th></th>
<th>Plan</th>
<th>Execute</th>
<th>Review</th>
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<tbody>
<tr>
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<td>45% 25% 25% 5%</td>
<td>27% 60% 7%</td>
<td>31% 56% 11%</td>
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<table>
<thead>
<tr>
<th>Plan</th>
<th>Execute</th>
<th>Review</th>
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<tbody>
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<td>Consequence management</td>
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<tr>
<td>Focus on the weekly schedule</td>
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<tr>
<td>Attendance &amp; shift planning</td>
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<tr>
<td>Level of Ad-hoc &amp; non-scheduled work</td>
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<tr>
<td>Consistent leadership</td>
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<tr>
<td>Adherence to procedures</td>
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<tr>
<td>Shift handovers (supervisors)</td>
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<tr>
<td>Use of Initiative</td>
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<tr>
<td>Understanding impact of in-pit conditions on Schedule</td>
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<td></td>
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<tr>
<td>Schedule Compliance considered throughout shift</td>
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<tr>
<td>Extent to which close supervision required</td>
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<td></td>
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<tr>
<td>Shift mobilisation impact on DOH</td>
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<tr>
<td>Ratio of Admin VS Pit-Time</td>
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<tr>
<td>Feedback consistent &amp; accurate</td>
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<td></td>
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<tr>
<td>Articulates reason(s) behind performance</td>
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<tr>
<td>Hand-overs formal and consistent</td>
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</tbody>
</table>

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

- Not Confident
- Slightly Confident
- Moderately Confident
- Very Confident
Reality survey: May|June 2019

**Plan**
- Consequence management: Very confident (60%)
- Focus on the weekly schedule: Very confident (50%)
- Attendance & shift planning: Very confident (30%)
- Level of Ad-hoc & non-scheduled work: Very confident (20%)

**Execute**
- Consistent leadership: Very confident (50%)
- Adherence to procedures: Very confident (40%)
- Active Interaction e.g. Shift handovers: Very confident (30%)
- Use of Initiative: Very confident (20%)
- Understanding impact of mining conditions on Schedule: Very confident (10%)
- Schedule Compliance considered for shift/day: Very confident (10%)
- Extent to which close supervision required: Very confident (10%)
- Structured handovers impact on operational performance: Not confident (5%)
- Ratio of Admin VS Shift execution: Very confident (50%)
- Feedback consistent & accurate: Very confident (70%)
- Articulates reason(s) behind performance: Very confident (50%)
- Hand-overs formal and consistent: Very confident (20%)

**Review**
- Consequence management: Not confident (5%)
- Focus on the weekly schedule: Not confident (5%)
- Attendance & shift planning: Not confident (5%)
- Level of Ad-hoc & non-scheduled work: Not confident (5%)

Legend:
- Not Confident
- Slightly Confident
- Moderately Confident
- Very confident
The management maturity matrix

**CONSERVATIVES**
Stage 3 to 5 management maturity (Conceptual) with low performance. Indicates that the supervisor is achieving “mechanical” compliance, but is not yet leveraging the toolsets to effectively manage their processes.

**HIGH-FLYERS**
Stage 3 to 5 level of management maturity (Conceptual, Ownership & Innovation). Adoption driving improved performance. Enhanced use of OM operational tools. Leverage as “Reference Points” to less mature areas.

**NON-CONFORMISTS**
Stage 1 to 2 management maturity (Informal & Compliant). Normally first 4 to 6 months. Mechanical compliance with little or no benefit realisation. High risk period > 6 months’ formal intervention is required: enhancing complementary skillset, increase reporting frequency, intensive coaching etc.

**OPPORTUNISTS**
Stage 1 to 2 management maturity (Informal & Compliant) High-performance rating is synthetic: Due to overcapacity / low targets or effective informal management approaches or “Transactional” leadership style “Sustainability Risk” as far as maintaining level of performance is concerned.

Aim: move from non-conformist to high flyer

Scorecard KPIs = Measure Performance
The management maturity matrix

Mining supervisor development assessments

Legend
- Final Role (Dilo) Assessment: Compared to Q3 2017
- Interim Role (Dilo) Assessment: Compared to Q2 2017
- Baseline Role (Dilo) Assessment: Compared to Q1 2017 Scorecard
The supervisor
SOLUTION
Embedding behavioural change through coaching

We link COMPETENCIES + THEORY + COACHING to measure real operational improvement.
Mining: pre- vs post-assessment

<table>
<thead>
<tr>
<th>Competency</th>
<th>Pre-assessment</th>
<th>Post-assessment</th>
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<tr>
<td>Assertiveness</td>
<td>2.67</td>
<td>3.05</td>
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<tr>
<td>Communication Skills</td>
<td>2.82</td>
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<tr>
<td>Interpersonal Sensitivity</td>
<td>2.81</td>
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<tr>
<td>Analysis &amp; Problem Solving</td>
<td>2.55</td>
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<tr>
<td>Leading &amp; developing others</td>
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<tr>
<td>Planning &amp; Organising</td>
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<tr>
<td>Overall</td>
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<td>2.96</td>
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</table>
Role execution

Average score per day element - mining

<table>
<thead>
<tr>
<th>Day Element</th>
<th>Baseline</th>
<th>Interim</th>
<th>End of Project</th>
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</thead>
<tbody>
<tr>
<td>Start of Shift</td>
<td>1.65</td>
<td>2.27</td>
<td>2.72</td>
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<tr>
<td>Day Elements</td>
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<td>End of Shift</td>
<td>1.63</td>
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<tr>
<td>Average</td>
<td>1.63</td>
<td>2.20</td>
<td>2.71</td>
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</table>
The current state of supervisory competencies

**Before**
- Competent in role: 12%
- Not competent in role: 6%
- Partially competent in role: 82%

**After**
- Exceeds requirements of role: 2%
- Not competent in role: 1%
- Competent in role: 44%
- Partially competent in role: 53%
Mine overseer’s confidence level in supervisors

**Plan**
- Before: 45% Not confident, 25% Slightly confident, 25% Moderately confident, 5% Very confident
- After: 4% Not confident, 23% Slightly confident, 54% Moderately confident, 18% Very confident

**Execute**
- Before: 27% Not confident, 60% Slightly confident, 7% Moderately confident, 7% Very confident
- After: 8% Not confident, 24% Slightly confident, 52% Moderately confident, 16% Very confident

**Review**
- Before: 31% Not confident, 56% Slightly confident, 11% Moderately confident, 2% Very confident
- After: 6% Not confident, 20% Slightly confident, 54% Moderately confident, 20% Very confident
The impact on performance

Some highlights

GOLD MINE
54% ▲ in meters per rig
86% ▲ in tons per rig

GLOBAL IRON-ORE PRODUCER
14% ▲ per day of saleable and stacked tons

SOUTH AFRICAN IRON-ORE PRODUCER
10% ▲ productivity tons per employee
25% ▲ planned maintenance

MANGANESE MINE
Total product tons 9% ▲
Total ROM tons 14% ▲

ZIMBABWEAN CEMENT PRODUCER
Revenue 40% ▲
In conclusion

**The importance of coaching and the link to sustainability**

- The **integrated approach** of supervisory competency development and on-the-floor coaching result in operational improvement and better organisational performance

**HOWEVER**

- Although positive results have been recorded at numerous clients, we will be amiss if we don’t highlight the importance of building a coaching culture in organisations
- Most supervisors operate below the required competency level in all performance areas – and even after weeks of intense coaching and training they still don’t function at the required level
- Just as training course after training course is not the answer to the supervisory skills challenge, the one intervention after the other – however effective – is also not a sustainable option
Where companies have **EMBRACED** the establishment of a **COACHING CULTURE** they have continued to report an increase in supervisory performance and overall organisational results.
In conclusion

The importance of coaching and the link to sustainability

Unfortunately, the opposite is also true
Where companies *did not* focus on this aspect, they recorded the same and/or declining results in the performance of their supervisors

Line as coach
The development of line manager coaches who can “take up” the role of:
- Capacitating new supervisors
- Conducting regular audits
- Implementing action plans where required
Case study: coaching culture entrenched
## Case study: little/no coaching

### Supervisor DILO Compliance Heat Map

<table>
<thead>
<tr>
<th>Supervisors</th>
<th>Drill &amp; Blast</th>
<th>North Mine</th>
<th>Pre-Strip</th>
<th>South Mine</th>
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### Effective Team Climate

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### Line Manager Coaching Heat Map

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### KPI Performance Index

- **Tempo** & **DOH** KPI’s (Shovels & Trucks)

### Competency Post Assessments

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Pre-Anderson</th>
<th>Post-Anderson</th>
<th>Pre-Communication</th>
<th>Post-Communication</th>
<th>Pre-Interpersonal</th>
<th>Post-Interpersonal</th>
<th>Pre-Analysis &amp; Problem Solving</th>
<th>Post-Analysis &amp; Problem Solving</th>
<th>Pre-Leading &amp; Influencing</th>
<th>Post-Leading &amp; Influencing</th>
<th>Pre-Planning &amp; Organizing</th>
<th>Post-Planning &amp; Organizing</th>
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Translating learning into action

- Practical application of training is a challenge
- Performance coaching
- Customised coaching
- Transactional leadership style vs developmental leadership style
- Survey results at key clients
Regardless of what you do around digitisation and mechanisation... Your **SUPERVISOR** is the key to unlocking the full benefit of your investment.
Analyse. Improve. Sustain.