

SAFETY EFFECTIVENESS INDICATORS

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Previous Research



- **Safety Competency Framework**
- **Research identified:**
 - **Which positions/roles are critical to safety**
 - **Critical Safety Management Tasks**
 - **The skills, attitudes & behavioural competencies required to perform each task successfully.**
 - **Compiled into an industry code/standard**



Outcomes



- **39 Critical Safety Management Tasks (SMT)**
 - All SMTs Underpinned by 9 key cultural building blocks
 - Each SMT has a competency developed which identifies:
 - Process steps
 - Required Knowledge, Skill & Behavioural competencies
 - Cultural outcomes

Industry Competency Matrix

- Training developed to target the provision of skill and competency to deliver these tasks effectively
- Currently all we can do is measure how many times we do each task.
- There is no current scientifically backed way of measuring and determining how effectively we deliver each task



Current Performance Measures

Current

- Lag Indicators
- Positive Performance Indicators (PPIs)
- Investigation Results
- Audits

Future Focus

- Perception/Culture Surveys
- Integrated 360 Feedback
- Safety Effectiveness Indicators (SEI)



The Future !

What if we could identify and measure how well we are doing each task and categorise the findings to deliver us clarity on where we are not effective in delivering each task or group of tasks and where we are good at it?



Industry Competency Matrix

- 9 foundation behaviours which broadly underpin the 39 SMTs
 - Personalise safety outcomes
 - Develop positive safety attitudes
 - Increase hazard/risk awareness
- Individual SMT descriptors, e.g.
 - Plan and deliver toolbox talks
 - Facilitate group/work team OH&S discussions.
 - Deliver company induction
- Each SMT has specific behaviours identified
- The SMTs can be grouped into categories.



Research Goals

- To develop an accurate, easily comprehensible and practical measurement tool that can:
 - Assess key tasks and/or behaviours that underlie 13 of the 39 SMTs in the Competency Matrix
 - Measure not only task effectiveness but also be able to measure individual's personal safety effectiveness. That is, each task is not only considered in isolation but also contributes elements to a broader assessment of behavioural competency or skill area.



SMT Description & Measure

Plan and deliver toolbox talks

- Behaviours & approaches underlying this activity
 - Encourages and gains participation, listens, and provides ample opportunities for input from all attendees.
 - Assign actions arising from meeting and allocates responsibilities.
 - Record toolbox relevant meeting discussion and awareness points and follow-up on required actions.



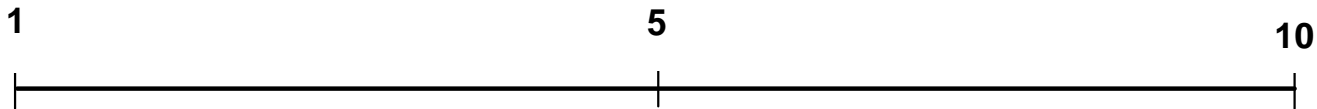
SMT Skill Requirements

- The skill areas or aptitudes required for each of these respective tasks are
 - Skill 1: Consultation & Facilitation
 - Skill 2: Delegation
 - Skill 3: Documentation & Writing



SEI Example

- Competency
 - Plan and deliver toolbox talks
- First task underlying this competency
 - Encourages and gains participation, listens, and provides ample opportunities for input from all attendees.
- A possible rating scale for this task?



Limited eye contact with audience, is closed and uninviting of questions and input, doesn't engage audience or provide opportunity for discussion. Isn't open to challenge or directive towards all audience members.

Presents information in an interesting and practical way, provides examples and maintains engagement of audience but is not open to feedback of challenge and is unwilling to enter into discussion

Actively engages audience and invites participation and feedback. IS well prepared and presents accurate and practical advice. Is open to challenge and invites feedback and discussion for resolution of issues

- The single score from this task can be combined with relevant scores from other tasks.



SEI Potential

- Each SMT can be taken in isolation and assessed. Ability to mix and match different sets of SMTs for different worksites.
- Each SMT can be weighted by a factor that reflects the relative importance of that task (or competency) in the overall assessment of performance.
- Behaviours both desirable and undesirable are detailed so standards are explicit. The tool potentially has broader application and ease of use and administration in the field.



Advantages to a SEI Measurement Approach

- Each SMT will consist of a number of measures/descriptors attached to individual activities sitting under competencies.
- As any of the SMTs from the list of 39 can be coupled together to assess any given work site (depending upon project, workplace, stage etc.) and these competencies can be weighted (depending upon relative importance) the resultant scores will reflect not only:
 - Task performance, but also
 - Ratings and rankings of skill areas or aptitude.



Research Scope & Team

- **Develop SEIs fo13 core SMTs**
- **18 months project duration**
- **Team consists of:**
 - **Dean Cipolla & Jim Pevitt (John Holland Group)**
 - **Herbert Biggs & Don Dingsdag (QUT)**
 - **Rod Houlston (Leighton Contractors)**
 - **Dean Bingham (Thiess)**
 - **Willi Harley (OFSC)**

