

## Knowledge and Risk



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## Overview

- Risk and knowledge management concepts
- Overview of Knowledge Management concepts
- Introduce Knowledge Management tools
- Demonstrate how Knowledge Management can be applied to a current issue



## So how are we doing ?

- 15 years of performance based legislation
- Codes of Practice
- Risk Management Standard AS 4360
- OHS Standards 4801 and 4804
- Quality Standards
- OHS Management Systems
- How are we going.....?



## Not so well it would seem

- The effectiveness of risk assessments is being increasingly questioned
- One million working days lost in 1996/97 due to work related injury (NOHSC)
- By comparison only 650,400 working days were lost due to industrial action in 1999 (ABS)

**It would seem that traditional approaches are not working and that many organisations, managers, OHS professionals and risk managers are not coping** (Covello 1986)



## The Changing Nature of Risk

- The rise of the risk society
- The nature of risk has changed
- The complexity of the workplace
- Performance Based legislation
- Leveraged finance
- New technology
- Are we coping?



## The need to Manage Knowledge

- The rise of the knowledge based economy and organisations has begun
- We need enhanced problem solving capacities, better sources of information, information technology, communications, and new team approaches to managing risks
- Knowledge and risk management techniques are converging



## But what is Knowledge ?

"The ability of people and organisations to understand and act effectively" (Despres and Chauvel, 2000).

"Knowledge is the whole body of learning and skills that individuals (not machines) use for solving problems" (Probst, Raub, Romhardt, 2000).



## Tacit vs Explicit

**Tacit knowledge** - refers to what resides in a persons mind and can include individual perception, experiences, rules of thumb and intuition.

**Explicit knowledge** - recorded information, documents, images, computer data, film clip, photographs.



## What is Knowledge Management

- A multi disciplined approach to managing data, information and knowledge.
- Systematic and explicit management of knowledge related activities, practices, programs and policies within the enterprise.

Knowledge Management is the "capturing, creating, distilling, sharing and using of knowledge" (Collison and Parcell, 2001).



## Why use Knowledge Management?

- Greater sharing of information (don't re-invent the wheel)
- Better quality hazard identification, risk assessment and control development
- More rigorous risk assessments
- better information (as an input) used in risk assessments
- Better controls (outputs) for the management of risks
- Team involvement and ownership
- Continual Improvement

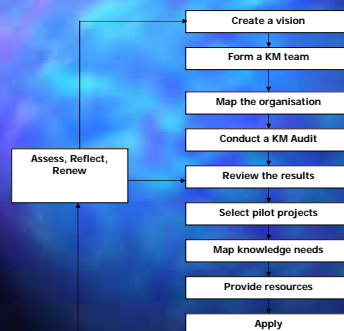


## Three key questions

- What do we already know?
- What do we need to know?
- How do we get from here to there?



## Developing a KM Strategy



## Mapping the Organisation

- What do you do now?
- Where do you do it?
- What are the main tasks?
- Map information both tacit and explicit
- Who are the stakeholders?
- What are you going to be doing in the future?



## What do we know?

- What do we know?
- Do we know what we need to know?
- Where is the knowledge?
- Where and how is it stored?
- Do we need to capture it?



## Auditing Your Current Status

- What are your main risks?
- What controls are in place?
- **Are they effective / adequate?**
- Information
- Resources
- Communications
- Audit of current risk register



## What do we need to know?

- What will the future hold?
- More of the same or greater change?
- A fast moving economy
- Globalisation
- Increasing risks
- More reliance on technology
- less employees?



## Finding Knowledge Gaps

- What do you know **vs** what do you need to know?
- Where is there poor performance?
- Where can we improve?
- What are the highest risks?
- Determine what knowledge will have to be created or acquired to manage those risks



## How do we get from here to there?

- Projects and Ideas
- Project teams
- Team based tools
- Web based tools
- Time and resources





## Projects and Ideas

- Workshop projects and project teams
- Develop OHS hazard and risk management projects
  - physical
  - behavioural
  - training
  - communication



## Team Based Tools

- After Action Reviews (AAR)
- Peer Assist
- Knowledge analysis of risk processes
- Benchmarking
- Risk blitz
- Knowledge Management Workshops
- Focus Groups
- Inter team briefings



## Web Based Tools

- Corporate Yellow Pages
- Knowledge Management Web Site
- Discussion forums
- Offers and requests for assistance
- On line file sharing
- Lessons learnt
- Case studies



## Time and Resources

- Commitment - to the process
- Support - for the projects and teams
- Time - to undertake projects
- Innovation - generate new ideas
- Resources - adequate and timely
- Training - for the champions and teams



## Emergency Management

- All mines have an emergency response plan
- How good is yours?
- Is it the best it can be?
- Do you know what resources you have or need?
- How do you use the available knowledge on and off site?



## Emergency Management

- Who knows what? - technical experts / information
- Who has relevant experience?
- Evidence, collection, storage, privilege issues
- Communications - regulatory and employee
- Reporting requirements
- Crisis Management Team - who, training, skills
- Management of Emergency Services - security / police / fire / ambulance / first aid
- Information Technology
- Business continuity / media management
- Debriefings / AAR's / War Room
- Where are the gaps in the plan?



## Emergency Management

- **Map** - current and potential future circumstances
- **Audit** - current knowledge and capacities
- **Identify gaps** - Review results of audit and mapping
- **Projects** - develop ideas to fill gaps
- **Team based tools**
- **Web based tools**
- **Review**



## Conclusion

- The mining industry has many challenges
- We need some new ideas, new approaches to respond to the changing nature of risk
- Knowledge Management may offer new ways of looking at old problems and new methods of managing risks



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