

Critical Risk Management



riskDELTA

PREVENTING SERIOUS
INJURIES AND FATAL
ACCIDENTS: IT'S POSSIBLE.

DELTA BRINGS RISK FACTORS AND HUMAN
FACTORS INTO ONE SYSTEM BRINGING YOUR
SAFETY SYSTEM UNDER CONTROL.



DELTA BRINGS A NEW APPROACH TO THE MANAGEMENT OF RISK IN YOUR BUSINESS:



Deep – the embedded risk culture and systemic causes

Elimination – combining engineering and human controls

Latent – identifying hidden and concealed exposures

Triggers – several failures that combine randomly to create a unique event

Accidents – outcomes that have serious or fatal consequences

In many organizations today, safety has hit a plateau of performance, with sudden incidences of very serious, sometimes fatal accidents. These are symptoms of a management system that lost control.

DELTA brings your safety system under control.

WHAT MAKES THE DELTA PROCESS DIFFERENT?

The DELTA process addresses two problems, or deficiencies, in traditional safety and risk management:

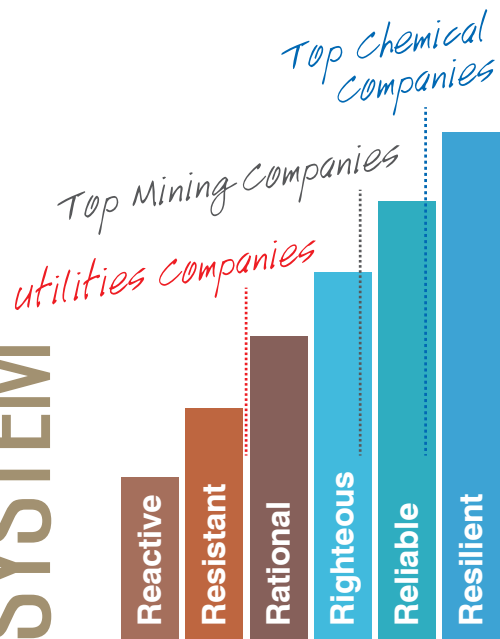
THE PROBLEM

Solving the “randomness problem” by approaching risk in a unique way – creating a ‘readiness to respond to risk’ by using random processes to combat randomness.

FOCUS

Focusing on the human factor, not by trying to eliminate the human operator, but by including it and strengthening it as the strongest link in the safety chain.

CRITICAL RISK SYSTEM



CONTROL THREATS AND HUMAN ERROR TO OPTIMIZE SAFE PRODUCTION.

SIF THINKING IS ON THE MARK, BUT WHAT DO YOU DO WITH THE RESULTS?

The recent thinking to analyze and focus on Significant Incidents and Fatalities is right on the mark. There is little doubt that managing the risk of significant and catastrophic events is different. However, there is more to it than looking at trends and focusing the organization to find similar patterns. Fortunately, and interestingly, the resource industry (in Australia) has been focused on a risk based approach for high potential hazards, and is making progress. The system known as Critical Risk Management (CRM) is well documented and publicly available within the ICM (International Council of Mining and Metals).

IS DATA ANALYSIS LOOKING AT TRENDS SUFFICIENT?

Latent triggers of accidents can lie deep and hidden within organizations processes, equipment, systems and practices for many years. And then the wrong set of random circumstances come together to create a catastrophe. Companies can reduce their risk of such events by employing the DELTA system developed by RISKmap, a Division of SAFEmap.

The DELTA acronym represents ‘Deep Elimination of Latent Triggers of Accidents’ and is comprised of two key processes:

- First, it uses the CRM process (above) as the so-called ‘defense’ mechanism, meaning that the organization proactively assures that a critical few controls most likely to prevent significant incidents are healthy and effective, as applied in the field.
- Secondly, it creatively uses an ‘Offense’ process (based on the ‘Simian Army’ process of Netflix) to creatively and dynamically challenge the defense system to give it life and renewal. The two processes combined creates a vibrant organization focused on critical risks, that expects incidents, and becomes resilient in its ability to respond to and manage significant risk.

WILL THE DELTA PROCESS WORK IN MY ORGANIZATION?

The more significant the risk, the more appropriate the process is to the organization. It is essential to keep the risk process as focused and lean as possible, especially when starting from the beginning.

The DELTA process has built-in continuous improvement loops which will improve the maturity of the process. Continuous improvement is based on the DELTA challenge process, incidents that occur, and data based feedback (Tornado charts) of control effectiveness gathered from the defense system.

How Do I Get Started?

Companies first install the DEFENSE side of DELTA and become comfortable with the key concepts of risk management. These include Critical Risk Identification, Risk Ownership, Critical Control identification and deployment, and Field Verification. Once the continuous improvement loop is established, then the OFFENSE side of DELTA can be deployed.

Do I Need Additional People?

All roles within both the OFFENSIVE and DEFENSIVE systems are assigned from within the existing organization. One of the strengths of the system is that it utilizes existing people, and quite simply focuses part of their time on Critical Risk. Most companies already have some of the processes in place, which become focused and attuned to the management of critical risks.

The DELTA process will allow organizations to increase their capacity to manage their biggest risks, to expect failure, and be able to respond when it happens.

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THE DEEP ELIMINATION OF LATENT TRIGGERS OF ACCIDENTS

CLIENTS WE WORK WITH:

GOLDCORP

BOEING

AngloAmerican

RioTinto

bhpbilliton

umicore

ANTOFAGASTA
MINERALS

INTERGEN

stanwell

PotashCorp
Helping Nature Provide



**CORRIE
PITZER**
CEO SAFEMAP
INTERNATIONAL



**EWAN
ALEXANDER**
COO RISKMAP
INTERNATIONAL



**STEVE
WOODWARD**
COO SAFEMAP
INTERNATIONAL



**ALEX
STEINHILBER**
SVP SAFEMAP
LATINOMERICA



**ERIC
RATSHIKHOPHA**
SVP SAFEMAP
AFRICA



**LINCOLN
ELDRIDGE**
SVP SAFEMAP
AUSTRALASIA



**PROFESSOR
SIDNEY DEKKER**
STRATEGIC
PARTNER



**KARL
ZANDER**
VP SAFEMAP
AFRICA



**MARK
PERGREM**
SENIOR
CONSULTANT



**DR. PAUL
DE KORTE**
SAFEMAP
EUROPE



**CLAUDIA
MARIN**
SENIOR
CONSULTANT



**DR. ROSEMARY
MURRAY**
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R&D MANAGER



**ROSE
BAKRI**
SAFEMAP
EUROPE



**MICHEL
POLITY**
VP SAFEMAP
BRAZIL



**DWAYNE
PERGREM**
SENIOR
CONSULTANT



**MICKI
MACLEAN**
CLIENT RELATIONS
MANAGER



**ZANÉLL
TEIS**
EXECUTIVE
ASSISTANT

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Safety is not our business, it is our passion