



UQR!SK

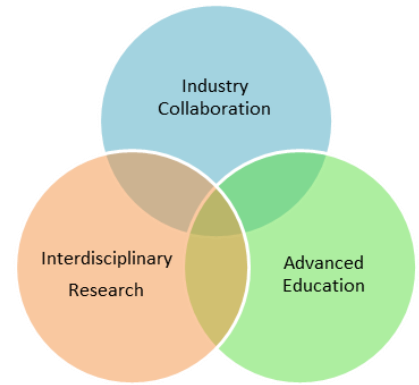
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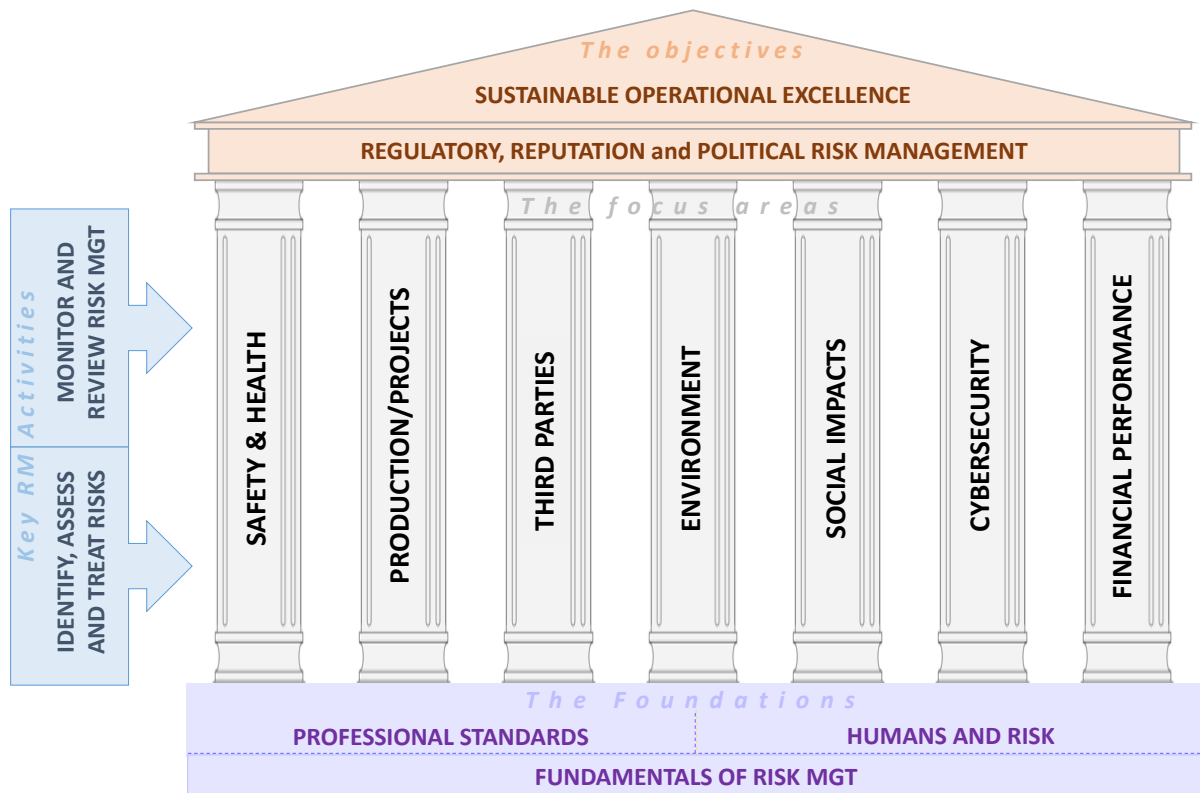
UQR!SK

Creating innovative, human-centred risk management approaches that help transform industry's ability to sustain leading-edge operations in a changing world.



UQ **R!SK** SCOPE

The **UQ R!SK** program of work focuses on discovering, implementing and teaching wholistic approaches to risk management that cover:



WHAT DOES UQ **R!SK** DO?

UQ R!SK specialises in developing and empirically testing innovative approaches to better identify and address current and future risks challenges that can impact operational competitiveness. We collaborate with companies, government and industry bodies and other researchers to deliver innovative, integrated, wholistic, and practical risk management initiatives that improve risk identification, assessment and treatment processes as well as risk-based intelligence, decision making, and communication processes.

WHY UQ RISK?

UQ RISK aims to advance risk management beyond traditional loss reduction mindsets to identify and optimise the range of upside and downside risks that can impact performance.



UQ RISK's PROJECT PARTNERS

UQ RISK focuses on collaborative projects aimed at delivering effective, practical and impactful solutions for industry. Project partners have come from:

- Industry bodies: mining and primary industries
- Major service contractors
- Manufacturing
- Mining
- Process industries
- Oil and Gas
- Technology developers
- Gaming industry

Entities that UQ RISK has performed work include ACARP, Downer EDI, Glencore, Minerals Council of Australia, NSW Resources Department, Peabody, Primary Industry Health and Safety Partnership, Rio Tinto, Sandvik, Yancoal.

Projects include delivering training programs, providing expert risk advice, facilitating critical control work, doing in-depth in-field performance assessments, and partnering on PhD projects.

UQ **RISK** FOCUS AREAS

	RISK MANAGEMENT <i>Better preventions</i>	RISK ACUITY <i>Improving efficacy</i>	RISK OPTIMISATION <i>Maximising value</i>	RISK EDUCATION <i>Building capability</i>
RESEARCH	Identifying ways to deliver improved human-system control of unwanted events and to enhance our ability to learn from events	Creating human factors and sociology methods to improve risk perception, appetite, communication and decision making processes	Developing practical risk-based techniques that help decision makers identify and optimise trade-offs between different business objectives	Identifying knowledge, skills, and competencies required and determining how best to inform and <u>learn</u> about risk?
PRACTICE	Applying evidence-based approaches to gain innovative, ground-truth insights into ways to improve risk management systems	Using scientific approaches to understand different risk perspectives and to develop effective communications that address different needs	Developing and applying methods that help decision makers identify and manage risks in ways that deliver and sustain excellent operations	Teaching the latest, leading edge approaches that address current and future risk challenges to students and industry professionals

UQ **RISK** EDUCATION PROGRAMS

UQ **RISK** provides a series of popular master classes each year and a wide range of tailored continuing professional development (CPD) courses and workshops including:

- Critical control identification and management
- Human-centred design
- Incident investigation
- Decision making and project performance
- Human factors
- Strategic systemic risk management.

UQ **RISK** also supports PhD and Masters programs often in collaboration with industry partners.

Current projects include:

- Development of data mining and intelligence approaches to improve operator decision making
- Next generation approach for managing Boeing Research and Technology risks
- Human Factors for energy management
- Development of incident investigation processes that promote more effective risk control
- Integrated Project Risk Management for Residential Recycled Water Schemes
- Social risk management in the Australian coal industry
- Integration of risk management and occupational health and safety (OHS) in assessing the implementation and acceptance of gold processing technology in artisanal mining
- The use of high fidelity dynamic process simulators to improve risk analyses
- Superior megaproject performance through timely intervention in Civil Engineering curricula
- Contractor risk management in industry: A SWOT analysis
- Evaluation of incident investigations in the Ghanaian Mining Industry to promote practices