

Michael Regan

Risky Business

A new approach to developing skills in decision-making under conditions of uncertainty.



Risky Business

Project management is a profession with many different applications such as constructing a high-rise building project, managing a sporting team on tour, undertaking house renovations or conducting a research project. The project manager's task is to deliver a project outcome that aligns with expectations.

Project managers are drawn from many disciplines and are often required to make spontaneous decisions in circumstances where information is incomplete, the resources necessary for dealing with the problem are unavailable, or timeliness is a pressing requirement.

Sound decision-making is a skill acquired with experience and that requires lots of on-the-job practice.

The task is greater when project managers are operating in a high-risk or uncertain environment in which events may unfold quickly, such as managing responses to natural disasters, particularly cyclones and earthquakes.

An incorrect decision may worsen the problem, endanger people, incur cost and time overruns and if the problem could have been better managed, may adversely affect firm reputation.

The challenge for a Project Management educator is to realistically simulate the chain of events and decision points that require project managers to make often difficult decisions in a classroom environment.

The Project Idea

In order to address this challenge a virtual scenario "Risky Business" was collaboratively developed by the Faculty of Society and Design and the Office of Learning and Teaching.

This digital learning tool was designed to assess the decision making skills of students enrolled in Bond University's Master of Project Management program.

Risky Business was prototyped in Microsoft PowerPoint, developed in Articulate Storyline and delivered to students through Bond's iLearn learning management system.

High quality multimedia assets including licensed stock images, sound effects and music bring the virtual scenario to life.

The Scenario

Risky Business is set in scenic Mt Ontake in Japan, a country located in one of the most active seismic regions on earth.

"Risky Business provides an opportunity for students to practice complex disaster management in a real world environment with a number of options and outcomes."

Students are given the role of a newly appointed manager of emergency services with the Department of Environment for the Japanese island of Honshu.

The manager is responsible for planning, resourcing, and managing rescue operations in the event of natural disaster at Mt Ontake, a shrine and popular tourist attraction in summer.

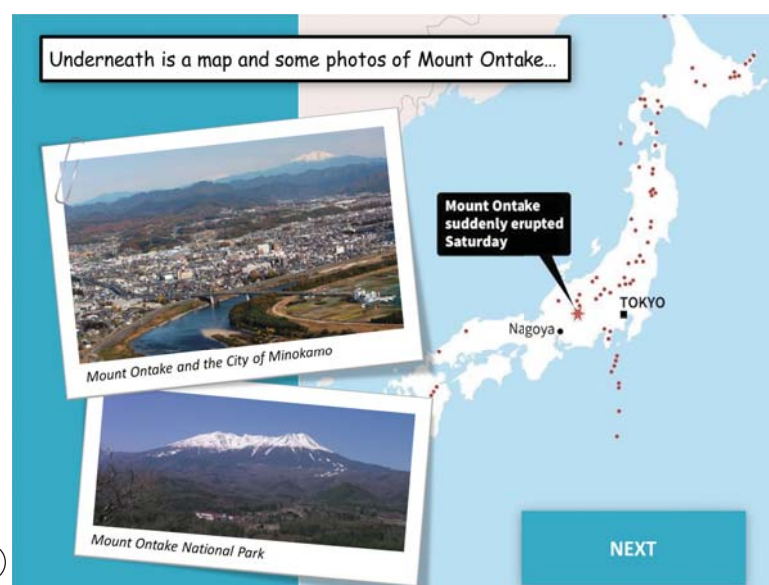
With no earthquakes ever recorded at Mt Ontake the project management task does not appear too hard. However, 12 months after appointment to the role, an earthquake actually occurred in 2014 with loss of life.

This event provides an ideal setting for decision-making under conditions of uncertainty in which neither the likelihood nor the severity of an earthquake can be predicted.

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An information kit helps students with the preparation of a disaster management plan, details of the Mt Ontake scenario and history, and the resources necessary to manage evacuation and rescue operations.

The Asian setting requires the manager to work within the cultural values of Japan's institutions and respect the hierarchial and consensual approach that is often used for decision-making in government.



GOV AGENCY SAVES THE DAY



Mount Ontake Yesterday morning a 10am Mount Ontake once again erupted sending kilometers of dust and debris into the air. The eruption could have been another disaster, however and amazing response by the Ministry of the Environment has saved the day.

Mr Fujimoto who runs the Business operations at the Ministry of the Environment said in a statement that he was ecstatic at the professionalism exhibited by his team.

"This could have been another disaster, but our team is strong and we rose to this challenge" he said. "I think some celebrations will be in order today".

The team worked through the night ensuring that everyone escaped the mountain. Mount Ontake hiking trail will remain off limits for the next week whilst specialists assess the damage.

Other hiking trails in the region are not affected.

A positive outcome for students or who excel at decision making.

Student Feedback

In semester 152, student Scott Schultz took an interest in the predictability of seismic activity after completing a workshop which featured the Risky Business scenario.

He earned a high distinction for his efforts to identify correlations in historical data for earth tremors and earthquakes in three towns in Borneo over a 20 year period.

While the research failed to draw a direct association, it did establish a positive but weak association between the likelihood and severity of follow-up events in two of the cities, suggesting further research using a larger sample and study period with a number of cities on seismic fault lines in the Asia Pacific may attract future research interest. Thank you Risky Business for inspiring Scott. ■

Michael teaches Risk Management in the Faculty of Society and Design at Bond University.

He has extensive commercial experience in corporate advisory and finance in Australia and overseas.

Formerly Director of the Australian Centre for Public Infrastructure at the University of Melbourne, Michael's responsibilities include supervision of the postgraduate research and coursework programs in infrastructure and large project procurement including relationship contracting and public private partnerships.

Assessing Student Decisions

There are nine decisions points in Risky Business each of which carries consequences for the rescue and recovery work depending on the number of casualties recorded.

Decisions carry points designed to measure the manager's planning skills, the allocation of resources, the selection of staff and advisers best for the task, and the effectiveness of strategies to minimise casualties.

The scoring system rewards critical analysis, consistency and good judgement. With repeated attempts, students learn to properly scope the planning, resourcing and rescue tasks, identify practical solutions to problems and benefit from the experience.

Cumulative points provide a guide to comparative performance against "best practice" benchmarks established in semester 152. For semester 162, Risky Business will account for up to 10% of assessment marks with the Risk Management subject.

In the classroom, Risky Business forms part of a 90 minute workshop on decision-making under uncertainty in which a number of earthquake case studies are examined to demonstrate the difficulty of making decisions when we can't rely on the past to assist us anticipate the future. Students generally engage with the topic because it is both challenging and contemporary.

I've had a look through your risk management plan, but I'm not 100% convinced about your approach.

What are the main objectives of the plan?

A fast Rescue and Evacuation response

To minimise Casualties

To bring Medical Personnel to the site

Students justify the reasoning behind their decisions