

About InterDynamics

InterDynamics is a leading provider of decision support and risk management methodologies and software. Servicing an international market, our extensive client base spans the spectrum of shift work and safety-critical industries, including transportation, mining, logistics, healthcare and manufacturing.

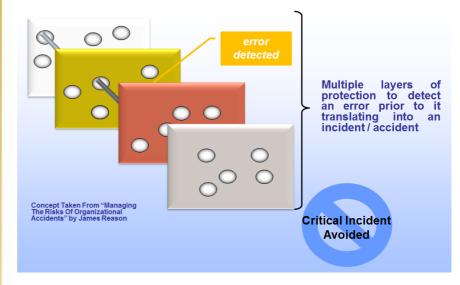
Fatigue Risk Management Solutions: Helping businesses identify, assess and manage the risks associated with work-related fatigue at both operational and management levels.

Decision Support Solutions:Helping organisations plan and schedule their business operations more effectively.

Our collaborative approach to customer service also helps us stand out from the crowd. Our experienced team can call on a wealth of problem-solving expertise to offer advice that is both practical and implementable.

Please contact us to find out more on this or other FRMS support offerings

Tel: +61 7 3229 8300 enquire@interdynamics.com An effective Fatigue Risk Management System (**FRMS**) is one that is able to avoid an intolerable event by detecting a fatigue-related error prior to it translating into an incident or accident.



A model FRMS can be summarised into 4 key areas of influence as part of addressing fatigue-related risks:

1. Promoting and fostering a safety culture that recognises fatigue as a safety concern.

Organisations and individuals that recognise fatigue as a safety concern are more likely to respond appropriately as fatigue-related risks escalate. A culture of concern can be stimulated by adequate fatigue education and training that focuses on managing fatigue-related risks for the organisation as well as the individual.

Adequate staff engagement and consultation is required to truly foster a cohesive and effective FRMS. Sufficient protections and treatments can only be developed through an approach which draws on the experience and feedback of personnel.



Comprehensive FRMS support:

- InterDynamics' Managing
 Fatique Survey provides a
 practical mechanism for staff
 engagement and consultation,
 as well as ongoing improvement
 of organisational fatigue
 management. A gauge of
 changes in company culture with
 respect to fatigue management
 can also be achieved through
 multiple uses of the
 questionnaire over time.
- InterDynamics' Managing
 Fatique Training Workshop
 has been successfully utilised
 across the aviation, construction,
 energy, rail and marine
 industries, equipping participants
 with general awareness
 information on managing fatigue,
 managing the social and lifestyle
 impacts of working shift work, as
 well as providing personally
 relevant and practical techniques
 for managing individual fatigue.
- InterDynamics' FRMS Management Workshop provides the perfect starting point for practical discussion and engagement with the management team on the issues of fatigue and fatigue management. Coupled with results from a Managing Fatigue Survey and a current state analysis, the organisation's Fatigue Risk Profile can be reviewed, with action plans developed by the management team at this workshop.
- InterDynamics can customise FAID to suit an organisation's specific requirements, or carry out <u>FAID Hours of Work</u> <u>Diagnostics on behalf of an</u> <u>organisation.</u>

InterDynamics can work cooperatively with an organisation to develop an investigative tool to determine the likelihood of fatigue as a contributing factor to an incident / accident.

2. Implementing protective measures to avoid unacceptable fatiguetriggered events.

A risk assessment that takes into account hazards in the context of fatigue is required to ensure adequate protective measures are in place. The objective is to not only minimise the likelihood of fatigue but also to safe-guard personnel when fatigue is present. InterDynamics' Fatigue Hazard Analysis Risk Assessment Workshop facilitates this form of risk assessment by assessing the likelihood and consequence of fatigue-triggered events, and determining associated risk improvement actions for a particular job type / role.

3. Ensuring the fatigue exposure of working hours are not at an unacceptable level.

Compliance to hours of work rules may not be sufficient to ensure safety with regards to fatigue. Many regulators and industry bodies recognise that within an FRMS, adequate management of fatigue-related risks associated with working hours includes more than working hour limits. Circadian influencers and biological limits to recovery are also important. Consideration of these factors can most effectively and efficiently be supported by the strategic use of a biomathematical model such as <u>FAID</u>®.

FAID takes into account the time of day and duration of work / break periods, the accumulating effect of fatigue, and the biological limits on recovery sleep. All these factors are difficult to include in hours of work rules without these rules being very complex and prescriptive, thereby restricting viable business operations. FAID is a business decision support tool that can be used to limit hours of work-related fatigue exposure, while still providing operational flexibility.

FAID can be used to:

- Understand an organisation's current hours of work fatigue exposure level;
- Review changes in hours of work fatigue exposure trends over time;
- Plan rosters within agreed fatigue exposure levels;
- Allocate overtime, shift swaps, any roster changes, etc. to within agreed fatigue exposure levels; and
- Audit actual hours of work to ensure compliance within agreed fatigue exposure levels, and consider business process improvements for noncompliant hours.
- 4. Proactively investigating fatigue as a possible contributing factor to incidents and accidents.

Understanding <u>when fatigue has been a contributing factor</u> to an incident or accident is imperative to minimising a reoccurrence related to fatigue, and ensuring the effectiveness of an organisation's FRMS. This investigative process allows an organisation to identify any gaps in its FRMS and develop appropriate corrective actions.