LFI-Engage: Research funded by Shell, Energy Institute, & Centrica

This industry-academia research project was led by the Caledonian Academy at Glasgow Caledonian University in 2012-2013. Industry partners included the UK Energy Institute, Shell and Centrica. The research was conducted across industrial sites at the Shell Scotford Upgrader, Canada, and Centrica Killingholme Plant, UK. The aim of the project was to develop an easy-to-use set of tools that could be used by people in companies to analyse and improve their learning from incident (LFI) processes and practices– the LFI-Engage Toolkit. The LFI-Engage Toolkit was designed to be used by frontline managers, safety officers and employees to guide the implementation of LFI initiatives across industrial sites. The toolkit forms a part of the 'Hearts & Minds' tools available from the Energy Institute. (For more information, visit *http://www. energyinst.org/heartsandminds/*)

Starting Point
Companies have invested heavily in implementing approaches to LFI. However, the return on investment is not optimal. There are three main problems that prevent companies learning from incidents:

- *Problem 1: LFI activities do not focus on how people use information about incidents;*
- *Problem 2: Key opportunities for learning throughout the incident lifecycle are missed;*
- *Problem 3: People are given limited scope to make sense of incident information and relate it to their own work.*

Methodology
The LFI-Engage project addressed the aforementioned problems by developing the LFI-Engage Toolkit in collaboration with workers at the industry sites. The first phase of the project included development and two

rounds of validation of the Learning from Incidents Questionnaire (LFIQ). The LFIQ was answered by a total of N=1096 respondents across Shell and Centrica. The second phase of the project included organising two focus group workshops with the employees at the sites in order to collaboratively develop a series of tools that would help companies improve their LFI processes and practices.

Figure 1: LFI-Engage Toolkit overview

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