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Title	Systems Engineering Knowledge Capture and Dissemination in a Distributed Complex Engineering Environment
Abstract	<p>Systems Engineering Knowledge Capture and Dissemination in a Distributed Complex Engineering Environment</p> <p>In a fast-paced engineering company, important "how-to" high-level system design and integration lessons-learned are often not passed on between projects. The corporate intellectual capital is consequently poorly captured, understood and disseminated. Many previous software-led attempts at corporate Knowledge Management (KM) rely on data entry and maintenance by the same engineering experts who are already too busy to share their knowledge, and consequently the sought-for improvements in knowledge dissemination efficiency are not achieved.</p> <p>The proposed EngD programme is aimed at a more focussed, Systems Engineering-led approach to the problem. This includes:</p> <ul style="list-style-type: none"> * Analysis of the engineering environment and stakeholders * Identification of the critical factors in design and integration corporate knowledge needing preservation and dissemination * Investigation of data mining techniques applied to current complex, distributed file storage and configuration management data repositories for semi-automated extraction of KM sources * Use of Intelligent Agents in searching for critical KM data from candidate sources; training of Agents across multiple engineering Domains * Investigation of usability and other Human Factors in take-up of an online KM repository by senior engineering designers * Quantitative comparisons of knowledge transfer efficiency pre- and post- KM repository introduction; and across a range of distributed engineering team environments * Publication of results in both commercially

	confidential (to sponsor) and open domains (e.g. EPSRC)
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