

Title: The application of Knowledge Management practices in the procurement and construction of cleanroom projects

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Purpose:

This thesis stemmed from the researcher's experience in managing cleanroom projects with one of Ireland's largest construction companies. The lack of knowledge sharing practices in this division was a concern. It was expected that the findings and recommendations would be used by the company to improve their skills in delivering cleanroom projects and to assist in implementing better procedures.

Methodology:

A comprehensive Literature Review was undertaken but the lack of available and specific reference sources to cleanroom projects, particularly in Ireland, was identified. The methodology used in the sourcing of primary data was 'action research' in that it combined a number of semi-structured interviews, a focus group and a questionnaire to evaluate the focus group. The participants were senior managers who were actively managing major cleanroom projects for the company.

Findings:

The early appointment of a cleanroom contractor was found to be crucial. Similar quality, design and commissioning / validation issues were found to reinforce the recommendations for knowledge management structures to be implemented. Value Engineering was found to be of critical importance. Other recommendations included the need to train staff in commissioning and in particular validation practices, the increased use of factory-made cleanroom wall panels.

Keywords:

Knowledge Management, Construction, Cleanrooms, Focus Group, Procurement.

Classification: Knowledge Management (KM)