

## Early Requirement Engineering for Design of Learner Centric Dynamic LMS

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**Abstract :** We present a modelling framework that supports the engineering of early requirements specifications for design of learner centric dynamic Learning Management System. The framework is based on i\* modelling tool and Means End Analysis, that adopts primitive concepts for modelling early requirements (such as actor, goal, and strategic dependency). We show how pedagogical and computational requirements for designing a learner centric Learning Management system can be adapted for the automatic early requirement engineering specifications. Finally, we presented a model on a Learner Quanta based adaptive Courseware. Our early requirement analysis shows that how means end analysis reveals gaps and inconsistencies in early requirements specifications that are by no means trivial to discover without the help of formal analysis tool.

**Keywords :** adaptive courseware, early requirement engineering, means end analysis, organizational modelling, requirement modelling

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