## **ABSTRACT**

Knowledge Management can help a Learning Organization for transformation of knowledge from all parts of the company, including the Pusat Dokumentasi dan Informasi Ilmiah – Lembaga Ilmu Pengetahuan Indonesia (PDII – LIPI) as a learning organization that wants to build a Knowledge Management System (KMS), which focus on Knowledge Repository (Knowledge Repository) for the internal LIPI company.

Knowledge Repository developed by using iterative incremental methods. In the inception phase consists of the business modeling activities, requirements identification, analysis and design. In the elaboration phase consists of activities analysis and design and implementation. In the construction phase consists of the implementation, and testing. In the transition phase consists of the implementation and final testing. Each activities in each phase has different purpose related with Knowledge Repository development iteatively.

Results of this research is the creation of a Knowledge Repository application with 12 functions for the role admin, 13 functions for role moderator and 12 function for the role kontributor. Then to support all existing functions we have designed 12 tables in the database that supports all the functionality of the application.

For further development, the system can be developed beautify the look of content and forum, so users can feel more comfortable when using the feature content and forums. Then the function that provides a list of contributors and moderators to facilitate the search for the username used during the addition of the forum members.

Keywords: knowledge management system, knowledge repository, java web application, incremental iterative methods, spring framework