

## ABSTRAK

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Program Studi : Ilmu Komputer  
Judul : Pengembangan Model *Knowledge Management System* pada  
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Tugas akhir ini membahas suatu pengembangan model untuk suatu *knowledge management system* dengan domain riset, yaitu pada Badan Pengkajian dan Penerapan Teknologi. Model berupa prototipe berbasis *web*. Pengembangan ini bertujuan dalam *sharing* data, informasi, dan pengetahuan serta komunikasi yang terjadi pada lembaga tersebut sehingga diharapkan dapat membantu pertukaran informasi yang terkadang terputus. Hal ini dikarenakan belum ada suatu *repository* khusus yang menampung dan mengelola *human capital* (sebagai dasar utama pengetahuan yang dimiliki lembaga riset) di BPPT.

Prototipe *web* ini menggunakan teknologi *semantic web* dengan penerapan ontologi. Pemilihan teknologi tersebut berdasarkan kajian terhadap pengembangan *knowledge management system* di beberapa lembaga riset dunia. Lalu, analisis *project flow* di BPPT serta analisis berdasarkan *contingency factor*. Kemudian, pengembangan model bernama BPPT Intranet ini dibuat dengan menggunakan *open source*, yaitu portalCore yang telah digunakan pula dalam salah satu proyek SWAD-E, yaitu SWED serta *blog* Wordpress sebagai media untuk membantu *sharing* komunikasi (bersifat *independent*).

Selain itu, tugas akhir ini menampilkan beberapa *screenshot* tampilan disain prototipe BPPT Intranet serta rincian uji fungsionalitas pada sistem tersebut. Model *knowledge management system* pada BPPT Intranet ini adalah *knowledge sharing system*. Hal ini dibuktikan melalui analisis *contingency factor* yang disesuaikan pula dengan *project flow* dan tujuan penelitian.

Kata kunci:

*Knowledge management system, semantic web, ontologi, BPPT*

## ABSTRACT

Name : Pita Larasati Fauziah Nur  
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The focus on this thesis is developing a model for knowledge management system in research domain, Badan Pengkajian dan Penerapan Teknologi. This model is a web prototype. The purpose of developing this knowledge management system are sharing data, information, knowledge, communication that happen at this organization so that the system can improve information exchange in research area. In BPPT itself, they do not have yet some repository which can accomodate and manage human capital (as main fundamental of knowledge owned by research area).

This web prototype is using semantic web technology with ontology application. The chosen of the technology is based on study from previous works about development of knowledge management system in several research organizations in the world. Then, continue with some analysis for BPPT's project flow and analysis based on contingency factors. After that, knowledge management system model (known as BPPT Intranet) is developed using an open source named portalCore that has been used in one of SWAD-E projects, called SWED and also Wordpress blog as a media for helping knowledge workers to communicate each other.

Moreover, this thesis displays some screenshot from BPPT Intranet's prototype design and details about functional test that have been applied on the system. The appropriate knowledge management system model at BPPT Intranet is knowledge sharing system. That is proofed by analysis based on contingency factor and also according to BPPT's project flow and purpose of the research itself.

Key words:

Knowledge management system, semantic web, ontology, BPPT