



## BADAN PENGAWAS TENAGA NUKLIR

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### CHALLENGES TO IMPLEMENTATION OF KNOWLEDGE MANAGEMENT ON DRAFTING OF NUCLEAR REGULATION IN INDONESIA

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#### ABSTRACT

This paper describes the implementation of knowledge management on drafting of nuclear regulation. Implementation of knowledge management prevents breaking of knowledge and information between senior and junior regulation drafter. Formulating of nuclear regulation can be improved by knowledge management.

Keywords: *Knowledge Management, Drafting, Regulation.*

#### Introduction

- Indonesian Government enacted, on 10 April 1997, Act No. 10 year 1997 on Nuclear Energy.
- The regulatory authority, Badan Pengawas Tenaga Nuklir (BAPETEN), or Nuclear Energy Regulatory Agency (NERA).

#### The Goal of the control of any nuclear energy application is:

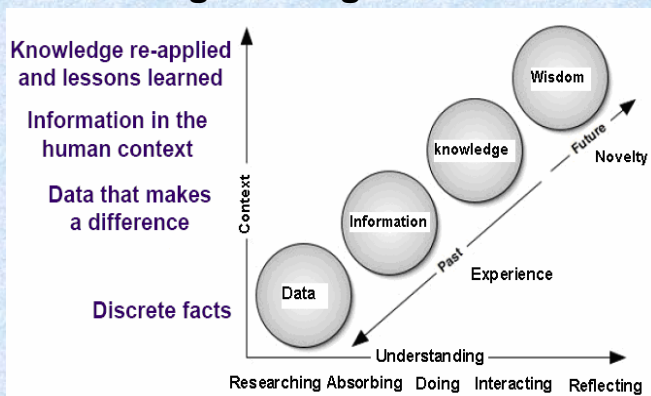
- Assure the welfare, the security and the peace of people;
- Assure the safety and the health of workers and public, and the environmental protection;
- Maintain the legal order in implementing the use of nuclear energy;
- Increase the legal awareness of nuclear energy user to develop a safety culture in nuclear field;
- Prevent the diversion of the purpose of the nuclear material utilization; and
- Assure for maintaining and increasing the worker discipline on the implementation of nuclear energy utilization.

## Knowledge Management

The process of collecting, organizing, storing and exploiting the information and data that is held within an organization, particularly information known to individuals (tacit knowledge), as well as the general store of known information and data (explicit knowledge)

### Component of Knowledge management

- Data
- Information
- Knowledge
- Wisdom

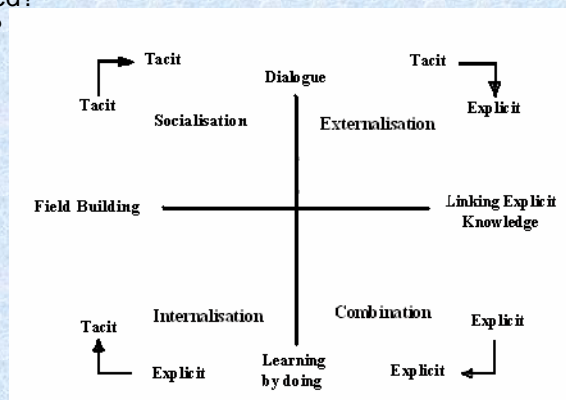


## Transforming Data to Knowledge

The evolution of data to knowledge is a multi-step process.

An organization must first understand the data it holds:

- Where are the data?
- What is their quality (e.g., how reliable, how accurate)?
- How are they managed?
- What is their content?



## **Knowledge Management on Drafting Regulation**

### **Implementation knowledge management on Regulation Development:**

- including making regulation list,
- evaluating content, classifying according to regulation hierarchy,
- integrating of regulation which is one with other,
- knowledge sharing.

### **Step of Development of Nuclear Regulation is:**

- Preparation.
- Discussion of format and Content
- Formulating Regulation

### **Knowledge of regulation drafting in preparation phase:**

- Know-How: How to draft regulation, by team discussing, public participating and stakeholder involving.
- Know-what: What does arranged in regulation.
- Know-why: why that regulation has to be made.
- Know-who: who are going to prepare, involve with and formulate regulation.

### **Socialization mode**

- Junior and senior regulation drafters need sharing experience about know-how, know-what, know-why, know who regulation drafting. The process of sharing experience can be conducted in some informal meeting. Informal meetings can be held inside or outside the office.

### **Externalisation Mode**

- All senior regulation drafters or expert present their experience on making of regulation to all team formulating nuclear regulation in formal forum such as some kind meeting. This system prevents breaking of knowledge and information between senior and junior regulation drafter.

### **Socialization and externalization modes**

- Discussing among Junior and senior drafters, inviting expert on regulation drafting to represent the way of connecting mode of socialization and externalization.

### **Knowledge of regulation drafting in Discussion phase:**

- Know-How: How to make a quick right a document in the meeting.
- Know-what: What will be discussed and decided.
- Know-why: Why are drafter comment, request and input accepted or refused.
- Know-who: Who will be an expert in the meeting.

### **Internalization mode**

**Understanding of knowledge drafter from the result of discussion.**

### **Externalisation**

**Producing Nuclear Energy Regulation specified by BAPETEN  
Chairman or President Represent.**

**The difficulties in transferring knowledge to implement knowledge management in a nuclear regulation development context can include:**

- Lack of leadership commitment;
- Lack of understanding of an processes;
- Cultural barriers;
- Lack of processes for data sharing and re-use;
- Scope of content;
- Lack of appropriate technology and skills;
- Language, for example Language difference between foreign expert and regulation drafter or lack of foreign Language of drafter;
- Generational age difference which far between senior and junior;
- Incentives;
- Faulty information;
- Lack of trust;
- Information overload and information isolation.

**Conclusions**

The knowledge management is used in many fields of activity implying that the concept is of broad applicability and relevance. One of the applying of management of knowledge is making of nuclear regulation. Knowledge management prevents breaking of knowledge and information between senior and junior regulation drafter. Formulating nuclear regulation can be improved by knowledge management.