Design REA Ontology for Knowledge Sharing In IT Project

A thesis submitted to the Graduate School in partial fulfillment of the requirements for the degree Master of Science (Information Technology)

Universiti Utara Malaysia

By

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ABSTRACT

The Resources-Events-Agents (REA) model is a semantic data model for the development and integration of conceptual schemas of accounting information systems. This paper is to change the look of REA modeling and to test the REA as a conceptual design, this study is to model the knowledge sharing mechanism in KPT system of SerindIT Company using REA component, also to use the Protégé OWL software as a tool to validate the REA ontology on the selected case which is Knowledge sharing mechanism adopted in KPT system.

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Table 4.1 REA Matrix

LIST OF ABBREVIATIONS

IT Information Technology

REA Resource, Event, and Agent

ERP Enterprise Resource Planning

EDI Electronic Data Interchange

XML Extensible Markup Language

B2B Business to Business

APS Advanced Planning and Scheduling Systems

EAI Enterprise Application Integration Software

KM Knowledge Management

ICT Information and Communication Technology

OWL Ontology Web Language

ISD Information Systems Development

PBOs Project Based Organizations

KMS Knowledge Management Systems

SIS School Information System

ER Entity Relationship

UML Unified Modeling Language

CHAPTER 1

INTRODUCTION

1.0 Introduction

Knowledge is one of the important factors, since their relationship to be limited to persons, and as each person having knowledge by its own, the comprehensive knowledge is fed by professional experiences, experimental field, conducting surveys and practical life exercises.

Knowledge is something in your mind, so you cannot control it in any traditional sense, it can be split in two parts "knowing that" which means facts and information, and "knowing how" which means the ability to do something (trans4mind.com).

Before continue with this research we must differentiate between data, information, and knowledge; generally accepted view sees data as simple facts that become information as data is combined into meaningful structures, which then become knowledge as meaningful information is put into a context and when it can be used to make predictions (Godbout & Alain, 1999).

In any project there is a team or group of teams and all have to work together to finish specific jobs in a specific time and every team member have his own interested knowledge, and this knowledge of each member may cause a problem because either the team members have not enough knowledge or they can not express and explain the knowledge that they have.

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