AN ONTOLOGY DEVELOPMENT ARCHITECTURE FOR STRATEGIC THREAT INTELLIGENCE SOUTH CHINA SEA CONFLICT

MUHAMMAD FAKHRUL SYAZWAN BIN KAMARUDIN

A project reportsubmitted in fulfilment of the
requirements for the award of the degree of
Master of Science (Information Security)

School of Computing
Faculty of Engineering
Universiti Teknologi Malaysia

JANUARY 2020

ACKNOWLEDGEMENT

In preparing this thesis, I was in contact with many people, researchers, academicians, and practitioners. They have contributed towards my understanding and thoughts. In particular, I wish to express my sincere appreciation to my main thesis supervisor, Dr Siti Hajar Othman, for encouragement, guidance, critics and friendship. She also gives guidance, advices and motivation. Without her continued support and interest, this thesis would not have been the same as presented here.

I am also indebted to Universiti Teknologi Malaysia (UTM) for funding my MSc study. Librarians at UTM also deserve special thanks for their assistance in supplying the relevant literatures.

My fellow postgraduate student should also be recognised for their support. My sincere appreciation also extends to all my colleagues and others who have provided assistance at various occasions. Their views and tips are useful indeed. Unfortunately, it is not possible to list all of them in this limited space. I am grateful to all my family member.

ABSTRACT

The purpose of this study is to analyse the conflict of South China Sea area and develop an ontology architecture South China Sea conflict. The South China Sea is a marginal sea that is part of the Pacific Ocean, covering an area of about 3,500,000 square kilometers (1,400,000 sq mi) from the Karimata and Malacca Straits to the Taiwan Strait. Under its seabed are believed to be huge oil and gas reserves. In addition, several countries are subject to competing claims of sovereignty for the sea and its mostly uninhabited islands. The variety of names used for the islands and the sea also reflect these claims. The disputes within the South China Sea can possibly touch off an increasingly broad territorial conflagration. Various claimants fight about issues of sovereignty not defenseless to simple lawful goals. More regrettable, the stakes are high which is the Sea is one of the primary courses for overall worldwide market, and various claimants trust that the Sea covers up abundant oil saves notwithstanding its copious fishing stocks. Other than that, the disputes are additionally discover by wild patriotism, as each inquirer joins symbolic motivation toward the South China Sea's islands that deep exceed their aim material wealth. Furthermore, Ontology is the study of being's philosophy. More broadly, its studies concepts that are directly related to becoming, existence, reality in particular, as well as the basic categories of being and their relationships. Traditionally listed as part of the major branch of philosophy known as metaphysics, ontology frequently deals with questions about what entities exist or can be said to exist and how these entities can be grouped, linked within a hierarchy, and subdivided by similarities and differences about South China Sea conflicts.

ABSTRAK

Tujuan kajian ini adalah untuk mengkaji konflik kawasan Laut China Selatan dan membangunkan konflik ontologi konflik Laut China Selatan. Laut China Selatan adalah laut marginal yang merupakan sebahagian daripada Lautan Pasifik, yang meliputi kawasan sekitar 3,500,000 kilometer persegi (1,400,000 meter persegi) dari Selat Karimata dan Selat Melaka ke Selat Taiwan. Di bawah dasar lautnya dipercayai rizab minyak dan gas yang besar. Di samping itu, beberapa negara tertakluk kepada tuntutan kedaulatan untuk laut dan pulau-pulau yang kebanyakannya tidak berpenghuni. Pelbagai nama yang digunakan untuk pulau-pulau dan laut juga mencerminkan tuntutan-tuntutan ini. Perselisihan di Laut China Selatan mungkin dapat menyentuh kebakaran wilayah yang semakin luas. Pelbagai pihak menentang isu-isu kedaulatan yang tidak bertentangan dengan matlamat yang sah. Lebih disesalkan, kepentingannya adalah tinggi dimana Laut adalah salah satu daripada kursus utama untuk keseluruhan pasaran di seluruh dunia, dan pelbagai pihak menuntut bahawa Laut merangkumi minyak yang melimpah walau banyak stok memancingnya. Selain itu, perselisihan itu juga ditemui oleh patriotisme liar, kerana setiap penyelidik menyertai motivasi simbolik ke arah kepulauan Laut China Selatan yang mendalam melampaui kekayaan bahan sasaran mereka. Tambahan pula, Ontologi adalah kajian falsafah. Lebih luas, konsep kajiannya yang berkaitan secara langsung dengan menjadi, kewujudan, realiti khususnya, serta kategori asas untuk menjadi dan hubungan mereka. Secara tradisinya disenaraikan sebagai sebahagian daripada cabang falsafah utama yang dikenali sebagai metafizik, ontologi sering berurusan dengan soalan-soalan mengenai entiti apa yang wujud atau boleh dikatakan wujud dan bagaimana entiti-entiti ini dapat dikumpulkan, dikaitkan dalam hirarki, dan dibahagikan dengan persamaan dan perbezaan di konflik Laut China Selatan.

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LIST OF ABBREVIATIONS

Capt	-	Captain
EEZ	-	Exclusive Economic Zone
GFO	-	General Formal Ontology
Left Col	-	Leftenan Colonel
Left Kdr	-	Leftenan Commander
OAD	-	Ontology Design Tool
OAT	-	Ontology Analysis Tool
OntoSCSC	-	Ontology South China Sea Confict
SCS	-	South China Sea
UTM	-	Universiti Teknologi Malaysia

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CHAPTER 1

INTRODUCTION

1.1 Introduction

The South China Sea is a basic business gateway for a huge part of the world's vendor shipping. In addition, that sea is likewise a significant economic and strategic sub-locale of the Indo-Pacific. Because of its huge, the site cause a few complex regional disputes which make many conflict and pressure inside the region and all through the Indo-Pacific. China's growing nearness in the South China Sea is currently a big source of raising tension dominant to a circling of crisis with the United States and the littoral conditions of east Asia (Morton, 2016).

The phrase “ontology” come from philosophy theory and present presents the idea of the things, which occur in real life. Besides that, it’s giving idea that directly identify with being, reality, existence, substance, cause, action and phenomenon. The effort “How to describe, design and realize ontologies?” is of ultimate importance. Solving this undertaking is a subject of informatics. Ontology is characterized in informatics as try for thorough and definite formalization of a given subject matter by means of a reasonable plan. This plan normally comprises of progressive information structures, containing separate articles, the relations among these, and the tenets explicit for this specific region. It is connected as a type of image of information about this present reality or portions of it. The world comprises of explicit items, which can be assembled in dynamic classes on the premise of shared qualities. Formally, a philosophy comprises of terms, sorted out in a scientific classification, their definitions and properties, just as the related axioms and guidelines.

1.2 Problem Background

A limited outcropping of sand every so often breaks the tremendous region of the South China Sea. Those islands are moderate, even miniature, however they structure the center of a furious regional debate among six main claimants state which is Vietnam, Malaysia, China, Philippines, Taiwan, and Brunei. Those claimants state additionally conflict about their privilege and obligations focus on the near to waters similarly just as the seabed underneath. Therefore, to advance this, few states, including the United States, charge "privilege of shipping" action.

The disputes within the South China Sea can possibly touch off an increasingly broad territorial conflagration. Various claimants fight about issues of sovereignty not defenseless to simple lawful goals. More regrettable, the stakes are high which is the Sea is one of the primary courses for overall worldwide market, and various claimants trust that the Sea covers up abundant oil saves notwithstanding its copious fishing stocks. Other than that, the disputes are additionally discover by wild patriotism, as each inquirer joins symbolic motivation toward the South China Sea's islands that deep exceed their aim material wealth. Additionally, the question is likewise tinged by uncommon power administrative issues as United States and China begin to bump each other for control of the worldwide solicitation. It is an argument about district and power over sea zones, and the Paracels and the Spratlys where two island group asserted in entire or partially by various nations.

Many international legal scholars also agreed that the arguments of China on the grounds of historical claims are baseless. China's stance on its UNCLOS- and history-based marine statements was unclear, particularly with its nine dash-line map. Nevertheless, China has explicitly stated that it claims the territorial waters of every island and of all its own exclusive economic zone and mainland shelf. An important problem with the claim is that it does not distinguish the geographical features that are regarded under UNCLOS as "islands," or "rocks".

Throughout the most recent year, the South China Sea's disputes has overwhelmed features, and they give off an impression of being sure to keep on producing crisp national security issues. As of now, as well, they have brought up an assortment of legitimate issues that will notify the future development regarding both the issues and the territory. Furthermore, competing countries have wrangled over region in the South China Sea for quite a long time, yet pressure has relentlessly expanded lately.

1.3 Problem Statement

Territorial disputes in the South China Sea were a major topic, but its joint statement, different conflict area problems can be divided into further subtypes, such as conflict with lateral issues area, total issues area and issues area with fewer faces. Sharing a common understanding of knowledge systems between conflict or issues is one of the most important goals of ontological growth and one of the driving forces behind the recent growth in ontology research was the reuse of domain knowledge.

Furthermore, an initial version of the ontology can evaluate and debug it by using it in applications or problem-solving methods or by discussing it with experts in the field, or both. Besides, revise the ontology will become process of iterative design and implementation will likely continue through the entire lifecycle of the ontology. Separating the domain knowledge from Further common usage of ontology is operational knowledge and field information can be interpreted when declarative words are necessary. Real-world scenarios for each of these conflict types need to find the issues area covered, or the number of objects required covering the issues and others.

1.4 Research Question

Below shown several questions which are related to this research project. The question to support the goal of this research are including:

i. What is the initial process or phase to start research project development of ontology South China Sea conflict?

ii. How to achieve the expected result to show as representation of knowledge?

iii. How to evaluate the final performance an ontology development of South China Sea conflict?

1.5 Aim of Research

This research will make refers to a branch of metaphysics that aims to dissect the underlying structure of reality. An ontology is carried out the element of issues within the region Asia Pacific which is Malaysia and Philippines.

1.6 Objectives of Research

This research has several objectives, among others:

i. To identify all prerequisite for a development of an Ontology Architecture Framework for South China Sea Conflict.

ii. To develop the Ontology Architecture Framework for South China Sea Conflict namely (OntoSCSC).

iii. To validate and evaluate the developed ontology by using ontology validation techniques which is expert review.

1.7 Scope of Research

This research will be limited including:

i. Focus on several issues within South China Sea region which is Malaysia and Philippines.

ii. The issues must have related within South China Sea region to create the presentation of knowledge.

iii. The sources or data come from public news agency such as ABC-CBN News, South China Morning Post, The Star, NavyTimes, The Straits Times, CNBC, Express.co.uk, People's Daily and others to create the presentation of knowledge.

1.8 Significant Research

This research is useful for researcher who actively searching their study if they want to come out the result of ontology in different area. By develop the ontology, future research be able to understand the presentation of knowledge about identify with being, reality, existence, substance, cause, action and phenomenon. Therefore, this research will help the community as guideline to develop an ontology to kickoff.

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