



AIUB DSpace Publication Details

Title	An Ontology based Framework for E-Government Regulatory Requirements Compliance		
Author(s) Name	M. Mahmudul Hasan, , Dimosthenis Anagnostopoulos, George Kousiouris, Teta Stamati, Peri Loucopoulos, Mara Nikolaidou		
Contact Email(s)	m.hasan@aiub.edu		
Published Journal Name	International Journal of E-Services and Mobile Applications (IJESMA)		
Type of Publication	Journal		
Volume	11	Issue	2
Publisher	IGI Global		
Publication Date	April, 2019		
ISSN	1941-627X		
DOI	https://doi.org/10.4018/IJESMA.2019040102		
URL	https://www.igi-global.com/article/an-ontology-based-framework-for-e-government-regulatory-requirements-compliance/225076		
Other Related Info.	Page 22 - 42		





AIUB DSpace Publication Details

Abstract

E-Government has gained an enormous amount of attention by researchers and practitioners interested in digitizing the public sector through enacting policies and regulations. Compliance of regulatory requirements from these policies and regulations is an important requirement in e-Government service development projects. However, the concepts of regulatory requirements compliance are still scattered around in developing e-Government services. This article presents an e-Government regulatory requirement compliance (eGRRC) ontology framework that describes the interrelated concepts of regulatory requirements compliance in e-Government service development. The proposed eGRRC ontology is then applied on the recently introduced general data protection regulation (GDPR) for personal data processing across European Union (EU) countries, in order to indicate how the concepts can be mapped to the defined entities. The contribution of this article is on introducing a framework for researchers and practitioners to explore regulatory requirements compliance and their interrelationships in e-Government service development. Furthermore, e-Government legislation can accordingly be modeled using on the eGRRC ontology, that serves as basis for queries to infer knowledge about the source of regulatory requirements, objectives of the regulation, various types of requirements, the services affected, orientation of regulatory rules in requirements, priorities, and amendments of regulations in e-Government service development.

