

Introduction

Today, enormous amount of information generated and shared every day, this according to the technological tools available. Anyone with a computer or even a phone - any digital device with the ability to save data, creates and gathers quantities of various types of information: text files, music, videos and more. In addition, most people use the internet to share this information to others. In such a world, where the amount of data is enormous, tools to handle the data are required. The tools need to manage intelligently the data and organize it in a way that it can be retrieved in an efficient and simple way in order to produce benefit from it. Today, when every digital device can connect to the Internet, the task of managing personal knowledge or access to specific knowledge is not enough, and the ability to access all the data from anywhere and anytime is necessary.

The Knowledge Management domain and the cloud environment which gathering momentum in recent years, can be used as a solid basis to establish an infrastructure in order to manage all existing knowledge, which includes tools for organizing and filtering the vast information on order to derive new knowledge from it. The Knowledge Management domain is a longstanding domain, compared with the cloud environment which is a newer one. This work describes a model which combines these two domains in order to establish an environment for Knowledge Management using the new cloud technologies.

The first part of the work presents a literature review on Knowledge Management and cloud computing domains, and a literature review on a new domain - Knowledge Management in a cloud environment. This part includes long detailed research information on this domains including articles, researches, and existing applications.

The second part of the work, describes a model which combines the Knowledge Management and cloud computing domains into an environment called "Knowledge Management in a cloud environment". The model describes a generic environment based on various capabilities of cloud technologies, and its goal is to catalog world's information in its various forms, and allows retrieval of this information in a simple and effective way in order to use the information and derive new knowledge.

The model describes the main principles of such an environment and the use of various tools of cloud technology in order to implement the various capabilities of the environment, the lead actors which create the environment and use it, and the various links between them. In addition, this part includes diagrams which describe the environment graphically, the various classes representing the different objects, and a description of the various relationships between them.