

Chapter 12

The New Paradigms of the Internet Combined with Energy Management: New Models and Tools to Aid the Integration of Data

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ABSTRACT

Earlier this century there was a crisis among the major Web companies. Berners-Lee started the concept of semantics for the Web. The large academic centers began to create tools to support the dissemination and research associated with their work; the collaborative networks emerged. Taking advantage of this new concept and seeking to attract new users to the Web, social networks began to emerge with a single purpose: to enable new users to customize data. Startups represent this new concept of the Web of the 21st century. In this sense, cloud computing, as well as energy efficiency should represent the biggest advances of this decade, enabling the growth of new market niches. This, along with the need for integration and mobility, is the object of study in this chapter.

INTRODUCTION

There is no more space for virtual environments without discussion, debate rages as an inclusion of groups and individuals. This new paradigm is the new challenge of the digital world. This new concept has been developed since the 2000s. Earlier, only the Semantic Web, however, this

paradigm evolved into a closer concept of reality in the society. In everything or almost everything is passive debate, without interaction. This new model of knowledge or knowledge management is supported by rules. These rules need to follow certain models that consider not only the result, but the construction of the dialogue.

Accordingly since 2009 I have been working in a management model that incorporates knowledge from the description of information

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to the end result. This model aims to manage the entire lifecycle of information. It was divided into three major items. The first, the formal description of a model of knowledge management, which was based on this model can work on the treatment of the data produced. The amount of data produced every day is a challenge to any mechanism of knowledge management, mainly due to the fact that much of this material is low technical quality.

Thus, the current models of knowledge management should manifest the quality of information, one of the elements of the Semantic Web. However, to choose what represents a quality material amidst dozens of other content associated with the same theme is a complex task. Accordingly formal models help building a more affordable model construction and elaboration of reputation mechanisms. This model includes elements that lists the degree of credibility of the source of information, covering concepts related to society, such as reputation.

The second temporal model includes the description of the data, this is the time it takes to translate information from the time when this was posted to the result of the search. In this case it is necessary to consider that many other data will be similar and that one should attempt to list in order of importance and the subject person or entity. The third model includes the description of reuse that gave the battery ecological principle, awarded by Siemens. This model allows to work with the management of data, power and energy management platform based on the consumption of each type of data from processing to the share, thus helping to build a model of battery smarter and therefore more durable.

The three models are described below. The first of them is described in the architecture. This architecture was developed over two years in which several tests in order to produce a model of reuse systems were made. An architecture three entities which later proven effective for

the production of a three cells feed system, one graphene.

The second model is described in a temporal, with mathematical elements in high-level language. The third is in the process patent and thus there is only a symbolic description of its functionality.

Behind all these concepts need of union in which language communication is no barrier or production. The increasing international competition, while creating new opportunities, opening markets that were previously distant, whether due to culture or language. The location becomes the lowest barrier in this new digital world.

BACKGROUND

This section presents the key concepts behind the changes present in new applications, and communication systems on the web.

Globalization has given a new model for the business, the language does not represent a significant barrier, the website follows this growth and modernization rather than just a production environment to aggregate multimedia text, allowing a new market niche and diversified in full transformation. The competition requires business entities such strategies conquests, and customizing a technique facilitating this process.

In this new paradigm of society, where many options and services are provided (Reategui & Lorenzatti, 2005, p.1) for the sake of convenience or momentum needed to keep up the fast pace of everyday life, the recommendation systems emerge as a mean to restrict these options to a small number and therefore, easily accepted (Reategui & Lorenzatti 2005, p.2). In a typical system people provide information as inputs, the system adds value and directs individuals.

The e-commerce is currently a major focus for the use of recommender systems (Reategui & Lorenzatti, 2005, p.3), employing different

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