Zohra Bellahsène
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LNCS 2425

Object-Oriented Information Systems

8th International Conference, OOIS 2002
Montpellier, France, September 2002
Proceedings

Springer

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Cataloging-in-Publication Data applied for

Die Deutsche Bibliothek - CIP-Einheitsaufnahme

Object oriented information systems : 8th international conference ;
proceedings / OOIS 2002, Montpellier, France, September 2 - 5, 2002 /
Zohra Bellahsène ... (ed.). - Berlin ; Heidelberg ; New York ; Barcelona ;
Hong Kong ; London ; Milan ; Paris ; Tokyo : Springer, 2002
(Lecture notes in computer science ; Vol. 2425)
ISBN 3-540-44087-9

CR Subject Classification (1998): H.2, H.3, H.4, H.5, I.2, D.2, D.4, K.4.4, J.1

ISSN 0302-9743
ISBN 3-540-44087-9 Springer-Verlag Berlin Heidelberg New York

Springer-Verlag Berlin Heidelberg New York
a member of BertelsmannSpringer Science+Business Media GmbH

http://www.springer.de

Typesetting: Camera-ready by author, data conversion by DA-TeX Gerd Blumenstein
Printed on acid-free paper SPIN: 10873853 06/3142 5 4 3 2 1 0

Lecture Notes in Computer Science 2425
Edited by G. Goos, J. Hartmanis, and J. van Leeuwen

Preface

The OOIS series of conferences has provided a forum for the presentation and exchange of academic research and industrial experiences within the field of information systems, based on object-oriented technology.

The 8th International Conference on OOIS was held in the University of Montpellier from 2nd to 5th September 2002. The conference focused on the design, maintenance and implementation of web-based information systems. The first day consisted of preconference workshops. The workshop themes included the specialization/generalization hierarchy, reuse, optimization in web-based information systems, and model-driven software development.

The main conference program also included four invited papers, namely "Corporate Semantic Webs" by Dr. Rose Dieng, INRIA, France, "A Framework for Defining E-business Models" by Prof. Yves Pigneur, University of Lausanne, Switzerland, "GRID in E-business" by Pierre Sablonière, IBM, France, and "The Latest Development on Cognitive Informatics" by Dr. Yingxu Wang, University of Calgary, Canada.

The conference attracted 116 papers from more than 20 countries and the program committee accepted 34 regular papers and 17 short papers. The selected papers included the following themes:

- advanced object-information systems,
- web-based information systems,
- knowledge management in object information systems,
- CORBA,
- e-business,
- software metrics,
- object databases.

We would like to thank the members of the program committee and all the other referees who gave up their valuable time to review the papers and helped in putting together an exciting program. We would also like to thank the invited speakers, authors and other individuals who helped, without whom this conference would not have been possible. Finally, our thanks go out to the local organizing committee and all the institutions and organizations that provided financial support.

June 2002

Colette Rolland
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Corporate Semantic Webs

Rose Dieng

INRIA, France

The next generation of the Web will be the semantic Web where semantic contents of the Web resources will be interpretable not only by human but also by machine. One popular approach for Semantic Web consists of describing this semantic contents through metadata. Knowledge Management is one of the key progress factors inorganizations. It can rely on explicit and persistent materialization of knowledge of dispersed groups of people in the organization, so as to improve the activities of the organization. When the organization knowledge is distributed among several experts and documents, an Intranet inside the organization and Web technologies can be a privileged means for acquisition, modelling, management of this distributed knowledge. One promising approach relies on the analogy between the resources constituting a corporate memory and the resources accessible through the Web. A corporate memory can thus be materialised in a "corporate semantic Web" made up of resources (e.g. documents or experts), ontologies and semantic annotations on these resources by using the conceptualvocabulary of the ontologies. I shall present a survey of present research useful for building suchcorporate semantic webs.

Z. Bellahsène, D. Patel, and C. Rolland (Eds.): OOIS 2002, LNCS 2425, p. 1, 2002.

A Framework for Defining E-business Models

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Nowadays new business models are constantly emerging in electronic commerce and can become a major stake in the e-business game. It is even possible to patent them in some countries. Understanding them and helping to design them are important issues.

We propose a framework or ontology for defining business models. Our e-business model ontology outlines what value a company offers to which customer segments. It describes the architecture of the firm and its network of partners for creating, marketing and delivering value and relationship capital, in order to generate profitable and sustainable revenue streams.

We design this ontology based on an extensive literature review on business model and on enterprise ontology. By merging the conceptually rich business model approach with the more rigorous ontological approach and by applying it to e-business, we achieve an appropriate foundation for tools that would allow the understanding, sharing and communication, change, measuring and simulation of e-business models.

Our e-Business Model Ontology is the conceptualization and formalization into elements, relationships, vocabulary and semantics of the essential objects in the e-business model domain. The ontology is structured into several levels of decomposition with increasing depth and complexity. The first level of decomposition of our ontology contains the four main pillars of a business model, which are the products and services a firm offers, the relationship it maintains with its customers, the infrastructure necessary in order to provide this and finally, the financials, which are the expression of business success or failure (see figure 1).

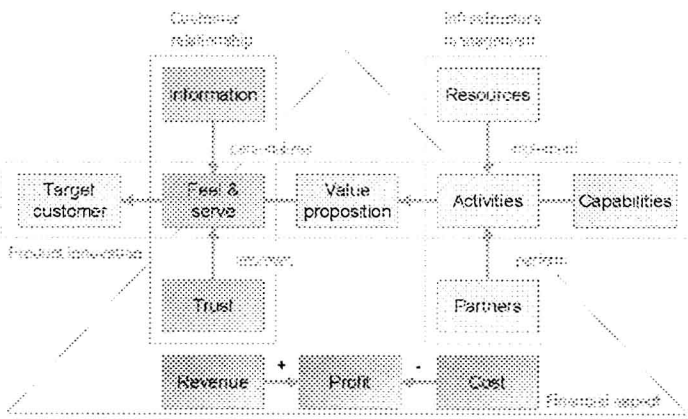

Fig. 1. The main components of the Business Model Ontology

Z. Bellahsène, D. Patel, and C. Rolland (Eds.): OOIS 2002, LNCS 2425, pp. 2-3, 2002.

The **product** component of the e-business model framework describes the *value proposition* a firm wants to offer to a specific *target customer segment*. To deliver this value, the firm has to possess a certain set of in-house and/or outsourced *capabilities*.

ICT offer a range of opportunities to create new and exploit existing **customer** relationships to *feel and serve for* customers and develop an enduring relationship with them. In order to improve the customers experience in doing business, the firm has to gather and exploit *customer information*. More then ever before, the focus has to be on a positive customer relationship which will result in customer *trust* and *loyalty*.

In the product component of the e-business model framework we have described the capabilities which are needed in order to create and deliver the value proposition. The **infrastructure** component describes the value system configuration that is necessary to deliver the value proposition; in other words, the relationship between in-house *resources and assets,* the *activity and process configuration* of the business the firm is operating in and the firms *partner network.*

Of course, the **financial** perspective also belongs to our e-business model framework. Financial aspects can be understood as *costs* required to get the infrastructure to create value and as *revenues* of sold value. The difference between revenues and costs determines the *profitability* of a company.

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