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A Min Tjoa
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Preface

The Third International Conference on E-commerce and Web Technology (EC-Web 2002) was held in conjunction with the DEXA 02 in Aix-en-Provence, France. This conference, first held in Greenwich, United Kingdom in 2000, is now in its third year and is very well established. As in the two previous years, it served as a forum bringing together researchers from academia and commercial developers from industry to discuss the current state of the art in E-commerce and web technology. Inspirations and new ideas emerged from intensive discussions during formal sessions and social events.

Keynote addresses, research presentations, and discussions during the conference helped to further develop the exchange of ideas among the researchers, developers, and practitioners who attended.

The conference attracted more than 100 submissions and each paper was reviewed by at least three program committee members. The program committee selected 40 papers for presentation and publication, a task which was not easy due to the high quality of the submitted papers.

We would like to express our thanks to our colleagues who helped to put together the technical program: the program committee members and external reviewers for their timely and rigorous reviews of the papers, and the organizing committee for their help in the administrative work and support. We owe special thanks to Gabriela Wagner and Maria Schweikert for always being available when their helping hand was needed.

Finally, we would like to thank all the authors who submitted papers, authors who presented papers, and the participants who together made this conference an intellectually stimulating event through their active contributions.

We had a successful conference and hope that you enjoyed the hospitality of Aix-en-Provence.

September 2002

A Min Tjoa (TU Wien, Austria)
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and University of South Australia)

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Enabling Virtual Enterprises: A Case for Multi-disciplinary Research

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Abstract: The paper begins by defining different kinds of virtual enterprises and the kinds of support needed to make them sustainable. The paper identifies three requirements must be satisfied. These are technology that supports interaction across distance, a favorable organizational culture and the desire to share knowledge. All must be present to result in sustainable virtual organizations. Thus participants in such organizations must be willing to share knowledge, be encouraged to do so by their work environment and have suitable services provided by technologies for this purpose. The paper concludes with some examples of research questions that need to be addressed.

1 Introduction

Virtual organization is a term that is frequently used by often not clearly defined. Too many this simply means working across distance. However, a more generic definition extends this to include the possibility of transient members that make up virtual communities. Furthermore any such definition must recognize the importance of social aspects of managing relationships [13] including criteria of developing trust and shared goals. Knowledge is another enabler. New knowledge is continually needed to develop improved products and services [14, 5] and the way business is done. Virtual organizations that provide such knowledge are more likely to be sustainable. In summary a successful virtual organization must somehow combine the three dimensions shown in Figure 1. This requires technologies that allow community relationships to evolve in ways that allow community members to gain benefit through the sharing and creation of knowledge.

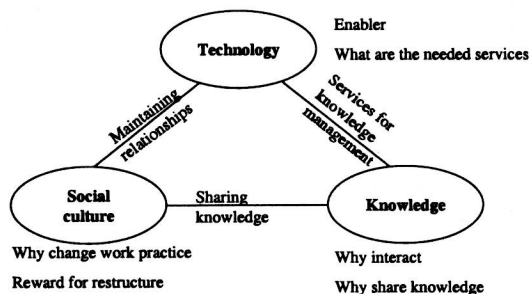


Fig. 1. The major Dimensions

2 Community and Team Building

Virtual community means different things to different people. Sometimes people simply using the same repository like common file repository are termed as a community. Communities have been defined more specifically by Carrol (1998) and Mynatt (1998). The more specific ways include shared goals and multiple interaction styles. These can depend on community characteristics such as those shown in Figure 2. These are:

The length of relationship between participating members,
 The degree of separation ranging from loosely to strongly coupled,
 The degree of focus, that is, whether there is a specific objective to be met by the team.

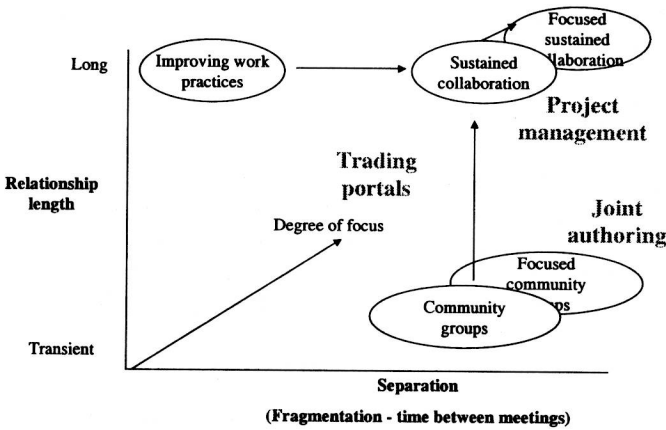


Fig. 2. Evolving organizations

Some examples in Figure 2 include trading portals, which are partially transient, joint authoring, which is more focused but often more transient and project management [2], which tends to extend over time. One distinguishing characteristic here can be community governance [10]. The governance on transient and widely separated community groups is usually minimal. In contrast governance in more focused groups is formalized, usually through the creation of roles with defined responsibilities and greater requirement placed on trust. The community of practice can include a variety of roles. In more elaborate environments, there can be owners, experts, novices or apprentices as well as a variety of users. Many writers also see shared terminologies [1, 4] to be important especially where interaction is intense. Research has also indicated interesting differences in the way new knowledge evolves. Results [17] indicate that loosely coupled teams often search finding than strongly coupled teams or that loose terminology can reduce collaboration in multi-disciplinary teams [4].