The IADIS International Conference e-Commerce 2005 was held in Porto, Portugal, December 15-17.

The communication and information technologies (ICTs) are playing the central role in making the continuous changes happen in the world. There are very few events in the world today that are not dominated, or at least influenced, by ICTs. E-business or e-commerce is one of the wonderful and value creating products of Internet revolution. It has created a promising market in the cyberspace providing equal opportunity to all to take part in this new business paradigm. After some initial hype and myth it is now an effective commercial hot spot.

Due to continued interest in e-commerce, we decided to run an international conference dedicated to it in 2004. This was our second international conference on e-commerce.

The main goal of this International Conference was the gathering of researchers, practitioners, students and anyone who works or studies in the field of e-business/e-commerce and related disciplines.

The topics for this Conference included the following thirty-six areas:
- Development of e-Business
- e-Business Applications
- Barriers to e-Business
- Business-oriented e-Commerce
- Cases in e-Commerce
- Consumer-oriented e-Commerce
- Cryptography for enabling e-Commerce
- e-Commerce in developing countries
- Commerce Software
- Commerce Strategy & Implementation
- e-Communities
- e-Logistics
- e-Government
- e-Procurement
- e-Services
- Economics of e-Commerce
- EDI and the Internet
- Global e-Commerce
- Infrastructure for e-Commerce
- Internet payment systems
- Knowledge Management
- Managing Innovation
- Marketing on the Web
- Mobile Commerce
- Multimedia and Web casting on the Web
- Organisational and Managerial Issues
- Other e-Commerce Models and Applications
- Retailing in e-Commerce (e-Tailing)
- Social Issues for e-Commerce
- Supply Chain Management & e-Fulfilment
- Technical issues for e-Commerce
- The future of e-commerce
- Web advertising and Web Publishing
- The future of e-Commerce technologies
- The Regulatory Environment of e-Commerce
- and Trust & Security for e-Commerce.

The IADIS e-Commerce 2005 Conference had about 128 submissions from more than 32 countries. Each submission had been anonymously reviewed by at least two independent reviewers, to ensure the final high standard of the accepted submissions. The final result was the approval of 38 full papers, which meant that the acceptance rate was below 30%. A few more papers have been accepted as short papers and posters. Best papers were selected for publishing as extended versions in the IADIS International Journal on WWW/Internet (IJWI).

The Conference, besides the presentation of full papers, short papers, (the program was divided in fourteen parallel paper sessions) and posters presentations also included two keynotes presentations and one tutorial.

Keynotes Presentations:

**TEN TRENDS THAT WILL RESHAPE E-COMMERCE IN THE NEXT FIVE YEARS**
by Professor Sandeep Krishnamurthy, University of Washington, USA
Abstract:

Amazon.co.jp now allows Japanese consumers to walk into a store, scan a UPC code into their cell phone and access the company's page for that product. Customers can easily compare prices and if they like what they see, they can place an order with Amazon.co.jp instantly. The product is delivered to the consumer's doorstep - most likely with zero shipping cost. This simple example shows us how important E-Commerce has become in our daily lives. It seems like we do everything online nowadays. We shop. We sell. We trade. We communicate. We interact. We socialize. We consume content. Companies such as Amazon, eBay, Google, Yahoo and NTT DoCoMo are household names. Exciting new applications continue to sprout. In this talk, I will highlight ten important trends that will reshape how B2C and B2B E-Commerce works in the next five years. These trends will challenge us while enabling us to build a stronger online future at the same time.

ICT USE IN COMPANIES: PROMISE OR HASSLE? by Professor Petra Schubert, University of Applied Sciences Basel (UAS Basel), Switzerland

Abstract:

The keynote speech will look into the ICT use of companies with the aim of assessing e-commerce readiness of European players. The presentation reports on a decade of experience in research projects with industry partners. The presentation is structured into three main parts: results from a recent study on ICT use, experiences from current e-business practice, and an outlook into the future potentials of the Internet.

E-commerce applications need to be integrated with existing business software. The increasing volume of data that is being exchanged electronically forces companies to integrate their historical IT landscape – inside the company as well as with business partners. Whereas many companies are still struggling with internal integration (EAI) the use of e-commerce makes it necessary to look over the boundaries of one single company into the topic of B2B-integration. In order to gain insight into the current situation of business software, the presentation will start with a recent management survey about the importance of ICT in Swiss small and medium-sized enterprises. The results include the current use of business software modules, the assessment of the potential of ICT use, the attitude of employees and management towards ICT, as well as the current and future investments and spending.

Interviews with e-business managers showed that there are different factors that influence the way a company approaches the integration of e-commerce solutions. There are no ready-made solutions available on the market. Customer requirements are in the centre of attention. Most e-business projects aim at improving business processes by electronically linking business partners. The right IT partner is the key to a successful project and to the long-term success of an e-business solution in general. Scalability is a basic requirement in most of the projects.

The presentation concludes with the search for the ingredients of the next Internet killer application. The presentation draws on the ideas of Moore, Metcalfe and Coase for the discussion of mobile devices and applications, digital signatures, PKI, and payment solutions.

Conference Tutorial:

PRIVACY TECHNOLOGIES AND APPLICATIONS ON ELECTRONIC MARKETS by Sören Preibusch, German Institute for Economic Research, Germany

Abstract:

Users’ perceptions of a service provider’s privacy principles constitute a major barrier on Electronic Markets. They lead to poor conversion rates in the business perspective and a loss of social welfare due to
missed transactions in the economics perspective. This tutorial addresses both academia and industry and presents privacy issues in current Electronic Commerce applications along with technologies to overcome them.

In a first part, the ethical and legal bases of privacy are portrayed, with a focus on the legislation in the European Union and the recommendations of the OECD concerning electronic services. The social dimension is underlined as inappropriate data processing principles might lead to discrimination of social groups.

In a second part, current Privacy Enhancing Technologies (PETs) are summarized, facing Privacy Invasive Technologies (PITs); secure data mining techniques are confronted with data inference problems. Special attention is paid to Privacy Negotiation Techniques as they can conciliate users’ and service providers’ conflicting preferences in the privacy-personalization trade-off. Approaches to code (P3P, APPEL and EPAL) and to communicate (suitable site design, contextualized presentation) privacy policies are examined theoretically. They are endorsed by experimental evidence and case studies from A9.com and Amazon.com. Holistic privacy protection all along the value chain requires verifiable compliance of privacy promises towards customers and their realization in backend processes. A framework for secure integration of third parties data analysis providers will be presented. It is shown how business metrics can be calculated in a privacy compliant way.

Two emerging fields will be covered in the third part: first, Ubiquitous Computing is a forthcoming threat for privacy. Pervasive technologies such as RFID allow tracking users’ actions and behaviours. Second, multichannel retailing, combining traditional stores and electronic retailing, gives rise to new potential privacy infringements, such as by linking offline and online identities. Game theoretic and information economical considerations will conclude the tutorial along with recommendations for users and practitioners.

The Best Papers were:

MANAGING CRITICAL SUCCESS FACTORS IN A B2B SETTING by Lena Aggestam and Eva Söderström, University of Skövde, Sweden

Abstract:

When information systems (IS) are developed and implemented, in any context, a number of success factors determine whether or not the effort will succeed. Attention to success factors helps to avoid some costly mistakes, and speeds up the way change is managed. This paper is focused on how to manage critical success factors (CSF) in organisations involved in standards-based Business-to-Business (B2B), with a focus on organizational CSFs. An existing CSF framework in IS planning is applied theoretically to a B2B setting. Activities in a B2B standards implementation model are compared and matched against the framework. Results show that the framework is suitable for planning B2B implementations, essentially for strategic planning. Future work will consist of further detailing and empirical validation in order to develop practical guidelines for how the framework can be used in planning for B2B standards implementation.

MOVING FROM PRODUCT-BASED BUSINESS TO ONLINE SERVICE BUSINESS by Aki Lassila, Helsinki University of Technology, Finland

Abstract:

The purpose of this paper is to study how a software product company can expand its business with the Software as a Service (SaaS) model. The differences between the product and service business are considerable and the change of focus from one to the other is not easily done. For example, the scale economies, which are associated with product business, are not easily achieved in service business. However, the SaaS business model has many benefits to offer to both SaaS customers and providers. SaaS services e.g. enable customers to focus on their core competencies, provide easier access to technical expertise, and offer economical access to valuable software applications at anytime and from anywhere. To providers, SaaS offers e.g. lowered production and distribution costs, more predictable cash flows, and shortened sales cycle. In this research study we examine how the SaaS model can be implemented by a software company and conduct a case study on F-Secure and its Personal Express
security service. By successfully solving the risks associated with the SaaS model and by fulfilling the customers’ demands of customization and at the same time benefiting from economies of scale, scope, and aggregation, F-Secure has leveraged its domain area expertise with its SaaS offering; F-Secure has expanded its operations in a number of countries and increased its customer base both in B2C and SME markets profitably with the help of its partners.

**PRIVACY-PRESERVING PHYSICAL DELIVERY IN ELECTRONIC COMMERCE** by Esma Aïmeu, Gilles Brassard and Flavien Serge Mani Onana, Université de Montréal, Canada

Abstract:

Privacy in Electronic Commerce transactions is the subject of ever increasing research. However, many challenges remain to be overcome. For example, let us consider a customer, Sir Bob, who buys anonymously a product over the Internet. Since he must receive delivery, how could his anonymity be maintained? When dealing with digital products, several solutions have been proposed. But if Sir Bob has bought a physical product, then it might seem that he must give an address for delivery. This would obviously threaten his privacy. Until now, while dealing with privacy in e-commerce, the privacy of physical product delivery has not been considered seriously. Instead, the conventional wisdom (which sometimes even appears in print) is that nothing can be done. In this paper, we introduce Anonymous Delivery Centres (ADCs) to complete the anonymity of the buying process on the Internet that we had initiated in our earlier work on Blind Electronic Commerce. These centres enable Sir Bob to pick up the physical product he has bought online without revealing his identity to the merchant.

**WHAT CONSTITUTES THE ‘ASSIST’ IN E-ASSISTANTS: THE CUSTOMER VIEWPOINT** by Kathy Keeling, Susan Beatty and Peter McGoldrick, Manchester Business School, UK

Abstract:

Customer relationship building is difficult to achieve in online situations where interaction is limited to keyboard and mouse clicks. For online customers, the presence of an Embodied Conversational Agent (ECA) representing an ‘eassistant’ on computer screens could engage users in interactions with greater resemblance to face-to-face communication. Through their life-like behaviours, customer interactions with e-assistants could be smoother and take on a more familiar style. However, research indicates several potential disadvantages concerning extra effort, distraction and difficulties with appropriate design. The literature so far has mostly concentrated on short-term, often experimental, interactions with ECAs. The longitudinal study of ‘naturalistic’ ECA use has received little attention. Since relationships are built over time, it seems important to study whether relationships do evolve and whether the reality lives up to the potential of e-assistants to affect purchasing behaviour.

This paper reports on a qualitative study of respondent opinions, beliefs and emotions after several months of at least weekly use of one of three ECAs. We explore whether respondents desired the help or even the presence of ECAs and what advantages and disadvantages they perceive. We conclude that a) 40% of respondents reject ECA use in the present form and b) failing to match customer expectations of service quality or interaction style poses a significant challenge for the design and acceptance of ECAs on retail websites c) substantial investment in research and programming is needed to ensure interactions support user needs appropriately. There are also some ethical considerations posed by the use of ECAs. Nonetheless, with careful and better design, there is potential to differentiate retail websites and online services through customer recall and recognition of brand identity; providing a friendlier environment; facilitating alternative methods of information search; contributing to an error correction service; acting as a navigation aid and help through process; providing for stimulation needs; and contributing to emotional support for product decisions.

A complete version of these papers and also all the other papers published in the IADIS International Conference e-Commerce 2005 can be accessed at our Digital Library.

It is worth mentioning that the IADIS e-Commerce 2005 was truly a global forum comprising of distinguished researchers, practitioners and industry specialists for presentations of keynotes, tutorial, papers and posters.

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