

Welcome to the I3E Conference

E-commerce, e-business, and e-government are part of an area that is presently booming, and yet these topics are characterized by different and, in some cases, widely diverging conceptual views. This provides the diverse grounds needed for developing new ideas, improving existing concepts, and refining methods. However, mutual understanding and coordination are required for the inevitably increasing need for cooperation. Designing and creating an appropriate platform will make future I3E activities in both the application and scientific environment truly successful.

The First IFIP (International Federation for Information Processing) Conference on E-Commerce, E-Business and E-Government is supported by the following three technical committees of IFIP:

- Communication Systems (TC6),
- Information Systems (TC8), and
- Security and Protection in Information Processing Systems (TC11).

The goal of the conference is to represent the state of the art that has been reached and to point to further challenges and necessary activities in research and development.

Events like this could not take place without many helpers. I would like to thank everyone who contributed to the conference program, the local organizing committee for their coordination, and all sponsors and supporters who have helped to make this conference a success.

General Chair

K. Bauknecht, University of Zurich, CH

The I3E Conference Program

The I3E 2001 conference was conceived to provide a forum, where users, engineers, and scientists from academia, industry, and government can present their latest findings in e-commerce, e-business, and e-government applications and the underlying technology supporting those applications.

The conference comprises a main track and a number of mini tracks dedicated to special topics. The papers to be presented in the main track were rigorously refereed and selected by the International Program Committee of the conference. The sessions are titled Security and Trust, Inter-organisational Transactions, Virtual Enterprises, Online Communities, Strategies and Business Models, and Customer Relationships.

Five mini tracks have been organized by dedicated chairpersons and program committees. They are titled Formal E-Models, E-Commerce-Induced Reengineering, E-Government, E-Democracy, and M-Commerce. Two industry tracks will round off the conference presentations.

Social events on Thursday evening will give ample time for further exchange among the conference participants.

Many persons have contributed to making this conference a success. We would like to thank the members of the organizing and program committees, the authors and reviewers, the mini track chairs, the universities of Zurich and St. Gallen, GMD FOKUS Berlin, the IFIP secretariat, and the sponsors of the conference.

Program Chairs

Beat Schmid
Volker Tschammer

St. Gallen and Berlin, October 2001

ISE Conference **3-5 October 2001** **Zurich, Switzerland**

WEDNESDAY 3 OCTOBER

Tutorial 1

Y. Pigneur **E-Business Models**

Tutorial 2

A. Göldi **Peer-to-Peer**

Tutorial 3

H. Ludwig **E-Contracting**

THURSDAY 4 OCTOBER

Opening and Invited Talk

Peter C. Rudin **Business Models for the E-Society**

Session

Security and Trust

Session

Interorganisational Transactions

Minitrack

Formal E-Models

Minitrack

E-Government

Session

Security and Trust

Session

Virtual Enterprises

Minitrack

Formal E-Models

Minitrack

E-Government

Session

Security and Trust

Session

Online Communities

Industry Track

Minitrack

E-Government

Conference Dinner

FRIDAY 5 OCTOBER

Invited Talk

TBA

Session

Strategies/Business Models

Session

Customer Relationships

Industry Track

Minitrack

E-Commerce-induced Reengineering

Session

Strategies/Business Models

Session

Customer Relationships

Minitrack

M-Commerce

Minitrack

E-Democracy

Session

Strategies/Business Models

Minitrack

M-Commerce

Minitrack

E-Democracy

Closing and Farewell

Wednesday Afternoon

3 October

12:00 **Registration**

14:00 **Tutorial 1**

to **E-Business Models**

17:30 **Y. Pigneur**
University of Lausanne, CH

This lecture proposes a theoretical framework or ontology for defining, classifying, and measuring business models. This framework could be used for describing, cataloging, and analysing case studies illustrating typical business models. Another use might be to develop a computer-aided design tool for supporting the design, assessment, benchmarking, critics, and the simulation of new business models. The presentation tackles four aspects of the suggested ontology covering product innovation, customer relationship, infrastructure management and financial aspects of business models.

Tutorial 2

Peer to Peer Technology

A. Göldi
namics AG, St. Gallen, CH

Peer-to-peer networking, the idea of connecting similar network nodes that cooperatively exchange services, is not really a new concept in computing. However, thanks to popular file-exchange services like Napster, peer-to-peer has recently become one of the most hyped Internet technologies. The tutorial will discuss peer-to-peer technology and its most important application classes, show some of the services and products that are available today, and explain their technological background. Furthermore, it will discuss whether peer-to-peer is a viable new model for e-business.

Tutorial 3

E-Contracting

M. Gisler
University of Applied Sciences,
Bern, CH

H. Ludwig
IBM TJ Watson Research Center

In the traditional world, contracts are an explicit way to express agreement of two to more parties that are entering a business relationship. In the age of electronic communications, business, service organisations, and individuals want to enter and execute business relationships electronically. Three main issues of electronic contracts are discussed in this tutorial: electronic contract format, contract processing functionality, and legal aspects of electronic contracts.

Thursday Morning

4 October

08:00 *Registration*

09:00 *Opening*

President of the University of Zurich, Prof Dr. H. Weder

Conference General Chair, K. Bauknecht

Conference Program Co-Chair, B. Schmid

Conference Program Co-Chair, V. Tschammer

Invited Talk

Business Models for the E-Society

Peter C. Rudin
CEO UPAQ, Ltd., CH

Prior to founding UPAQ, Peter Rudin owned and operated several technology companies, most recently the Multimedia Application Center AG (M.A.C.). Prior to his entrepreneurial career, Peter Rudin worked for IBM in New York and Zurich.

10:30 *Break*

11:00

Session

Security and Trust

Trust-based contracting in virtual organizations

K. Lenz K., A. Oberweis A.,
S. Schneider

Trustbuilders and trustbusters

J. Riegelsberger, M. A. Sasse

A taxonomy for trusted services

J. Ølnes

Session

Interorganizational Transactions

Pattern-directed auditing of inter-organisational trade procedures

R. M. Lee, R. W. H. Bons,
R. W. Wagenaar

Cross-organizational workflow management

O. Kulendik, K. Rothermel,
R. Siebert

Modelling a business to business intermediation platform

A. K. Kaltabani, M. A. Lambrou,
G. T. Karetos, M. E. Anagnostou

Minitrack

Formal E-Models

The influence of market uncertainties on business models for online music

W. Buhse

An approach to knowledge management support in e-business processes

I. Slembek

Electronic reverse auctions – success metrics and dynamics

I. Millet, D. H. Parente, J. L. Fize!,
R. R. Venkataraman

Minitrack

E-Government

Applying a stakeholder theory to e-government

H. J. Scholl

Recreating government through effective knowledge management

G. Robins , Janice Burn

Linking databases and linking cultures

A.-M. Oostveen,
P. van den Besselaar

12:30

Lunch

Thursday Afternoon

4 October

14:00

Session

Security and Trust

System models, e-risks and e-trust

T. Dimitrakos

Digital evidence

N. Lundblad

Security requirements of e-business processes

K. Knorr, S. Röhrig

Session

Virtual Enterprises

Towards dynamic virtual enterprises

V. Ouzounis, V. Tschammer

A semi-automated brokerage for a virtual organization of mould and die industries in Brazil

R. J. Rabelo, R. V. Vallejos

An engineering approach to develop business networks

R. Alt, C. Reichmayr, T. Puschmann, F. Leser, H. Oesterle

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Formal E-Models

Security modelling for electronic commerce: the common electronic purse specifications

J. Jürjens, G. Wimmel

A three-phase model of electronic marketplaces for software components in chemical engineering

M. Schoop, J. Köller, T. List, C. Quix

The communicative logic of negotiation in B2B e-commerce

H. Weigand

Hierarchical knowledge and meta-observations

R. Riedl

Minitrack

E-Government

Exploring the interrelations between electronic government and the new public management

K. Schedler, M. C. Scharf

XML-based process representation for e-government serviceflows

R. Klischewski, I. Wetzel

Digital identity and its implication for electronic government

C. H. Cap, N. Maibaum

15:30

Break

16:00

Session

Security and Trust

Performance analysis of smart card-based fingerprint recognition for secure user authentication

Y.-H. Gi, Y. Chung, D. Ahn, J. Moon, H. Kim

Fingerprint authentication system for smart cards

N. Kaku, T. Murayama, S. Yamamoto

Tamper-resistance network

K. Kuramitsu, K. Sakamura

Session

Online Communities

The community model of content management

J. Hummel, U. Lechner

Learning about the online customer

A. Nyberg, O. Henfridsson

Information dissemination in virtual communities as challenge to real world companies

C. Lueg

Industry Track

Solcon IT-Management

IT-security as a critical success factor of service management

Gerd Tichy
IT&Business Engineer,
Managing Director

Credit Suisse

Banking im Cyberspace

Markus Simon
Director Web Services

Price Waterhouse Coopers

E-Business: In the eye of the hurricane

Guido Streit
Director Management Consulting
Services

Minitrack

E-Government

Development of a European-wide citizen Javacard to support administrative processes by the use of the electronic signature and the biometric fingerprint sensor

M. Wenderoth, D. Wörmann

A review of the first cooperative projects in the Italian e-government initiative

M. Mecella, C. Batini

E-governance and digital government in Canada

J. Roy

17:30

Apero Reception *sponsored by the Department of Information Technology, University of Zurich – ca.1hr*

20:00

Conference Dinner *sponsored by Credit Suisse, Zurich, CH*

Friday Morning

5 October

08:00 **Registration**

09:00 **Invited Talk**

The EU supporting the paradigm change

Bror Salmelin

Head of Unit Information Society DG
European Commission, Brussels, Belgium

Bror Salmelin joined the European Commission in 1998 as Head of Unit for Integration in Manufacturing. He soon became Head of the Information Society Technology programme for Electronic Commerce. He is currently responsible for the Electronic Commerce in DG INFSO and has written a number of papers relating to the European e-commerce market and future trends.

10:30 **Break**

11:00

Session

Strategies and Business Models

Insights into IST and e-business strategy development

D. H. Brown, P. J. Robinson

E-commerce strategy formulation

L. Labuschagne, J. Eloff

Business models for information goods electronic commerce

F. Wijnhoven

Session

Customer Relationships

A mechanism for evaluating feedback of e-commerce sites

K. Renaud, P. Kotzé, T. van Dyk

Feature-oriented vs. needs-oriented product access for non-expert online shoppers

D. Felix, C. Niederberger, P. Steiger, M. Stolze

An architecture for Web-based post-sales service in a flexible manufacturing environment

W. Zhang, F. Coenen, P. Leng

Industry track

TKS-Teknosoft SA
The India-Swiss IT Connection

Jakob Schmid
(CEO Services)

Winterthur Versicherung
E-initiatives of Winterthur Insurance

Urs Stoob
Head of E-Business,
Dieter Lützeltschwab
Head of E-Insurance

Software AG
XML - edging toward e-Government
Gert Christian Schroeter
Business Development Director

Minitrack

E-Commerce-Induced Reengineering

ERP implementation: an integrative methodology

A. Al-Mudimigh, M. Zairi, M. Al-Mashari

Web-driven management thinking: a look at business process redesign in the age of the Web

N. Kock

E-engineering through e-business change management

C. G. Ash, J. M. Burn

12:30

Lunch

Friday Afternoon

5 October

14:00

Session

Strategies and Business Models

Implications of e-commerce for banking and finance

M. S. H. Heng

Electronic commerce use in small and medium-sized enterprises

F. Karakaya, O. Khalil

The development of e-commerce in Malaysia

A. Sulaiman, R. Jani, S. Bahri

Session

Negotiations

Efficient winner determination techniques for internet multi-unit auctions

A. Bassamboo, M. Gupta, S. Juneja

"Figaro should be in Sydney by the 2nd of July" – contracting in many-to-many e-services

O. Marjanovic, Z. Milosevic

Trading among untrusted partners via voucher trading system

K. Fujimura, M. Terada

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M-Commerce

A conditional e-coupon service for location-aware mobile commerce

H. Luo, N. K. Shankaranarayanan

Symbolon – a novel concept for secure e-commerce

S. Fischmeister, G. Hagleitner, W. Pree, G. Pomberger

A functional model for mobile commerce

R. Riedl

Minitrack

E-Democracy

Towards a democratic education for e-government

J. Foster

Receipt-freeness in large-scale elections without untappable channels

E. Magkos, M. Burmester, V. Chrissikopoulos

E-democracy and the Scottish parliament

L. Beddie, A. Macintosh, A. Malina

15:30

Break

16:00

Session

Strategies and Business Models

Employing the balanced scorecard for the online media business

M. Anding, T. Hess

A model for value-added internet service provisioning

H. Kneer, U. Zurfluh, B. Stiller

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M-Commerce

Mobile payment solutions

M. Gerdes, S. Holtmanns

An adoption framework for mobile commerce

P. E. Pedersen

Diffusion models in analysing emerging technology-based services

L. Frank, J. Heikkilä

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E-Democracy

Building value into e-government

G. Robins, J. Burn

Under some delusion: considerations on the limits of e-democracy

N. Collins, P. Butler

17:30

Closing and Farewell

Conference Committees

Program Committee

D. Avison, Essec Business School, F
M. Bichler, University of Economics, Vienna, A
L. M. Camarinha-Matos, University Nova, P
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H. Weigand, University Tilburg, NL
R. Wigand, Syracuse University, USA
L. Yngstrom, DSV, Stockholm, S
H.-D. Zimmermann, University St. Gallen, CH

Local Conference Organization

H. Häuschen, University of Zurich, CH
H. Kneer, University of Zurich, CH
K. Knorr, University of Zurich, CH
L. Kündig, University of Zurich, CH
H. Rudin, Consultant Zurich, CH
H. Stormer, University of Zurich, CH
B. von Bredow, University of Zurich, CH
H. Weidner, University of Zurich, CH

Registration

The Conference Fee

Includes participation in the two-day conference, one copy of the proceedings and the conference dinner. Tutorial fees are additional.

The Student Conference Fee

Includes the conference dinner (no proceedings or tutorials). A valid International Student Card or equivalent document must be presented when checking in at the conference, otherwise the on-site registration fees will be charged. Note: Authors of papers in the conference proceedings cannot register as students.

Tutorials

It is possible to register for a tutorial and/or the conference dinner, without attending the conference.

Participation

Conference Fee

Pre-Registration

640,-CHF

On-Site Registration

740,- CHF

Student Fee

320,- CHF

420,- CHF

Additional Options

Tutorial I or Tutorial II or Tutorial III

Pre- and On-Site Registration

165,- CHF

Conference dinner for accompanying person

100,- CHF

Additional copy of the conference proceedings

160,- CHF

In case of cancellation before 1 September 2001, the conference fee (minus a 10% charge) will be refunded. Between 1 and 30 September, 50% of the fee will be refunded. After 30 September, no refund will be possible.

Please visit the conference Web site at www.ifi.unizh.ch/I3E-conference for further information and registration.

Venue

The tutorials and the conference will both take place at the University of Zurich, Irchel Campus.

Address

Department of Information
Technology
University of Zurich
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Directions

Please refer to the I3E conference
Web site for details on the venue,
transportation and hotels in Zurich.

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