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Education

1984 PhD, information systems, Facultés Universitaires de Namur (FUNDP), Belgium
 1977 Ms, informatics, Facultés Universitaires de Namur (FUNDP), Belgium
 1974 Bs, economics, Facultés Universitaires de Namur (FUNDP), Belgium

Academic experience

2006- Head of the information systems department, Université de Lausanne
 2000-2004 Adjunct dean, HEC Lausanne, Université de Lausanne
 1996-2004 Head of the information systems department, HEC Lausanne, Université de Lausanne
 1984- Professor of information systems, HEC Lausanne (Business School), Université de Lausanne
 courses taught: *Introduction to information systems, Databases Design, Information System Engineering, Management of Information Technology, Strategy and Information Technology, and Design of Interactive Software*
 board of a Master program in Business Information Systems by HEC Lausanne, and Management of Technology, Innovation & Entrepreneurship by EPFL (engineering school) and HEC Lausanne (business school).

Visiting positions

2004 University of British Columbia
 1999- Université de Lyon (IAE)
 1995, 1998 Facultés Universitaires de Namur
 1994 Hong Kong University of Science and Technology
 1993-1994 Georgia State University, Atlanta
 1993 The Naval Postgraduated School, Monterey

External service

2005- National representative at IFIP TC8
 2000-2004 Académie suisse d'expertise comptable - coordinator of the IT management program
 1998-2001 Swiss National Science Foundation - management team of a research program in electronic commerce
 1996 Swiss Science Council - technology assessment study on electronic market
 1995-97 Belgian government - jury of a research program entitled "From digital to multimedia"
 1990-92 3ème cycle romand d'informatique - chair

Consulting

with an entertainment company, a bank, an insurance company, a telecom operator, a computer manufacturer, a telecom manufacturer, a retailing company, a watch manufacturer, an international consulting firm, software houses, and internet start-ups.

Editorial, referee and review experience

- Editor of *Système d'Information et Management (SIM)*, leading IS journal in the French speaking world, since 1996, *Journal of Decision Systems*, and *Journal of the Association on Information Systems (JAIS)*
- Conference chair of the Intl Society for *Decision Support Systems (ISDSS'97)*, and the *Intl Conference of the Management of Networked Enterprises (CIMRE'96)*, *Association Information & Management (AIM'2007)* Lausanne
- Member of the program committee of several international conferences such as *ICIS'98, ER'99, ECIS'01, HICSS, ISDSS, OOIS, AIM, CIMRE, MiniEuro, IFIP 8.1 (1998-2005), HCC'98, EMMSAD'02, EISIC'02, MCTA'03, ESA'05, CAISE/EMOI'05, CONTEXT'05, RE/REBNITA'05, pre-ICIS/AIM'05, ECIS'06 (track co-chair), CAISE/BUSITAL'06, IFIP'06, AIM*
- Reviewer for several journals: *MISQ, CACM, EJIS, IJEM, JMM, Telecom Policy ...*
- Reviewer for candidate (tenure) positions: *GSU (Atlanta), EPFL, U. Colorado, Geneva, Hawaii, Neuchatel, Namur*
- Reviewer of research proposals: *Luxembourg NSF, Quebec NSF (Nateq), Canada Research Chair (CRC), ...*
- Editorial board of «*Encyclopédie des systèmes d'information*» (J. Akoka & I. Comyn-Wattiau), Vuibert, Paris 2006

Research interests

Design of information systems, requirement engineering, management of information technology, e-commerce, ontology for e-business model, analysis of m-business.

Prediction market (2005-) and technology foresight

The main objective of the research will be to design and operate an idea market for assessing the emergence and the evolution of mobile technologies. This recent innovation suggests transferring the tools and methods for trading commodity and financial futures to futures markets for ideas. Such electronic markets trade on propositions whether events will occur, have applications to decision-making, and has proven itself to be an accurate predictor of future events. The price of an idea aggregates beliefs that the proposition will be realized.

Thesis guided

Cedric Gaspoz, *Predictive markets for assessing research in ITC* (PhD in progress)

Selected publications

Gaspoz, C., Pigneur, Y. «A Design Science Approach for Developing Prediction Markets in a R&D Community», submitted 2nd Workshop on Prediction Markets, ACM EC'07

Conferences

«Idea futures markets and technology foresight»
HEC & EPFL, January 2005

Research grants

Project «Idea futures market for MICS technology foresight (MarMix)» of the National Competence Center in Research on Mobile Information and Communication Systems (NCCR MICS), a center supported by the Swiss National Science Foundation under grant number 5005-67322 (Phase II).

m-payment (2003-) and disruption technology

The objective of this research is to assess the possible disruptive innovation of m-payment in Switzerland using a multi-actor multi-criterion framework. Firstly, a disruptive analysis is conducted to detect a possible sliding from the current payment cards initially introduced by financial institutions to the newly designed mobile payment schemes involving mobile phones and supported by mobile operators. Secondly, another analysis intends to observe a possible switch from an integrated market driven by dominant actors to a more or less self-organized market where mobile payment solutions are offered by intermediaries and new-comers.

Thesis guided

Jan Ondrus, *A multi-actor multi-criterion analysis of m-payment* (PhD thesis, May 2007)

Selected publications

Ondrus, J., Pigneur, Y. «An Assessment of NFC for Future Mobile Payment Systems», ICMB m>business 2007

Ondrus, J., Pigneur, Y. «A design approach for systems that support the assessment of mobile payment disruptions», submitted JMIS

Ondrus, J., Pigneur, Y. «Cross-industry preferences for mobile payments - Development in Switzerland», *Journal on Electronic Market*, 17(2), 2007

Ondrus, J., Monzani, J., Pigneur, Y. «A GDSS for Visualizing and Assessing a Technology Environment» AMCIS'06, Aca-pulco, August 2006

Ondrus, J., Pigneur, Y. «A Systematic Approach to Explain the Delayed Deployment of Mobile Payments in Switzerland» fifth International Conference on m>Business, Copenhagen, Copenhagen, IEEE Computer Society, June 2006

Ondrus, J., Pigneur, Y. «Towards A Holistic Analysis of Mobile Payments: A Multiple Perspectives Approach», *Journal Electronic Commerce Research and Applications (ECRA)*, 5(3), 2006: 246-257

Ondrus, J., Pigneur, Y. «A Multi-stakeholder Multi-criteria Assessment Framework of Mobile Payments: An Illustration with the Swiss Public Transportation Industry» *Proc. Hawaii International Conference on System Sciences, HICSS 39*, January 2006

Ondrus, J., Pigneur, Y. «A multi-actor, multicriteria approach for technology selection when designing mobile information systems» *IFIP MOBIS'*, December 2005

Camponovo, G., Ondrus, J., Pigneur, Y. «A Multi-Perspective Analysis of the Mobile Payments Environment» *International Conference on m-Business*, Sidney, July 2005

Ondrus, J., Pigneur, Y. «A Disruption Analysis in the Mobile Payment Market» *Proc. Hawaii International Conference on System Sciences, HICSS 38*, January 2005

Ondrus, J., Pigneur, Y. «An Architecture for Mobile Payments and Couponing in the Retail Industry» *Proc. IADIS International Conference WWW / Internet*, Madrid, October 2004

Research grants

Leading the individual project «*Wireless e-business models and scenario planning*» of the National Competence Center in Research on Mobile Information and Communication Systems (NCCR MICCS), a center supported by the Swiss National Science Foundation under grant number 5005-67322.

m-business and assessment of technological environments (2001-)

This research aims at designing a theoretical framework or information system to assess the evolution of the m-business, the role of new technology such as ad hoc networks, and the business models of the different stakeholders. Based on this framework, this research also plans a technology assessment of the m-business which should detect and analyze the eventual disruption caused by ad hoc networks. This framework and this assessment should also be used to suggest a scenario approach for analyzing, forecasting, and simulating the uncertain evolution of the mobile business.

Thesis guided

Giovanni Camponovo, *Conceptual Models for designing information systems supporting the strategic analysis of technology environments*. (PhD thesis, June 2006)

Selected publications

Camponovo, G. and Pigneur, Y. , «Conceptual Foundations for Designing Information Systems for the Strategic Analysis of Technology Environments», submitted ISJ

Camponovo, G. and Pigneur, Y. «Conceptual foundations for designing information systems supporting the strategic analysis of technology environments» Pre-ICIS 2006 SIGDSS Research Workshop, Milwaukee, 2006.

Camponovo, G., Pigneur, Y. «From Hype to Reality: a Case Study on the Evolution of the Swiss WISP Industry» fifth International Conference on m>Business, Copenhagen, IEEE Computer Society, June 2006

Bendahan, S., Camponovo, G., Monzani, J., Pigneur, Y. «Negotiation in Technology Landscapes: an Actor-Issue Analysis» Journal of Management Information Systems (JMIS), Vol. 21, No. 4, Spring 2005, 137-172

Camponovo, G., Ondrus, J., Pigneur, Y. «Environmental Context Significance in Strategic Decision Support» Context'05, Paris, June 2005

Camponovo, G., Pigneur, Y., Rangone, A., Renga, F. « Mobile Customer Relationship Management: An Explorative Investigation of the Italian Consumer Market», International Conference on m-Business, Sidney, July 2005

Camponovo, G., Pigneur, Y. «Extending technology Roadmapping for environmental analysis» Colloque Veille Stratégique, Scientifique et Technologique(VSST), Toulouse, October2004

Dubosson, M., Pigneur, Y., Usunier, J.C. «Business models for music distribution after the P2P revolution» Intl Conference on WEB Delivering of Music (Wedelmusic), Barcelone, September 2004

Laperrouza, M., Pigneur, Y. «China's broadband wireless industry - A prospective approach» Pacific Conference on Information Systems (PACIS), Pékin, July 2004

Camponovo, G., Debetaz, S., Pigneur, Y. «A comparative analysis of published scenarios for m-business» International Conference on m-Business, New York, July 2004

Camponovo, G., Pigneur, Y. I «Information Systems alignment in uncertain environments» IFIP DSS, Prato, 2004

Camponovo, G., Bendahan, S., Pigneur, Y. «A DSS for assessing a technology environment» .6th International Conference on Enterprise Information Systems (ICEIS,) Porto, April 2004

Monzani, J., Bendahan, S., Pigneur, Y. «Decision and Visualization for Negotiation». *Proc. Hawaii International Conference on System Sciences, HICSS 37*, January 2004 (Best Paper Award)

Bendahan, S., Camponovo, G., Pigneur, Y. «Multi-issue actor analysis: tools and models for assessing technology environments», submitted to *Journal of Decision Systems*, Vol. 13, No. 4, 2004

Camponovo, G., Osterwalder, A., Pigneur, Y. «Assessing a complex, uncertain and disruptive technology environment for better IT alignment» Intl Workshop on Utility, Usability and Complexity of Emergent IS, Namur, 2003

Camponovo, G., Heitmann, M., Stanoevska, K., Pigneur, Y. «Exploring the WISP Industry: Swiss Case Study», 16th Bled Electronic Commerce Conference, Slovenie, June 2003

Camponovo, G., Pigneur, Y. «Business Model Analysis Applied to Mobile Business», Intl Conference on Enterprise Information Systems (ICEIS), Anger, May 2003

Camponovo, G., Pigneur, Y. «Analyzing the m-Business Landscape», *Annals of Telecommunications*, vol. 58, no. 1-2, 2003

Camponovo, G., Pigneur, Y. «Analyzing the Actor Game in m-Business», First International Conference on Mobile Business (mBusiness'2002), Athens, July 2002 (selected among the best papers)

Keller, P., Mang, P., Oyon, D., Pigneur, Y. «M-commerce and Strategic Innovation», 20th Intl Conference Strategic Management Society, Vancouver, October 2000

Conferences

«An ontology for m-business models», keynote conference
Conference on Conceptual Modeling (ER'02), Tampere, October 2002

«China's Broadband Wireless Industry: a Scenario Approach», with Marc Laperrouza
EPFL, June 2003

«m-commerce: quelques scénarios de développement possibles»
IT Valley, Fribourg, Juin 2001

Workshop organized

Swiss NSF/MICS workshop on «Wireless e-business models and scenario planning», Monte Verita, 2003

International workshop on business models, HEC Lausanne, October 2002, basis for a forthcoming Panel at the Bled Conference on Electronic Commerce 2003 on Business Models & the Mobile Industry (organized by A. Osterwalder)

Research grants

Leading the individual project «Wireless e-business models and scenario planning» of the National Competence Center in Research on Mobile Information and Communication Systems (NCCR MICS), a center supported by the Swiss National Science Foundation under grant number 5005-67322.

e-business, ontology and business models (2000-)

This research aims at developing an ontology or framework for e-business models. 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.

Thesis guided

Alexander Osterwalder, *The business model ontology: a proposition in a design science approach*, Février 2004 (Prix Prophyrogenis)

Selected publications

Karl Cox, Eric Dubois, Yves Pigneur (eds). Requirements engineering for business needs and information technology alignment. University of New South Wales Press, 2005, 174 p. (ISBN: 0 7334 2276 4)

Osterwalder, A., Pigneur, Y., Tucci, C., «Clarifying Business Models: Origins, present and Future of the Concept» *Comm. AIS*, Vol. 15, 2005, p. 751-775

Osterwalder, A., Ondrus, J., Pigneur, Y. «Skype's Disruptive Potential in the Telecom Market: A Systematic Comparison of Business Models» submitted

Gordijn, J. Osterwalder, A., Pigneur, Y. «Comparing two Business Model Ontologies for Designing eBusiness Models and Value Constellations» 18th Bled Electronic Commerce Conference, June 2005

Osterwalder, A., Pigneur, Y. «Investi»gating the Use of the Business Model Concept through Interviews» International Conference on Electronic Business (ICEB) Beijing, 2004

Osterwalder, A., Parent, C., Pigneur, Y. «Setting up an ontology of business model» CAISE/EMOI'2004 (Interop), June 2004

Osterwalder, A., Pigneur, Y. «An ontology for e-business models» chapter in Wendy Currie. (ed) *Value Creation from E-Business Models*, Butterworth-Heinemann, 2004

Osterwalder, A., Pigneur, Y. «Towards Strategy and Information Systems Alignment through a Business Model Ontology», Strategic Management Society (SMS), Baltimore, November 2003

Osterwalder, A., Pigneur, Y. «Modeling Value Propositions in e-Business», 5th Intl Conference on Electronic Commerce (ICEC'03), Pittsburgh, 2003

Osterwalder, A., Pigneur, Y. «Modelling Customer Relationships in e-Business», 16th Bled Electronic Commerce Conference, June 2003

Osterwalder, A., Pigneur, Y. «An e-business model ontology for modeling e-business», 15th Bled Electronic Commerce Conference, June 2002

Osterwalder, A., Ben Lagha, S., Pigneur, Y. «Une ontologie de business model pour la formalisation des stratégies e-business», 5th AIM Conference, Hammamet, Tunisia, June 2002

Osterwalder, A., Ben Lagha, S., Pigneur, Y. «An ontology for developing e-business models», IFIP Decision Systems and Internet (DsiAge'02), June 2002

Osterwalder, A., Ben Lagha, S., Pigneur, Y. «Towards a Virtual Coaching Service for SMEs», *ERCIM News*, 48, 2002:: 44-45

Dubosson, M., Osterwalder, A., Pigneur, Y. «eBusiness Model Design, Classification and Measurements», *Thunderbird International Business Review*, vol. 44, no. 1, January 2002: 5-23

Osterwalder, A., Ben Lagha, S., Pigneur, Y. «Modelling e-business with eBML», Cimre'01, Mahdia, Tunisia, October 2001

Pigneur, Y. «Yield management, des prix à la tête ou au goût du client?», «Business model, pierre philosophale de l'alchimie Internet», «Une solution ASP pour se lancer dans l'e-business», «Des scénarios pour apprivoiser un futur incertain», «Vers un support informatique aux appels d'offres» *PME Magazine*, Janvier-Juin 2001

Conferences and tutorials

«A framework for describing business models and detecting their disruptive potential», with A. Osterwalder
Pacific Conference on Information Systems (PACIS), July 2005

«E-Business model, business/IT alignment and ontology», keynote conference
CAISE-EMOI, Porto, June 2005

E-Business model ontology for improving business/IT alignment
Italian NSF (LEKS), Romas, May 2005

«Conceptual modeling, business model and business/IT alignment»
Georgia State University, July 2004

«When requirement engineering meets business/IT alignment»
Case Western Reserve University, University of Toronto, McGill University, May 2004

«An ontology for defining e-business models»
University of British Columbia, IS dpmt, January 2004

«A framework for defining e-business models», keynote conference
Object-Oriented Information Systems (OOIS'02) Montpellier, September 2002 (Lecture Notes in Computer Science 2426)

«Les business models du commerce électronique», keynote conference
Inforsid, Toulouse, Mai 2000

«Ontology for e-business models», keynote conference
International Workshop on Open Enterprise Solutions: Systems, Experiences, and Organizations (OES-SEO'01), Roma, 2001

«Modelling e-business models», tutorial
CAISE'01, Interlaken, June 2001

«Strategy and e-business models», tutorial
IFIP I3E, Zurich, October 2001

Workshop organized

International workshop on business/IT alignment and business models, BUSITAL'06, pre-CAISE '2006 conference, Luxembourg, June 2006, with Carson Woo

International workshop on business/IT alignment and requirement engineering, REBNITA'2005, pre-RE '2005 conference, Paris, September 2005, with Eric Dubois

International workshop on business models, HEC Lausanne, October 2002, basis for a forthcoming Panel at the Bled Conference on Electronic Commerce 2003 on Business Models & the Mobile Industry (organized by A. Osterwalder)

Research grants

Leading, with Eric Dubois, the project «Business/IT alignment (TG5)» of the European Union project «Interoperability Research for Networked Enterprises Applications and Software (Interop)», under grant number FP6-508011.

Electronic markets (1995-2000)

This research proposed and used a framework for analyzing e-market situations in enterprises using ICTs to improve (a) the use of information at their boundaries, (b) relations and cooperation with their partners, and (c) competition on their markets. This research also assessed the state-of-the-art in Switzerland, and suggested propositions or recommendations to improve the situation.

Two case studies were specially investigated: trading of human competencies and request for proposal management.

Thesis guided

André Lang, *Marché électronique de compétences*, 1999

Selected publications

Lang, A., Paravicini, D., Revaz, E., Pigneur, Y., «Collaborative Reputation Mechanisms in a RFP electronic Platform», Swiss NSF report, December 2002

Lang, A., Paravicini, D., Revaz, E., Pigneur, Y., «From Customer Relationship Management to Supplier Relationship Management», Swiss NSF report, December 2002

Lang, A., Pigneur, Y., «Digital trade of Human Competencies», 32nd Annual Hawaii International Conference on System Sciences (HICSS-32), January 1999

Lang, A., Revaz, E., Stricker, C., Pigneur, Y., *Business to Business Electronic Commerce - Research Opportunities for Switzerland*, Swiss National Science Foundation SPP ICS, February 1999, 46 p.

Lang, A., Pigneur, Y., «An Electronic Market of Individual Human Competencies for Team Building», *Virtual Organization.Net Newsletter*, Vol. 1, No. 3, 1997

Klein, S., Pigneur, Y., Schmid, B., Schiesser, G. *Electronic Markets - Importance and Meaning for Switzerland*, Conseil Suisse de la Science, Technology Assessment, TA23, October 1996

Swiss NSF grants

Electronic market for competencies (SkillWorld project), Swiss NSF, 1995-1996

Electronic market and request for proposal (RfP project), Swiss NSF, 1998-2001

Electronic markets in Switzerland, Conseil Suisse de la Science, 1996

Spin off

Internet start-ups SkillWorld & Linkom

Electronic commerce (1995-1999)

This research addressed the issue of understanding the components of the business value an organization can derive from using electronic commerce. It proposed a framework showing how they can improve, transform or redefine current products, processes or business models, with examples of successful early adopters from the retail, banking and travel industries. This research also formulated as a set of propositions, linked with Porter's model for competitive advantage within an industry.

Selected publications

Pigneur, Y. «Les technologies de l'information changent l'art du possible», chapitre de *Genève, 21ème siècle, 21 défis et 21 talents pour les relever*, Editio, 1999

Caflish, M., Pfyffer, H., Pigneur, Y., «National Competence Network on Electronic Commerce», *Informatik*, No. 6, November 1999: 27-30

Pigneur, Y. «De l'esprit des lois - Le commerce électronique», *Bulletin HEC*, no.59, Octobre 1999

Pigneur, Y. «Teamwork, Extended Enterprises and Electronic Commerce», *ERCIM News*, no. 30, July 97

Pigneur, Y. «Systèmes d'information, entreprises étendues et commerce électronique», *Actes d'Inforsid*, juin 1997: 21-31

Pigneur, Y. «Internet, entreprise en réseau et commerce électronique», *Employeur Suisse*, no. 21, octobre 1997: 1009-1012

Pigneur, Y. «Towards New Electronic Commercial Practices», *Information Society Project Switzerland Newsletter*, No. 1, October 1996, No. 2, 1997 and No 3, 1997

Bui, T., Pigneur, Y. (ed) *Proc. of the 4th Conference of the International Society for Decision Support System (ISDSS'97)*, University of Lausanne, July 1997

Bloch, M., Pigneur, Y., Segev, A. «A Business Value Framework for Electronic Commerce», *Informatik*, No. 6, 1996: 29-36

Pigneur, Y. «Electronic Commerce and Extended Enterprises», *European Conference on Information Systems (ECIS'96)*, round table on Electronic Commerce, Lisbonne, July 1996

Bloch, M., Pigneur, Y., Segev, A. «Leveraging Electronic Commerce for Competitive Advantage: a Business Value Framework», *9th International EDI-IOS Conference*, Bled, Slovenia, June 1996: 91-112 (published in many other books, periodics and textbooks)

Bloch, M., Pigneur, Steiner, T. «The IT-enabled extended enterprise, applications in the tourism industry», *Proc. Intl Conference on Information and Communication Technology in Tourism (Enter'96)*, Austria, January 1996

Pigneur, Y. «A Framework for Designing New Information Systems», in F. Bodart & al. (eds), *The Future of Information Systems: Challenge and Pitfalls*, FUNDP, Namur, October 1996: 61-102

Schenk, M., Pigneur, Y. «Vers des activités commerciales dans Internet», *Bulletin HEC*, Février 1995

Conference organized

4th Conference of the International Society for Decision Support System (ISDSS'97), University of Lausanne, July 1997

Electronic commerce and extranet, Lausanne, May 1998 (with Dr C. Stricker)

Swiss NSF grants

Management team of the Swiss NSF (SPP ICS/IuK) research program on Electronic Commerce, 1998-2001

Extended enterprise (1990-1994)

This research defined a framework covering the strategy, the organization and the management activities in a context of mutations, alliances, and extended enterprises. The corresponding meta-model and the analysis tools aim at designing changing situations of value chains and other configurations of activities.

Thesis guided

Eric Revaz, *Alliances, fusions & acquisitions, démantèlements - Une approche intégrée de la stratégie, de l'organisation et de la gestion, fondée sur un système d'information outil et objet du changement*, 1994

Selected publications

Revaz, E., Pigneur, Y. «Models for Designing Business Situations in the Context of Mutations», *International Journal of Intelligent Systems in Accounting, Finance & Management*, No. 7, 1998: 53-66

Bloch, M., Pigneur, Y., «Unicible - Outsourcing & Cooperation Between Swiss Cantonal Banks», *European Conference on Information Systems (ECIS)*, Cork, Ireland, June 1997

Bloch, M., Pigneur, Y., «L'émergence de la virtualité», *Bulletin HEC*, no. 55, octobre 1997

Pigneur, Y. (eds) *Actes de la 2^{ème} Conférence Internationale de Management des Réseaux d'Entreprises (CIMRE)*, Lausanne, Septembre 1996

Revaz, E., Pigneur, Y. «A DSS to support the decision process and the creativity in the context of mutations», *Journal of Decision Systems*, vol. 5, no. 3-4, 1996: 329-354

Revaz, E., Pigneur, Y. «Alliances, fusions & acquisitions, démantèlements - Une approche intégrée du changement», 2^{ème} colloque AIM, Namur, mai 1995

Revaz, E., Pigneur, Y. «A DSS to Support the Decision Process and the Creativity in the Context of Mutations», *Intl Society for Decision Support Systems (ISDSS'95)*, Hong Kong, June 1995

Revaz, E., Pigneur, Y. «Tools for Designing Business Situations in the Context of Mutations», 2nd AIS Research Symposium; Phoenix, February 1995

Conference organized

2^{ème} *Conférence Internationale de Management des Réseaux d'Entreprises (CIMRE)*, Lausanne, Septembre 1996

Computer-supported collaborative work (1990-1994)

This research proposed a teamwork typology that allows to extract some generic configurations for supporting teamwork, in the light of distributed artificial intelligence systems. It then designed an architecture which included a mechanism for sharing norms among the team members. Finally, it proposed a software engineering approach for developing a computer-supported teamwork environment by selecting and customizing generic teamwork frameworks.

Thesis guided

Giovanni Zucchinetti, *Conception du poste de travail du gestionnaire adapté au travail coopératif*, PhD thesis, Université de Lausanne, 1994

Selected publications

Zucchinetti, G., Pigneur, Y. *Supporting Teamwork by Customizing Generic Framework*, Swiss NSF report, 1995

Conference organized

Gestion électronique de documents, intranet et groupware, Lausanne, March 1997 (with Dr C. Stricker). The keynote speaker was Ralf Sprague (U. Hawaii).

Spring School «3^{ème} cycle romand d'informatique» entitled *Computer-Supported Cooperative Work*, Anzère, March 1993. The guest speakers were Andy Whinston (U. Texas, Austin), Kevin Crowston (U. Michigan) and Tung Bui (NPS).

Swiss NSF grants

Modelling distributed and cooperative decision-making situations (PLEIADE project), Swiss NSF, February 1992

Development of database applications (1985-1994)

This research highlighted the necessity to use the methodical development of a specification and the progressive, systematic and controlled derivation of the software, based on this specification. It aims at reconciling functional decomposition, conceptuel modelling, modular design, formal proof, refinement, and object orientation for application development.

Thesis guided

Gabor Maksay, *Le rôle des contraintes d'intégrité dans la conception des applications*, PhD thesis, Université de Lausanne, 1994

Selected publications

Adiba, M., Bodart, F., Léonard, M., Pigneur, Y. *Conception et génération d'applications «bases de données»*, Edition Systèmes et Informations, 1992

Maksay, G., Pigneur, Y., Zucchinetti, G. «Spécification, validation et construction d'une application interactive», *Actes des journées de travail de Beaune 91*, © Edition systèmes et information, 1992: 135-162

Maksay, G., Pigneur, Y. «Reconciling Functional Decomposition, Conceptuel Modelling, Modular Design and Object Orientation for Application Development», in F. van Assche, B. Moulin & C. Rolland (eds.), *The Object Oriented Approach in Information Systems*, Elsevier Science Publishers B.V. (North-Holland), © IFIP 1991: 233-253

Petoud, I., Schenk, M., Pigneur, Y., «La conception assistée par ordinateur des systèmes d'information: une vision futuriste» *UNIL*, N° 46, december 1986: 40-43

Conference organized

Spring School «3ème cycle romand d'informatique» entitled *Software engineering, artificial intelligence and integrated environment*, , Villars, March 1988. The guest speakers were David Barstow (Schlumberger-Doll), Eric Dubois (MBLE-Philips) and John Mylopoulos (U. of Toronto)

Man-Machine Interface (1985-1990)

This research was an attempt to automatically generate a highly interactive user interface directly from a functional specification. The user has complete control over the dialog, as long as his behavior is consistent with the functional specifications. In particular, data can be input and operations invoked in any order by direct manipulation. We designed a set of tools and defined an architecture which support such a flexibility.

Thesis guided

Isabelle Petoud, *Génération automatique de l'interface homme-machine d'une application de gestion hautement interactive*; PhD thesis, Université de Lausanne, 1990

Selected publications

Petoud, I., Pigneur, Y. «An Automatic and Visual Approach for User Interface Design», in G. Cockton (ed.), *Engineering for Human-Computer Interaction*, Elsevier Science Publishers B.V. (North-Holland), © IFIP 1990: 403-419

Petoud, I., Pigneur, Y. «Des spécifications fonctionnelles à l'interface-utilisateur sans programmation», in J. Coutaz (ed.), *Ingénierie des interfaces homme-machine*, Sophia Antipolis, May 1989

Adiba, M., Bodart, F., Léonard, M., Pigneur, Y. *Le poste de travail dans les systèmes d'information*, Edition Systèmes et Informations, 1989

Conference organized

Rencontres lausannoises sur les interfaces homme-machine, Lausanne, 1992. The guest speakers included Joelle Coutaz (IMAG - Grenoble), François Bodart (FUN - Namur), Christine Collet (IMAG - Grenoble) , Bernard Senach (INRIA - Sophia Antipolis) and Claude Valot (CERMA - Paris).

Computer-Aided Requirement Engineering (1978-1984)

This project, constructed under the direction of Prof. François Bodart (University of Namur) coherently integrates an extensible set of models, tools and design technics for designing information systems. The special contribution of this approach depends on the experimental character which is favorized in the design of information systems with simulation and prototyping tools. It permits to consider different hypotheses, to test their impacts and to better appreciate the structure and the behavior of a future information system. One should also mention that the construction of this first european "CASE" tool was initiated by a deep collaboration with the ISDOS project of the University of Michigan, directed by the professor Daniel Teichroew.

Books

Bodart, F., Pigneur, Y. *Conception assistée des systèmes d'information: méthodes, modèles et outils*, Masson, Paris 1989, 317 p.

Bodart, F., Pigneur, Y. *Conception assistée des applications informatiques: étude d'opportunité et analyse conceptuelle*, Masson, Paris 1983, 241 p.

Selected publications

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Software developed and distributed

IDA (DSL/DSA), a computer-aided software engineering (CASE) tool

Spin off

Software house Metsi (Paris) for distributing the IDA CASE tool