

# Cédric Gaspoz

## Education

- 2006–2010 **PhD in Business Information Systems**, *HEC Lausanne, University of Lausanne, Switzerland.*  
**Title:** “Prediction Markets Supporting Technology Assessment”  
**Committee:** Prof. Yves Pigneur (Supervisor, University of Lausanne), Prof. Shirley Gregor (The Australian National University), Prof. Jean-Fabrice Lebraty (University of Nice Sophia Antipolis), Prof. François Grize (University of Lausanne)
- 2003–2005 **Master in Business Information (MBI)**, *HEC Lausanne, University of Lausanne, Switzerland.*  
**Title:** “Designing a Prediction Market to Assess Mobile Information and Communication Systems (MICS)”  
**Committee:** Prof. Yves Pigneur (Supervisor, University of Lausanne), Prof. Thibault Estier (University of Lausanne)
- 1995–2000 **BA in Management**, *University of Neuchâtel, Switzerland.*

## University Positions

- 2010–noon **Postdoctoral Fellow**, *Sauder Business School, University of British Columbia, Canada.*  
Postdoctoral research fellow funded by the Swiss National Science Foundation.
- 2004–2009 **Research and Teaching Assistant**, *HEC Lausanne, University of Lausanne, Switzerland.*  
*Research Assistant*  
Information systems research fellow for Prof. Yves Pigneur. Funded by the Swiss National Science Foundation to participate in the National Competence Center in Research on Mobile Information and Communication Systems (NCCR-MICS). Website: <http://www.mics.org>.
- Teaching Assistant*  
Teaching courses, organizing and monitoring student’s projects and assignments.  
List of courses:
- Interactive Systems Design (2009)
  - eBusiness (2008)
  - Information Systems Integration (2006–2008)
  - Information Systems Auditing (2004–2008)

## Grants and Awards

- Grants Prospective researcher fellowship, Swiss National Science Foundation (PBLAP1-129408)  
Prospective researcher fellowship extension, Swiss National Science Foundation (PBLAP1-136966)

Awards The University of British Columbia Postdoctoral Fellow Travel Award Q1/2012  
Thesis Awards **Doctoral Thesis:** “Prix de la Solidarité Confédérale 2011”  
**Master Thesis:** “TSA Telecom Best Student Award”

## Research Interests

- Information Systems Modeling and Design
- Technological Forecasting
- Decision Science
- Ontologies
- Information Extraction and Aggregation

## Publications

### Articles Published in Refereed Conferences

Cédric Gaspoz and Yair Wand. Using Ontologies and Soft Systems Methodology to Provide Multi-user Support in Problem Structuring. In *Proceedings of the 45th Annual Hawaii International Conference on System Sciences (HICSS 2012)*, pages 658–667, Maui, HI, USA, January 2012. IEEE.

Cédric Gaspoz. Prediction Markets as Web 2.0 Tools for Enterprise 2.0. In *Americas Conference on Information Systems (AMCIS 2011)*, page Paper 432, Detroit, August 2011.

Cédric Gaspoz and Yves Pigneur. Preparing a Negotiated R&D Portfolio with a Prediction Market. In *Proceedings of the 41st Annual Hawaii International Conference on System Sciences (HICSS 2008)*, page 10, Hawaii, January 2008. IEEE.

Cédric Gaspoz, Jan Ondrus, and Yves Pigneur. Comparison of Multi-criteria and Prediction Market Approaches for Technology Foresight. In *Proceedings of the 13th Conference of the Association Information and Management (AIM)*, page 9, Paris, France, December 2008.

Jan Ondrus, Cédric Gaspoz, and Yves Pigneur. Technology Foresight for IT Investment: Multi-Criteria Decision-Making versus Prediction Markets. In *Proceedings of the 6th French affiliated AIM pre-ICIS workshop*, page 4, Montreal, Canada, December 2007.

Cédric Gaspoz. Prediction Markets As an Innovative Way to Manage R&D Portfolios. In *Proceedings of the 15th Doctoral Consortium at CAiSE-2008*, pages 62–73, Montpellier, France, 2008.

### Articles Under Review

Cédric Gaspoz. Using Ontologies to Enable Decision Support Systems to Generate Better Strategic Decisions. In *ECIS 2012*, page 10, 2012.

### Thesis

Cédric Gaspoz. *Prediction Markets Supporting Technology Assessment*. Phd thesis, University of Lausanne, 2010.

### Doctoral Consortium

Cédric Gaspoz. Prediction Markets As an Innovative Way to Manage R&D Portfolios. In *Doctoral Consortium at ECIS-2008*, page 11, Galway, Ireland, 2008.

### Working Papers

Cédric Gaspoz and Yves Pigneur. A design science approach for developing prediction markets in an r&d community. ISI Working Paper, 2009.

### Invited Presentations

Cédric Gaspoz. Could science help predicting the future? Public Course, University of Lausanne, 2009.

Cédric Gaspoz. Preparing a negotiated r&d portfolio with a prediction market. MICS Scientific Conference, Neuchâtel, 2007.

Cédric Gaspoz. Prediction markets as forecasting tools. ISI Seminar, University of Lausanne, 2006.

Cédric Gaspoz. The marmix project ...forecasting the future. MICS Scientific Conference, Zürich, 2006.

### Newspapers Articles and Radio Broadcasts

Météo imprévisible. Le Grand 8, RSR La Première, May 2008.

Mieux que les astrologues, les économistes voient déjà 2007. Allez Savoir, October 2007.

Forecasting the future with marmix. MICS Newsletter, March 2007.

La bourse s'invite au palais fédéral. Le Matin Dimanche, August 2007.

Prédire l'avenir. Bulletin HEC, 11 2007.

Les sondages sont-ils fiables? Le Grand 8, RSR La Première, September 2006.

Marmix, le site qui lit l'avenir dans les marchés financiers. 24 Heures, December 2005.

### Academic Duties & Association membership

Reviews	Journal of the Association for Information Systems (JAIS), Electronic Markets (EM), Information Systems and e-Business Management (ISeB)
Representation	Past graduate assistants' representative at the HEC Faculty Council, HEC Lausanne
Association	Past committee member of the PhD association (PhDnet), HEC Lausanne Membership: AIS, ACM, IEEE, SI

### Other Professional Experience

#### Employee

- 2009–2010 **Internet/Intranet Expert**, *University of Lausanne*, Lausanne, Switzerland.  
Design, development and maintenance of web applications as well as installation and monitoring of the underlying infrastructure.
- 2000–2004 **Managing Director**, *younet.org*, Bern, Switzerland.  
Daily and strategic management of the company (5 employees). Internet/Intranet projects for NGO and small corporations.
- 1999–2000 **Political Secretary**, *National Youth Council of Switzerland*, Bern, Switzerland.  
In charge of the French office of the NYCS. Organization of various national and international events on youth policy.
- 1996–1999 **Trainee**, *Nivarox-FAR SA*, Le Locle, Switzerland.  
Project Assistant and Project Leader in various projects. Fixed assets management, remuneration of the executives, controlling of the production's employees.

#### Entrepreneur

- 1995–noon **Founder, Managing Director**, *Tarqis Ltd*, Biel/Bienne, Switzerland.  
Creation and strategic management of the company. Pro audio and light rentals for entertainment productions.

## Languages

French **Fluent**  
German **Fluent**  
English **Good knowledge**

*Academic Writing for Graduates, Level B2*

## Academic References

- Yves Pigneur Professor, Head of the Department of Information Systems  
HEC Lausanne, University of Lausanne, Switzerland  
*yves.pigneur@unil.ch*, +41 21 692 34 16
- Yair Wand Professor, Head of the Department of Management Information Systems  
Sauder School of Business, The University of British Columbia, Canada  
*yair.wand@ubc.ca*, +1 604 822 8395
- Shirley Gregor Professor, ANU College of Business & Economics  
The Australian National University, Canberra, Australia  
*shirley.gregor@anu.edu.au*, +61 2 6125 3749
- Jan Ondrus Assistant Professor, Information Systems and Decision Sciences Department  
ESSEC Business School, Paris, France  
*ondrus@essec.fr*, +33 1 34 43 36 73

## Research Statement

### Past–Present

My primary research focus is on decision support, specifically on the use of information systems to support users in reaching better decisions. This comprises three different perspectives: (1) supporting decision choice, (2) supporting problem structuring and information retrieval and (3) understanding the use of information systems in the context of decision making. The first perspective has given rise to my thesis on the use of prediction markets to support technology assessment. Prediction markets are speculative markets created for the purpose of making predictions. Shares are created whose final cash value is tied to a particular event or parameter. The current market prices can then be interpreted as predictions of the probability of the event or the expected value of the parameter. This emerging research topic has not been extensively studied from an information systems perspective. Previous research indicates that there was a need to study the design of prediction markets for enterprise applications. Therefore, new experiments and architectures had to be designed. My dissertation proposes tackling new enterprise prediction market applications using a design science approach. I developed and instantiated three prediction markets to support R&D portfolio management, technological forecasting and idea evaluation. This led us to define various design properties, considering the application field and the expected outcomes. Most of my publications are directly related to this topic.

In the short time I have been doing research in the prediction market field, I have come to be considered an expert in enterprise prediction markets by both academia and industry. This resulted in giving many invited lectures, as well as numerous appearances in public radio broadcasts and newspapers. My contributions are both theoretical and practical. Importantly, I was able to find a good balance between rigor and relevance, one of the major challenges in the current information systems research community.

In terms of theoretical contributions, I demonstrated the successful use of prediction markets to support R&D portfolio management and technology foresight, two new prediction market applications. Therefore, I established a comparison framework for technology foresight applications and compared prediction markets with more traditional approaches such as MCDM.

As a natural extension of these results, I started to work on problem structuring during my time as a visiting scholar in the MIS division of The University of British Columbia (UBC). This second research perspective attempts to develop an ontology-based approach to support users in problem structuring in the context of the use of a decision support system (DSS). Current DSSs make the assumption that users are aware of the problem domain and of the information they need in order to generate and select solutions. However, in the current fast-changing organizational and environmental contexts these assumptions tend to no longer hold. Therefore, I propose to use an application ontology, built by specializing multiple domain ontologies and a task ontology, to support the user of a DSS in structuring the problem, acquiring a shared understanding of the problem domain and finally in discovering and retrieving relevant information. This work in progress has resulted in various published conference papers.

Finally, I decided to research the third perspective by studying the relation between one's privacy concerns and the installation of applications on mobile phones. General media report more and more news about firms using their customers' mobile phones to collect various data in a more or less public manner. These stories raise a lot of comments, but at the same time, users tend to install more and more applications on their phones, increasing the risk of privacy issues. I propose to study the cognitive mechanisms resulting in the installation of applications on mobile phones, mainly from a decision support perspective. I am concerned to understand how to present the applications rights' requests to the user in order to help him or her in making a fully informed decision during the installation process. This last research is currently at a design level, and a conference paper should appear in the next few months with some preliminary results.

## Future Plans

My future research plans are to strengthen the current progress I have made within the prediction markets and decision support systems fields. Besides pursuing the current projects, there are many aspects of these topics that have emerged during my research such as requirements engineering, information aggregation and retrieval, and the design of decision support tools.

In an attempt to support the design of corporate prediction markets, I drafted an ontology-based requirement analysis. Such a method could greatly improve the use of DSS tools in enterprise and would support a broad range of applications, allowing managers to dynamically create and adapt their applications' requirements, based on their business needs.

Furthermore, we found that in order to support technological forecasting we need to improve the creation of new shares on prediction markets. We are currently conducting exploratory research using classifiers on large datasets to extract emerging research topics. The next step would be to explore the use of ontology and web semantics to improve the work done by the classifiers, allowing the creation of prediction markets' shares based on the extracted emerging research fields.

Finally, with the multiplication and the dispersion of information, it becomes more and more difficult to make informed decisions. Based on our research on the design of prediction markets and on the presentation of information in the context of mobile applications installers, we identified a need to develop a method to combine, aggregate and synthesize information dynamically in order to adapt to the users' current needs. Depending on the situation, a given user can have various needs regarding the detail of information provided by the system. This is also true across multiple users confronted with the same situation. Research on networked decision support systems tends to address these issues using various methods. My intuition is that an ontological approach could be a good way to address this issue.

I believe that there are still many opportunities to publish original and quality work in top-tier journals based on these complementary research perspectives. In conclusion, my research objective is to produce high quality research that has significant impacts in both academia and industry.

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