



Simon Fraser University  
Faculty of Business Administration  
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# Michael Brydon

## Education

### University of British Columbia

Vancouver, BC

- 2000: Ph.D. in Management Information Systems, Faculty of Commerce and Business Administration.
- Dissertation title: *A Market-Based Approach to Resource Allocation in Manufacturing.*

### Royal Military College of Canada

Kingston, ON

- 1993: M.Eng. in Engineering Management (Industrial Engineering)
- Thesis title: *Intelligent Quality Control and Improvement: Applying Machine Learning to a Large-Scale Continuous Industrial Process.*

### Royal Military College of Canada

Kingston, ON

### Royal Roads Military College

Victoria, BC

- 1990: B.Eng. in Engineering Management (Industrial Engineering)-
- Thesis title: *Applied Quality Control: Alcan's Paint Line 3*

## Research Interests

### Primary research interest

Decision making, multi-agent intelligent systems, decision-theoretic planning, combinatorial auctions, online auctions, real options valuation

### Secondary research interest

Knowledge management, open source software, public goods, data mining, group decision support

## Experience

### Simon Fraser University

Burnaby, BC

Sep 2008 – present: Associate Professor  
Dec 2000 – Sep 2008: Assistant Professor  
May 1999 – Dec 2000: Instructor  
1997 – 1999: Sessional Lecturer

### University of British Columbia

Vancouver, BC

1998: Fellow, Centre for Operations Excellence  
1993 – 1998: Sessional Lecturer/Teaching Assistant  
1997: Lecturer, Certified General Accountants Program

### Royal Military College of Canada

Kingston, ON

1990 – 1993: Technical Officer and Lecturer, Department of Engineering Management

## Journal Publications

- Brydon, M. J. and Vining, A. R., 2008, "Adoption, Improvement and Disruption: Predicting the Impact of Open Source Applications in Enterprise Software Markets," *Journal of Database Management*, 19(2), pp. 73-94.
- Brydon, M. J. and Gemino A. C., "You've Data Mined. Now What?" *Communications of the Association for Information Systems*, 22(33).
- Brydon, M. J. and Gemino, A. C., "Classification Trees and Decision-Analytic Feedforward Control: A Case Study from the Video Game Industry," *Data Mining and Knowledge Discovery*, 17(2), pp. 317-342.
- Brydon, M. J. (2006) "Economic metaphors for solving intrafirm allocation problems: What does a market buy us?" *Decision Support Systems*, 42(3), pp. 1657-1672.
- Brydon, M. J. and Vining, A. R., (2006) "Understanding the failure of internal knowledge markets: A framework for diagnosis and improvement," *Information & Management*, 43(8), pp. 964-974.
- Brydon, M.J., (2006) "Evaluating strategic options using decision-theoretic planning," *Information Technology and Management*, 7(1), pp. 35-49.
- Brydon, M.J. (1990) "Using Control Charts to Monitor the Performance of Large-Scale Systems," *Engineering Management Journal*, Vol.3, No.1

## Papers under Review

- Chwelos, P., Brydon, M., and Benbasat, I., "Recognizing Strategic Reputation Manipulation on eBay: An Experimental Investigation" under second review at *Journal of Management Information Systems*.
- Brydon, M. J., Chwelos, P. D., and Benbasat, I., "Plugging the Holes in eBay's Reputation System," under review at *Communications of the Association for Computing Machinery (CACM)*.

## Conference Papers and Presentations

- Brownstein, M., Brydon, M. J., and Vining, A. R., (2006), "Can Open Source Disrupt Enterprise Software? The Case of CRM," in the proceedings of Conference of the Administrative Sciences Association of Canada (ASAC 06).
- Brydon, M. J., (2004) "Economic Metaphors for Computation: What do Markets Buy Us?" presented at the CORS/INFORMS International Meeting, Banff, AB.
- Brydon, Michael J., (2003), "Evaluating Strategic Options Using Decision Theoretic Planning," Eighth Annual Informis Conference on Information Systems and Technology (CIST-03), Atlanta, GA.
- Collins-Dodd, C., Brydon, M., and Maygar, E., 2003, "Consumer channel decisions in a bricks and mortar vs. electronic retailing environment," 10th International Conference on Recent Advances in Retailing and Services Science (EIRASS '03).

- Brydon, Michael J., 2002, "Using Decision-Theoretic Planning Agents in Market-Based Systems," AAAI Workshop on Game Theoretic and Decision Theoretic Agents (GTDT'02), Edmonton, AB.
- Gemino, A., Brydon, M., and Olnick Kutzschan, A., 2002, "Requirements Engineering in Web Development Projects," Conference of the Administrative Sciences Association of Canada (ASAC '02).
- Chwelos, Paul D., and Brydon, Michael J., 2000, "Clicks vs. Bricks: Towards a Model of Internet-Induced Channel Competition," International Conference on Information Systems (ICIS-2000), Brisbane, Australia.
- Brydon, Michael J., 1998, "Markets As Decision Makers: A Framework For Multi-Agent Planning," in the Proceedings of the 1998 Workshop on Information Technology and Systems (WITS 98), Helsinki, Finland.
- M. J. Brydon, 1996, "Emergent Planning and Control in Manufacturing" presented at INFORMS-96, Atlanta, GA, 03 Nov.
- M.J. Brydon and A.L. Jenkins, 1994, "Applying Machine Learning for Intelligent Quality Improvement," *Proceedings of the 6th Symposium/Workshop on Applications of Expert Systems in DND*, Kingston, Ont.
- M. J. Brydon, 1993, "Quality Control Using Artificial Intelligence Techniques," presented at the 35th Annual Conference of the Canadian Operational Research Society, Halifax, N. S., 26 May.
- M.J. Brydon, 1990, "Using Control Charts to Monitor the Performance of Large-Scale Systems," Proceedings of the 11th Annual Conference of the American Society for Engineering Management, St. Louis MO, 15 Oct.

### Invited Presentations

- 2004 Management Information Systems Seminar, Sauder School of Business, "Valuating Strategic Alternatives Using Decision-Theoretic Planning".
- 2003, Management Information Systems Colloquium, Haskayne School of Business, University of Calgary, "Strategic Decision Making in the Face of Uncertainty or: What to do with a GartnerGroup Report".
- 2001, Fisher College of Business, Ohio State University, "Resource Allocation Using Markets".

### Works in Progress

- Brydon, M.J. and Gemino, A.C., "Evaluating Product Development Options in the Video Game Industry: a Decision-Theoretic Approach," for submission in *Decision Analysis* in fall of 2007
- "Predicting Success in the Video Game Industry: Is it Like the Movies?"(with Aidan Vining and Andrew Gemino), statistical analysis in fall of 2007.
- "Open Source as an Alternative to Make Versus Buy," preparing manuscript for submission in spring 2008.
- An experimental analysis of eBay's Reputation 2.0 (with Izak Benbasat).

## Grants

- A longitudinal analysis of reputation manipulation on eBay (with Tirtha Dhar).
- 2008 SSHRC-SFU Institutional Grant – Small with P. Tingling “Predicting black swans: an empirical investigation of forecasting in fat-tailed environments” (\$5,800)
- 2002-04 SSHRC INE with A. Vining (principal), E. Love, and A. Pavlov: “Rethinking the Application of Formal Models to Strategic Decision Making” (\$200,000)
- 2000-04 NSERC Individual Research Grant: “Solving resource allocation problems using markets and rational agents” (\$55,500)
- 2000-01 Finning Endowment, SFU: “A Market-Based Approach to Resource Allocation in Manufacturing” (\$10,000)
- 2000 Management of Technology Business Council, SFU: “Channel Conflict: The Risks of Clicks and Mortar” (\$3,900)

## Teaching

Years	Level	Course	Name
2007, 2006, 2005, 2004, 2003, 2002, 2001, 2000	Graduate/ MBA	Bus 756	Strategic Use of Information and Knowledge
2001, 2000, 1999	Graduate/ MBA	Bus 905	Electronic Commerce
2004	Graduate/ MBA	Bus 554	Management Information Systems (Regional MBA)
2004	Graduate	SAR 893	Directed Studies
2006, 2005, 2004	Undergrad	Bus 462	Managerial Support Systems
2003, 2000(2)	Undergrad	Bus 492/ 464	Building Business Systems
2006, 2005, 2003, 2002(2), 2001	Undergrad	Bus 362	Information Systems Analysis and Design
2002, 2000(2)	Undergrad	Bus 499	Directed Studies

## Professional Service

- Reviewer for Management Science, Information Systems Research, IEEE Transactions on Engineering Management, Computational Intelligence
- 2006, Reviewer for SSHRC Individual Grants.
- 2007, 2006: Reviewer for Administrative Sciences Association of Canada (ASAC)

## **University/Faculty Service**

- 2002, 1999: Reviewer for NSERC Discovery Grants and Collaborative R&D Grants
- 2007, 2004, 2002, 2001, 2000 Program Committee for the International Conference on Information Systems (ICIS)
- 2001 Program Committee for the Workshop on Information Technology and Systems (WITS 2001)
- Management of Technology MBA Committee, 2007 – present
- Academic Appeals Committee, 2006 – 2007
- Area Coordinator, MIS, Aug 2003 – Sep 2005
- Member, Appointments Committee, Jun 2002 – May 2003
- Member, Faculty Tenure and Promotion Committee: Jun 2001 – Jan 2002

## **Awards and Achievements**

- 1996 International Conference on Information Systems (ICIS) doctoral consortium participant
- McPhee Fellowship, University of British Columbia (1993-1996)
- First place: 1990 American Society for Engineering Management/McDonnell Aircraft Student Paper Competition

## Senior Supervisory Duties of a Thesis/Dissertation/or Major Project

Name	Degree	Project/Thesis Title	Status	Began	Completed
<b>Primary supervisor</b>					
Medina, Ahmed	M.B.A.	Vivonet: HALO DataWarehouse Strategic Plan	Completed	2006-3	2007-1
Wu, Shirley	M.B.A.	Commercial Viability Of Elecar Transportation System	Active	2005-2	
Singh, Ravi	M.B.A.	Changing Channels: Exploring Alternative Sources Of Revenues For Knowledge Network In An Uncertain Future	Completed	2004-3	2005-1
Oneata, Cristian Marius	M.B.A.	Strategic Analysis for the Open Source Institute at Simon Fraser University	Completed	2004-2	2004-3
Sarrafi, Massouc	M.B.A.	Strategic Analysis for the Open Source Institute at Simon Fraser University	Completed	2004-2	2004-3
Tsang, Davie	M.B.A.	The adoption factors of 3D graph technology in computer and video gaming development	Completed	2000-1	2002-2
Wong, Chung	M.B.A.	Factors influencing wireless service providers' decision to adopt 3G wireless infrastructure : an adoption model	Completed	1999-3	2002-2
Campbell, Christopher	M.B.A.	The Effect of Online Selling on Channel Structure: Factors leading to a high degree of Internet induced channel competition	Completed	2000-1	2001-3

## Serving on a Committee of a Thesis/Dissertation/or Major Project

Name	Degree	Project/Thesis Title	Status	Began	Completed
<b>Committee member</b>					
Gibbons, David	Ph.D.	The use of formal methods to support strategic decision making	Active	2003-1	
Sharma, Pratibha	M.Sc.	Using Markets to Solve Constraint Satisfaction Problems	On Leave	2001-1	
Vastani, Hussein	M.Sc.	Using distributed mechanisms to solve the n-vehicle pick-up and delivery problem	On Leave	1999-3	
Susanto, Tedi	M.Sc.	Approximating the Nash Bargaining Solution in Multi-Agent Allocation Problems	Completed	2002-2	2004-2
Magyar, Erika	M.B.A.	Channel Competition: Consumer Search And Purchase In A Multiple Channel Environment	Completed	2000-3	2002-1
Zhu, Hong	M.B.A.	Business partnership in ASP marketplace	Completed	2000-1	2001-2
Lian, Minli	M.B.A.	Transition in Business Intelligence: An examination of Web-based Models for Decision Support Systems	Completed	1999-3	2001-2
Doering, Marco	M.B.A.	How Product Uncertainty Affects Consumers' Willingness to Purchase Over the Internet.	Completed		2001-1
Bhattacharya, Anant	M.B.A.	Development of a DSS model for a timber company	Completed	1999-3	2000-1
<b>Second reader</b>					
Archer, Ann	M.B.A.	A Strategic Analysis of Wireless Innovation In Intelligent Transportation Systems	Active	2006-3	
Ellickson, Sean	M.B.A.	An Analysis of The Potential Application of RFID To Helicopter Maintenance Operations	Completed	2006-3	2006-3

<b>Name</b>	<b>Degree</b>	<b>Project/Thesis Title</b>	<b>Status</b>	<b>Began</b>	<b>Completed</b>
Galvin, Jamie	M.B.A.	Analysis of Shipping Logistics Management for An E-Commerce Firm	Completed	2006-3	2006-3
Brownstein, Matthev	M.B.A.	Pivotal And The Threat of Op Source CRM: A Strategic Assessment	Completed	2005-2	2005-3
Lin, Diego	M.B.A.	Pivotal And The Threat of Op Source CRM: A Strategic Assessment	Completed	2005-2	2005-3
Chavez, Paola	M.B.A.	Business Case – TELUS VoIP Peering Service	Completed	2004-2	2004-3
Pinchbeck, Rod	M.B.A.	Business Case – TELUS VoIP Peering Service	Completed	2004-2	2004-3
Meng, Aidong	M.B.A.	A Strategic Analysis Of Raffemet’s Entry Into The Chinese Fuel Oil Futures	Completed	2004-1	2004-3
Secchin de Freitas, Humberto	M.B.A.	Developing a Technopolis: A Model and Strategy for Developing A high-Tech Clust in Petropolis Brazil	Completed	1999-3	2002-1
<b>Examiner</b>					
Law, Andy	Ph.D.	Cadia: Combinatorial Auction Winner Determination Using Item Association	Completed		2005-2



## Graduate Supervision Outside SFU (incl. External Examinations)

Name	Degree	Status	Dates	Role
Irene Pan	M.Sc.	Completed	November 2003 - September 2004	Committee Member
<b>Area:</b>	Management Information Systems			
<b>Title:</b>	Time and Price Dimensions in an Online Auction Reputation Mechanism			
<b>Institution:</b>	University of British Columbia			
Russ Ovans	Ph.D.	Completed	August 2002 - August 2002	Internal-External
<b>Area:</b>	Computer Science			
<b>Title:</b>	A Multiagent Solution to the Venue Equalization Problem			
<b>Institution:</b>	SFU			
Sampson, Peter	M.B.A.	Completed	January 2001 - August 2001	Senior Supervisor
<b>Area:</b>	Management			
<b>Title:</b>	Strategic Analysis of Second Narrows Projects Inc			
<b>Institution:</b>	Royal Roads University			