



**Alan Mehlenbacher, MBA, PhD
Economics and Management Consultant**

CONSULTING AND EMPLOYMENT SUMMARY

Years	Position	Organization
1989-present	Economics and Management Consultant	Alan Mehlenbacher Associates Ltd.
1992-2007	President and Partner	Stellar Financial Management Group Ltd.
1989-1993	Director and Partner	Stellar Systems Group Inc.
1987-1989	IT Director	BC Ferry Corporation
1986-1987	IT Assistant Director	BC Systems Corporation
1984-1986	IT Manager	BC Systems Corporation
1980-1984	IT Project Manager	BC Systems Corporation
1979-1980	Senior Systems Analyst	Alberta Transportation
1977-1979	Statistician and Programmer	University of Alberta
1975-1977	Mathematician and Programmer	Alberta Oil Sands Environmental Research Project

EDUCATION AND CERTIFICATION SUMMARY

- PhD (Economics), University of Victoria
- MBA, Simon Fraser University
- MSc (Biology), University of British Columbia
- BS (Math, Biology), University of Michigan
- CMC (Certified Management Consultant), Institute of Certified Management Consultants
- ISO 9000 Implementation Certificate, Institute of Certified Management Consultants
- Strategic Management Certificate, American Management Association



ACADEMIC APPOINTMENT SUMMARY

Years	Position	Organization
2010-present	Adjunct Assistant Professor	University of Victoria: Economics
2009-2010	Sessional Instructor	University of Victoria: Economics
2007-2009	Assistant Professor Limited Term	University of Victoria: Economics
2005-2007	Sessional Instructor	University of Victoria: Economics
1999-2003	Sessional Instructor	University of Victoria: Computer Science
1990-1992	Instructor	University of Victoria: Continuing Studies

CONSULTING PROJECTS
(alphabetical order)

Anonymous Private Clients

- Assisted a private client in preparing a **value-for-money** analysis for submission to Competition Bureau Canada in further support of the earlier price-fixing complaint (2009).
- Assisted a private client in preparing a **price-fixing** complaint for submission to Competition Bureau Canada (2008).

BC Archives and Records Services

- For the government-wide group of Records Managers, facilitated a **business area analysis** for the records management functions, including objectives, business process definition, and information needs (1990).
- For the BC Records Management functions, developed an **information technology plan**, including data and application architectures, technology alternatives, and migration strategies (1990).

BC Buildings Corporation

- Developed an implementation strategy for **systems and data integration processes** (1994)



BC Ministry of Environment, Lands and Parks

- For the Water Resources Branch Utilities Section, developed a **management system** to support the tracking of outstanding references for utilities using Visual Basic and Excel objects (1996).
- For the Water Resources Branch Appeals Section, developed a **scheduling system** to support the priority scheduling of water rights appeals. The system uses Visual Basic, Excel objects, and Project objects (1995-1996).
- For the Water Resources Branch, developed an **executive information system** for the Director and Comptroller of Water Rights. The system uses Visual Basic, Excel objects, Word Basic, and Open Database Connectivity to integrate data from an Oracle database, a commitment accounting system, LAN files produced by other operational systems, and a database of Word documents (1995).
- For the Prince George Regional Office, determined system requirements using a prototyping process for an **executive information system** for the management of referrals. The prototype used Visual Basic, Excel objects, and Open Database Connectivity to information in an Oracle database (1995).
- For the Hydrology Branch, developed an overall **project plan** for a project involving map conversion, incorporation of Geographic Information System technology in the regional water management process, and Web access by the public (1995).

BC Ministry of Forests

- For the Revenue Branch, **directed a large systems development project** with project leaders from Stellar Systems Group Inc. This project included developing requirements for a new Harvest Billing System using electronic commerce with forest companies, a plan for a Year 2000 conversion of a legacy system, a data conversion plan, and a Treasury Board Submission (1996-1997).
- As a Project Management Consultant to the Manager of the Tree Seed Centre, developed and implemented turn-around strategies for **systems development and implementation** (1994-1995)
- For the Information Systems Branch, developed a working prototype for a **business plan measurement system**. The prototype used Visual Basic and Excel objects (1995).
- For the Information Systems Branch, developed a series of presentations on the **information management process** (1993).
- For the Valuation Branch, facilitated development of a **project plan** for the integrated harvest systems and developed **technical architectures for the system migration process** (1990-1991).

BC Ministry of Health

- For the Information Management Steering Committee, facilitated **information management** projects (1992-1993).
- For the Systems Division, led a team of consultants providing data management, client/server standards, and **systems development processes** and tools (1992-1993).
- For Ministry executives and managers, developed and delivered customized courses in **Strategic Information Management**, presenting nine sessions in Victoria and Vancouver (1991-1992).



- For Pharmacare Division, led the management team through a **strategic planning process**, including mission, objectives, strategies, business process design, organization design, and implementation plan (1990).
- For the Pharmacare Division, developed a strategic **information technology plan**, including data and application architectures, technology infrastructure, and systems implementation. This resulted in the development of **PharmaNet** (1990).

BC Ministry of Transportation and Highways

- For the executive systems committee, developed a strategic **planning process** for formulating and assessing IT strategies (1994).
- For executives and managers of the Ministry, developed and delivered customized courses in ***Strategic Information Management***. Delivered six sessions in Victoria and Nelson (1992-1993).
- For the Properties Branch, facilitated development of **information technology requirements and business case** (1991).
- For the Properties Branch, developed a **business process analysis, information requirements, system and data architecture, technology evaluation, financial analysis, and implementation plan**, and **Treasury Board submission** for a Property Acquisition and Inventory Management system (1989-1990).

BC Tel Advanced Communications Inc. (with SRI Strategic Resources Inc., Vancouver)

- Developed a **business plan** with the management team for the start-up of the Electronic Commerce Division (1994), recommending the abandonment of existing products and the development of Internet service. This resulted in **Telus.net**.
- Developed an **executive information system** for the General Manager of the Inter-Networking Services Division. This system used Excel macros and Open Database connectivity to integrate data created by marketing (Paradox) and service order entry (VAX Rdb) systems (1994).
- Developed an information **systems plan** for the Inter-Networking Services Division (1994).
- Facilitated a **business process design** with the management team for the start-up of the Inter-Networking Services Division (1993).

BC Tel Systems Solutions (with SRI Strategic Resources Inc, Vancouver)

- Assisted the management team in developing a **long-range business plan** that is focused on high-priority objectives (1993).

Centra Gas Ltd.

- Developed an **information technology evaluation** for the BC Division (1990).

Ecotrust Canada

- Developed a 10-year database for a **mission-based loan fund** and developed a comprehensive statistical analysis (2011).



Environmental Law Centre

- Created a database of BC mining companies and evaluated the current level of mining reclamation security deposits relative to financial measures (2011).
- Developed a detailed evaluation of Philadelphia's environmental economic cost-benefit analysis of its low impact development strategy and evaluated its applicability to the Capital Regional District (2011).

Maltais Geomatics Inc.

- Provide ongoing **advice and business counsel** to the President (2001-present).
- Developed a **company valuation** of a potential acquisition (2011).
- Developed a **company valuation** of MGI to provide the partners with negotiating strength during a takeover bid (2002).
- Developed guidelines for writing **federal proposals** for surveys on Inuit-Owned Lands (1995).

Northern Sales of Alaska Inc.

- Facilitated the management team's development of a **strategic analysis and strategic plan** in Juneau and Ketchikan (1991).

Pacific Climate Impact Consortium

- Developed computational models using spatial optimization techniques for assessing the impact of **climate change** and pests on forests and the economy (2007-2009).

Royal British Columbia Museum

- For the RBCM and IMAX executives, facilitated the **resolution** of operational issues with management working groups (1999).
- For the RBCM executives, facilitated the development of the **five-year strategic plan** for 2000-2004 (1998).
- For the RBCM executives, facilitated the development of **annual business plans** for 1996-1997, 1997-1998, 1998-1999, and 1999-2000 (1996-1998).
- For the Friends of the Royal BC Museum, facilitated the development of the **annual business plan** for 1999-2000 (1998).
- For the Systems Manager, provided **project management** consulting to ensure the successful implementation of systems involving public Web access and Oracle databases (1996-1999).
- For the Financial Services Branch, developed a **financial forecasting system** using Visual Basic, Excel objects, and Open Database Connectivity to the Ministry of Finance Oracle database (1998).
- For the RBCM executives, developed **business plan measurement systems** for the 1996-1997, 1997-1998, and 1998-1999 measurements. The system uses Visual Basic, Excel objects, and Open Database Connectivity to Oracle and FoxPro databases (1996-1998).



- For the RBCM executives, facilitated the development of requirements and evaluated products for acquisition of an interdepartmental **fund-raising system** (1997).
- For the corporate IT Steering Committee, developed RFPs for DBA and systems development support and facilitated the **RFP process** (1995-1996).
- For the corporate IT Steering Committee, facilitated the development of **IT strategies, IT investment analysis, and project plans**. (1995).
- For the corporate IT Steering Committee, facilitated the development of a **business process model and IT assessment**. (1995).

School District No. 62 (Sooke, BC)

- For the management team, developed and delivered a customized *Project Sponsor's Workshop* (1992).

University of Victoria, Department of Computer Science

- Developed **course material** and taught courses in **Network-Centric Computing and Agent Systems** (1999-2001).

University of Victoria, Department of Economics

- Developed **simulations** that incorporated large-scale models of innovation networks and efficient network searches into a growth model (for Dr. Don Ferguson, 2009-2010).
- Developed **simulations** for solving first-order conditions in a model of the impact of income splitting on intrafamily distribution in a dynamic family bargaining unit (for Dr. Elisabeth Gugl, 2007-2008).

University of Victoria, Division of Continuing Studies

- Developed **course material** and taught public sessions of **Strategic Information Management** (1991-1992).
- Developed **course material** and taught public sessions of **Database Concepts** (1990).



MANAGEMENT EXPERIENCE
(chronological order)

President, Director, and Partner
Stellar Financial Management Group Ltd., 1992-2007

Business Experience and Achievements

- Maintained harmony and focus on business objectives within a group of seven partners, some of whom were CEOs of other companies.
- Managed productive relationships with tenants, building service providers, and financial, legal, and real estate professionals.
- Managed the company through profitable disposition of assets and final dissolution.

Director and Partner
Stellar Systems Group Inc., 1989-1993

Business Experience and Achievements

- Vice President, Director, and Principal.
- Contributed to management of the company's **growth** to over 70 employees, with offices in Victoria, Vancouver, Nelson, and Prince George, and annual revenues of \$4.7 million.

Planning and Marketing

- Introduced a thorough process of **market research** and **financial analysis** to enable the Board to avoid new unprofitable business ventures and to discontinue old unprofitable ventures.
- Introduced a **capital investment** approval process to improve the Board's ability to adopt successful strategies in entering new markets.
- Developed successful **proposals** to clients for major projects.

Organizational Development

- Led a team of senior employees in developing **systems development processes** for a wide variety of software development projects and mentored several of Stellar's outstanding senior employees.



**Director, Information Systems
BC Ferry Corporation, 1987-1989**

Professional Mandate

- Accountability for all Information Systems functions, including data and voice communications, in a Crown Corporation with over 3,000 employees.
- Supervision of three Managers and a department of 23 employees plus 6-12 consultants.

Planning

- Led the executive team through a strategic planning process for information management, producing a five-year **Strategic Information Systems Plan** (1989). This involved business process analysis, information technology strategies, and financial implications.
- Managed the development of data, application, hardware, and network architectures and the first version of a long-range **Information Technology Plan** for the Corporation.

Systems Development

- Directed Managers in developing **database administration procedures** and **systems development methodologies**.
- Developed **corporate information technologies policies**.

Organization Development

- Created and managed monthly meetings for an Information Systems **Steering Committee** comprised of senior management, and led this group to an understanding of how information technology should support high priority organizational objectives.
- Fostered **user commitment** by introducing the concepts and practices of user-involvement in information systems projects and the use of pilot projects.
- Fostered **user expertise** by training and supporting users, phasing implementation, and fostering the creation of user/systems coordinator positions.
- Focused the efforts of the IS department on systems to support the **line functions** such as project scheduling, automated drafting, shipboard support, control of the transportation of dangerous goods, and materials management.
- Opened BC Ferries to **collaboration with external agencies** and vendors such as BC Systems, Office of Controller General, and IBM.

Staff Development

- Organized a demoralized department into three effective sections committed to **contribution, collaboration, and communication**; worked with IS staff to develop a departmental mission statement, directions, and strategies.
- Hired managers with appropriate strengths, established an **objective-setting** and evaluation process, and coached managers on strategies to improve performance.
- Implemented an intensive **training** schedule to bring IS staff up to date on technologies and methodologies, and maintained on-going attention to professional development.



**Assistant Director, BC Systems Corporation
BC Ministry of Forests and Lands Information Systems Branch, 1986-1987**

Professional Mandate

- Accountability for Planning, Data and Database Administration, Lands Systems, Finance and Administration Systems, Security, and Quality Assurance within the Ministry.
- Supervision of three Managers, four Planning and Data Analysts, six Regional Systems Officers, and a department of 26 employees and 12-15 contractors.

Planning, Systems Development, and Professional Services

- Managed the development of a three year **Strategic Information Systems Plan** which included high-level business processes and data requirements.
- Managed the development of the 1987-1988 **Information Systems Plan** for the budget of \$12.8 million.
- Managed the development of comprehensive Data, Application, and Hardware & Network **Architectures**.
- Managed the preparation of the 1986-1987 annual systems report to **Treasury Board**, which was used by Treasury Board staff as an example for other ministries.
- Managed the preparation of **Treasury Board Submissions** and Requests for Proposals for implementation of new ministry hardware and network architecture.
- Managed the development of a practical and effective **standard systems development** environment of the new ministry architectures.
- Provided **consulting advice** to the BC Ferry Corporation on their Data Architecture project.
- Served on the **BC Systems Corporation Action Team** for the development of policy recommendations for the management appraisal and compensation program.



**Manager, BC Systems Corporation
Ministry of Lands, Parks, and Housing Information Systems Branch, 1984-1986**

Professional Mandate

- Accountability for Planning, Data and Database Administration, Lands Systems, Housing Systems, Parks Systems, Finance and Administration Systems, Security, and Quality Assurance within the Ministry.
- Management of nine Systems Analysts and 12-15 contractors.

Planning

- Developed the 1986-1987 **Information Systems Plan** for the \$3.2 million budget.
- Prepared the annual **Information Systems budgets** and was responsible for the quarterly budget reviews.
- Managed development of data model and systems **architecture** for the Parks Division.

Staff Development and External Liaison

- **Reorganized** the Information Systems Analysts into effective functional units and implemented a performance planning and evaluation process.
- Managed **contract administration processes**, ensuring quality, terminating unsatisfactory contractors, and maintaining relationships with skilled contractors.
- Fostered and managed a positive, cooperative relationship with **Treasury Board** staff.

Systems Development Projects

- Managed the development and successful implementation of state-of-the-art Lands and Housing systems using data modelling, user participation, prototyping, structured techniques, and relational database technology. This was the **first relational database system** in the BC government.
- Excerpts from the 1986 **Report of the Auditor General** regarding systems development in the Ministry of Lands, Parks and Housing:

We found the process used to develop and install the individual systems followed sound project management practices. The Ministry handled the difficult chore...particularly well compared to computer industry norms.

We found the Ministry... used some new approaches to systems development.

We concluded that these methods were effective and economical... and that they should be considered by other ministries.



PROJECT MANAGER AND SYSTEMS ANALYST
1975 - 1984

Project Manager, BC Systems Corporation
Lands, Parks, and Housing, Forests, and Environment Units, 1980-1984

Planning

- Developed for the Lands Division a long-range **Information Systems Plan** which included comprehensive system and data architectures, alternative hardware and software architectures, and project plans and cost/benefit analyses. This plan was subsequently implemented under my management between 1984 and 1986.

Standards

- Compiled the **Systems Development Guidelines** which have been used as the standard for projects in the Ministry and have been adopted for use in at least one other ministry.
- Led the project for the design and development of an online **Data Dictionary** system.

Project Management

- Led the project involving Analysts and users for development of the detailed Lands high level process and data requirements using data flow diagrams, data modelling, and data dictionary. The **data model** was successfully implemented in SQL/DS, contains over thirty tables, and is accessed by several systems and *ad hoc* queries.
- Led the project for the development of the Volume Information System for the Ministry of Forests. This was a large project which included **JAD** workshops, business process analysis using dataflow diagrams, a comprehensive data dictionary, planning and controlling the work of seven Analysts, frequent review with the users, and detailed user testing.
- Determined user requirements and system design for Inventory Systems for the Barkerville Historic Park and the Map Sales Department of the Ministry of Environment.

Alberta, 1975-1980

- **Mathematician and Programmer, Alberta Oil Sands Environmental Research Project**
- **Statistician and Programmer, University of Alberta Animal Science Department**
- **Senior Systems Analyst, Alberta Transportation**
- In each position, was responsible for designing and developing systems that incorporated advanced mathematics, including **mathematical models** using differential equations, mixed integer quadratic **optimization**, and advanced **statistical analysis**.



UNIVERSITY COURSE DEVELOPMENT AND TEACHING

- University of Victoria Economics Department (2005 - present):
 - Computational Economics** (Econ 457)
 - Applied Econometrics** (Econ 345)
 - Competition Economics I** (Econ 310A)
 - Competition Policy** (Econ 310B)
 - Computer Aided Modelling in Economics** (Econ 353)
 - Environmental Economics** (Econ 381)
 - Statistical Inference** (Econ 246)
 - Intermediate Macroeconomics** (Econ 204)
- University of Victoria Computer Science Department (1999 - 2003):
 - Agent Systems** (CSc 485 and 585)
 - Network-Centric Computing** (SEng 450 and 550)
 - Practice of Computer Science** (CSc 212)
- University of Victoria Continuing Studies (1990-1992):
 - Strategic Information Management**
 - Database Concepts**

MANAGEMENT TRAINING COURSE DEVELOPMENT AND DELIVERY

- Developed and taught two customized versions of **Strategic Information Management** for the Ministry of Health and Ministry of Transportation and Highways (1991-1993).
- Taught public sessions of **Strategic Information Management** for the University of Victoria Division of Continuing Studies (1991-1992).
- Developed a management course in **Strategic Information Management** (1990-1991) for public and private sector managers.
- Developed and taught a course in **Data Modelling for Experienced Systems Analysts** for Stellar Systems Group (1991).



PUBLICATIONS

Economics, Business, and Computational Modelling

- T. Murdock, A. Montenegro, A. Mehlenbacher, A. Flower, S. Taylor, R. Alfaro, and F. W. Zwiars. 2011. Economic impacts, pest outbreaks and changing landscape in British Columbia. *Journal of Environmental Science & Policy*.
- Carin, B. and A. Mehlenbacher. 2010. Constituting Global Leadership: Which Countries Need to Be Around the Summit Table for Climate Change and Energy Security? *Global Governance*. 16: 21-37.
- Mehlenbacher, A. 2009. Multiagent system simulations of signal averaging in English auctions with two-dimensional value signals. *Computational Economics*. 34: 119-143.
- Mehlenbacher, A. 2009. Multiagent system simulations of treasury auctions. *Computational Economics*. 34: 67-117.
- Mehlenbacher, L.A. 2002. Just say no to annual budgeting. *Signals*. The Signal Group.
- Mehlenbacher, L.A. 1993. Information technology strategy alignment. *The CMC Report*. Institute of Certified Management Consultants.
- Whitfield, D.W.A., L.A. Mehlenbacher, and C. Labine. 1982. Solar radiation attenuation in a hillside jack pine forest. *Canadian Journal of Botany*. 60: 1913-1922.
- Mehlenbacher, L.A. and D.W.A. Whitfield. 1977. Modelling thermal eddy diffusivity at canopy height. *Boundary-Layer Meteorology*. 12: 153-170.
- Whitfield, D.W.A., J.M. Mayo, J.E. Harter, S. Nelson, and A. Mehlenbacher. 1977. Tree geometry and optical properties of leaves. *Long term prediction of vegetation performance on mined sands*, L.C. Bliss, ed. Report of the Alberta Oil Sands Environmental Research Project, VE 6, Government of Alberta.

Biology

- Mehlenbacher, L. 1971. Devonian plants from the Yahatinda formation near Ghost River Alberta. *American Journal of Botany*. 58: 470.
- Spellenberg, R. W. and L. Mehlenbacher. 1971. Anatomical and cytological studies of an intergeneric hybrid. *Canadian Journal of Botany*. 49: 1565-1574.
- Mehlenbacher, L. 1970. Floret development, embryology, and systematic position of *Oryzopsis hendersonii*. *Canadian Journal of Botany*. 48: 1741-1758.
- Maze, J., L. Bohm, and L. Mehlenbacher. 1970. Embryo sac and early ovule development in *Oryzopsis milacea* and *Stipa tortilis*. *Canadian Journal of Botany*. 48: 27-41.