DEAN MACKIE, B.Sc., M.Sc. deanbmackie@gmail.com <u>www.deanmackie.com</u> M: 604-679-1241

Career Objective: Executive IT Management, with a focus on strategy-driven execution and delivering results while building a strong, loyal team in an environment of excellence, innovation, and good governance.

Profile: Senior Technology Professional with over 25 years' experience including more than 15 years of leadership roles in a variety of environments comprising mining, supply chain, retail, financial services, manufacturing, professional services, and technology vendors. Managerial and hands-on expertise in technology; business strategy and operations; and business partner, vendor, government, and customer relations. Strong communications skills one-to-one, in working groups, and public speaking for large audiences.

Key strengths include:

- Leadership Development, Organizational and Cultural Change
- Enterprise Architecture, Application Development, SDLC
- Business Intelligence, Analysis, Strategy, and Roadmaps, AI/ML/XR
- Project Management, Traditional and Agile Methodologies, Application Service Management
- Cyber Security, Privacy, ITIL, Corporate Governance

EXPERIENCE

TECK RESOURCES LTD.

2013 – 2023

2020 - 2023

Teck is one of Canada's leading mining companies, focused on providing products that are essential to building a better quality of life for people around the globe. Our employees worldwide have expertise across a wide range of activities related to mining and minerals processing including exploration, development, smelting, refining, safety, environmental protection, product stewardship, recycling and research.

Director, Technology and Emerging Systems

Responsible for managing Teck's technology innovation relationships, partnerships, and consortia with digitally- and mining-focused organizations and universities, as well as for creating viable approaches to emerging technologies that will have strategic value for Teck. I managed the \$25M Ideas at Work fund, the \$10M Chrysalix Venture Capital investment, advanced simulation/drones/metaverse development, and the \$10M Digital Supercluster relationship. The latter was the source of a Canadian Government ISED-funded Mining Microbiome Analytics Platform project to look at using bioinformatics to identify new low-cost low-impact mining processing and remediation bioreactor applications. Also oversaw the creation of Teck's Decarbonization Roadmap which helped launch a new team at Teck. **Director, Enterprise Applications**

Reporting to the CIO, I managed over 120 staff doing work for software development and sustainment, business intelligence, project management, training, and virtual/augmented reality for business systems in exploration, finance, corporate, HR, records management, Health/Sustainability/Environment/Communities, operations management, and fixed/mobile asset maintenance. Key result was the launch of the Renew Business Systems program across all sites (SAP, Maximo, Microsoft Dynamics, IsoMetrix), and the future-of-work "Empower" stream of RACE21.

Chief Architect

Worked closely with a matrixed global team of practitioner Architects to help Teck meet operational and strategic business goals with effective and informed decisions, design, and delivery. Projects included standard operating metrics, vendor remediation for HVC HR Systems and Coal Mining Production Statistics, and structure around detailed architecture review of projects to avoid future issues.

INNOVAT MPS and DMA Ltd

Delivering new technology and process into the Mining industry: DMA was an Ontario-based Mining Project Management and Plant Design consultancy with a successful history of implementing innovative, cost effective, robust engineering solutions. Its patented INNOVAT continuous vat leach (CVL) technology has been demonstrated as a breakthrough for copper and gold processing, with low power and water requirements and a very small footprint delivering high recovery rates quickly.

Vice President, Director, Consultant

Working closely with Teck Resource Limited's technical teams at Vancouver and Calgary offices as well as at production sites in Canada, U.S., and Chile, I was responsible for optimizing Application Delivery practices. I.T. Application Architecture Portfolio review, allowing planning and decision making for improving the efficiency and cost effectiveness of I.T. Applications Teams in a way that was aligned with the company's current challenges and forthcoming business plans.

LOBLAW COMPANIES LIMITED

In 2013, Loblaw Companies Limited was Canada's largest food retailer and a leading provider of drugstore, general merchandise and financial products and services. Over 135,000 full-time and part-time employees execute its business strategy in more than 1,000 corporate and franchised stores from coast to coast. It offers Canada's strongest control label program, including the unique President's Choice, no name and Joe Fresh brands. In addition, it provides customers with President's Choice Financial services and offers the PC points loyalty program. **Director, Enterprise End User Services (EUS)**

Technology Service Management: in Stores, Corporate Offices, and Distribution Centres, EUS staff are the names and faces that Loblaw employees trust to facilitate success with IT.

- Managed a large cross-Canada team: Brampton, Ontario headquarters plus 4 regional head offices (Halifax, Montreal, Winnipeg, Calgary), 25 Distribution Centres, plus PC Bank, Joe Fresh, and Matheson Development Lab, plus support of U.S. and International Operations
- Helped deliver SAP to Distribution Centres as part of multi-year Supply Chain Transformation, along with rollout of a Warehouse Management System and a Transportation Management System
- Results include multi-million dollar strategic technology savings initiatives: PCI Compliance, Print Optimization, Windows migration, Video Conferencing, VOIP, BYOD, Legacy Application and Equipment Decommissioning
- Helped outsource the national call centre (NSC) to IBM involving significant vendor contact to coach them to effectiveness while developing and monitoring metrics to track and report the value delivered and documenting support articles for vendor staff
- Brought together teams in Supply Chain Support, Store and Corporate Staging, Desktop/Laptop, Telephony/Mobility, Printing, Projects and Technology Integration, Patch and Release Management

2013 – 2015

2012 - 2014

2008 - 2013

Technical Environment: Multi-site data centre. IBM zSeries Mainframe. Windows/Linux/Unix Servers, Cisco LAN/WAN, Wireless RF, JDA, SAP, Manhattan, Oracle, Java/C/VB/.Net, ESB, CORBA, etc.

ONTARIO TEACHERS' PENSION PLAN

1996 - 2007

With over \$100 Billion in net assets, in 2007 OTPP was the largest single-profession pension plan in Canada, administering the pensions of 300,000 active and retired teachers. Senior Manager, Software Development, and Lead Architect

Reporting to the Vice President of I.T., led a team of managers and architects, plus their staff of OPSEU and contract software developers. Role included SDLC, projects, strategy, planning, technical and architectural roadmap creation and execution, recruiting/retention, negotiation, contracts, major software acquisitions, and budget management.

- Designed and launched a new CTI-enabled integrated CRM system with automated regression test tools, Benefit Entitlement System for Teachers, which helped improve customer service levels to their highest ever
- Oversaw complete Software Development Life Cycle (SDLC) of Objectives-driven portfolio of I.T. projects, maintenance, enhancements, business initiatives, in close collaboration with heads of Technical Services, Project Management PMO, Software Testing and QA
- Principal responsibility for working with Senior OTPP Business Directors, VP's, CIO, CFO, and CEO in development and acceptance of Technical and Architectural Roadmap, Corporate Privacy system planning, Application Security Roadmap, and Legacy Application retirement.
- Extended applications to offer Java/WebSphere web-based self-service, resulting in 43% of all 2006 retirements being initiated online, and significant cost savings for the organization measured by cost-per-member which decreased each year since 2001
- Deployed a new Java/WebSphere web-based B2B system for over 200 business • partners that helped improve data accuracy and reduce related costs by 30% in 2006
- Team recruiting, team building, management: maintained retention at 95%
- Technical Environment: Java/J2EE, Smalltalk, C++, MS .Net, RPG, WebSphere/RAD, Eclipse RCP, EJBs, JSPs, Servlets, JavaScript, AJAX, Enterprise Service Bus (ESB), XML, XSLT, SOAP, Web 2.0, Adobe Flash, CVS, DB/2, Oracle, Cognos, CTI, VOIP, Workflow, Imaging, ETL, Data Warehousing, Astra QuickTest, LoadTest, SOATest, Lotus Notes, MS Office, MS Project, Lawson Financials, Hyperion Pillar Financials, OpenPages SOX Express ITIL, Web Services, Service-Oriented Architecture (SOA), Object-Oriented Analysis and Design (OOAD), Distributed Architecture, on Windows, linux, and OS/400, using RUP, Agile Methodologies

PARCPLACE-DIGITALK INC.

1995 - 1996

Founded at Xerox's Palo Alto Research Center (PARC), a supplier of Smalltalk client server systems environments that set the standard in object-oriented development. Consultant

Provided on-site post-sales support to customers across North America. Extensive travel and customer contact.

- Supported Smalltalk customers such as Bell South, HBOC, City of Phoenix, Footprint Systems, and Penn State University on a multitude of hardware/software platforms.
- Consulted with internal engineering for the VisualWave product for web connectivity
- **Technical Environment:** Smalltalk, C/C++, Visual Basic, HTML, Windows, Unix, Sybase

DISCIS KNOWLEDGE RESEARCH INC.

Publisher of CD-ROMs for the educational and retail markets. One of the first organizations to have interactive CD-ROMs certified as textbooks for purchase into K-12 Schools in Canada and USA.

Staff Developer

Developed a multimedia production system using client-server tools and object-oriented database environment.

- Working closely with sales and production teams, part of a group that created an integrated end-to-end multimedia creation environment combining audio, video, graphics, natural language processing and text.
- Product throughput increased by 10X
- **Technical Environment:** Smalltalk, C/C++, Relational and GemStone Object-Oriented Databases in a Windows, Unix and Mac OS Client-Server environment.

IBM CANADA/CELESTICA

1991 - 1994

A specialized Electronic Component Assembly and Test (ECAT) plant with extensive prototyping capability, spun off from IBM Toronto Manufacturing in 1993.

Technical Lead

- Helped create a new team to develop a leading-edge real-time shop-floor control system using object-oriented tools and techniques to integrate manufacturing line robots and test systems, enabling Internet-based centralized dashboard monitoring.
- Applied artificial intelligence techniques to detect defects more quickly, and utilized object-oriented models for faster manufacturing process changes.
- Company saved millions of dollars by avoiding scrapped product and built a reputation for ability to customize and monitor new process lines.
- Held principal responsibility for data modeling, and database schema design, in a Client-Server environment.
- GUI design and development, and robotic controller development
- Won IBM Team Success Award and Database Expo RealWare Award.
- Technical Environment: C/C++, Smalltalk, GemStone, Sybase, AIX Unix, OS/2, Windows

EDUCATION

M. Sc., Computer Science, University of California at Santa Cruz.

Thesis: *Volume rendering with Hermite tricubics*, a modular approach to analysis and interpolation of large 3D data sets

B. Sc., Computer Science, University of Toronto

Society for Information Management, Regional Leadership Forum (RLF) Canadian Securities Course (CSC), Java 2 Certified (J2EE)

PUBLICATIONS, Workshops, Speaking Engagements, etc

- 2023 PDAC: CEMI MICA hosted event speaker: Opportunities for Chilean Technology Companies in North America
- 2022 Teck Sustainability Conference: Closing keynote panel "Mining in 2072"
- 2022 PDAC: UBC Dept of Applied Science Alumni Breakfast Panel: Biotechnology in Mining
- 2021 PDAC (virtual): Online host, Mining Innovation at Teck Resources
- 2020 Teck Sustainability Conference (virtual): Panel Chair, Innovation in Mining
- 2018 BC Tech Association Technology Impact Awards: Technology Adoption Award for work on Teck's Digital Twin of its Galore Creek Project working with Llamazoo
- 2017 Teck Sustainability Conference, Closing keynote panel "Safety Innovation in Mining"

1994 - 1995

- 2017 Unearthed Vancouver Hackathon: Opening keynote and judge
- 2017 Teck Technology and Innovation Conference, conference program chair and MC
- 2010-2014 Toronto CIO Forum and Executive IT Summit Conference Director 2011 Panel Moderator: "SOCIAL NETWORKING IN THE WORK PLACE" 2010 Panelist: "IT WORK FORCE - FUTURE TRENDS"
- 2003 2015: Society for Information Management (SIM), An International association of >4000 senior IT executives, academicians, consultants and IT thought leaders with 31 chapters in major cities throughout North America.
 - Director and Board Member, Toronto Area Chapter of SIM, 2005 2015 Work with a board of Toronto-area IT executives, as well as Global CIOs and VPs from SIM International and Chapter Leadership across the continent. Organize and speak at Toronto Area events. SIMposium Conference National Committee Member, 2006 2013
- 2011 Vocollect User Conference Invited Speaker: "The Path to Voice in Supply Chain"
- Agile Environments study on the effects of physical environments on employee productivity. Co-authored with Jason Rogers, Gifford Louie, and Niall Shaw. Association of Computing Machinery (ACM) conference on Object-Oriented Programming Systems, Languages, and Applications (OOPSLA) 2005
- Successful Smalltalk and WebSphere Coexistence. Co-authored with Fred Fiene and Izaak Alpert. Smalltalk Solutions Conference, 2003
- Automating & Integrating Business Rules, Processes and Technology. IQPC Canada Conference on Enterprise Application Integration, 2002
- Business Automation with Distributed Objects. Co-authored with Jason Rogers, Angus MacArthur, OOPSLA 2001
- Best practices in software development management. Federated Press Workshop on IT Project Management, 2000
- Applying a Design Pattern: Automatic Correspondence Generation. Co-authored with Scott Hergott, Ray Miller, and Brad Hughes, OOPSLA 1999
- Automated Testing of an Object Application. Co-authored with Martin Xue, OOPSLA 1998
- CIM Using OODB's: OO Applications Using Transactions, Fifth International High Performance Transaction Systems (HPTS) Workshop, 1993
- Object Technology in Manufacturing: A Case Study of Deployment, co-authored with Kalev Ruberg, 6th IBM Conference on Object Oriented Software Development, 1993
- The DACS Model of Flexible and Seamless Process Interlock Control, IBM Process Control Interdivisional Technical Liaison, 1993
- An Object-Oriented Schema for Manufacturing Data Collection, IBM Manufacturing Productivity Symposium, 1992
- Why Object Databases, Object World 1992
- *MOM: Monitoring of On-Line Manufacturing,* Co-authored with Kalev Ruberg, Kim Chapman, and Paul Wujek, IBM Interdivisional Technical Liaison, 1991
- Electricity, CHP Books, with Dan Mackie and Dave Mackie, 1986, ISBN 0-88625-133-8
- *TRS-80 Colour Computer Programmer's Handbook*, Hayes Publishing, with Peter J. Lear, John Miller, Scott McCann, Derek Simonson, Graham Richards, 1986, ISBN 0-88625-136-2
- Exploring the TRS-80, Hayes Publishing, with Peter J. Lear, 1986, ISBN 0-88625-122-2
- What Else You Can Do With Your TRS-80, Hayes Publishing, with Peter J. Lear, Graham Richards, 1985, ISBN 0-88625-119-2
- Let's Look at BASIC, Hayes Publishing, with David Mackie, 1985, ISBN 0-88625-085-4

REFERENCES: Available upon request