DIGITAL SERVICES STRATEGY ADVISOR

Strategic Planning/Roadmap Development • Information Technology • Information Management Digital Services Strategy and Transformation Advisory • Security and Compliance

Profile: Proven innovator, leader, solution and team builder offering more than 25 years of progressive Strategic IT Planning experience with world class Software, Security, HealthCare, Government, and IT organizations. Proven track record demonstrating the requisite *strategic vision*, *disciplined execution*, and *leadership* to successfully formulate and deliver on Strategic IT Roadmaps especially in the areas of Digital Services Strategy and Transformation.

Key Accomplishments:

Strategic Vision

- Creation of SSC's GC Cloud Centre of Excellence and associated Executive Playbooks and tools for use by all Partner Departments. Worked with many departments to execute these Playbooks to create and implement their Cloud Strategy and Roadmap.
- Elevated CGI to leadership status in the National Capital Region IT Services market through development and execution of the *Strategic Vision and Business Plan* for CGI Ottawa's Outsourcing Sector which transformed it from a low value, generic, operations player to a focused, high value, Government On-Line (GOL) provider in the mid 2000s.
- Elevated CGI to the leading Managed Security Services Provider in Canada as selected by industry analyst IDC in 2008 through development and execution of the Strategic Vision and Portfolio Management Plan. The execution of this roadmap transformed the regional security practice into CGI's Global Centre of Excellence for Security with a full portfolio of Technical and Business Security Services to address both the Security First and Outsourcing markets.

Disciplined Execution

- Achieved 500% revenue growth with a 29% net margin over a 3 year period for CGI's regional Outsourcing Sector (\$80M) through strategic use of *shared infrastructure* and advanced service, systems, and security *management tools and processes*.
- Achieved an average of 20% annual revenue and margin growth over a 4 year period with full P&L ownership of CGI's Global Security Centre of Excellence (\$10.5M) through diligent Strategic Portfolio Management focusing on disciplined balanced scorecard execution and controlled gating processes for growth.

Leadership

- Awarded (one of only 2) prestigious CGI Ottawa Builders Award for leadership in building CGI's
 regional presence often through forging win-win partnerships with C-level client, supplier, and other
 CGI business unit leaders.
- Successfully led the delivery of the complex, high availability, high security infrastructure and operations component of *Secure Channel* (core enabling infrastructure for Canada's globally recognized GOL program) through creative, resourceful leadership despite significant political, program, facilities, and resource challenges.
- Driving force/founder of No More Islands startup focused on creating and delivering Technology Programs that 'bridge' the Health Care and Education gap for remote and rural communities in the areas of TeleMedicine/TeleHealth, Health Records Integration (EHR/EMR/PHR), and Distance Learning.

Professional Experience:

President and CEO - murraytoll.com

Jun 2016 – current

• Digital Services Strategy Advisory services to define and execute Digital Services Assessments, Digital Services Strategies, and Digital Services Transformation Plans based on the organization's business objectives and the evolving supply of Digital services and technologies.

- Strategic Cloud Migration Advisory services to organizations migrating to the Cloud from either the product or services worlds or migrating their Enterprise workloads to the Cloud. Advise companies with respect to creation of cloud adoption strategies, governance, readiness, cloud services design, roadmap, etc
- Key Projects include the followings:

Correctional Services Canada Cloud Strategy and Roadmap Strategic Cloud Advisor December 2018 – March 2024

Project Description

The Information Management Services (IMS) division of Correctional Services Canada is looking to actively align with the Government of Canada (GC) Cloud First Strategy and accelerate its cloud onboarding activities. Mr. Toll was engaged as Strategic Cloud Advisor to define the CSC Cloud Adoption Vision and Roadmap as well as identifying Application Readiness options and alternatives.

- Engaged to initially to develop the following Cloud Adoption Strategy components including cloud best practices in the following areas:
 - High Level Cloud Adoption Plan
 - Cloud Adoption Objectives and KPI Workshop
 - Cloud Governance Teams Mandates, Composition, and Processes including Cloud Centre of Excellence
 - Cloud Readiness Assessment
 - High Level Cloud Service Design and End State
 - High Level Cloud Roadmap including Adoption Phases
 - Lead Cloud Initiatives Identification
- Mr. Toll was subsequently engaged to obtain approval for the Cloud Direction and create the following more detailed Cloud Design components:
 - Executive Presentations for Cloud Adoption Journey
 - Executive Presentations for Senior Management Engagement
 - Presentations of Proposed Cloud Governance Model including Cloud Centre of Excellence
 - Detailed Cloud Program Roadmap/Plan
 - Detailed RACI for the Cloud Program
 - Detailed Cloud Program Initiation Plans
 - o Cloud Centre of Excellence Terms of Reference
 - Cloud Core Team Terms of Reference
 - Detailed Cloud Readiness Priorities and Plan
 - DevSecOps Primer and Best Practices
 - Detailed Cloud Service Management and Support Model
 - Multi-Cloud Management and Cost Management Best Practices
- Mr. Toll was then engaged to assist with the implementation of the Cloud Direction including the following components:

- Detailed Workplans for Cloud Program Establishment
- Detailed Cloud Staffing and Funding Programs
- Cloud Governance Implementation
- Alignment on Cloud Program RACI
- Establishing Cloud Guiding Principles with Cloud Governance Teams
- Establishing Cloud Adoption Objectives and KPIs with Cloud Governance Teams
- Work with Communications to establish Organizational Change Management Plan
- Microsoft M365 Adoption Direction
- Detailed Workplans for Microsoft M365 Deployment
- Mr. Toll was then engaged to assist with the implementation of the Cloud Direction including the following components:
 - Establishing Overall Cloud Adoption Plan for this fiscal including Governance, Program, and Initiative's components
 - Detailed Definition of the Cloud Intake Process including Steps, RACI, and Project Gate Process integration
 - Post COVID Cloud Governance re-initiation and Cloud Advisory to Governance Teams
 - Ongoing Cloud Readiness Assessment iterations including evaluation definition of top priorities
 - Detailed Application Readiness process definition including Business Priority and Organizational Readiness
 - Evaluation and Definition of SaaS Adoption Plan including Playbooks Evaluation, Procurement Options, and RACI
 - Ongoing M365 Planning and Advisory including Roadmap Updates, Phase III and IV Planning, organizational data segregation options evaluation for PBC and OCI
 - Evaluation, recommendations, and business case for M365 E5 Licensing Adoption
 - Review and Evaluation of proposed SSC COM 3.0 Model and creation of CSC Adoption recommendation

Natural Resources Canada Strategic Cloud Advisory Services April 2022 – March 2024

Project Description

Provide Cloud Advisory Services to NRCan to define NRCan's Cloud Adoption Strategy, Cloud Adoption Framework, Roadmap, and Reference Architecture in order to more easily evaluate the feasibility of moving existing application to the cloud as well as guide NRCan sectors in modernizing their applications and adopting cloud.

- Produce an NRCan centered cloud strategy, recommendation, and decisions with sectors on the approach for IaaS as well PaaS and SaaS adoption.
- Develop an NRCan cloud reference architecture and roadmap for SaaS, PaaS, and IaaS with considerations given to GoC enterprise standards and services vis a vis NRCan solution portfolio.
- Produce a cloud adoption framework that can guide decision making when considering migrating a solution to cloud including special adoption considerations including those for mission critical services, infrastructure and data accessibility in the event of disaster.
- Document the application triage process which leverages the cloud adoption framework.

• Confirm the scope of applications within NRCan's portfolio to be considered for cloud and highlight groupings/buckets of application types/capabilities and where they fit within the cloud reference architecture.

- Define a process for the application business owners and technical authorities to leverage the cloud reference architecture and identify SaaS, PaaS, and IaaS candidates.
- Develop criteria and prioritize each of the buckets for SaaS, PaaS, and IaaS.
- Document the outcome in a cloud roadmap with associated cloud adoption framework.

Bell Hybrid, Multi-Cloud Services Strategic Cloud Advisory Services March 2023 – May 2023

Project Description

Provide Strategic Cloud Advisory Services to Bell's Hybrid, Multi-Cloud Managed Services Team in the form of Strategic Planning, Program Design, as well as Service Offering Design to maximize Bell's penetration and profitability in the Canadian Cloud Services market.

Deliverables

- Review and feedback of current Bell Hybrid, Multi-Cloud Managed Services Strategy
- Review and feedback of current Hybrid, Multi-Cloud Managed Services Organization
- Review and proposed new Hybrid, Multi-Cloud Managed Services Technology Stack
- Review and proposed refinement of Multi-Cloud Managed Services Roadmap
- Based on roadmap, creation of Hybrid, Multi-Cloud Managed Services Design

Library and Archives Canada Cloud Strategy and Program Creation Strategic Cloud Advisor February 2021 – May 2021

Project Description

The Information Management and Information Technology (IMIT) division of Library and Archives Canada (LAC) is looking to actively align with the Government of Canada (GC) Cloud First Strategy and to create a Cloud Adoption Program to accelerate its cloud onboarding activities. Mr. Toll was engaged as Strategic Cloud Advisor to define the LAC Cloud Adoption Vision and Roadmap as well as defining all the components of the required Cloud Program.

Deliverables

Engaged to initially to develop the following Cloud Program components including:

- Program Definition
 - Cloud Adoption Objectives and KPIs
 - o Cloud Program Roadmap
 - Cloud Program RACI
- Program Leadership
 - Governance Team Mandates
 - o Governance Leadership Selection
 - Cloud Guiding Principles
- Program Planning

- Staffing Plans
- o Program Funding
- o Program Establishment Project Plan

Shared Services Canada (SSC) – Cloud Services Directorate (CSD) Enablement Cloud Centre of Excellence (CCoE) Creation Strategic Cloud Advisor January 2019 – August 2020

Project Description

SSC CSD's mandate is to establish SSC's leadership in Cloud Enablement for the Government of Canada (GC) and the realization of the Cloud First Strategy. Their mission is to be a secure and reliable Cloud Broker and Enabler for Cloud consumption in the GC, facilitating the realization of cloud benefits while mitigating risks and providing value for money and stewardship. Their vision is to be the GC's Cloud Centre of Excellence (CCoE) influencing and enabling cloud adoption across all levels of governments. Mr. Toll was responsible to provide guidance in developing SSC's Enablement CCoE to influence and enable cloud adoption across all GC departments by providing guidance and assistance with:

- Cloud Journey Education
- Cloud Strategy/Roadmap
- Cloud Governance/CCoE Establishment
- Cloud Design, Deployment, and Operations Best Practices
- Cloud Readiness Assessment
- Cloud Services Provider/Foundational Services Provisioning
- Multi-Cloud Management Best Practices including Cost Management
- DevSecOps Best Practices

- Engaged to develop an overall strategy and roadmap for the Enablement CCoE. This included the following Program Definition Components:
 - o Enablement CCoE Mandate
 - CCoE Staffing Plan
 - CCoE Program Design
- Following the Program Definition deliverable, Mr. Toll also created the following CCoE Content
 Deliverables including best practices and templates for the GC departments in the form of Playbooks
 for specific audiences on:
 - Cloud Awareness
 - Cloud Adoption Journey
 - Cloud Adoption Program Creation
 - GC Cloud Use Cases and Usage Profiles
 - Cloud Program Initiation
 - Cloud Program Evolution
 - Cloud Adoption Objectives and KPIs
 - Cloud Readiness Assessment
 - Cloud Governance Teams
 - Cloud Governance Processes
 - Cloud Services Design and End State
 - Cloud Adoption Roadmap
 - Work Load Analysis Establishment

- Multi-Cloud Management incl Cost Management
- In addition, Mr. Toll also performed cloud assessments in the following areas for SSC:
 - SSC Foundational Services Readiness including Potential Issues Identification
 - SSC DevSecOps Readiness and Integration Impacts
 - o Monitoring of Microsoft Cloud Adoption Programs with selected lead departments
 - o Multi-Cloud Management toolset including Cost Management

Canadian Museum of Nature Work Load Migration Analysis Strategic Cloud Advisor June 2019 – Dec 2019

Project Description

The purpose of the Canadian Museum of Nature (CMN) is to increase throughout Canada and internationally, interest in, knowledge of and appreciation and respect for the natural world by establishing, maintaining and developing for research and posterity a collection of natural history objects, with special but not exclusive reference to Canada, and by demonstrating the natural world, the knowledge derived from it and the understanding it represents. The CMN is looking to leverage the Cloud to more efficiently manage its IT infrastructure. To that end, they have contracted Bell to perform an analysis of all their workloads and to create a workload migration strategy for them.

Mr. Toll was responsible to provide the qualitative component of the workload analysis as well as formulate the recommendations for workload migrations to the cloud including the following activities:

- Creation of the Qualitative Workload Analysis Questionnaire
- Lead Client Discovery Sessions to Capture the required Qualitative information
- Analyse the Quantitative data captured using the Bell Cloudscape tool
- Formulate the Workload Migration Strategy based on the following approach:
 - Classification of Systems based on the 6Rs approach
 - Perform Platform Selection Private/Public Cloud and then laaS/PaaS/SaaS
 - Prioritization into Phases based on business value, readiness, etc
 - Identification of systems that required more detailed analysis in terms of code reviews, database assessment, etc
- Evaluate potential migration options and provide recommendations

Deliverables

Workload Migration Strategy Recommendations report

Agriculture and Agri-Food Canada (AAFC) Cloud Strategy and Transformation Strategic Cloud Advisor March 2019 – October 2019

Project Description

The Information Systems Branch (ISB) of AAFC is looking to actively align the Government of Canada (GC) Cloud First Strategy and accelerate its cloud onboarding activities. Mr. Toll was engaged as Strategic Cloud Advisor to help refine the AAFC Cloud Strategy and Transformation Plans.

Mr. Toll was responsible to provide Cloud Advisory Services in the following areas to the IMS senior management team:

- Cloud Strategy Creation and Executive Briefing
- Cloud Transformation Roles and Responsibilities including:
 - Cloud Governance Teams
 - Cloud Delivery Team Options
- Cloud Database Adoption Options Assessment
- Multi-Cloud Management especially Cost Management

Cord3 Innovation Cloud Strategy and Roadmap Strategic Cloud Advisor April 2018 – March 2019 (12 months)

Project Description

Cord3 Innovation provides transparent, policy driven, data-centric security solutions to protect sensitive information from Insider and External threats. Initially, their strong encryption products were integrated exclusively with on-premises IT solutions. However, with the current movement to the cloud, they are proactively extending their products to become Cloud services that leverage Public Cloud infrastructure such as Azure and AWS. Mr. Toll was responsible for designing and architecting the Public Cloud infrastructure solution for Cord3's UNITY product.

- Engaged to develop an overall strategy and roadmap to fully extend CORD3's UNITY security products to the Cloud. This work included the following steps executed in collaboration with the Cord3 Executive Team:
 - Identification and Documentation of Business Requirements
 - Creation of the Problem Statement
 - Scope Refinement with the Executive Team
 - Cloud Readiness Assessment
 - Development of the Overall Roadmap
- In addition, Mr. Toll was engaged to create a Logical and Physical Design for Phase I of the overall Cloud Strategy. This work included the following steps:
 - o Scope
 - Use Cases
 - Requirements Functional and Non-Functional
 - Solution Principles and Cloud Best Practices
 - Options Analysis
 - Systems Architecture
 - Logical Design including Application, Infrastructure, Security, Performance, Availability, and Operations Design
 - Physical Design including Application, Infrastructure, Security, Performance, Availability, and Operations Design
 - High Level Project Plan
 - Test Strategy and Plan
- The design and architecture of these cloud solutions leveraged existing public cloud technologies and services from MS Azure. The cloud services leveraged included:
 - Infrastructure Services for compute, centralized storage/backups,
 - Network Services for VLANs, routing, firewalls, load balancers
 - Redundancy Services such as load balancing, clustering, and containers
 - Automation including Resource Templates, Autoscaling/Elastic Compute, and Orchestration tools

- o Application Services including Azure Active Directory, DNS, ADFS, and Application Gateways
- Following the initial scope of work, the contract was extended to investigate how CORD3's UNITY security products would integrate with new Enterprise Technologies that were just being introduced to the market. This work included the following steps:
 - Identification of New Enterprise Technologies
 - Explanation of New Enterprise Technology functionality, architecture and data flows
 - o Problem Statement
 - Solution Principles and Cloud Best Practices
 - Options Analysis
 - Logical Design including Application, Infrastructure, Security, Performance, Availability, and Operations Design
 - Physical Design including Application, Infrastructure, Security, Performance, Availability, and Operations Design
 - High Level Project Plan
 - Test Strategy and Plan
- The design and architecture of these cloud solutions leveraged existing public cloud technologies and services from MS Azure. The cloud services leveraged included:
 - o Infrastructure Services for compute, centralized storage/backups,
 - Network Services for VLANs, routing, firewalls, load balancers
 - o Redundancy Services such as load balancing, clustering, and containers
 - Automation including Resource Templates, Autoscaling/Elastic Complete, and Orchestration tools
 - o Application Services including Azure Active Directory, DNS, ADFS, and Application Gateways
- Lastly, Mr. Toll was engaged to create a Client Architecture Review Process to ensure the
 onboarding of new clients was as smooth as possible and all potential integration and migration
 issues were identified up front and solutions and architectural strategies and plans were developed to
 deal with any architectural or integration challenges. Previous and currently ongoing
 implementation challenges were leveraged extensively in this process.

TechInsights/ChipWorks
Cloud Integration and Transition
Cloud Architect
December 2016 – November 2017 (12 months)

Project Description

TechInsights has been a **trusted patent and advanced technology intelligence partner** to the world's largest and most successful companies including 37 of the top 50 U.S. Patent holders. They recently merged with one of the other top players in this market **Chipworks** to further solidify their market leadership position. Following this merger, Mr. Toll was engaged to create a **Cloud Strategy** to integrate and transition the two companies' processes and systems onto a single integrated cloud based platform and set of processes leveraging existing public cloud solution where possible.

Duties and Accomplishments

Successful delivery and implementation of a Cloud Transition Plan to both integrate the merged
companies processes and systems as well as define and migrate the appropriate Enterprise services to
the Cloud. Systems including Finance, HR, CRM, Project Management, Enterprise Content
Management, and a proprietary Conflict of Interest (CoI) system to allow the former two companies
Intellectual Property teams to still represent all of their previous clients even when one companies'
client may be 'targeting' the other companies' client

• The work included developing architectures/high level designs/transition and implementation plans for:

- Current State document current state with dual systems/processes
- Integrated State single integrated set of cloud systems/processes
- Future State enhanced cloud functionality/processes
- This work included the following:
 - o Gathering and documenting business requirements for Integrated and Future State
 - Conduct inventory of both TechInsights and ChipWorks current environment, workloads, services, and data
 - Conduct cloud assessment and analysis of both companies' workloads and service to determine which workloads should be moved to the cloud and which ones need to remain on-premises
 - Mapping of source environment resources and services from each company to the new Integrated State and Future State target resources and services
 - Evaluation of Cloud specific security requirements and threat analysis for the new Integrated
 State and Future State services ensuring all business security needs especially conflict of interest
 threats were captured and documented.
 - Developing an overall systems architecture for each State (Current, Integrated, and Future) based on Cloud Best Practices for both Functional and Non-Functional requirements (Security, Compliance, Performance, Resiliency, Availability, Operations, etc)
 - Developing Logical and Physical Design Models including Application, Infrastructure, Security, Availability, Performance and Operations designs for Integrated and Future State
 - Creation of Cloud Readiness Assessment/Gap Analysis between the Current State and the proposed Integrated State in terms of people, process, and technology.
 - Developing, evaluating, and implementing different architectural strategies and plans for various components including custom development, to COTS consolidation, to new COTS selection leveraging IaaS, PaaS, and SaaS where applicable
 - Creating high level Project Plans especially for Custom Development work such as the COI systems
 - o Creating Test Strategies and Plans especially for new systems such as the COI system
 - Creation of Phased Migration Plans for both workloads and data from Current to Integrated State and from Integrated to Future State
 - Creation of Operations Plans for all new and existing systems
 - Oversight of the migration of workloads to the new Integrated State cloud and on-premises consolidated systems
 - Escalation Assistance in the migration process in resolution of architectural, integration, and migration issues.
- For Integrated State, additional work focused on:
 - Process Flows
 - Detailed Designs
 - User Interface Design
 - Cloud Vendor Requirements Creation and Selections
 - Cloud Vendor Management and Testing
 - Implementation Plans
- The resulting Cloud Technology Design leveraged the following public cloud technologies and services:
 - o Infrastructure Services for compute, centralized storage, and centralized backups,
 - Network Services for VLANs, routing, firewalls, load balancers
 - Redundancy Services such as load balancing, global server load balancing, clustering, and containers

- DevOps Automation including Resource Templates, Autoscaling/Elastic Compute, and Orchestration tools
- Application Platform (PaaS) and Gateways Services including Single Sign On, O365, Sharepoint Online, NetSuite Finance and HRIS
- Security Platform Services such as Azure Information Protection (AIP) and Information Rights Management (IRM)
- Application Software Services (SaaS) including SalesForce CRM and Pulse, FairSail, and Patent Vista

RedSeal.co Cloud Transition Study IM Architect June 2016 – November 2016 (6 months)

Project Description

RedSeal.co is a software company that develops on-premise security software products that measure the 'digital resilience' of a company's network against potential security incidents. They are considering expanding their channel to include **Managed Security Service Providers** (MSSPs) globally.

Duties and Accomplishments

- Successful delivery of a Cloud Transition plan to evolve this high business value, on premises software product to a service which can delivered via Managed Security Services Providers (MSSPs) globally leading to increased adoption for this private California based security company
- Leveraging his experience leading a global MSSP, engaged to create a Cloud Transition Plan to evaluate the feasibility of moving RedSeal's product to a cloud service. This included the people, process, as well as the technology components of such an offering as well as the product roadmap changes that would be required to move into this market and attract MSSPs

Mxi Technologies Cloud Feasibility Study Advisory Consultant – IM Architecture June 2016 – November 2016 (6 months)

Project Description

Mxi Technologies is an Aviation Maintenance Software company that provides aviation maintenance software to Airlines and Maintenance, Repair, and Overhaul (MRO) facilities globally. They currently provide their software to some of the largest airlines in the world in the form of software that is installed on-premises. However, the market is moving towards a cloud delivery model. Mr. Toll was engaged to perform a Feasibility Study for moving Mxi's products to a cloud offering as well as a Full Cloud Solution Architecture and Design for migrating selected Mxi products to a Public Cloud Infrastructure solution.

Duties and Accomplishments

- Successfully delivered a Cloud Feasibility Study, Cloud Solution Design including all Technology, People and Process components, Implementation Plan, and Financial Analysis to transition this global aviation maintenance software vendor from an on-premises delivery model to a cloud delivery model leveraging DevOps
- The Initial Feasibility Study focused on:

 Identifying the Incremental Components of a Service Offering namely responsibility for Security, Performance and Availability, as well as the myriad of Cloud Configuration Options including public, private, and hybrid cloud as well as cloud services including co-location, IaaS, PaaS, and SaaS.

- Validating Demand for a Cloud offering through a detailed Market Segmentation and Analysis
- Determining Cloud Readiness for the Mxi products through a detailed Cloud Readiness/Gap Assessment from a Technology, People, and Process view point
- Upon successful completion of the initial feasibility phases, the Detailed Feasibility Study focused on:
 - Cloud Service Design for Mxi products including all Technology, People, and Process components based on stated Cloud Best Practices for design on cloud services. The resulting Cloud Technology Design leveraged the following public cloud technologies and services including:
 - o Infrastructure Services for compute, centralized storage, and centralized backups,
 - Network Services for VLANs, routing, firewalls, load balancers
 - Redundancy Services such as load balancing, global server load balancing, clustering, and containers
 - Automation including Resource Templates, Autoscaling/Elastic Compute, and Orchestration tools
 - Application Platform Services including Single Sign On, Oracle Databases, and Application Gateways including WebLogic
 - o ITSM Cloud-based Service Management including ServiceNow
 - O The resulting Cloud People Design focused on the creation of a Cloud Centre of Excellence (CCoE) and a Cloud Core Team. The CCoE including membership from Product Management, R&D Dev, R&D Test, Operations Infra, Security, and Ops as well as Finance. It's focus was to evangelize, engage, train and drive all parts of the business side of this transition to the Cloud and DevOps/DevSecOps. The Cloud Core Team has similar membership other than Finance and was focused on the technology side of the transition to the Cloud and DevOps/DevSecOps.
 - The resulting Cloud Process Design focused on the movement to a DevOps/DevSecOps approach and all of the required process as well as technology tooling and people roles required to make that happen.
 - Cloud Migration Planning and Timelines including Migration Method Selection, Implementation Streams and Geographical Prioritization
 - Cloud Provider Identification, Evaluation and Selection including any necessary Risk Mitigations
 - Detailed Financial Analysis marrying bottom-up bottom-up costing and top down sales forecasts and pricing models to determine profitability and payback.
 - Move Forward Recommendations and Next Steps presented to the Mxi Executive Team as part of the Annual Strategic Planning.

Director - Cloud Services Design, Entrust Datacard (EDC)

May 2015 - Mar 2016

- Leadership of the EDC's Cloud Services Design team. Working closely with R&D, Cloud Services, and Product Management, responsible for the Architecture and Design of the following Cloud Services offerings: Entrust Certificate Services (ECS), Public Key Infrastructure (PKI), and Authentication/IdentityGuard (IDG).
- Key Initiatives included creation and implementation of strategic plans for:
 - Program Management of three external Cloud Services (ECS, PKI, and IDG), and two enabling services (Infrastructure and Operation Support System). Programs include initiatives identification, prioritization, and tracking via dashboards and monthly reviews.

o Migration of EDC's Cloud Services to a DevOps/Agile rapid release methodology incl Infrastructure Architecture, Full Environment Landscape Uplift, and Automation Plan.

- Creation of a Detailed Cloud Service Management and Support Model to enable the transition to a DevOps methodology.
- Short/Medium/Long Term Plan to improve the reliability, scalability and profitability of EDC's PKI Cloud Services globally.
- o Proper Service Catalogue for our Cloud Services including both technical and service attributes for both internal and client usage.
- Acquisition evaluation, due diligence, and integration plans to grow our Cloud Services to the next level.

Director - Cloud Services Deployment, Entrust Datacard (EDC)

Apr 2014 – Apr 2015

- Leadership of the Cloud Services Delivery team. Responsible for delivery of the Entrust hosted product portfolio. Responsible for EDC's data centres, deployment of new networks, storage, and server systems as well as overseeing hosted customer on-boarding efforts and new hosted product deployment efforts.
- Key Initiatives included creation and implementation of strategic plans for:
 - O Data Center Strategy creation incl growth from 4 to 8 data centers, services placement, replication, and standards definition naming, IP Addressing, equipment
 - Evaluation of all Prod and Non-Prod environments globally and creation of a plan to standardize and consolidate.
 - o Architecture and implementation plans for a Management network to meet strict security and audit requirements both locally and remotely.
 - Evaluation, creation, implementation, and exercising of Disaster Recovery plans for existing EDC Cloud Services
 - o New Service Introduction for IDG Smart Credentials Cloud offering

Director IT Infrastructure, Minto Group

Oct 2011 – Mar 2014

- Successfully optimized the operational delivery of Minto's IT Infrastructure team as well as
 ensured it was a proactive, business enabler of the rest of the company. This included the
 creation of a Strategic 3 Year Roadmap for the team which included key initiatives, projects to
 achieve those initiatives, as well as ongoing programs to support those initiatives. This plan
 encompassed key initiatives focused on virtualization, collaboration, unified communications,
 mobility, and ITIL based service desk technologies leveraging cloud implementations where
 appropriate.
- Key Projects included companywide implementations of:
 - o Virtual Desktop Infrastructure (VDI) based on Citrix XenDesktop
 - o oneMinto Sharepoint Portal, Document Mgmt, Collaboration, and Workflow
 - Unified Communications based on Avaya and Microsoft Lync technologies
 - o Mobile Device Management (MDM), Corporate Container, Corporate App Store, and Cloud-based File Sharing technology leveraging Citrix XenMobile and ShareFile
 - ITSM Cloud-based Service Management solution evaluation, selection, and deployment of SunView ChangeGear Cloud Offering
 - o Negotiation of a Microsoft Enterprise Licensing Agreement

• Successfully transitioned Bridgewater's IT/IM team from a reactive cost centre to a proactive business enabler through extensive consultation with senior management and the user community. Developed and implemented a Plan of Record with strong focus on IT/IM automation, R&D Lab self-service, and remote office/mobile worker improvements.

Designed and managed the implementation of a significant Lab Uplift Project for the R&D community that added to the required flexibility, agility and performance to the Lab Environmentals and Compute platforms. This included modular in-row cooling, high density rack configs, virtualized blade servers, unified fabric, shared storage, and backups with orchestration, chargeback, self-service provisioning, and performance/capacity management.

President and CEO, No More Islands

Nov 2009- Oct 2010

- Driving force/founder of No More Islands startup focused on creating and delivering Technology Programs that 'bridge' the IT gap especially for remote and rural communities and effectively create 'No More Islands!'
- Delivered expert assessment, implementation, integration, and adoption services in the areas of TeleMedicine/TeleHealth, Health Records Integration (EHR/EMR/PHR), and Distance Learning.

CGI: 2001- Oct 2009

Vice President, Commercial Managed Services

Sept 2008 – Sept 2009

- Drove the globalization of the Managed Security Services practice into the US and Europe including establishing win-win relationships with sister organizations in Phoenix, Fairfax, UK, and Germany. US instantiation and European joint business development was firmly established.
- Led the new Strategic Portfolio Management (SPM) team to continue to drive the strategic portfolio direction for the regional Outsourcing Sector (~\$80M business). This included the identification, creation, and evolution of new services lines to address the new Selective Sourcing approach to Outsourcing. This resulted in the incubation of three new business lines.

Director, Commercial Managed Services

Sept 2006 – Aug 2008

- Evolved the Managed Security Services practice into a full service Managed Security Services Provider serving both the Security First and Outsourcing markets featuring both traditional Technical Security Services and Business Security Services such as Compliance and Data Loss Protection. This led to significant industry analyst recognition and continued profitable growth.
- Created the business plan for a new Commercial Managed Services line of business in Ottawa to provide common Citizen-facing Managed Services to all Federal Government departments via the potentially lucrative Secure Channel Long Term Contact vehicle.
- Implemented this business plan to create a New Service Incubation team to identify, evaluate, validate demand, and implement new Commercial Managed Services using a structured product management gating process. This resulted in a lucrative Forms and Workflow service offering for CGI.

Director, Business Engineering

Sept 2004 – Aug 2006

- Evolved the Strategic Direction and Business Plan for the regional Outsourcing Sector including the establishment of Strategic Consulting and Trusted Advisor programs, and Product Management disciplines within the new matrix management environment.
- Delivered Pre Sales Support in terms of strategic pursuit plan development, opportunity qualification, win themes development, overall solution architecture, costing and pricing strategies, packaging, client presentations, and contract support.
- Revitalized a CGI Managed Security Services (MSS) practice into a CGI Global Centre of Excellence (COE) which is now rated the leading Managed Security Services Provider in Canada according to Industry Analyst IDC and now services clients in 14 countries globally.

Rescued through the creation of C-level partnerships, high profile client accounts and vendor
partners which were dissatisfied with other CGI Business Units' expertise and/or service delivery
including Russell Investments and Sun.

Director, Operations Engineering

Sept 2002 - Aug 2004

- Evolved the Strategic Direction and Business Plan for the regional Outsourcing Sector including
 the evolution of the Sweet Spot/Target Market Analysis, establishment of a formal Managed
 Service Incubation process, and formalization of the Service Definition processes for new client
 scoping and pricing.
- Program Director for all Outsourcing and GOL client transitions including ensuring all transitions were structured for success (governance, key resources, budget, timeline/milestones/dependencies, risk management, requirements definition, and acceptance criteria) and provided delivery oversight to ensure expectations were effectively communicated, delivery was monitored/corrected, and issues were resolved in a timely, efficient fashion.
- Leveraged the Secure Channel initiative to build the regional Outsourcing Sector from 50 low end operations staff with no facilities, infrastructure and only basic operations skills to a team of over 250 (now 400) highly skilled subject matters experts, a Tier-3 internet data centre leveraging a high security, high availability, shared infrastructure.
- From 2001 through 2004, the regional Outsourcing Sector sales grew from \$12.1M to \$77.2M (538% increase), revenues grew from \$12.1M to \$53.4M (341% increase) and the contribution in 2004 was \$15.4M (29% net margin) all during a very challenging economic time in the regional market.
- Created successful CGI practices and services in response to Government market demand including: Business Continuity, Enterprise Systems Management, Secure Storage Solution, and Service Management.

Executive Consultant Apr 2001 – Aug 2002

- Developed the Strategic Direction and Business Plan and obtained Investment funding to transition CGI's regional Outsourcing Sector from a low value, generic, operations player to a focused high value, Government On-Line (GOL) provider.
- Led CGI's execution of the Business Plan initiative including the lead client Secure Channel (key enabler for Canada's GOL) program). Personally drove CGI's Infrastructure and Operations component of the Secure Channel Initiative from its inception until successful Go-Live before settling into an oversight role.

Manager, Network Engineering, Nortel Networks – eXtremeVoice Business Unit 2000 – 2001

Responsible for the technical and operational design, deployment, and support escalation for the
high availability ASP delivery network that provided voice enabled, web applications to such
clients as Sprint, Bell, and NetZero. This ASP implementation serviced the entire continental
US and Canada and was a leading provider of internet telephony services in NA at the time.
Collaborated with senior management team to review and recreate the business plan. This
included leading a SWOT analysis, identifying cost reduction areas, identifying and addressing
revenue barriers, and determining the future competitive strategy, channel partner selection, and
new product direction.

Manager, Systems Engineering, EDS/SHL Systemhouse – Ottawa IS

1992-2000

- Led a team of approx 30 resources responsible for technical and operational direction, design, deployment and support of the Information Systems for the Ottawa Region of SHL. This included 3 sites and in excess of 800 users. The team was comprised of service desk, desktop support, LAN (server, storage, backup, etc), network (network and security), telecom, and apps (mail, portal, workflow, doc mgmt, etc) resources.
- Collaborated with the senior management team to establish the strategic IT initiatives for the Region and managed the development and deployment of these projects including:
 - o Corporate Proposal Knowledge Management system (still in place 10 years after I left)
 - o Corporate Project Health Tracking tool (deployed globally)
 - Ottawa Regional Portal (one of the first in SHL)
 - Systems Development Environment Connectivity (security architecture/procedures)
 - Ottawa Regional Electronic Forms (1st e-forms/workflow implementation in SHL)
- Provided strategic consulting to high profile external clients in the areas of network infrastructure, network operating systems, LAN management services, and messaging services.

Systems Engineer, LanVision	1990-1992
Senior Programmer Analyst, SHL Systemhouse	1989-1990
Programmer Analyst – Co-op Student, SHL Systemhouse	1986-1988
Programmer Analyst – Co-op Student, Department of Communications	1985-1986

Education: University of Waterloo, Bachelor of Mathematics: Computer Science – Information Systems, Honours Co-op, 1989

Professional Development/Recognition:

- CGI Ottawa Builder's Award one of only 2 ever awarded
- Canadian Executive Development Series (Queen's Executive MBA sponsored program) Innovation in Leadership Course graduate of inaugural class

Security Clearance: Government of Canada Level II Secret security clearance