

SUMMARY

15+ years' experience as a C/C-1 level technology, data science, and strategy executive building successful, profitable companies and teams on four continents. Direct multi-million dollar revenue contributions creating and leading technology and data teams building startups and new enterprise business capabilities. Strong hands-on experience in software development, data science, product management, and organizational design. Deep industry experience in travel, fintech, online gaming, SaaS, B2C, consulting, and campaigning.

SELECTED WORK EXPERIENCE

Vice President, Data 2017 – present

Traveloka Pte Ltd, Singapore

Lead 125+ person team for \$5B USD SE Asian travel unicorn, heading Data Science, Platforms, Analytics, Economics, and AI+Machine Learning across 16 businesses in 8 countries. Built new data products and capabilities to make better decisions faster at scale, generate actionable insights, create competitive advantage, and drive an evidence-backed decision making culture. Restructured group, recruited and built out leadership bench, and re-focused strategy on pragmatic business outcomes.

- Overhauled team from BI-focused group on arrival into a modern data science, products, and AI/ML group powering entire new business models and units
- Went from zero production ML models to 28 within 22 months, adding 10s of millions of dollars of value across ranking and recommendation systems, customer service, credit scoring and risk modelling, UGC, fraud detection, KYC, marketing/discounting optimization, pricing, and NLP
- Slashed time to production for ML models from weeks to days through a standardized data science process, reproducible deployment framework (Raring Meerkat), Feature Store (+high-throughput, low-latency, GraphQL API for data serving), and Kubernetes deploys and scaling
- Rationalized organizational metrics across businesses to a consistent, trackable, and actionable Common View across our 3 petabyte data lake rebuilt on GCP's Big Query
- Created Experiments group and built new framework with fast integration and automation into platforms and product management processes to drive evidence-backed and de-personalized decision making (including advanced features like automated reporting and Contextual Bandits)
- Minted Fraud and Abuse team, reducing fraud rate in Traveloka credit product from over 20% to under 1%, adding \$16M USD to company bottom line in three months

Managing Director 2013 – 2017

Pivotal Labs APAC, Singapore (*formerly Neo Innovation*)

Led and grew underperforming APAC practice from four person team into Asia's go-to Agile development and innovation studio powerhouse: 25+ billable staff, \$10M+ USD in revenue, and industry-leading margins in under 2 years. Full P&L responsibility. Pivotal and Dell acquired Neo in Feb 2016.

- Built and launched prominent SE Asian SaaS/B2C/B2B startups that were acquired or IPOed including PIE (acquired by Google), Luxola (acquired by LVMH), Viki (acquired by Rakutan), etc.
- Built high volume, distributed, financial transactions systems, including a \$2B/day settlement and

clearing system for Asian division of a Tier 1 global bank, online business tax filing system for a major SE Asian government, and new fraud detection capabilities for Indonesia's largest payment processor

- MVPed and scaled Singtel's big data and analytics business DataSpark, processing petabyte volumes of heterogeneous telco data and providing predictive analytic insights deployed across major telcos in Singapore, Thailand, Indonesia, and the Philippines
- Stood up Samsung SE Asia's Data Science and Analytics capability, designed and implemented streaming ingestion, ETL, data lake, pipelines, datamarts and BI tooling

Director of Information Technology 2006 - 2009

Amnesty International – International Secretariat, London

Led global technology for the world's largest and most impactful human rights organization overseeing Application and Product Development, NOPS, DevOps, Infrastructure, and Support for 70+ offices and 5000+ staff with a budget of only \$5M USD/a.

- Gained executive board stakeholder support, approval, and funding for major strategy and product overhauls of existing IT initiatives to drive more effective campaigning and global technology operations through a major Digital Transformation initiative aligning AI's 70+ offices
- Introduced new product and development methodologies to de-risk software delivery, reduce complexity, and drastically cut software development and maintenance costs. Project failure rates plummeted from a previous 82% to 11% at end of first year.
- Pioneered new digital campaigning and rapid response capabilities creating vastly more effective lobbying and advocacy for global issues and crises
- Delivered an award-winning technical and product overhaul of Amnesty's global flagship site amnesty.org in addition to new ERP system, worldwide Human Resources system, global DAMS, enterprise search services and docstore, and data collection and analytics system

Director of Business Intelligence and Analytics 2003 - 2006

Lancashire Finance (Riptown Media), Vancouver

Founded team and grew department to give executive level (CEO/CFO/CMO) strategic analytics, data science, and BI to drive actionable decision-making for a \$500M/yr entertainment and conglomerate.

- Built and managed high-performance department from scratch to 12 personnel in 6 months, adept at rapid execution of *ad hoc* analyses while conceiving of and carrying out imaginative, longer-term data science projects to drive understanding, capitalize on new opportunities, and improve organizational decision-making capability
- Created and fostered an environment of data-driven and evidence-based decision-making across the organization, directly contributing to \$36.5M being added to the company bottom line from analytical and data science opportunities identified by team
- Team built out global datawarehouse and ingestion/ETL, streamlined self-service analytics for advanced users, and pioneered complex, strategic data science products and analyses for company using advanced mathematical modelling, machine learning, data mining, and simulations
- Delivered critical operational analytics and technology improvements including affiliate management system, marketing tracking to optimize ROI, automated customer profiling and segmentation, predictive modelling on retention rates, churn, win-back, and lifetime value models

Directeur Technique (CTO) 1998 - 2002

Michel Dyens Investment Bankers, Paris

Led IT for France's 6th largest private investment bank handling all technology operations. Chief technical advisor for bank's VC incubator and investment group and acted as interim startup CTO on numerous funded companies while building out execution teams and business.

- Led complete modernization of bank's core IT infrastructure and security, systems, modern application development practices, and operations
- Built systems to dramatically increasing M&A deal throughput and activity (+80%), and directly contributing to increased bank revenues on average of 30% year-over-year during tenure
- Advised on startup investments for bank's Venture Capital arm; acted as interim startup CTO and bank's chief technical advisor for numerous French startups in the bank's incubator and portfolio

ADDITIONAL WORK EXPERIENCE

Interim Head of IT and Research Operations (*contracting*) 2011 - 2013

Institute for Sustainable Futures, Sydney

Managed IT, project operations management, and application development for the University of Technology's global consulting research thinktank.

- Managing overall project portfolio P&L and delivery, high level client management, productization cross-sell opportunities, and shared oversight of business development activities
- Primary responsibility for platforms, IT initiatives, technology operations, and data and predictive modeling-focused projects and deliverables

Director of Online Campaigning and IT 2009 - 2011

GetUp, Sydney

Senior director responsible for online campaigning, digital, and technology of numerous \$1M+ social and political advocacy campaigns that drove national political and legislative change in Australia. Led high-impact rapid-response campaigns, campaign concept development, and creation of technology and analytics platforms for driving action and campaign success.

- Membership doubled during tenure to 1M+ with substantive improvements in action and donation repeat rates for campaign asks, and major reductions in across-the-board abandonment rates
- Re-architected core platform around rapid-response campaigning and high speed, large volume mailings and social media engagement to drive campaigning actions and political change
- Established culture of evidence-based and data-driven decision-making through metrics, experiments, testing, and analysis to maximize campaigns' effectiveness, donations, and reach

Evolution Architect 1995-1998

Bowne/Immersant, Toronto/New York (*formerly Quadravision*)

Solution architect and portfolio manager directing product design and implementation of multiple teams of 5-12 engineers, designers, and product managers on complex, multi-lingual banking, brokerage, insurance, and eCommerce Fortune 1000 sites.

- Built 1st generation of 4 of the Big Five Canadian online banks and several household-name North American insurance and brokerage sites (John Hancock, Blue Cross etc.)
- Key driver developing Quadravision product offerings through to acquisition including architecting Quadravision's patented personalization engine and Evolution analytics platform

VOLUNTEER AND PRO BONO EXPERIENCE

Amphibian Ark International, Australia/USA 2013-2019

Architected and built worldwide species assurance and tracking system to coordinate conservation, survival, and reintroduction of critically endangered amphibian species globally.

DataKind, Singapore 2014-2016

Co-founder and Director of Operations of one of the five global DataKind data-science-for-good charitable hubs for the global organization.

Taronga Zoo, Australia 2010-2012

Activism campaigns coaching and campaign strategy assistance in launching the new campaigning department and advocacy capabilities at Australia's largest zoo.

TECHNOLOGIES

Languages **Python** Flask/Django
 Ruby Rails/Sinatra/Padrino
 Javascript/Typescript Node+React
 Elixir Phoenix
 some production **Go, Rust, and Crystal**

Data Science Full stack data scientist
Python, R, Jupyter notebook environments
Most standard ML libraries, Tensorflow, scikit-learn etc
Google Cloud Platform (GCP) and Amazon (AWS) data science environments

DevOps Amazon AWS and Google Cloud Platform ecosystems
Docker, Kubernetes, varied deployment and orchestration tools, CI/CD pipelines
Most major cloud, open source, columnar, cache, and key value datastores at
scale incl. BigQuery, BigTable, Spanner, DynamoDB, Aurora, Redshift
Data engineering of streaming/batch pipelines, datalakes, ingestion, ETL
pipelines, feature stores, datamarts, GCP Pub/Sub, Dataflow, Kafka
REST, GraphQL, CQRS, and microservices implementation experience

EDUCATION

MSc Information Technology 2003 University of Liverpool

Honours BA Economics and Political Science 1992 Western University

LANGUAGES

English native, **French** advanced, **Spanish** proficient, **Indonesian** intermediate

CITIZENSHIP AND RIGHT TO WORK

Dual Canadian/British citizen
USA right to work as NAFTA Professional
EU right to work without visa
Singapore Employment Pass (to Jan 2021)