EDWARD VAN DOORN

edward@orangeedge.co
www.orangeedge.co
www.linkedin.com/in/edwardvandoorn
+61 409493465
English, Dutch, French
Perth, Australia
Dutch passport

EDUCATION

<u>1991 – 1993</u> Master of Engineering Science (Mechanical Engineering) – University of Queensland, <u>Australia</u>

- Master thesis: Attitude stability of an asymmetric dual-spin spacecraft.
- Undertook a one-year exchange with the University of Illinois (Urbana-Champaign, USA) in the department of Aerospace Engineering, where I completed additional non-compulsory coursework: system dynamics & control, non-linear dynamics & chaos, spacecraft trajectories.
- Presented a paper on my thesis at the 8th national space engineering symposium in Canberra (1993).

<u>1987 – 1990</u> Bachelor of Mechanical Engineering – University of Queensland, Australia

• Graduated with Honours IIB. First year was undertaken at the University of Western Australia.

CAREER HIGHLIGHTS

- 30 years of professional experience in the field of Estimating Development and Estimate Reviews.
- Commodities experience: Oil & Gas, Gold, Silver, Copper, Lead, Zinc, Molybdenum, Coal, Mineral & Oil Sands, Bauxite, Diamonds, Alumina, Rare Earth, Uranium, Iron Ore, Nickel, Tungsten, Lithium.
- Industry experience: On Shore and Offshore Oil & Gas, Mining & Mineral Processing, and Infrastructure (Roads, Ports, Rail, Non-Process, Marine, Pipelines, Pharmaceutical).
- Software experience: Candy CCS, ARES PRISM, WinEst, BETK, Primavera P6, MS Project, Acumen Fuse, Excel, Word, PowerPoint, Access, @Risk.
- Previous Employers: Bechtel, Newmont, Ausenco, Stork, Mace, Resource Capital Funds.
- Consultancy Clients: BHP, Rio Tinto, Bechtel, Wood, Alcoa, Turner & Townsend, FMG, SRK, iPLAN, South32, Aker Solutions.

Summary of Estimate Development and Estimate Review Experience:

- Experienced with estimating all classes of estimate.
- Project delivery experience: EPCM, EPC, PCM, Greenfield, Brownfield, Shutdown, FEED, D&C
- Development of: Estimating Procedures, Basis of Estimate, Estimate Plan.
- All disciplines: Earthworks, Civil, Concrete, Steel, Piping, Architectural, Mechanical, E&I.
- All indirect costs: EPCM, Temp Facilities & Services, Camp, Escalation, Contingency, FX, Spares.
- Labour Rates, Growth, Productivity Analysis, MTO checks, Freight, Start-up & Commissioning.
- Estimated projects worldwide: Australasia, Europe, Africa, Asia, North and South America.
- Risk Reviews and Analysis, WBS development, Database Maintenance, Benchmarking, Close-Out.
- Management, Mentoring, Recruitment, Presentations to Clients, Proposal input, Bid Evaluations.
- Project evaluation, due diligence, probabilistic financial modelling, qualitative and quantitative risk assessment, Steering committee participation, portfolio company support, development of strong owners' teams, use stage gate approach, framing projects, developing clear objectives, use of robust risk management processes.

Nov 2018 – Present Director of Estimating

Orange Edge (Perth Australia) – Consultancy that specialises in providing estimating services worldwide.

- Provision of worldwide estimating services in the following industries: On Shore and Offshore Oil & Gas, Mining & Mineral Processing, and Infrastructure (Roads, Ports, Rail, Buildings, Marine, Pipeline
- Delivery of all kinds of estimates: OOM, PFS, FS, FEED, with different project execution strategies (EPC, EPCM, D&C).
- We develop Estimating Procedures, Basis of Estimates Estimate Plans, Job-hour databases.
- Cover all disciplines: Earthworks, Civil, Concrete, Steel, Piping, Architectural, Mechanical, E&I.
- Cover all indirect costs: EPCM, Temp Facilities & Services, Camp, Escalation, Contingency, FX, Spares.
- Development of Labour Rates, Growth, Productivity Analysis, MTO checks, Freight, Start-up & Commissioning.
- Cost Risk Analysis, Benchmarking.
- Estimating projects worldwide: Australasia, Europe, Africa, Asia, North and South America.
- Clients: BHP, Rio Tinto, Bechtel, FMG, SRK, Alcoa, EVM, Wood, Allied Projects, Turner & Townsend

Apr 2015 – Oct 2018 Private Equity Specialist

Resource Capital Funds (Perth, Australia) - Mining focused private equity firm.

- Created an empirically proven and realistic project evaluation analysis based on John Hollmann's "Project Risk Quantification" method. It's the most accurate method to predict cost & schedule overruns.
- Evaluated over 50 worldwide mining projects to determine investment deal prospects. These ranged from scoping level to operating, both private and public companies, open pit and underground.
- Subject matter expert offering support, guidance and oversight to portfolio companies and specifically management to ultimately provide value by de-risking projects.
- Used statistical analysis to identify insights and conclusions from complex data for the following: Capex overruns, Opex overruns, execution schedule delays, ramp-up delays.
- Researched the role of biases in project & risk evaluations and the use of decision tree analysis.
- Presented a paper on private equity evaluations at the 10th ICEC World Congress in Rio de Janeiro (2016)
- Presented a panel on the role of the CFO in Capital Projects at the CFO conference in Toronto (2017).
- Held effective steering committee meetings for Toro Gold, a project build on time and budget.
- Developed a detailed project specific risk analysis that covers geology, schedule, budget, scope, rampup, mine & mill productivity, market risk, political risk, environmental risk, social risk.
- Communicated effectively with portfolio companies the following: use of stage gate process, proper framing of the project, ensure project sponsor involvement, set clear objectives, investing in Owners teams, reach strong project definition, set appropriate contingency in accordance with risk profile, build effective steering committee, use a robust risk management process and keeping stage gates strong.

Apr 2013 – Mar 2015 Principal Estimator

Aker Solutions (London, UK) - Global provider of products, systems and services to the offshore oil and gas industry.

- Assisted in the development of the estimate for phase 1 of the Johan Sverdrup project, one of the largest offshore oil discoveries ever made (2.7 billion barrels, \$10.3 billion).
- Developed a variety of different conceptual, feasibility, pre-FEED and FEED estimates, both greenfield and brownfield, for FPSO's, subsea pipelines, jackets, topsides, drilling vessels.

Apr 2011 – Mar 2013 Estimating Manager

Ausenco (Vancouver, Canada) - Engineering, procurement, and construction management provider.

- Managed a team of 6 estimators: 3 junior, 2 senior and 1 semi-retired estimator. Together, we developed capital cost estimates for scoping, pre-feasibility and feasibility study projects ranging from \$22 million to \$1.3 billion. Commodities: Gold, Copper, Coal, Nickel, Phosphine, Iron Ore, Moly in locations worldwide.
- Recruited and mentored two junior estimators with no prior estimating experience.

Jul 2007 – Mar 2011 Senior Estimator

Bechtel (Montreal, Canada) - Engineering, procurement, construction, and project management company.

- Managed 4 estimators and developed estimates for all levels of studies, with costs ranging from \$200 million to \$5 billion, in coal (Daunia), aluminium (Raz Az Zawr), alumina (GAC, Worsley).
- Developed a detailed manhour benchmarking and productivity tool in Excel.
- Participated in stage gate project analysis sessions under review by independent peers (IPA).

Nov 2004 – Jun 2007 Estimating Consultant

Provision of consultancy services in Paris, Milan, Moscow, and San Francisco

- Member of a junior resource company (Canico) that was successfully acquired by Vale. Canico were focused on the development of the Onça-Puma Nickel laterite project (\$1.1 billion) in Brazil.
- Developed the capital cost and successfully negotiated the EPC contract (\$330 million) with Ma'aden in Saudi Arabia for a phosphoric acid plant. Reported directly to the CEO of Litwin Italia.
- Developed the capital cost for a commercial shopping centre (\$80M) in Moscow for Mace. Negotiated through interpreter with Russian suppliers.
- Integrated into the owner's team (Guinea Alumina) where I developed the capital cost for the Guinea Alumina refinery (\$5 billion).

May 2003 – Oct 2004 Project Controls Manager

Newmont (Perth, Australia) - Mining company - gold mines in Nevada, Australia, Ghana, Peru, and Suriname

- Delivered under budget the annual Australasian capital project costs (\$300 million).
- Implemented a project controls and reporting system for Australasia. This involved successful incorporation of project controls training across six sites with frequent audits.

Jan 1996 – Apr 2003 Project Controls Specialist

Southern Pacific Petroleum (Brisbane, Australia) – Oil Shale developer

- Started as an estimator & planner (2 years) and then switched to a new role as a project controls engineer (2 years) where I learned on the go. Promoted to project controls manager (2 years) with budget accountability of \$10 million. Completed my tenure as financial analyst (1 year) working with the CEO and CFO on the financial model.
- Created a deterministic financial model for a combined mining and oil & gas operation. Frequently updated the model to incorporate additional features and learned advanced Excel skills.
- Established and implemented a system for measuring progress and earned value. This improved productivity and led to on-time schedule completion.
- Created effective joint Owner/EPCM dashboard reports that are kept constantly up to date. This resulted in management having the ability to take effective action and provided project transparency.
- Ensured that adequate scope control, accounting, and project controls were established at the outset.

Feb 1993 – Dec 1995 Estimator and Planner - Stork (Brisbane, Australia)

Stork (Brisbane, Australia) - Integrated operations, maintenance, modifications and asset integrity solutions.

- Learned the difficult skill of refinery shutdown estimating and planning.
- Delivered two planned and estimated shutdowns at the Caltex refinery on time and on budget.