Operating Plant and Systems Professionals

Inc.   'Your Increased Profitability is Our Bottom Line'

D. ALAN JENKIN
SENIOR PROCESS INDUSTRY SPECIALIST

CAREER PROFILE

Alan Jenkin is a Senior HPI Specialist at Facilitated Integration Technology (F.I.T.), where he specializes in functional design of planning, scheduling and information systems. Alan has over forty years' experience in the oil industry, computer software industry and consulting services industry.

Alan retired from Aspen Technology and has joined F.I.T. in order to enjoy the freedom to select those assignments which can best benefit from his particular skills. His background includes the direction of turnkey planning, scheduling and information systems projects for oil companies, investment organizations, financial institutions and governmental agencies. Work has been performed for clients in the United States, the Middle East, Europe, Latin America, Canada, Africa, Australia, Asia and the Pacific Rim. Transfer of technology, through formal and informal training of client personnel, has been a major part of most project work.

Within Aspen Technology, Alan developed the procedures for preparing functional design specifications for hydrocarbon industry planning and scheduling systems. His industry and consulting experience enabled him to review client needs, evaluate existing systems and specify the required new systems. Alan is particularly skilled at defining systems integration needs, including both new and existing systems, and recognizing how to achieve successful integration of planning and scheduling with other information systems.

PROFESSIONAL EMPLOYMENT

Facilitated Integration Technology, San Antonio, TX. (1999- Present)
Senior Specialist
With FIT, Alan provides business process analysis and consulting, especially in the area of supply chain. His background in creation and application of planning and scheduling systems is exceptional, especially applied to current Business to Business e-commerce computing.

Aspen Technology, Inc. (formerly Setpoint, Inc.), Houston, TX
(1991 - 1999)
Senior Specialist, Supply Chain Division
Alan's major responsibility was to provide supply chain consulting services. These services required expertise in the use of one or more of the supply software products, such as AspenPIMS, Ref-Sked, AspenMIMI, Pro-Sked and Pipe-Sked. These services also required intimate process knowledge of the application, as well as interactive skills that create successful communications between specialist and client.

Bonner & Moore Associates, Inc., Houston, TX
(1974-1991)
Vice President, Bonner & Moore Management Science
Alan's responsibilities while at Bonner & Moore included HPI application consulting and modeling using Bonner & Moore's RPMS suite of products, development of the chemical database (PRMS) for RPMS and training clients in the use of the various systems. He also worked with several other industries.

Scicon Ltd., Houston, TX. (1973-1974)
Manager, Operations Research
As Operations Research Manager for North America, Alan was responsible for starting up the Scicon office in Houston and developing and staffing projects from that office.

Scicon Ltd. (formerly C-E-I-R Ltd.), London, England (1964-1973)
Manager, Mathematical Programming Division
Alan was responsible for the Mathematical Programming Division, including marketing, project work, modeling and system development.

Altona Petrochemical Company, Victoria, Australia
(Esso Standard Eastern) (1962-1964)
Economics Engineer
Alan developed a planning and economics system for an ethylene/butadiene complex in Australia and trained successors in its use.

Esso Petroleum Company, Fawley, England (1956-1962)
Planning and Economics/Plant Technical Service
At the Fawley refinery, Alan started as a Plant Technical Service Engineer associated with the lube oil complex and moved on to Planning Coordinator in the Planning and Economics group.

RECENT MAJOR PROJECTS

- ✓ Specified the functional design for scheduling four domestic oil refineries, minimizing unforeseen operational interruptions, improving response to opportunities, and avoiding throughput reductions.
  Projected savings exceed $10,000,000/year.

- ✓ Defined scheduling systems for several international oil refineries including interfaces to relational databases and making maximum use of legacy systems to improve operating profit by maintaining production during changing conditions.

    Projected savings range from 5-15′/Bbl of crude.

- ✓ Designed a crude oil supply scheduling system for an integrated oil company, encompassing onshore and offshore production, imported crudes, pipelines, vessels, terminals and multiple refineries, to minimize interruptions in operation.

    Projected savings are estimated at 5% of total crude processing cost.

- ✓ Developed product supply management system for a Far Eastern oil company using G2, including scheduling daily supply of fourteen products from five refineries to about eighty depots for a two-month period.

    Moved 900,000 BPD, with annual cost savings of about $5,000,000.

- ✓ Performed cost/benefit analysis of operations scheduling system for an integrated oil company, including oil production, supply to multiple refineries, refining, and distribution to terminals using vessels, pipelines, railcars and trucks.

    Annual benefits are estimated at over $20,000,000.

- ✓ Designed and built a mathematical programming model for process configuration and sizing of remote gas processing facilities in Asia. The function of the model was rapid comparison of a variety of alternative process configurations to make environmentally acceptable fuel products from natural gas at remote locations.

- ✓ Developed a linear programming (LP) planning model for a small domestic refinery in startup mode and trained client personnel in model use and further model development for a variety of purposes.

- ✓ Developed linear programming (LP) planning model for a small domestic startup oil refinery and trained client personnel in model use, further development and implementation.

- ✓ Designed and built a strategic planning model of a complex domestic oil refinery's operation with capability for client modifications to analyze competitor refineries.

- ✓ Developed production/distribution model for use by a major U.S. chemical company, saving the company an estimated 5% of total operating cost.

- ✓ Developed and implemented a planning and scheduling system for an Australian petrochemical company.

- ✓ Developed a modeling database of over 100 chemical processes. Database is used in Bonner & Moore's Refinery and Petrochemical Modeling System (RPMS) as source data for downstream chemicals investment, yield and utilities.

- ✓ Developed and implemented a purchasing, processing and distribution model for a Latin American feeds company.

- ✓ Developed a production/distribution model for use by a major U.S. chemical company. The model is used in routine operations planning to determine which locations should act as sources for chemical product supply, taking into account capacity, operating and distribution cost.

- ✓ Developed a worldwide production/manufacturing/distribution model for use by a major U.S. food company. The model includes growing, harvesting, processing, packaging and distributing foods worldwide.

- ✓ Developed and implemented a manufacturing and distribution planning model for a major European cement company.

- ✓ Developed and implemented a process and blend planning model for a British tea manufacturer.

- ✓ Developed and implemented a shipbuilding planning model.

- ✓ Worked in a team developing a mathematical programming system for a major mainframe computer manufacturer. The system included LP, MIP, Separable Programming, Wolf-Dantzig decomposition, GUB.

EDUCATION

Oxford University (England)
MA in Natural Science (Physics)

PRESENTATIONS AND PAPERS

"Choosing Software," <u>Handbook of Computer Management</u>, Gower Press, 1973.

"Recent Applications of Mathematical Programming," presented at Civil Service Department, London, 1970.

"What is Simulation? Why Build A Model?" <u>Computer Management</u>, March 1973.

"Refinery Crude Oil Selection by Successive Linear Programming," presented at ORSA/TIMS Conference, Australia, 1986.

"Refinery Planning & Scheduling", SETPOINT internal report, 1992.

"A Knowledge-Based Scheduling System for the Distribution of Refined Products," presented at the NPRA Computer Conference, Anaheim, 1994.