
PROFESSIONAL SUMMARY

A proven entrepreneur with deep experience in the development, growth and management of companies that specialize in CRM, database marketing, analytics, market research, process consulting, technical consulting and software design. A superior communicator with skills honed by seven years of graduate and undergraduate teaching experience in the fields of quantitative methods, statistics, systems, economics and finance. A senior manager with hands-on capability as demonstrated by several years of line management experience, with complete financial and operating responsibility for several small to medium enterprises.

MARKETING ANALYTICS AND DECISION SUPPORT EXPERIENCE

GfK-NOP, NY, NY

Senior Vice President, Database Marketing Center of Excellence 2002 – 2007

- Conceived, developed, and managed unique market intelligence practice that has been hailed as a global "golden thread" offering that extends the value of market research offered through all industry sectors and centers of excellence within this \$350 million company. There is much excitement and buzz about the untapped earnings potential. Global marketing and sales initiatives have been mobilized to support it and 2005 bookings are increasing rapidly.
- Conceived and managed R&D activities resulting in bridging technology that accurately projects segmentations derived from small market research studies onto the entire adult U.S. population or any subset thereof. This makes the deep market insights heretofore available only for small samples of survey subjects also available for entire populations of sales prospects. This has proven to be of enormous value to marketers for the design and implementation of marketing campaigns.
- Co-authored a patent application for the bridging technology that enables the accurate projection of market research insights onto populations of sales prospects. Designated as the inventor.
- Created a compelling marketing strategy around the integration of market research and database marketing disciplines resulting in numerous client engagements that yielded enormously successful marketing campaigns.
- Developed relationships with other key areas of the company to deliver integrated service offerings covering the entire marketing "supply chain" from conducting market research, generating specific targets, designing and executing campaigns, and objectively measuring results. This was an enormous value-add to the other more traditional market research products of the company. It has greatly improved their appeal since the new service provides a clear road to successful marketing implementation.
- Developed key partnerships with leading third party data vendors to facilitate the development and testing of statistical bridging models and to support the application of those models in large national marketing campaigns.
- Developed key partnerships with marketing communication, creative, and fulfillment firms to offer a comprehensive, one-stop marketing solution.
- Developed and delivered numerous educational forums and presentations around the globe to educate both company personnel and prospective clients about the exceptional value of making market research fully operational in marketing contexts.
- Designed, implemented, and configured an analytic computing infrastructure that enables the rapid transformation and analysis of terabyte+ customer and prospect databases. This environment has also served as the platform for restaging the MRI database into a format that allows multivariate key-driver analyses and virtually unlimited data mining applications.

Data Square, LLC, Stamford, CT

Senior Vice President, Analytics and Technology 2000 – 2002

- Established consulting and analytic services delivery capability for this database marketing company providing strategic consulting, data mining, and data warehousing services.
- Recruited, organized, and supervised multi-disciplinary departments including statisticians, technologists and marketing/business consultants.
- Established capability to design and deliver substantial customer data warehouses, including IBM's North American Analytic Database.
- Developed descriptive and prescriptive modeling methods for segmenting and scoring customer databases, including the automation of techniques including logistic regression, cluster analysis, discriminant analysis, factor analysis, etc. using statistical analysis and neural network architectures.
- Built internal company infrastructure with a series of structured initiatives to establish:

- Solution Frameworks - Our "go to market" message and branding. How we bundle our services to address industry-specific business issues for our clients.
- Consulting Methodology - The processes that we follow to deliver our solutions (e.g. DW methodology, QA methodology, Modeling methodology).
- Core Technologies - The tools and technologies that we use in the execution of our methodology (e.g. SAS, Erwin, Informatica, DB2, Oracle, Essbase).
- Project Management - A multi-level process of planning, controlling /monitoring tasks, resources & core technologies in the execution of our methodology, to achieve a consistent, predictable, quality solution.
- People Stuff - A program of training, growth, and reward activities designed to acquire, retain and develop our employees to be the best in all of the above.
- Negotiated over \$10 million dollars in new technology and data mining business and dramatically diversified the company's client base.

Customer Analytics, Inc., Burlington, MA

Vice President, Analytical Services and Consulting 1999 – 2000

- Built the consulting and analytics group that supports this enterprise software and consulting services firm in its mission of helping companies establish, maintain and continually improve customer relationships through all channels (e.g. web, call centers, stores, etc.). The group currently includes three departments (CRM Consulting, Analytical Consulting and Analytical Services) and employs 25 scientists, consultants and technologists.
- Developed and delivered over \$3 million of new business in e-commerce and banking verticals within the first six months of starting the consulting group.
- Responsible for the design, development, instantiation and maintenance of a library of analytics and models within the software suite. The library evaluates and predicts customer behavior. The software is used for campaign planning and management, customer interaction governance, and web site design and dynamic personalization.
- Responsible for cultivating and managing consulting and software opportunities in new market verticals. A paid consulting engagement is the basis for procuring new information about a specific market segment. The industry-specific information becomes part of the company's content library and is the basis for adapting software to a new industry group.

AnswerThink Consulting Group, Boston, MA

Vice President 1998 - 1999

- Responsible for business development and application delivery in the Decision Support division of a rapidly growing systems integration and e-commerce consulting company.
- Established a data mining / quantitative methods sub-specialty within the DSS solution area.
- Led the development of a Customer Relationship Management product offering. Specifically involved the design of a business intelligence component and its integration with Call Center, SFA and supply chain solution areas of the company.
- Developed driver-based forecasting algorithms for a major US automobile manufacturer using dynamic regression (ARIMA) techniques. The approach considered the effects of history, in conjunction with exogenous, causal variables (drivers), in the estimation of future income statement values. Algorithms were encoded within a broader OLAP application using a native scripting language and made available for on-demand reporting.

Sapient Corporation, Cambridge, MA

Director of Analytic and Decision Support 1996-1998

- Established the Data Warehouse/Decision Support System (DW/DSS) practice for a rapidly growing, 1200-employee systems integration company.
- Adapted the company's proprietary design and development methodology to accommodate the unique requirements of DW/DSS implementations.
- Developed a knowledge center to disseminate highly specialized resources and information among active DW/DSS project teams throughout the company's 6 domestic and 2 international facilities.
- Established a customer laboratory for the evaluation and deployment of DW/DSS tools. The lab also served as the platform for exploratory data analysis and prototype development during DW/DSS designs.
- Developed superior competency in business requirement analysis and measurement design. This was a distinguishing characteristic of the company in the marketplace. As a result, Sapient was able to offer far greater analytic depth and functionality in its DW/DSS solutions than were its competitors.
- Provided expert leadership and support during technically demanding model design, development and integration. Projects included:

- Model yielding forecasts of price shifts in the energy commodities market and simulating the effect on profitability of various positions assumed in response to the predicted price changes. Included the measurement and simulation of risk associated with trading natural gas and energy derivatives under varying market conditions using methods such as value-at-risk and Black-Shoales.
- Models optimizing routes, batch sequencing, batch sizes, flow rates, scheduling and customer demand satisfaction for a 10,000 mile network of natural gas liquid pipelines using mixed integer linear programming, network optimization, heuristic and non-linear programming and simulation techniques.
- Models predicting the relative distribution of multiple components (e.g. ethane, propane, butane, etc.) in mixed batches of natural gas liquids based on historical gas chromatograph readings in association with inter-pipeline pressure, temperature and density. Employed linear and non-linear statistical methods and multi-layer backpropagation neural networks.
- Models forecasting the demand for propane in various markets based on weather, crop yields and historical demand. Employed linear and non-linear statistical methods and multi-layer backpropagation neural networks.
- Models predicting failure for both conventional and direct-buried underground electrical cable based on environmental, manufacturing, load and other historical characteristics. Models employed linear and non-linear statistical methods and multi-layer backpropagation neural networks.
- Models detecting patterns of fraud in health care claims. Employed data mining techniques such as discriminant and cluster analyses and neural networks.
- Assumed lead and support roles throughout DW/DSS project sales cycles resulting in several significant contracts.

American Analytic Institute, Sandwich, MA

Chief Executive Officer/Economist/Statistician 1992-1996

Consulting Analyst 1996-1998 2007-2009

- Conducted analyses and developed software to ascertain the presence of discriminatory patterns during job assignment procedures in the case of EEOC. et al. vs. Pipefitters Local No. 120 et al. Developed methods of measuring wages lost due to discriminatory practices that were used in assessing monetary damages. Provided expert testimony during depositions and trial.
- Evaluated international clinical trials on two blood pressure medications during the course of litigation between competing pharmaceutical companies. Included the application of parametric and non-parametric techniques to multi-site data. Developed software (in SAS) that generated unique linear estimator and summation statistics for all possible combinations of inter-group data and performed subsequent permutation tests to measure the relative effect of medications.
- Developed a health risk assessment and resource forecasting computer model. Included adaptation of an accelerated failure time forecasting model to predict diagnostic outcomes based on behavioral, environmental and hereditary risk factors; a study to establish cost and service distributions within diagnoses; a system design and computer code for linking predicted incidence, utilization and cost data and running a probabilistic simulation to forecast cost and volume under varying conditions of risk.
- Conducted a statewide study of the pediatric home health care market for a management company seeking to optimize its acquisition strategy for existing home health care agencies. Included the acquisition of Medicaid claims through the Freedom of Information Act followed by a comprehensive analysis of claims data, yielding a geographically segmented report on cost, utilization and service characteristics.
- Developed software (in SAS) evaluating clinical trials for several pharmaceutical companies. Included extensive data base development, formulation of statistical tables, generation of detailed data listings and collaborative interpretation of analysis plans with other biostatisticians.
- Performed security valuation for a major New York HMO. Included development of long-range earnings forecast using a hybrid linear trend/second-order autoregressive model, calculation of company-specific beta by measuring covariation between excess market and company returns, comparative industry financial analysis and development of leverage and risk-adjusted, multi-period stock valuation model.
- Consolidated and evaluated clinical, financial and operational data bases for staff and group model components of Massachusetts' largest HMO. Resulting reports were used in the development of a Medicare carve-out managed care plan and to support acquisition strategy during a merger with another HMO.
- Evaluated reimbursement structure of a major pediatric, chronic care facility. Included engagement and supervision of medical records coders to assign DRGs to a sample of the hospital's cases, abstracting of medical records into UB-82 format, merging of abstracted records with statewide UB-82 data base, and application of quantitative methods to neutralize case mix variation in reimbursement fields. The findings from a comparative analysis of statewide hospital reimbursement within payer category led to a 20% increase in the client hospital's Medicaid rate of reimbursement.
- Designed and executed a study to promote more effective cancer management programming for Medicaid recipients. Created continuum-of-care episodic database by merging multi-year Medicaid claims data and Public Health staging and mortality data.
- Developed a plan for SAS[®] system implementation for a major Massachusetts HMO resulting in an efficient, fully documented system of data storage, retrieval and analysis.

- Performed comprehensive analysis of inpatient and outpatient care in a region transcending two states. Report examined competitive and utilization intensity within the study region to identify the most promising municipalities for focused inpatient and outpatient marketing activities. Utilization within selected communities was then evaluated according to specific competitive, diagnostic, demographic, payer, referral and outcome criteria. Resulted in successfully implemented recommendations regarding market strategy within major diagnostic categories of care.
- Designed and authored a statewide, shared risk Mental Health and Substance Abuse Managed Care Program for consideration by the Medicaid Program in the Commonwealth of Massachusetts.
- Performed statistical analysis for a study involving the use of Prozac in Psychotic patients for a pharmaceutical company. Involved methodological selection, development of software to perform non-parametric techniques measuring paired replicates and independent samples, and interpretation of findings for client.
- Performed market analysis for acute care and psychiatric hospitals utilizing the statewide UB-82 data base for inpatient hospitals. Involved the development of JCL routines and SAS[®] analytic programs to access a million record clinical data base. Generated hard copy and video reports that resulted in a focused marketing strategy to attract patients and alternate referral sources and to achieve a more balanced third party payer mix. Findings also served as the basis for a comprehensive overhaul of the facility's charge structure for routine and ancillary services. Study was updated for a subsequent year and used as a tool for locating outpatient facilities statewide.
- Performed process quality and productivity analysis for an acute care hospital resulting in recommendations regarding the design of administrative information systems and hardware/software acquisition for patient accounting, medical records and financial departments.
- Developed and coded a completely automated electronic media claims submission system, using COBOL and ASSEMBLER routines, for a regional mental health facility. Software was completely integrated with existing A/R software.

HealthPro, Inc., Worcester, MA

Manager of Analytic Division 1990-1992

- Developed superior analytic capacity for a major Managed Care company resulting in greatly enhanced credibility with clients and significant internal operating efficiencies benefiting all departments.
- Developed a project management model in restructuring the analysis department that was ultimately adopted by other operating sections of the company.
- Educated staff in project planning/monitoring techniques, research design, data collection/preparation, quantitative/statistical methods, programming and report/ presentation development.
- Developed numerous standardized analytic computer algorithms for episode development, case mix adjustment, forecasting, etc.
- Created report formats and developed full color report and animated graphic presentation production capacity.
- Designed and initiated a project to restructure data files/libraries, standardize program development/storage, test internal and external data base integrity, convert data bases to standard format and permit collapse of multiple source data bases into common analytic files.
- Designed and initiated company wide systems analysis of Managed Care process, software and hardware.

The Health Data Institute, Baxter International, Lexington, MA

Project Manager 1988-1990

- Managed analytic projects for large corporate and governmental clients. Involved the design of data bases, implementation of analyses, development of reports and presentation of findings. This resulted in reports that became the company standard for health care utilization reporting.
- Also managed new product development and research design involving case mix adjustment techniques and analytic methodologies for DRG and PPO analyses.
- Managed project to consolidate indemnity, HMO, managed care, prescription, wellness and disability data into one integrated data base.

Office of Health Systems Management, Commonwealth of Massachusetts, Boston, MA

Manager of Operations Research 1986-1988

- Managed model development, data acquisition and preparation for projects involving the investigation of inpatient (acute, chronic, rehabilitation, psychiatric) and outpatient hospital activity.
- Designed and oversaw subsequent analyses and report generation relative to effective cost containment/service enhancement initiatives for Medicaid subsidized health care.
- Included the development of a comprehensive five year plan for the Massachusetts Medicaid system.

ACADEMIC APPOINTMENTS

- **Assistant Professor, Northeastern University, College of Business** 1986-1990
Quantitative Methods I & II (Graduate); Statistics I & II, Quantitative Modeling (Undergraduate)
- **Associate Professor, Massachusetts College of Pharmacy**, 1990
Health Economics
- **Associate Professor, University of Massachusetts**, 1986
Managerial Finance
- **Associate Professor, New School for Social Research**, 1984-1986
Statistics
- **Lecturer, Various Two Year Schools**, 1982-1984
Accounting, Systems Analysis, BASIC & COBOL Programming, Algebra, Managerial Psychology

OPERATIONS EXPERIENCE

Various Service Organizations with budgets of up to \$8 million

Chief Executive Officer, Chief Financial Officer, Associate Executive Director

TECHNICAL SUMMARY

Languages: SAS, COBOL, BASIC, Visual Basic, DYNAMO, JCL
Hardware: IBM, VAX, Borroughs Mainframes; IBM, VAX & Wang Minis; IBM & Mac
PCs; RS-6000 & Sun Solaris
Software: Multiple word processing, desktop publishing, spreadsheets, multimedia
presentation packages, MINITAB, SPSS, Oracle Express, Neural Ware
Operating Systems: MVS-TSO, VMS, CMS, Wang-VS, DOS, UNIX, AIX, Windows,
System 7

EDUCATION

M.B.A., Statistics & Operations Research, Union College & University
Full Graduate Assistantship, Magna Cum Laude
B.A., Siena College
President of the Student Government

BIBLIOGRAPHY

Upon request