Mike Morgan, PhD

SELECTED PROJECTS AND ENGAGEMENTS

Data Science:

* **Identified both risk and drivers of customer churn for a firm acquired by ADT** – home security, communications and website services. (Combined MR and DB modeling.)
* Predictive models and database propensity scoring of service upgrades and new service adoption among 6 million customers (Telecom company).
* Predictive models and database propensity scoring of hardware upgrades for 320,000 small and medium business customers (Telecom company).
* Dynamic model of monthly and lifetime customer value (contract status, monthly billing, cost of service, likelihood to cancel) for 5.5 million customers for voice-over-IP, data and video services. Used Hidden Markov model with convergence to steady states.
* Model of optimizing value of company new offers based on the existing space of price, promotions, product features, customer characteristics, changes in services over time. Utilized stochastic simulated annealing model to fit this complex, discontinuous, nowhere differentiable space.
* Latent class analysis to identify customer profiles and purchase/cancellation drivers (850,000 customers).
* Integrated and analyzed data feeds from vendors, residential owners to predict acceptance or cancellation of annual flood insurance policy (for FEMA agency).
* Constructed segmentation and predictive models from large in-house databases with appends from syndicated data for a major clothing manufacturer selling through multiple retail outlets as well as through their website.
* Time-dependent models of customer churn over multiple years for several clients. FEMA customer base, large home security provider, wireless and wireline telecom customers (consumer and B2B).
* Customer lifetime value classification and predictive model from frequent purchaser database of major healthy food store chain.
* Market segmentation using Nielsen household data on soup, catsup, and laundry detergent markets.
* Identified both risk and drivers of customer churn for a major home security firm – home security, communications and website services. (Combined MR and DB modeling.)

Digital Analytics:

* Integration of traditional media vehicles with website tracking/attribution platform.
* Testing multi-faceted, Web Banner ad strategy in four international markets In Asia and the West.
* Optimization of media spending across email and Web advertising.
* Development of lifetime value model for online subscriber base of large health care provider.
* Response modeling for cable TV ads w/embedded URLs for global bank.
* Search engine optimization model, including both paid and organic search, for two major clients.
* Testing structure of several client Web sites using a variety of methodologies.
* Studies of how page views and page sequencing produce new leads and customer conversions.
* Development of new, more effective composite scores for Web engagement.
* Computing ROI on multi-faceted online campaigns.

Primary (Survey) Marketing Research:

* Estimated drivers of discrete choices in simulated markets to determine interest, engagement and purchase of news media offerings (online and offline).
* Identifying types of employees in terms of what drives job performance, satisfaction and retention.
* Implemented discrete choice models to help major restaurant chains identify best menus by region.
* Identified six classes of early adopters for new wireless telecom service, accurately projecting first year sales.
* Calibrated choice model drivers for physicians prescribing a range of antidepressant brands.
* Conducted analysis and reporting for retailers and manufacturers of consumer goods and services to support targeting and messaging.
* Produced down-market B2B target profiling for a major IT support company.
* Identified both risk and drivers of customer churn for **a firm later acquired by ADT** – home security, communications and website services. (Combined MR and DB modeling.)