

CUNEYD C. KAYA

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HIGHLIGHTS

- Analytical and technical professional with an excellent Analytics, Business and IT knowledge and experience
- Proven leader of a technical group of professionals from diverse backgrounds with deep quantitative skills
- Capable of adapting to different business models in a rapidly changing environment
- Excellent communicator with great ability to explain highly technical issues to a very non-technical group
- Experienced in Supply Chain and Logistics Analytics
- Strong understanding of Financial Planning and Analysis techniques for Distribution, Logistics and Supply Chain
- Continuing Adjunct Faculty Member of Management Information Systems department at the University of Texas at Dallas
- *U.S. Permanent Resident*

PROFESSIONAL WORK EXPERIENCE

Blockbuster Inc.

Apr 2008 – Present

Manager, Decision Analysis

- Leads a group of highly-skilled, technical, analytic, and experienced quantitative professionals to design and maintains complex mathematical models to validate business decisions and to suggest new and improved courses of action
- Upgrades and maintains the production scheduling tool, and implements business rule changes
- Generates reports and performs analyses on special initiatives and new projects to support the logistics network
- Managed Engineering and Quality Assurance groups to achieve 99.99% pass on process audits and savings of \$100K in packaging annually

Projects (*Individual Projects and Projects Managed*)

- **Production Scheduling and Workload Planning Optimization**
 - Upgrading and maintaining the tool written in *Access VBA* and *Excel VBA* as the frontend with a *CPLEX* optimization engine
 - Performing model modifications, and UI development at the time business rules change
 - Synchronized with the Capacity planning tools
 - *Proven savings of \$1.5 million every year*
- **Trailer Utilization for Logistics and Distribution**
 - Developed a model in *SAS*, *MySQL* and *VisualBasic.NET* for trailer utilization to analyze the cartons in a trailer. The transportation vendor mandates a threshold for the number of cartons. The trade-off is higher utilization leads to higher transportation cost, so an optimum level has to be found
- **Consolidation Analysis**
 - The objective of this *SAS*, *MySQL* and *VisualBasic.NET* simulation project is to find the optimum sized cartons to minimize the transportation costs. Smaller cartons help trailer utilization but larger cartons are better for transportation costs
 - Model eventually will save \$750K/year in transportation costs
- **Direct Labor Budget Model for Distribution Organization**
 - Developed a model for direct labor budget that takes into account the estimated unit sales for each period for the year and generates a direct labor budget, broken down by department, function, product channel and direct labor type, using *Spreadsheet Modeling* techniques.
- **Slot Optimization Analysis for Blockbuster Online**
 - Based on their plans, each customer of Blockbuster Online (By-Mail) business can rent a specified number of discs at the same time. When a customer performed an in-store exchange, the next movie was sent before the customer returned the movie rented from the store. Performed a Risk analysis and laid out the options to save the company corresponding additional 50% of the cost for all online rentals

- **Customer Churn Behavior Analysis for Blockbuster Online**
 - Managed the modeling team to identify the factors in understanding customer churn behavior for Blockbuster Online. Used *Logistic Regression* and *Decision Tree induction* techniques simultaneously via *SAS* and *Weka* to understand and quantify the effects of customer behavior on their likelihood to churn.
- **Drop-Ship Analysis for Blockbuster By-Mail**
 - Modeled a recommendation method to increase the coverage of 1-day postal zone subscribers. This method takes into account operational limitations as well as USPS mail and postal zone constraints. This initiative mitigates expected revenue loss of \$1 million
- **Cross-Channel Packaging**
 - Designed a story board for implementing a cross-channel packaging solution, for Blockbuster By-Mail and Stores that will potentially save about \$3 million in product packaging costs including additional postage. The savings exclude transportation cost savings
- **Disc Inspection**
 - Built a disc inspection experiment to assess the lifetime of the discs for Blockbuster online. Determined that major cause for disk damages were from manual inspection processes. Reduced the damage rate from 5% to less than 1%
- **Costing Models for various business initiatives**
 - Built Financial Planning and Analysis models for various business initiatives, both internal and external, including but not limited to analyzing Fixed vs. Variable Costs for distribution centers, Centralized inventory receiving and fulfilling rental and retail games orders within the same process

School of Management, University of Texas, Dallas

Aug 2000 – May 2006

Research Assistant

- Designed the system architecture and developed the simulation tools used in the following projects using **MS Excel VBA, Visual Basic.NET, SQL, MATLAB and Mathematica**:
 - ***Demand Generator for a Proxy Server***: Developed a mathematical model to identify the pattern of requests coming to a Web proxy server
 - ***Demand Trace Extractor and Analyzer***: Developed an efficient technique to extract valuable data from raw proxy server log data that can process several thousands of data points in a few seconds
 - ***Proxy Caching Algorithm Simulator***: Developed an efficient extension to improve performance of common Proxy server algorithms (namely LRU, LAT and GD-Size). The end-user delay is improved more than 50% over the existing algorithms
 - ***Server Workload Analysis Simulator***: Built an efficient simulator that calculates the web content server processing capacity under different web traffic characterization scenarios
- Designed the curriculum and developed examples for E-Business Technologies course at the Executive MBA program
- Managed Executive MBA student year-end projects in E-Business Technologies course
- Designed, developed and maintained Course Management System in WebCT for the MIS department

AYZ Management Info. Sys. Ltd., Turkey

July 1999 – Apr 2000

Management Consultant

- ***Business Process Reengineering***
Industries: Steel Manufacturing, Packaging, Wholesale Food, Women's Apparel
 - Coordinated the team which performed extensive business process analysis through surveys and questionnaires at the client site
 - Improved the business process flows for optimal custom ERP solution implementation strategy using **MS Excel VBA** and **MS Access VBA**
 - Developed a new data model to capture newly developed business rules.
 - Improved the decision making process for the executive team, which implied significant cost savings
 - Customized Logo Business Solutions' domestic market-leading ERP solution to fit clients' business process and supply chain needs and managed the implementation phase

- Coordinated a new inventory coding technique to fit the customized ERP solution
- Systemized business processes and re-designed workflow in the Accounting and Finance Departments
- ***Business Forecasting and Reporting System Development***
Industries: Wholesale Food, Steel Manufacturing, Packaging
 - Managed the development of a complete solution for the executive team that effectively reduced total decision making time to 4 hours, which was initially 2 weeks, using **MS Excel VBA and MS Access VBA**
- ***Financial Analysis and Reporting System Development***
Industries: Wholesale Food, Packaging
 - Managed the early development phase of a custom Financial Portfolio Management tool
 - Developed basic understanding of financial instruments analysis and hedging techniques
 - Designed reporting module of the system

EDUCATION

University of Texas, Dallas

Dec 2006

PhD, Management Science, Information Systems Concentration,

- Graduate Scholarship at the University of Texas, Dallas
- Dissertation Title: “Essays on Web Content Distribution Management”
- Published and Work-in Progress Research Projects:
 - “A Screening Technique for Delay Reduction in Proxy Caching” (with Grace Zhuong, Yong Tan and Vijay Mookerjee), *Decision Support Systems, Volume 46, Issue 2, January 2009, Pages 594-603*
 - “An Economic and Operational Analysis of the Market for Content Distribution Services”, (with Kutsal Dogan and Vijay Mookerjee), published in Proceedings of the International Conference on Information Systems, 2003, Seattle, WA
 - “Impact of Bursty Traffic on Content Distribution Servers: A Model and Empirical Validation”, (with Kutsal Dogan and Vijay Mookerjee)

University of Texas, Dallas

Dec 2005

MS, Information Technology and Management,

Istanbul Technical University, Turkey

Aug 1998

BS, Mathematics Engineering,

ACADEMIC WORK EXPERIENCE

School of Management, University of Texas, Dallas

May 2003 – Present

Instructor and Adjunct Faculty Member

- Teaching following Graduate and undergraduate level courses in the MIS program:
 - Developing Business Applications in Visual Basic.NET (Graduate)
 - Introduction to Management Information Systems
 - Information Technology and MIS Fundamentals
 - Programming in Visual Basic
 - Database Fundamentals
- Had higher evaluation scores than the 90% of the faculty teaching in the School of Management

COMPUTER SKILLS

Languages

SQL, VB.NET, VBA, HTML, CSS, ASP.NET

Framework

.NET CLR, Winforms, ADO.NET

Operating Systems

Windows Server 2000/2003/XP/NT, Mac OS X,

Databases

MS Access, SQL Server 2000, Oracle, MySQL

Tools

SAS, Visual Studio 2005, Proficient in MS Excel, Microsoft Office including Visio 2003, Mathematica, Maple, MATLAB, Weka, R, AMPL/CPLEX