Senior Business Analyst, Optimization & Analytics

The Operations Planning Center is CTC's Supply Chain planning hub. The OPC works with our integrated partners – CTC Associate Stores, Suppliers, Forecasting and Replenishment, Transportation execution teams, Third Party providers and Carriers to plan efficient product flow across the network.

The Senior Business Analyst will:

- Develop mathematically-based Decision Models to support improved strategic, operational and tactical decision making.
    - These Models:
        - are for Supply Chain and other areas of company
        - are either used in production to support on-going business process requirements, or for one-time use to investigate specific issues
- Creates Models in a project environment, with projects typically being 2-6 months in duration
- Provides on-going support and enhancements to existing Models

RESPONSIBILITIES

Develop innovative solutions using specialized Operational Research techniques and thru interactive problem solving with Business Users.

Most Models are mixed integer linear programs based on a modeling language called OPL/CPLEX, and are designed to be integrated with custom-built external (SQL) data sources for use in both production and decision support environments.

Major work elements include:

- Optimization Modeling - involves: leading discussions with Business Users to determine/clarify Business Rules; evaluating data sources; building and testing Models; promoting Models to production; ensuring Models are properly documented
- Identifying Additional Opportunities - determine where optimization can be used to improve business processes and decision making (e.g. DC operations, Transportation effectiveness, Merchandising Planning processes); and documenting potential benefits
- Other Mathematically-Based Modeling - includes Simulation and predictive modeling on an as required basis

Model-building Activities:

- Develop/Enhance Models
- Create/Use project plans to ensure timely and successful completion
- Identify/Validate Business Rules that drive Model design by working with Business Users to analyze and recommend approaches to handling the various trade-offs that are required in decision making
- Analyze available data to establish inputs that support Models requirements using statistical analysis where necessary
- Design database structure that feeds the Model
- Build/Test decision Models by working interactively with Business Users to:
    - review business issues as they arise and determine approaches that resolve them
    - ensure Model efficiency
    - establish reasonable solution times and quality
- Prepare/validate Model reports
- Execute a Model testing plan
- Recommend/Run Model scenarios for evaluation
- Review Model results with Business Users

- Assist with integration testing for production applications
- Prepare presentation material that communicates Model results
- Create Model documentation to required standards

Qualifications

- Post-secondary education preferably in Operations research, Applied Math, Industrial Engineering, or computer science
- Familiar with SQL, Oracle, C#, .net, Python
- Strong analytical and technical abilities, within an understanding of statistics
- Proficiency in operations research techniques, e.g. Mixed Integer Linear Programming based techniques
- Exposure to server based technology
- Intermediate knowledge of standard desktop tools (MS Access, Excel, PowerPoint, Outlook)
- Ability to cultivate relationships with key stakeholders of varied levels
- Excellent time management skills and ability to effectively manage conflicting priorities
- Solid verbal and written communication skills with proven ability to effectively communicate proactively

Assets

- Masters in Applied Sciences or Operations research
- 2+ years of supply chain experience