PROS O&D Revenue Management

Increase revenue by differentiating price and availability for passengers based on true value
Addressing revenue-critical challenges

Challenges
- Are leg-based revenue management solutions maximizing revenue opportunity for major hub-based or network-oriented airlines?
- How can the overall network revenue be captured?
- What is the optimal fare mix between local and connecting demand?

Solutions
- PROS PNR-based, direct O&D demand forecasting technology
- PROS Dynamic Programming network optimization technology
- High-performance software architecture with proven scalability
- Analyst-friendly, configurable, web-based user interface
- Advanced real-time decision support to execute market strategies

Results
- PROS O&D Solution proven in production to generate revenue lift at world-leading airlines
- Major advantage over competitors with leg-based RM solutions as validated by real-life experiences and academic research

Analytics, execution, and optimization

Analytics
- Identifies low-performing markets
- Highlights potential denied boardings
- Monitors potential seat spoilage
- Alerts users to critical flights with high-revenue opportunity
- Identifies market anomalies requiring review or special handling
- Highlights opportunities and challenges requiring review and/or action
- Provides decision support for pricing availability

Execution
- Provides control of overbooking and minimum acceptance price/bid price decisions
- Provides user influences to impact final controls
- Automatically implements optimal controls
- Manages unique seasonal and holiday demand behavior
- Implements strategy at configurable levels of detail – i.e., by region, by market, by flight, etc.
- Manages pricing of products based on currency differential
- Appraises the value of interline traffic demand based on its revenue contribution to the airline

Optimization
- Maximizes network revenue by optimizing the traffic mix – i.e., local vs connecting, point-of-sale, B2B corporate deals, etc.
- Forecasts accurate micro-level demand and passenger show-up
- Determines optimal overbooking levels
- Determines optimal minimum acceptance price/bid price controls
- Maximizes revenue in markets that exhibit low-fare demand behavior by utilizing the proprietary PROS Hybrid Technology to counteract buy-down behavior and revenue spiral-down

The PROS O&D Solution is a state-of-the-art, PNR-based revenue optimization tool for the airline industry. The highly configurable PROS O&D System provides significant incremental revenue benefits over leg/segment solutions and non-PNR-based systems through ground-breaking, PNR-data-driven forecasting and network optimization to determine the right price that maximizes revenue.
Module overview

Data Loaders
PROS O&D utilizes multiple sources of data provided by the airline including rich PNR-level data extracted from the airline reservations system. This data is cleansed, transformed, and processed via the data loaders. The resulting booking and cancellation transactions are the building blocks for providing valuable insight into customer and market behavior.

Demand Forecasting
The PNR-based PROS O&D Forecaster includes major science innovations that improve forecast accuracy over other RM systems. The PROS O&D Forecaster provides distinct forecasts for bookings and cancellations at various levels from passenger itinerary down to the passenger type. The PROS O&D Solution allows analysts to apply influences to the forecasts to account for activities that affect demand such as holidays and special events. This flexibility enables the forecaster to model unique demand patterns and to quickly capture emerging trends.

Network Optimization
PROS O&D Network Optimizer incorporates leading-edge dynamic programming science with other optimization techniques to address a variety of challenges such as overbooking, upgrade/downgrade potential, convertible seats, flexible cabins, etc. The output from network optimization generates revenue-optimal bid price controls as well as leg/segment allocations to support the legacy booking process.

Fare Valuation
PROS O&D Fare Valuation generates accurate data input to be used in network optimization as well as in the pricing and availability decision process. Airlines with significant B2B and B2C fare differences by point-of-sale will reap significant benefits from the use of more precise price valuation when making decisions to accept/or reject passenger requests.