



The Travel Marketing Store



SkyTECH Solutions Pvt. Ltd



United Airlines, Inc

Travel Marketing Case Study:

Increasing efficiencies and optimizing operational costs through effective resource management for a global leader in the airlines industry

Synopsis: SkyTECH Solutions helped United Airlines (UA) utilize and manage its manpower effectively and save significantly on cost through the use of Resource Management System (Manpower Administrative Resource Suite- MARS) and the Absence Management System (AMS) applications. These allowed UA to centralize resource management across global locations, and monitor, manage and control discrepancies caused by the absence of personnel.

The solution helped improve operational levels which in turn positively impacted customer service and satisfaction that enhance brand equity of United Airlines as a leading player in the airlines industry.

UA could mitigate risks that arose due to lack of control on increasing fuel prices and manpower cost, replace legacy applications operating in “silos” with a centralized and integrated system, and optimize time and service management, facilitating savings of more than US \$10 million dollars annually.

Information on the Customer & Supplier



The Travel Marketing Store

Customer approval

Name: Mike Kennaugh

Position: Vice President, Operations and Shared Services | Information Technology

Date: 7th September 2012

The Supplier

Branch	SkyTECH Solutions Pvt. Ltd.
Address	BIPPL Building C. Block EP & GP. Sector V. Saltlake Electronics Complex
City, state, ZIP/Post Code	Kolkata, West Bengal, 700094
Phone number	+91 33 23575441
Contact name	Arpan Majumder
Title	Head of Sales & Marketing - APAC & EMEA
E-mail address	ArpanM@skytechsolutions.co.in
Solution offering	Resource Management System for Ground Stuff

The Client

Customer name	United Airlines, Inc.
Division	United Airlines - IT Division
Address	77 West Wacker Drive
City, state, ZIP/Post Code	Chicago, IL, 60601 United States
Web site address	www.united.com
Industry	Airlines Industry
Number of employees	More than 86,000 people are employed worldwide
Annual revenue	Net income of \$1.3 billion in Year 2011
Contact name	Mike Kennaugh
Title	Vice President, Operations and Shared Services Information Technology
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Travel Marketing Case Study

Case Study for United Airlines

Company profile

- World's most comprehensive global route network, including world-class international gateways to Asia and Australia, Europe, Latin America, Africa and the Middle East with non-stop or one-stop service from virtually anywhere in the United States
- Operates an average of 5,574 flights a day to 377 airports on six continents from hubs in Chicago, Cleveland, Denver, Guam, Houston, Los Angeles, New York/Newark, San Francisco, Tokyo and Washington, D.C.
- In 2011, United carried more traffic than any other airline in the world, and operated more than two million flights carrying 142 million passengers
- United operates nearly 700 mainline aircraft and has orders for more than 270 new aircraft deliveries through 2022, including 50 Boeing 787 Dreamliners, 25 Airbus A350XWBs, and 100 Boeing 737 MAX 9 aircraft
- United was rated the world's most admired airline on FORTUNE magazine's 2012 airline-industry list of the World's Most Admired Companies.
- United is a founding member of Star Alliance, which provides service to 193 countries via 27 member airlines.

Business situation

UA was facing tough business conditions due to a highly competitive market scenario, heightened by dynamic economic conditions governed by external and regulatory factors. Additionally, due to several heterogeneous legacy applications operating in silos across different hubs and geographical locations, the total cost of ownership was becoming very high. United Airlines used several legacy systems that needed a technology refresh to be competitive and compatible with contemporaries in the industry.

Inefficient manpower allocation and utilization coupled with untracked absenteeism were leading to significant revenue leaks affecting the company's bottom-line.

United Airlines believed it was imperative to have an integrated resource management suite, which would help centralize operations and would be built on contemporary technologies. The system would effectively help them measure, monitor and manage manpower utilization metrics to track and monitor work allocation and related absence of its personnel including Airport ground staff, front-desk CSR, flight operators and crewmembers.

Key objectives included:

- Consolidation of disparate systems and leveraging new technologies to reduce total cost of ownership.
- Integration of systems across locations to help seamless flow of data and a consolidated data warehouse across locations to be able to implement a standard manpower strategy across the organization



- Monitoring and reduction of staggering costs due to absenteeism and optimization of resource utilization
- Unification and expansion of the capabilities of numerous mainframe and client/server applications
- Reduction in costs incurred due to the inability to govern policies through older and less reliable technology systems leading to high payouts for union grievances

Market situation

The airline industry was going through tough economic conditions and UA was no exception. They identified a couple of significant parameters that were challenges facing the airline industry and risks they needed to mitigate:

- Lack of control on increasing fuel price
- Rising Manpower cost

With some competitors having better control on fuel pricing due to alternate and strategic locational advantages, UA had to improve manpower efficiencies to maintain a competitive advantage over its peers.

In addition, US hubs had localized rules followed by the respective employee unions on which the executive management had limited control. There was a need to bring all union contracts across all the locations in the US under a common generalized rule that could later be optimized as per the company policy.

Solution

Leveraging our domain specialization in the airline industry, SkyTECH served as a consultant to assist UA in developing a technology solution that would not only solve UA's business problem and help fill the current business gaps, but also ensure application scalability and optimal resource utilization in future. SkyTECH's team of specialized resources worked hand-in-hand with technical groups and business users of United to deliver the required solution. The critical success factor was very effective program management with onsite/offshore entities of SkyTECH and multiple groups of United, to ensure timely implementation of the technology solution deliverables as per the overall project plan.

Two project initiatives were identified to re-align the business goals to meet the long-term financial plans of United Airlines:

1. **Manpower Administrative Resource Suite (MARS)**
2. **Absence Management System (AMS)**

Manpower Administrative Resource Suite (MARS) is a comprehensive, robust, scalable, flexible and web-enabled resource management application. The main features /benefits include:

- **Enhanced usability and adoption:** Provided highly-interactive user interfaces through which employees and supervisors could query about their activities / plans, helped to



monitor overall statistics in a single elaborated customized dashboard and even flexibility to configure the system in advance for any possible future urgencies.

- **Rule-based configurable engine:** Solution has a configurable rule-based engine with a highly-scalable architecture enabling rapid inclusion of different business hub data, flexible enough to be tailored to customize hub-specific business rules that adhered to local union contracts.
- **Seamless integration with disparate systems:** The backend business process integrated with disparate legacy systems and applications like Payroll, Overtime, and Staffing etc. Vacation and different Work Assignment Management systems were made more configurable, yet manageable by Senior Management.
- Online publishing of staffing preferences, vacation eligibility, assignment trades and rosters resulted in a structured way of addressing employee grievances.

The **Absence Management System (AMS)** helped UA monitor and track employees' uninformed absence and pleasure travels during sick leave.

The value-added capabilities of the AMS system include:

- Detection of employees traveling while sick
- Monitoring of employee exception patterns and generation of alerts to relevant stakeholders
- Case creation ability (health-related exceptions only)
- Employee absence trend reporting
- Case-based workflow management
- Audit trails tracing all actions
- Extensive reporting capability

The solutions were developed using J2EE-based architecture following Java Design Patterns deployed in the Weblogic server along with Oracle database and BRIO reports.

Benefits

During the manpower crisis at O'Hare during March'06, when there was a huge shortfall of United Airlines' attendees, SkyTECH's solution (MARS + AMS) was recognized as the most critical resource management application that helped:

Improve productivity: The solution provided a centrally-controlled, single application that integrated all the disparate legacy systems being managed and controlled earlier by the separate hub managers. This resulted in substantial reduction in cost due to improved productivity.

Improved service levels: With the induced management efficiencies and automation, customer services levels were enhanced and positively impacted the brand equity and operations of UA

Improve business intelligence & reporting: Strategized actions were suggested by streamlined real-time operational decision-making capabilities of this tool. Effective management reporting helped reduce overhead expenditure and improve performance, resulting in minimized aircraft delays.

Reduce costs: MARS provided an integrated environment to manage employees in an efficient manner and reduce significant costs incurred through manual operations and disparate non-conforming existing systems.



Optimize time and service management: AMS identified defaulters, chronic sick leave-takers and occupational abusers. It also reduced “Sick Leave Cost” to ensure effective resource utilization and optimize operations.

Dollar savings: It helped UA in optimizing time and service management, facilitating savings of more than US \$10 million dollars annually.

Products and services your company used

- Strong Program management with onsite/offshore SkyTECH teams and close coordination and communication with various United Airlines technology and business groups.
- Development, Testing and Implementation Support of Paycert module, and involved in other major business critical modules like Vacation, Assignment, Overtime, Staffing, Preferencing, Roster etc. over the life cycle of this project
- J2EE architecture following Java Design Patterns deployed in Weblogic server along with Oracle database and BRIO reports

Services provided by other groups or companies

None

Critical success factors

- **Understanding of airline business:** SkyTECH’s specialization and association with the airline industry and our deep knowledge of the business domain helped grooming of competent resources that were effectively deployed and performed leadership roles to resolve the pain-points prioritizing the business criticalities.
- **Strong Program Management Model:** SkyTECH had provided a very strong and effective Client Engagement Model, which ensured proper communication between technical groups, business user groups and management of SkyTECH and United. Transparency was the key element which ensured all issues were discussed to achieve the business goals and proper escalation mechanisms were followed to enable proper closure of all issues.
- **Planning phase to align business to technology:** Exchanging a clear roadmap from the remote offshore development center with a cost effective phased resource ramp-up/ramp-down approach to ensure proper implementation of the agreed upon technology solution that enabled the business needs of the client.
- **Customer focus:** Focused account management and onsite-offshore teams through the lifecycle of the project and a dedicated management team to monitor progress and quality of delivery.
- **Ownership:** Flexibility provided by client to strategize and implement the solution in a consultative mode with the flexibility to use our industry intelligence to improve processes and functions in the relevant systems.



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- **Technology expertise:** Capabilities across diverse technologies to help interface and leverage existing technology investments of the client and develop the solution aligned to meet current and future needs

Lessons learnt

- Successfully implemented test automation across twelve functional modules
- Criticality to plan a roadmap to align business with technology for smooth execution which mitigated risks at later stages which may have had a far greater impact on time and cost
- The client appreciated our ability to adopt a phased and modular approach for effective ROI

Client Testimonials

"We are glad that we had engaged SkyTECH solutions for our initiative to improve operational efficiencies through effective resource management. The team at SkyTECH understood our business and worked closely with the UA IT team to successfully implement the conceptualized solution that fit into our needs and budget. Their proactive approach and customer friendly attitude is a rare characteristic among vendors and they worked as our partner in the project. The joint-effort helped us have a competent solution resulting in significant cost savings by automation of key processes"

- Mike Kennaugh, Managing Director at United Airlines



Media support

Different United Airlines Business Groups

