

# **Delta Air Lines: Understanding the Information Needs of Flight Attendants**

## **Executive Summary**

Delta implemented an Enterprise Portal to provide its 85,000 active employees and retirees with access to business applications, interactive tools and targeted communication through a single architecture. Adoption of the system by Flight Attendants was a concern because of their mobile work patterns and their preference for face-to-face communications. Usography conducted in-depth interviews, workshops with management, surveys, and ethnographic research to formulate a user interface design strategy that specifically addresses the needs of Flight Attendants.

## **Introduction**

Delta is in the process of rolling out new Portal technology that will provide employees with anytime/anywhere access to the company's online information resources. It is anticipated that this new technology will support Delta's initiatives to transform business processes, with the objective of increasing efficiency throughout the company's operations. The success of this objective depends on widespread adoption of the Portal as the primary means of accessing corporate information resources, which in turn depends to a large degree on how easy it will be for different types of users to accomplish their goals using the Portal.

Flight Attendants are a challenging group to reach, as indicated by low adoption rates of computer-based information resources in the past. Some of the reasons for the low adoption rates are:

- Flight Attendants do not have access to a computer in the air, which is their primary workplace
- They are a highly mobile work force, with little time to look at a computer before or between flights
- They don't work every day
- They have traditionally not used computers to complete most of their work tasks
- As a group, Flight Attendants seem to strongly prefer face-to-face communications over computer-based communications

Delta retained Usography to conduct primary research that would inform the next redesign of the Portal user interface. One area of the research focused on developing a user interface design strategy that would help bring a larger percentage of Flight Attendants to the Portal as their information resource of choice.

## **Research Methodology**

The objectives of the research were:

- To obtain quantitative data regarding current physical access to the Portal
- To determine Flight Attendants' current frequency of usage of Portal-based information resources
- To identify specific user characteristics and usage patterns of Flight Attendants
- To understand how the Portal user interface could be designed to increase its usage and effectiveness among Flight Attendants

Usography formulated three tracks of research to gather a rich set of data. Delta's Portal team worked together with Usography to conduct the field research. The three tracks of research are described below.

### **1. Workshops with Delta Management**

In-Flight Services Managers in Atlanta (ATL), Boston (BOS), and New York (JFK) attended workshops to establish baseline data for the investigation. Managers estimated the degree of access to Portal technology, based on proximity to sufficiently equipped computers. They also provided their estimates as to the frequency of usage of the Portal by Flight Attendants. Managers then ranked a list of available content and applications in order of their relative value to Delta's business performance.

## 2. Printed Survey

In-Flight Services managers distributed a printed survey to Flight Attendants at the three mentioned above: ATL, BOS, and JFK. The surveys corresponded to the data requested of managers in the workshops described above. The only difference was that Flight Attendants were asked to specify the frequency with which they use particular content types and applications, rather than their relative value to Delta's overall business.

## 3. Participant Observation (Ethnography)

Observation sessions were conducted in Flight Attendant lounges at ATL, BOS, and JFK to gain an understanding of the way they assimilated information prior to a flight. The objective was to identify barriers and opportunities that could be used to inform the user interface design strategy of the Portal.

In addition to the observation sessions, the joint Delta-Usography team conducted some intercept interviews for clarification of activities or situations we had observed.

## Results

The management workshops and surveys resulted in quantitative data that, taken together, provided a snapshot of current access to and usage of Portal information resources by Flight Attendants. Quantitative data was also used to prioritize individual tools and resources according to business value as well as a weighted average frequency of usage.

The observation sessions and intercept interviews resulted in a rich set of qualitative data. From this data Usography produced a design strategy that addressed the following aspects of Portal UI design:

- Identification of content and tools that should require little or no navigation
- User experience enhancements to accommodate Flight Attendant work patterns and user characteristics
- Approach to content packaging that would allow rapid scanning
- Functionality to help Flight Attendants find time-based information more quickly
- Description of barriers that tend to limit Portal usage by Flight Attendants
- Practical steps for weaning Flight Attendants from less efficient information resources
- Identification of opportunities for the Portal to generate business value (ROI)

As a result of the research, the Delta team has a clearer understanding of the special user characteristics and usage patterns of Flight Attendants, a key user segment that has a tremendous impact on how the public perceives Delta. They will take advantage of this understanding to design the next version of the Portal user interface.

Zeron Turlington, General Manager – Corporate Intranet, said, “Optimum use of the DeltaNet Employee Portal can be realized as employees see the tool as a reliable knowledge and information source that is interactive and continuously tuned to deliver business value. Usography offered a vivid snapshot of our user needs which allowed us to modify the employee portal user experience to ensure adoption.”