

The need for accessible self-service travel kiosks

Overview

Traveling for business or pleasure isn't what it used to be. In order to develop and maintain brand loyalty while streamlining operations in an increasingly competitive global market, airports, air carriers and hoteliers have been challenged to transform their business processes and integrate new forms of customer-facing technology.

Self-service technology has played an important role in this industry transformation. Today, travelers can manage air, hotel, train, and rental car reservations and check-in using kiosk, web or mobile applications. Increasingly, these applications support preferences ranging from dietary restrictions to airplane seating to hotel room/bed types and much more. In addition, travelers can use self-service kiosks while at an airport, hotel or off-site location, bypassing long queues.

While self-service travel kiosks have the potential to improve the traveler experience by making traveling easier, quicker and more enjoyable, some travelers may experience barriers when trying to use them. Self-service kiosks often utilize touch-screens which can be difficult if not impossible for persons to use if they are blind or have low vision or mobility impairments as a result of age or disability.

Providers of self-service travel kiosks are increasingly interested in removing such barriers in order to:

- Continuously improve the traveler experience and differentiate themselves
- Build brand loyalty in an increasingly competitive global market
- Capture market share for the growing segment of travelers with disabilities, whose annual business and leisure travel expenditures now exceed \$13.6 billion¹
- Comply with a variety of existing or emerging worldwide accessibility regulations such as the [Americans with Disabilities Act](#) and the [Air Carrier Access Act](#) in the U.S., [Canadian Government Travel Policies](#), the [Australian Standards for Accessible Public Transport](#), the [UK Disability Discrimination Act](#) and even regional government regulations such California Civil Code 54.9

The connection to travel industry open standards

The growing need for accessible self-service travel kiosks has caused the leading air travel standards organization, the International Air Transport Association (IATA), to begin considering the impact on a key open industry standard, the [Common Use Self-Service Standard \(CUSS\)](#).

As one of several leading suppliers involved in the ongoing development of the CUSS open standard, IBM has been providing guidance and thought leadership in this public discussion. In May 2007, experts from IBM presented our perspective and demonstrated our solutions to other suppliers, airport authorities, airlines and leading accessibility experts at a meeting of the CUSS Disabilities Sub-Group. In that same meeting, IBM helped facilitate the definition of initial functional requirements that may impact the CUSS standard in areas such as self-service kiosk client hardware and software. Since May, the CUSS Disabilities Sub-Group has agreed to pursue technical research into these initial functional requirements.

IBM Accessible Self-Service Travel Kiosk Solutions

As a leading supplier of travel and hospitality self-service kiosk solutions, IBM is working to help clients meet the growing need for accessible self-service kiosks.

Experts from the [IBM Human Ability & Accessibility Center](#) teamed up with IBM Global Business Services' [eAccess Solutions Practice](#) to develop two innovative accessible self-service travel kiosk solutions for air travel and hospitality. The resulting solutions leverage both IBM accessibility expertise and [EZ Access®](#) user interaction techniques that IBM is licensing from the [Wisconsin Alumni Research Foundation](#).

The solutions demonstrate many hardware and software accessibility features that are now available in [IBM self-service kiosk solutions for hotels](#) and [airlines and airports](#). Features include a standard audio connector (i.e. headset jack), accessible hardware controls and text-to-speech output. These features can help IBM clients provide more accessible self-service kiosks that support travelers who are blind, or who have low vision or mobility challenges.

In addition, such hardware and software accessibility features have the potential to significantly benefit the rapidly growing worldwide aging population, two-thirds of whom will acquire some type of disability after the age of 65. This aging population travels more than any other age group, registering more than 260 million trips a year², and according to a recent industry report³, "Active Seniors" are one of four major customer segments set to transform the airline industry in the next 15 years.

Since their initial development, the solutions have been featured at a number of industry events. First, they were demonstrated at the [IBM Self-Service User Group](#) (PDF, 953 KB), an exclusive meeting for current IBM clients held in Toronto in May 2007. Second, the accessible hotel check-in kiosk prototype was part of the invitation-only [Guestroom 2010 Exhibit](#) at the HITEC 2007 Conference in Orlando in June 2007. Third, in September 2007, the solutions were demonstrated at [Check In 2007](#), the premier education and networking event for airlines, airports, handlers, hotels, cruise operators, and suppliers dedicated to delivering a personalized travel experience through efficient and cost-effective self-service solutions. The prototype will next be demonstrated at the [16th Annual Airports Council International-North America Conference and Exhibition](#) in Kansas City.

Taking the Next Step

Already, one major IBM client has begun a pilot to develop an accessible self-service travel kiosk for their customers. Pilot projects are a cost-effective way for IBM clients to begin implementing accessible self-service solutions in their environment while considering the business value of such solutions in an increasingly competitive environment.

Contact IBM eAccess Solutions (eaccess@ca.ibm.com) to find out how accessible self-service kiosk solutions can help you improve your passengers' experience, improve adoption rates for self-service kiosks and differentiate you from your competitors.

1- David Koppel. ["Business Travel: Hotels Learn to Deal with Disability."](#) The New York Times on the Web. February 17, 2004.

2- Travel Industry Association. [Domestic Travel Market Report, 2006 Edition.](#)

3- Amadeus North America. ["Four traveler groups to transform the airline sector according to Landmark report commissioned by Amadeus"](#), February 7, 2007.