



CASE STUDY GOVERNMENT OF CANADA

Chain of Trust Project

ISSUE

According to the United Nations' World Tourism Organization, the tourism sector is in a period of sustained growth, with air travel being the most popular mode of transportation. Challenges resulting from an increase of traffic and lack of resources and space at airports have arisen.

In response to this issue, in 2017 WorldReach with government partners, embarked on a collaborative project to reduce wait time for admissible people and goods crossing the Canadian border. The Canadian Border Services Agency (CBSA), also identified the need to improve information management to process people quickly and securely. The ability to facilitate the clearance of low-risk travellers, while detecting and/or deterring potential terrorists/criminals before migration approval or entry, is of critical importance to the Government of Canada. This project, known as Chain of Trust, uses WorldReach's Know Your Traveller™ platform to address Electronic Travel Authorization (eTA) and screening (enrolment), security screening, arrival and border security, while feeding into security management and exit controls at the airport. In essence, the front door to seamless traveller journeys and "zero touch" border management.

WorldReach worked with government partners Immigration, Refugees and Citizenship Canada (IRCC), CBSA, as well as, industry and academic partners, Entrust Datacard, Face4 Systems, and the University of Ottawa. The Chain of Trust project partners came together through a call for proposals from the Centre of Security Science, which is managed by Defense Research Development Canada.

SOLUTION

Chain of Trust performs continuous risk assessment at every point in a traveller's trip – from the time of booking flights, to getting off the plane to officially entering the country – to ensure an expedient travelling process. The Chain of Trust process starts when Canadian travellers download the My Travel app and create a profile, then using their smartphone to obtain information from their passport to read and validate its authenticity. Validated information is then used for subsequent approvals and submissions of travel data to the appropriate government agencies, as well as providing the traveller with a unique identifier established from their own biometrics. This ensures that the traveller is who they say they are, while providing the government with a detailed risk assessment. Privacy of travellers will also be ensured and safeguarded as the system will be configured to encrypt their biometrics.

When the travellers are ready to enter Canada, they check in with their airline to begin their return trip. Upon check-in, the travel information is shared with Chain of Trust system for risk assessment. The travellers will be prompted to fill out their declaration form via the app and validate it using biometric facial recognition. Following their arrival, the travellers submit their declaration and are guided through the airport zones, with the assistance of facial recognition technology and personalized notifications sent to their smartphones.



ABOUT CANADA

Population: 37.06 million
[2018]

OFFICIAL NAME

Canada

INDUSTRY SECTOR

Government Travel and Citizen Services, Passport and Secure ID, Seamless Traveller Journeys

PRODUCTS DEPLOYED

My Travel/Secure ETA™ Mobile App, Know Your Traveller™ platform, Tablet-based Kiosk



CANADA



PROJECT FACTS

April 2017 until March 2019
[including Technology Demonstration from March 2018 until March 2019]

TECHNOLOGY DEVELOPMENT

Various microservices (ex. Photo QA service, Facial Match Service, ePassport Validation service, ePassport Signature Validation service);
Chain of Trust Mobile API;
Android App;
NFC Document Scanning;
Optical character recognition of the Passport's MRZ

EXTERNAL INTEGRATION

Integration with CBSA and IRCC Back Offices

OPERATES ON

Windows OS
Windows IIS
SQL server
Android OS
AWS
WiFi or 3G/
4G connection

Then, the travellers walk through facial recognition corridors which identify and direct them through corresponding border processing zones. The integrated Chain of Trust helps CBSA identify persons of interest so they can react to travellers in a timely and secure manner. Throughout the facial recognition corridors, roving border officers can make use of wearable technology to check the traveller's status, risk assessment information, and change status if deemed necessary.

The Chain of Trust system is also be applied to international visitors to Canada. The My Travel app provides the traveller with a user-friendly guidance for Canada's Electronic Travel Authorization (eTA) application, which includes information required for eligibility which is then submitted to the IRCC. Once the application information has been entered, the traveller can complete a payment, be provided with an electronic receipt for payment and real-time notification of eTA approval, or receive any further instruction for additional steps needed to be taken by the traveller.

Another capability, included in the Chain of Trust app, is automatic prompting for Canadians to renew their passport when an upcoming expiry is detected from reading the passport. This straightforward, simple renewal process has been incorporated into the app.

Aligned with the World Travel & Tourism Council's Seamless Traveller Journey, IATA's OneID, and ICAO's Digital Travel Credential, a safer, more seamless air traveller experience is possible via the Chain of Trust.

REFERENCE

<https://www.cbsa-asfc.gc.ca/agency-agence/reports-rapports/bp2020/2018/trust-confiance-eng.html>
<https://www.wttc.org/priorities/security-and-travel-facilitation/seamless-traveller-journey/>
<https://www.iata.org/whatwedo/passenger/Pages/one-id.aspx>
<http://marketintelligence.unwto.org/content/unwto-world-tourism-barometer>

ABOUT WORLDREACH SOFTWARE CORPORATION

WorldReach Software helps ensure traveller safety and security worldwide through its systems for government immigration, passport, border management and consular organizations. WorldReach supplies secure eID/Travel Document issuance, remote identity and document verification services and consular software, including the Know Your Traveller™ (KYT) innovative platform/processes. KYT is a highly secure and user-friendly innovative identity verification process for: Electronic Travel Authorization; eVisa; Visa; Registered Traveller Programs; online passport renewal; airport security facilitation programs and digital services delivery. With the KYT platform as the core, our product suites, VisaReach™ (Secure ETA™) and IdentityReach™ can remotely verify that the traveller is who they say they are by combining smartphone reading and comparing the traveller's ePassport secured facial image with a live selfie, including ePassport validations and liveness detection to help prevent fraud.

WorldReach staff are intimately familiar with the international technical standards for secure travel documents, based around ICAO Document 9303 and are active participants in standards setting bodies for seamless borders, identity verification and identity documents as well as biometrics.



REACHING TRAVELLERS AND CITIZENS ABROAD

WorldReach Software Corporation
2650 Queensview Drive
Ottawa, Ontario, K2B 8H6 Canada
T: +1-613-742-6482
F: 1-613-742-8188
TF: 1-800-566-8883 (In North America)
information@worldreach.com
www.worldreach.com