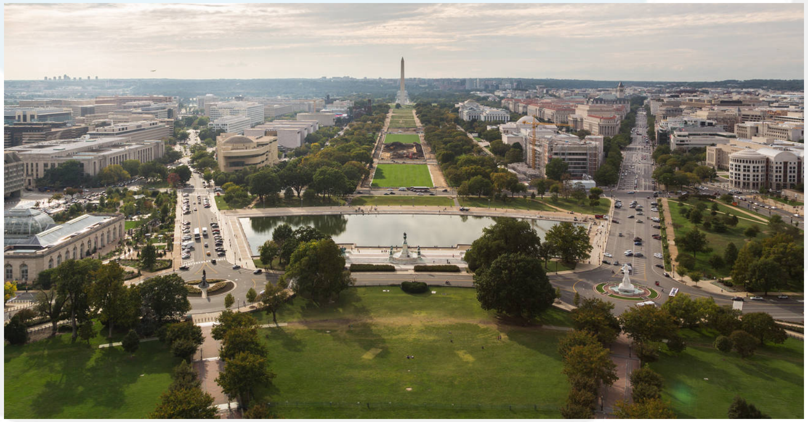
Document Authentication

Miss at Your Own Risk

Risk Considerations & Practicalities



Keesing Technologies

A bit about Keesing...

- Established in 1923
- Part of Hologram Industries in 2010
- Offices in Amsterdam and Washington, dedicated R&D in Paris
- ISO 9001 (quality)
  ISO 27001 (information security)

LLOYD'S REGISTER QUALITY ASSURANCE · ISO9001

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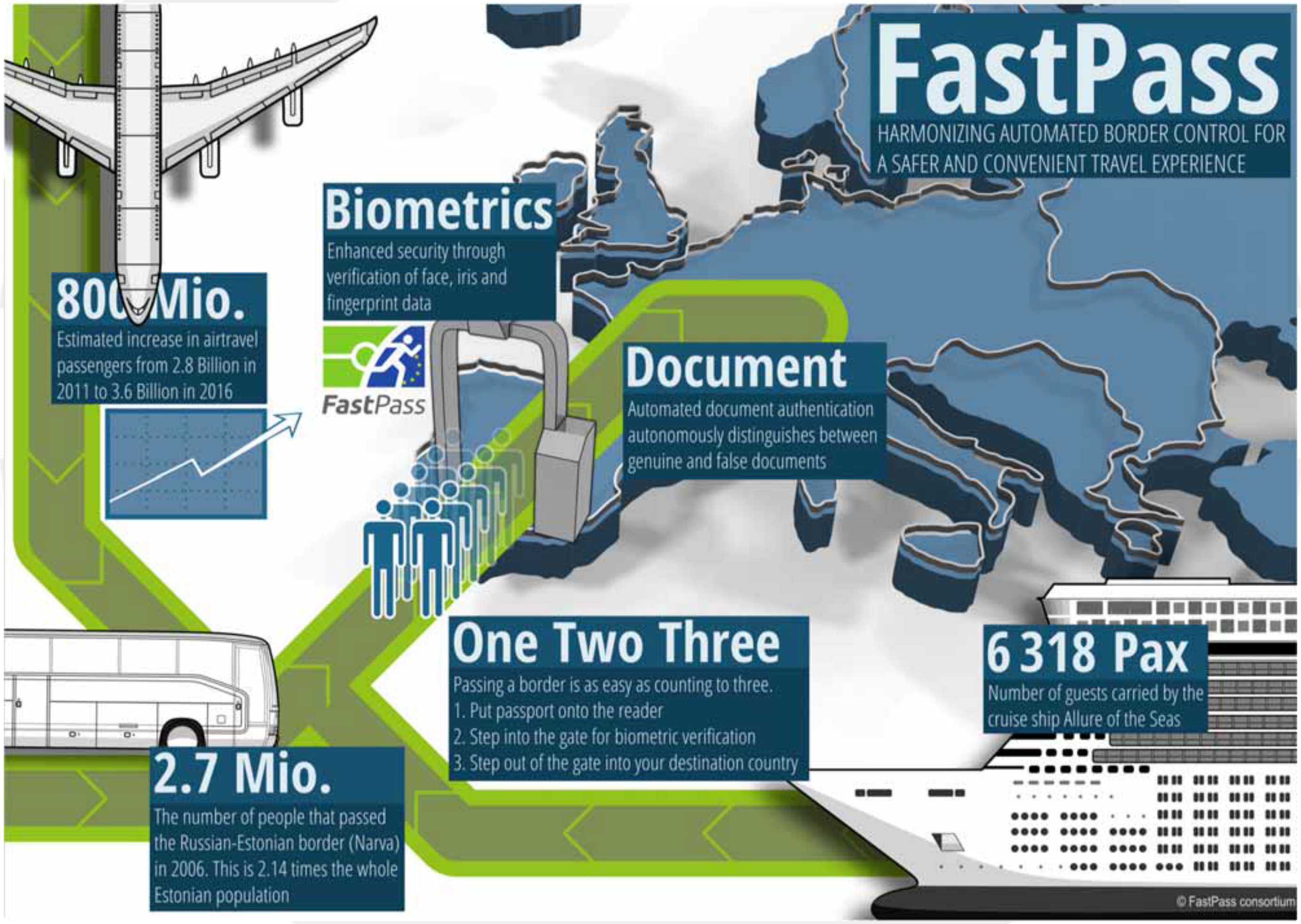
Finding the Fake – Back Then

To Today


FastPass
HARMONIZING AUTOMATED BORDER CONTROL FOR A SAFER AND CONVENIENT TRAVEL EXPERIENCE
800 Mio.
Estimated increase in airtravel passengers from 2.8 Billion in 2011 to 3.6 Billion in 2016
Biometrics
Enhanced security through verification of face, iris and fingerprint data
FastPass
Document
Automated document authentication autonomously distinguishes between genuine and false documents
One Two Three
Passing a border is as easy as counting to three.
1. Put passport onto the reader
2. Step into the gate for biometric verification
3. Step out of the gate into your destination country
6 318 Pax
Number of guests carried by the cruise ship Allure of the Seas
2.7 Mio.
The number of people that passed the Russian-Estonian border (Narva) in 2006. This is 2.14 times the whole Estonian population
© FastPass consortium

Some Players of Document Authentication

- National Printers and Private Sector Integrators
- Technology Piece Providers (Holograms, Security Ink, Chip Manufacturers, PKI Authorities
- Local, Federal and International Law Enforcement Agencies
- Document Standardization Authorities (ICAO, AAMVA, ISO etc)
- Secret Services of various Jurisdictions

Key Issues in Document Authentication Effectiveness

- Public Document vs Security Concerns
  - Law Enforcement Agencies & Right to Know
  - Inter Agency and Global Cooperation (INTERPOL)
  - Lack of use of falsified document databases
  - Some people, organizations and countries falsify other jurisdiction documents
- No International Taxonomic Structure
  - ISO Standardization of Security features do not exist
  - Unused PKI infrastructure to chip checking at an international the level
- Ease of Business vs Security
  - Risk Matrix scoring mentality applied in lower harm environments
  - Fear of losing a client because it is “too hard” to do business
  - Internal processes forged by litigation or fines by gov’t agencies

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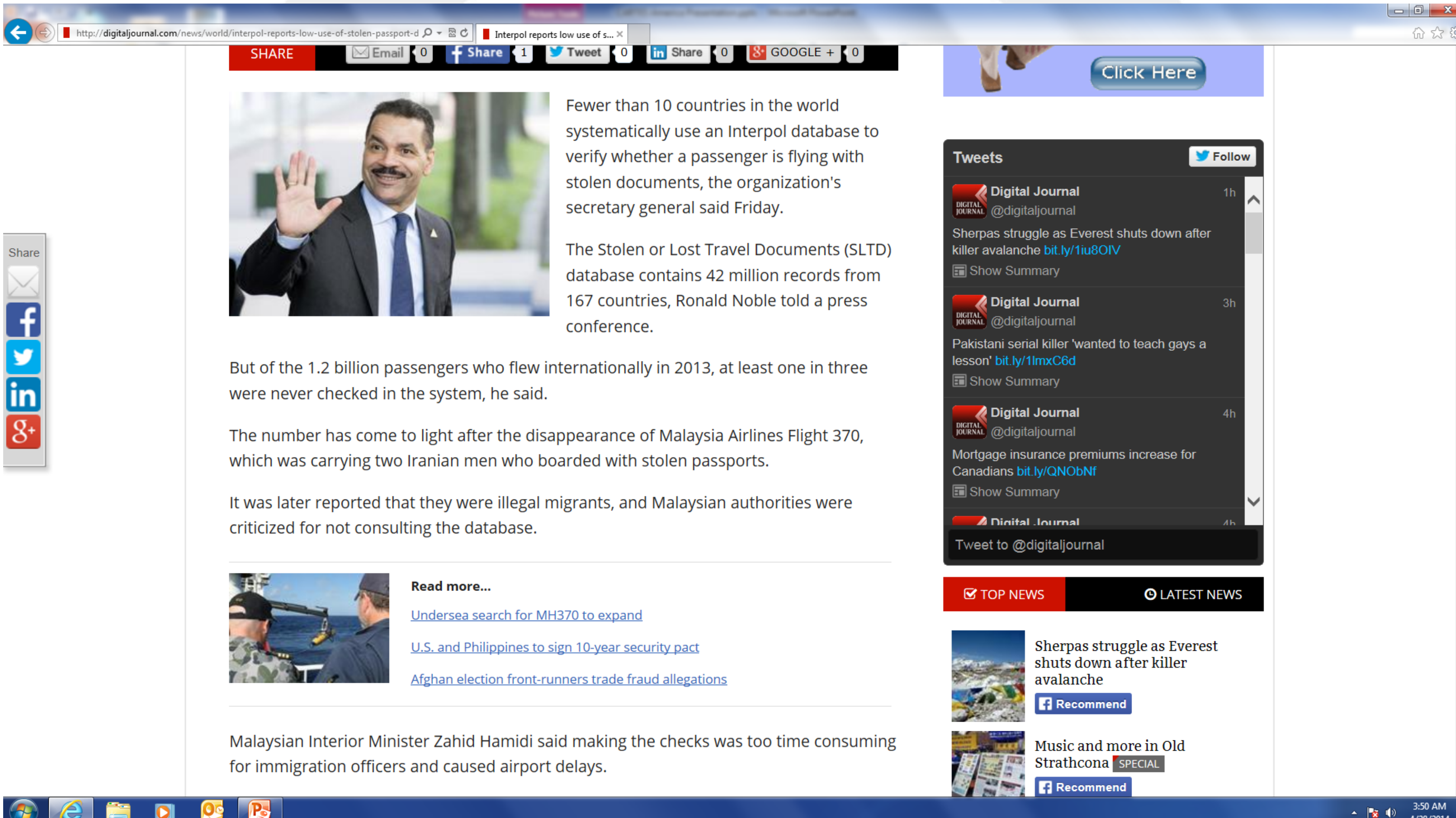
Speed of Business vs Risk

A Case Example



http://digitaljournal.com/news/world/interpol-reports-low-use-of-stolen-passport-d

Interpol reports low use of s...

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Fewer than 10 countries in the world systematically use an Interpol database to verify whether a passenger is flying with stolen documents, the organization's secretary general said Friday.

The Stolen or Lost Travel Documents (SLTD) database contains 42 million records from 167 countries, Ronald Noble told a press conference.

But of the 1.2 billion passengers who flew internationally in 2013, at least one in three were never checked in the system, he said.

The number has come to light after the disappearance of Malaysia Airlines Flight 370, which was carrying two Iranian men who boarded with stolen passports.

It was later reported that they were illegal migrants, and Malaysian authorities were criticized for not consulting the database.

Read more...

Undersea search for MH370 to expand

U.S. and Philippines to sign 10-year security pact

Afghan election front-runners trade fraud allegations

Malaysian Interior Minister Zahid Hamidi said making the checks was too time consuming for immigration officers and caused airport delays.

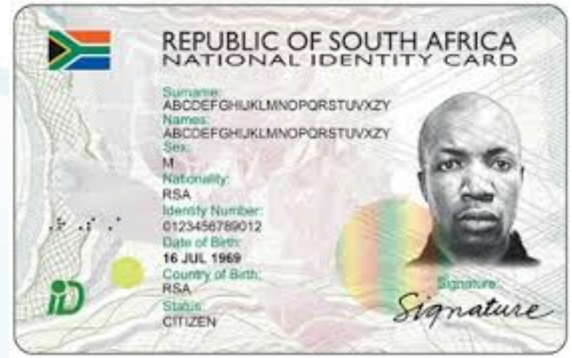
Risk Based on Environments

- US Federal Gov't
  - OMB 04-04 Sets Risk Score for ID Management (Section 2.1 Definitions, 2.2 Categories)
  - SP 800-79-1 Sets Framework for the Identity Vetting Process (Draft Version 2 calls for option electronic authentication of documents; in review for several years now
  - Background Checks done using I-9 documentation as initial review point

- Financial Services
  - US Patriot Act Section 326 Sets out guidelines associated with CIP (Customer Identification Program)
  - Collection and Analysis of Basic Identity Information (Customer Identification Program), Name Matching Against PEP's, Risk Threat Analysis of Person (using the OFAC – Office of Foreign Assets Control), Creation of Customer Behavior, Comparing transactions against behavior
  - Regulations and best practices of the banks are scored against an AML version of a Capture Maturity Model which scores their processes on a 1-5 basis (Chaotic to Optimized)
  - Background Checks done using Gov't Issued Photo ID, accompaniment of household bills
  - Practices reviewed under Capture Maturity Model (Scored under a 1-5 ranking)
- Air Transportation
  - TSA establishes guidelines for passenger entry to "secure facility" – "SSSS factor", Pre-Check
  - Implementation shared responsibility of Airline, Airport and TSA
  - Aside from passenger identity, screening based on risk score analysis including: flying destinations, type of ticket purchased, time of ticket purchased, Terrorist Watch List etc

What Can Be Examined

- Optical
  - Microstructures
  - Special inks
  - Special printing methods
  - Security laminates
  - Optically variable devices (Holograms)
  - Watermarks
  - Security fibres
  - Special paper
- Electronic
  - Basic Access Control
  - Passive Authentication
  - Active Authentication
  - Extended Access Control
- Match on Card
- Facial Biometrics



But That’s Not All

Document Security Concepts Being Developed

- Laser engraving as latent images on varying substrates
- Standardization of intaglio printing processes
- Floating images on PC documents
- Nanostructure arrays for multi-faceted security on OVD’s
- New graphical security features for authentication on proprietary iPhone applets
- Geometric distortions on captured images
- **Can one Person Authenticate? No Way!!!**

Jurisdiction, Validity and Public Record

- 3144 County and County Equivalents in the US (5 Territories and 50 States)
- Does not include 38 independent cities in Virginia alone
- Does not include municipal districts in Canada (10 Provinces + 3 Territories)
- No structured process for new look and fee of most ID documents within North America
- No public legislation for format of ID documents within North America
- No agreed best practices of ID documents at a tactical level (AAMVA CDS Standard does exist)
- No public record repository for ID documents within North America – Entities required to go to jurisdiction directly for specimens
- Several Jurisdictions simply do not release specimens to other Quasi-Gov't Agencies for fear of "Security" ------ Organizations end up doing it on their own
- Then there's the Non-North America ID Documents - Well over another 7000 in some form of circulation

Some Things to Do to Fix The Gap

- Law Enforcement must develop a framework that allows attribute checking of ID documents for private sector and non-enforcement entities
- Scaled capability based on vetting of individuals and organizations for release of how much information of document to allow decision making capability
- Tighter rules in higher risk environments to clearly demand authentication beyond "self-certification" eg. SP 800-79-1, FAA rule modification, US Patriot Act strengthening of CIP principles etc
- Better use and tighter use of media to alert entities of trends in document falsification and trends in authentication
- A Content work flow and risk management Mentality to aggregation and authentication – Current, Accurate, Comprehensive and Fast – This is how it works in Law, Tax, Medicine etc……

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http://www.documentchecker.c... | www.documentchecker.com

photograph and bearer's detail

Jamaica - JAM - all documents

P2 P3 P4 P5 **P6** D1 D2 D3 >>

photograph and bearer's details pages: 02/03

national passport

General | Data positions

validity
5 years, page 2 entry 'Date of expiry'

booklet
c. 125 x 88 mm / 4.9 x 3.5 in.
32 pages, page 2 not numbered

laminate
page 2, clear holographic laminate, sewn in

photo
integrated, repeated in smaller size on the right
background printing runs across the photograph

numbering
7 digits, preceded by a letter
page 2, laser printing
page 3, letterpress
pages 3 - 32, laser perforated

observations
this passport was first issued in 2013 and is issued to persons younger than 18;
pages 3 - 32: red en blue fibres in the paper;
pages 3 - 32: security thread with microprinting

RÉPUBLIQUE FRANÇAISE

Type/Type: P

Code du pays/Country code: FRA

Passeport n°/Passport no: 06ZZ00119

Nom/Surname (1): SPECIMEN

Prénoms/Given names (2): Natacha

Nationalité/Nationality (3): Française

Sexe/Sex (5): F

Taille/Height (12): 1,78 m

Couleur des yeux/Colour of eyes (13): Vert

Date de naissance/Date of birth (4): 12 07 1973

Lieu de naissance/Place of birth (6): TOULON

Date de délivrance/Date of issue (7): 07 03 2006

Domicile/Residence (11): 102 RUE PRINCIPALE 34700 LODÈVE FRANCE

Autorité/Authority (9): DIRECTION DES LIBERTÉS PUBLIQUES ET DES AFFAIRES JURIDIQUES

Date d'expiration/Date of expiry (8): 06 03 2016

P<FRASPECIMEN<<NATACHA<<<<<<<<<<<<<<<<<<<<<<

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Thank you, Merci, Gracias

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