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Digital Borders: Enhancing Security in Travel

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November 2017



The World Economic Forum, committed to improving the state of the world, is the international organization for public-private cooperation.

We provide a **global, independent, impartial** and **future-oriented** platform for the world's leaders to collaborate to shape a better future.

“The changes unleashed by the Fourth Industrial Revolution are so profound that, from the perspective of human history, there has never been a time of greater promise or potential peril.”

Klaus Schwab

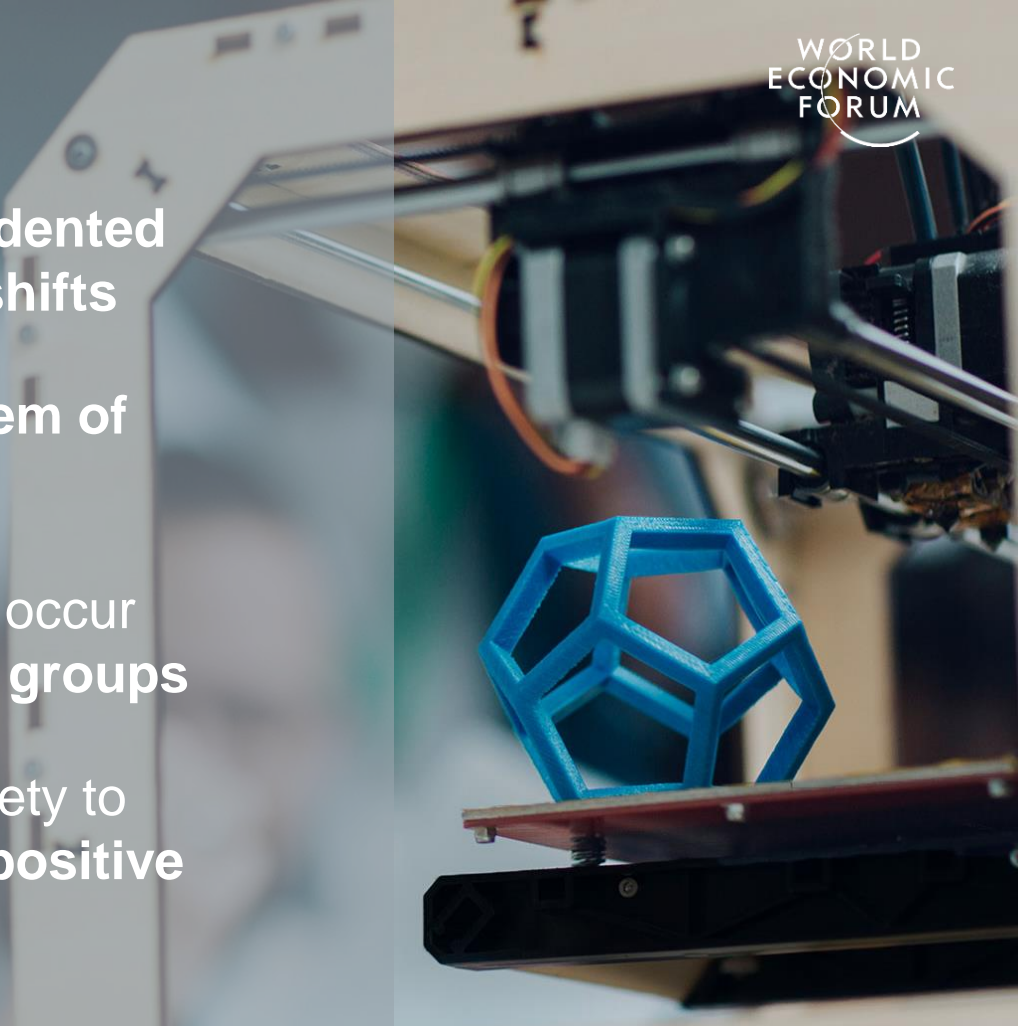
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The world is experiencing **unprecedented change driven by technological shifts**

We live in an **interconnected system of systems**

Dialogue and cooperation needs to occur **across domains and stakeholder groups**

Leadership must inspire global society to work together to make **sustained, positive and systemic change**



Aviation, Travel and Tourism Opportunities and Challenges



How does this impact the global systems governing the movement of people and goods?

- ✓ **Rapidly changing technology**
- ✓ **Adaptive policy making**

The Aviation and Travel Industry has been at the forefront of digital disruption, changing the way we travel in recent years.

However, the sector should brace itself for another wave of digital transformation.



Disruption will be fueled by the manner in which new technologies build on, combine with and transcend traditional technologies...

Enabling change that will scale exponentially create both benefits and challenges for society.

Such technologies specific to Travel Security include:



**Distributed Ledger
Technology**



**Advanced Data
Analytics**



Biometrics



Machine Learning

Can we re-imagine the security process for **greater collaboration** between industry and authorities, with the **passenger as a central actor**?

Standardization:

Register in Standardized System for "Known Traveler" profile with participating Governments



Digital Profile:

Facilitate booking and verifies eligibility to travel. Profile aggregates all travel information, passport information and syncs data from each booking interface. Data will be saved for future travel and family profiles can be linked.



Technology Clearing House:

You choose to push your digital profile to government agencies and your destination for pre-vetting and a smoother experience. Governments can verify your eligibility to travel and "Known" status.



Automated Trip Pass:

Your personalized, digital "concierge service" that manages your travel, develops your itinerary, remembers your preferences, handles in-country service bookings and tracks international purchases (VAT refunds, customs).



BOOKING / ELIGIBILITY

Security:

Use of biometrics will confirm you're a ticketed passenger and allow you through security. No lines or removal of items—you're monitored on your way to your gate through frictionless security devices. Travelers are pulled aside if they pose any issue. The rest go ahead to the gate.



Luggage:

Luggage is tracked automatically with your digital profile, allowing for easy drop off and pick up



Geo-locator:

Seamless check-in with verification for travel prepared prior to airport arrival and instant recognition during travel journey.



DEPARTURE / SECURITY

Know Me:

Traveler can push their digital profile to the in-country security agency to expedite the customs/immigration experience at the destination.



Automated Trip Pass:

Your trip pass has tracked your purchases and you can choose to digitally submit the data to the government for your declaration forms. It can also process your VAT refund.



Auto Trip Pass

HOTEL ITINERARY HISTORY:			
02.01.2017, 06:20	Check-in	2 Rooms	
EXCURSION HISTORY:			
02.06.2017, 09:30	Temple Tour	\$60.50	
02.08.2017, 12:00	Great Wall	\$150.50	
02.10.2017, 16:30	City Tour	\$70.50	
PURCHASES HISTORY:			
02.07.2017, 14:35	Souvenir	\$86.50	



FLIGHT / ARRIVAL

Can the Traveller be a central actor in the security process?

Building on the foundation of existing mechanisms and pilots:

- MRTD, PKD, ePassports, API/PNR, Biometric Exit and Entry Systems, OneID

Empower the passenger to build a “Known Traveller” Digital Identity:

- Digital Identity principals (secure, portable, travelled-owned, opt-in)
- Layered travel & itinerary data (incl. visas etc.) and additional data to build “known” profile (e.g. banking)
- Incentives through loyalty programmes and expedited processes

Authorities utilise data pushed by traveller to:

- Request data from passengers further in advance
- Use individualised risk assessment and segment passengers
- Process known ‘risk-free’ passengers faster, allowing more attention and resources to focus on less known/higher risk passengers

Moving forward

Towards a Known Traveller Digital Identity



Prototype

- Demonstrate capability to catalyse more rapid achievement of secure and seamless travel in the future
- Demonstrate ability to combine emerging technologies in positive manner

Pilot

- Execution of pilot on designated inter-country travel route
- Demonstrate possibility for improved security and travel facilitation
- Identify necessary regulatory, legislative modifications