

# Digital Health Passports

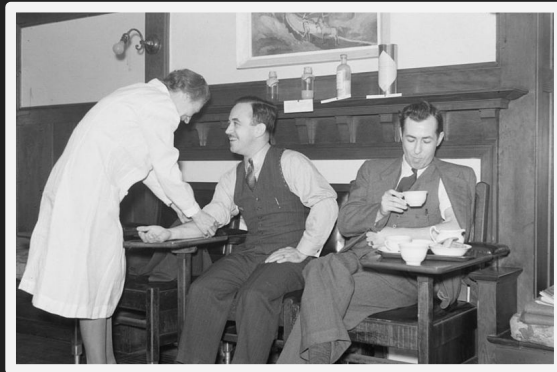


**CommonPass:** Defining Documentation  
for Travelers during  
COVID-19

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Human Centered  
Design Rhetoric

Alliteration: "Defining Documentation..."



*"Alone we can do so little;  
together we can do so much."*

– Helen Keller

Antithesis "Alone we can do so little; together we can do so much."  
Appeal to Pathos

# The World as of Now

**How do we provide a roadmap towards stimulating economic activity?** The arrival of promising COVID vaccines is on the brink of dawn, setup of distribution networks has already begun.

**Recovery will require active control measures** to ensure current health infrastructure is not overwhelmed by a spike in cases.

**The reestablishment of national and international economies** will require revving up efforts in trade, travel, and distribution, in order to reach pre-pandemic conditions.



Images convey sadness and lack of hope from the current Covid-19 situation. The window is a metaphor for an obstacle in the way of people's lives while observing outwards, and in a literal sense keeping them away from being outside.

Rhetorical Question: "How do we provide a roadmap towards stimulating economic activity?"

Tricolon: "trade, travel, and distribution".

Metaphor: "roadmap towards..." , "brink of dawn"

## Current State of Affairs

- Cross-border supply chains are impacted by mandatory ship quarantines which delay the return of vessels.
- Non-essential travel (i.e. tourism and leisure) limited or eliminated.
- Retail and hospitality brick and mortar locations selling non-essential consumer goods or services have been shut down or limited in operation.
- Small and medium-sized businesses and their partners may not survive into the post-pandemic state.



Metaphor: brick and mortar

# Impact on UX: How do we travel safely?

**As countries attempt to restart their economies how do nations safely reopen their borders?**

There needs to be a way to validate individual health status that follows the ever-changing standards of the countries of arrival, as well as communicating those requirements to travelers from their originating regions.



**Forming novel solutions using established techniques.**



Rhetorical question: "How do we travel safely?"

Antithesis: "Forming novel solutions with established techniques."

# Common Trust Network

A voluntary global network of public and private stakeholders set up by The Commons Project Foundation and the World Economic Forum.

Network professionals implement an infrastructure for digital health information access providing:

- 1) **Health status** for safe return to work, travel, school

*while*

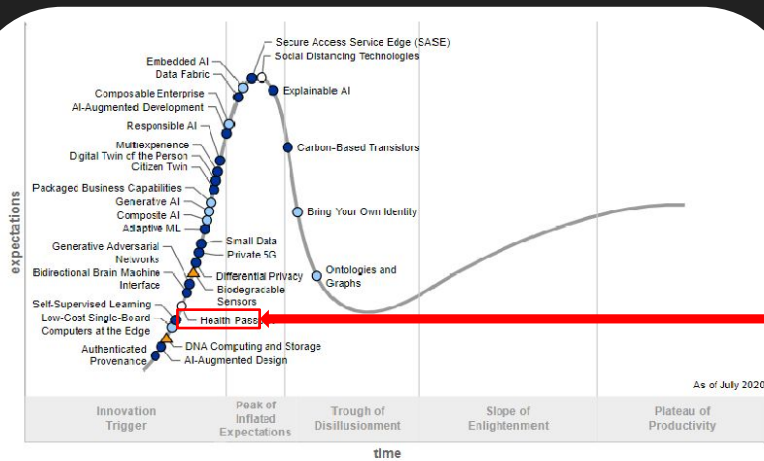
- 2) Ensuring **data privacy**



**CommonPass**

Appeal to Logos

# Gartner Hype Cycle graph



- Usage in India and China due to sheer population size pushed **health passport technology to a 5% to 20% market penetration...**
- **...which is unprecedented for a technology just entering the Hype Cycle.**
- Due to urgency, magnitude and pervasiveness of the situation, development is ramping up a lot faster than other forms of emerging tech on the hype cycle.

Plateau will be reached:  
 ○ less than 2 years ● 2 to 5 years ● 5 to 10 years ▲ more than 10 years ✕ obsolete before plateau

Source: <https://www.gartner.com>

Tricolon: "...urgency, magnitude and pervasiveness"  
 Appeal to Logos

# Precedent Technology

## *How did we get to this point?*

As with many technology breakthroughs, innovation does not happen in a vacuum.

Rather, it is the convergence of existing systems and technologies:

- 1) Expedited Border Entry Systems (e.g. NEXUS, Global Entry)
- 2) Electronic Health Records
- 3) Mobile Apps (using QR Codes)
- 4) Data Encryption Security

### **Streamlining Health Verification Process for Travel**



Rhetorical question: “How did we get to this point?”

Mention similar digital infrastructures (NEXUS, Electronic Health Records, Mobile Phones, QR Codes, Data encryption, remote authorization via DocuSign)

Convergence of technologies and streamlining infrastructure

...work fast in response to the COVID-19 pandemic that has affected millions around the world.

Countries/govn'ts, travel industry & health care converge on tech (Diagram)



# How it works in a nutshell

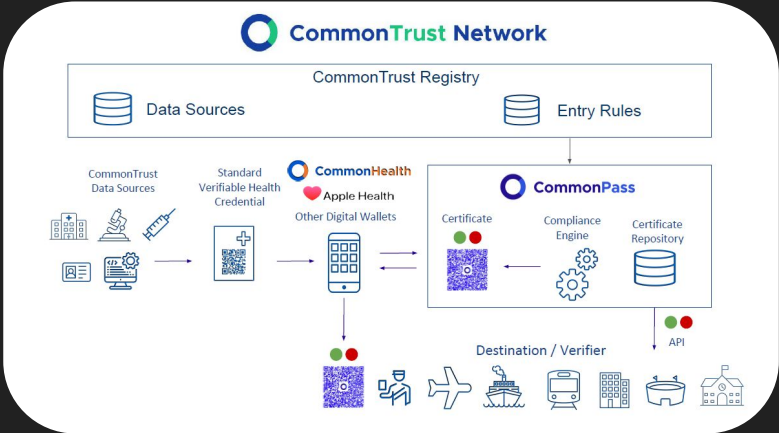


Source: <https://commonpass.org/>

“Metaphor: “...in a nutshell”

# Behind-the-scenes look

Diagram of verification and authentication system



Source: <https://commonpass.org/>

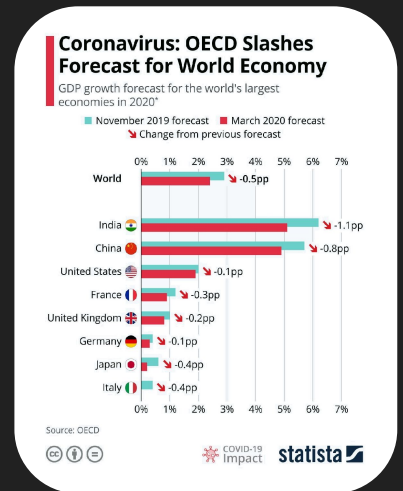
Metaphor: "Behind-the-scenes"

# Current Stats & Facts

According to the World Bank, the global economy is poised to suffer its **worst recession since World War II**, and emerging market and developing economies in particular will collectively suffer their first contraction in 60 years.

In a report published in October 2020, the Bank predicts that **extreme poverty—people living on less than US\$1.90 a day—will rise in 2020 for the first time in 20 years**. Absent COVID-19, extreme poverty was on the path towards a decline; instead, it will make a comeback.

Source: <https://dai-global-developments.com>



Source: <https://emirati.news>

Metaphor: “on the path”

# Pros and Cons, Odds and Ends, Ins and Outs...

A **neutral system** based on country of arrival screening and quarantine protocols alongside foreseeable COVID 19 vaccinations it recognizes.

**Global collaboration** will give respective national and regional organizations the **ability to respond quicker to infection clusters** and by that token, a shortening of the period to manageable case numbers.

Although CommonPass is designed not to reveal personal health information it will be **up to each nation to assess privacy concerns**.

Accuracy of data and effectiveness will be **contingent on participation and country/nation buy-in**.



Tricolon: "Pros and Cons, Odds and Ends, Ins and Outs..."

# Where do we go from here?

- First CommonPass trials completed in October 2020 among Cathay Pacific and United Airlines.
- Further trials will need to be conducted to get governments buy-in on proof of effectiveness of CommonPass and the framework that assesses incoming traveller health.
- Encourage Approved Sources to implement health data interoperability standards (HL7 FHIR, W3C, LOINC).
- Publish health screening requirements in CommonTrust Registry.
- Airlines to use CommonPass for verifying traveller compliance before check-in.
- Integration with airport and border entry procedures.



Rhetorical question: "Where do we go from here?"  
Appeal to Ethos, Logos

# Speculative applications of this tech

The possibility of extensive collaboration on open source technologies regarding health data has applications for quicker health assessments and identifications for such things as:

- Organ donation and candidacy.
- Easier and quicker patient treatment options and consultations that maybe local or perhaps more geographically distant.
- Interregional quarantine checkpoints

However, a caveat still exists concerning the assurance of security and privacy of health data against potential abuse.



Appeal to Ethos

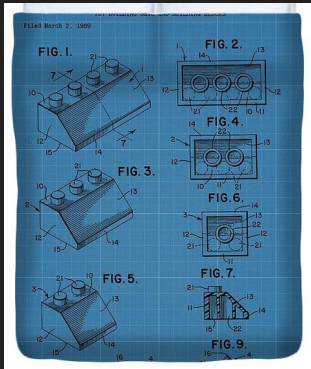
## Speculative UX opportunities for this tech

- Integration into additional health apps and devices; opens up summative research opportunities
- Faster testing methods may instigate the inclusion of lab tests being done at the airport, possibly changing customer journeys while in the airport and utilizing the CommonPass system.
- Identifying user pain points at the front stage of the verification process along with other touchpoints
- Stress testing the front and back ends of the software to reflect on the dynamics of air travel once capacity starts to increase again.
- Transitioning from pandemic-level usage to general health verification

Appeal to Ethos

# Our insights, thoughts, and conclusions...

COVID-19 is not the only pandemic that the world has had to contend with and will not be the last....



- CommonPass could outline a blueprint for effective mitigation of the impacts of the current pandemic and future ones.
- Ingenuity can come from consolidating existing tools and current tech to innovate.

Tricolon: “insights, thoughts, conclusions”

Metaphor: Image of blueprint of building blocks- signifying the planning and modularity of the CommonPass solution

Appeal to Ethos



## Our insights, thoughts, and conclusions (cont'd)...

The pandemic has laid bare the inherent fragility of global economies and government institutions.

Lack of openness and transparency have often times come with an inability to mobilize regional and nationwide infrastructure in combating the spread of COVID.



***What is becoming increasingly clear is the need for a more global and inclusive approach for dealing with matters of global significance.***

Tricolon: "insights, thoughts, conclusions"  
Appeal to Ethos

## The way forward...

“However we emerge from the pandemic, it will involve recapturing our physical connection with one another. The only way that happens is by working together.”



Appeal to Pathos