As more and more governments adopt major COVID certificate standards (see the blog post series we released on this topic) to reopen borders, the travel industry is working hard to catch their technology up to meet the evolving travel requirements. In the meantime, there are no shortage of complaints from travelers about cumbersome international travel experiences.

Linux Foundation Public Health (LFPH) and its COVID Credentials Initiative (CCI) have been working to support the implementers of COVID credential solutions with a particular focus on facilitating interoperability among technology standards while preserving privacy protection of individual's data. At this critical juncture of global reopening, LFPH/CCI and our member Affinidi, a leading player in the space, brought together key actors from the travel industry and related technology vendors to share and discuss:

- What technology solutions are in use to issue, process, manage and verify COVID certificates along the journey for international travelers, from before they leave home to their arrival at the hotel at their destination.
- How they navigate and implement the complicated health policies and travel rules.
- What key challenges they are facing to provide a safe and smooth travel experience, including major technology and policy gaps that the LFPH/CCI community can help address.

To accommodate our international audience, the summit had two sessions, APAC and EU/Americas, each adopting the same two-part format. Part 1 had panel presentations from key players to share the particular travel issues they are addressing while Part 2 opened up the floor for all participants to have discussions around key threads that emerged from Part 1. Kaliya Young, the Ecosystems Director of CCI, led the facilitation of the summit with Lucy Yang, the Community Director of CCI, and the support from the Affinidi staff.
## Event Details

**PART 1: PANEL PRESENTATION**  
**INTERNATIONAL TRAVEL JOURNEY: Challenges, Ideals and Reality**

<table>
<thead>
<tr>
<th>Category</th>
<th>APAC Session (Recording)</th>
<th>EU/Americas Session (Recording)</th>
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<tbody>
<tr>
<td>Universal Verifier</td>
<td>“How Verifiable Credentials Can Help Unlock Safe International Travels” (14:41) by Toby Berger, Dir. of Affinidi Travel</td>
<td>“How Verifiable Credentials Can Help Unlock Safe International Travels” (10:23) by Toby Berger, Dir. of Affinidi Travel</td>
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| Security Solution Provider| “A seamless passenger operation in the new aviation world” (27:50)  
By Viola Wang - Head of Asia and Africa region, ICTS Europe | “A seamless passenger operation in the new aviation world” (21:21)  
By Guy Doron - VP Global Sales,, ICTS Europe |
| Airline                   | “Re-enabling of airport check-in for seamless and frictionless passenger journey” (39:27)  
By Alvin Lee - Digital Strategist, SIA | “Re-enabling of airport check-in for seamless and frictionless passenger journey” (32:26)  
By Alvin Lee - Digital Strategist, SIA |
| Travel Tech Provider      | “Rebuild Travel: The digital Traveler Journey as a new way of traveling” (55:11)  
by Jonathan Tong – Senior Vice President, Airline Solutions, Delivery and IT Sales (APAC), Amadeus | “Rebuild Travel: The digital Traveler Journey as a new way of traveling” (46:41)  
By Christian Warneck - Vice President Safe Travel Ecosystem, Amadeus |
| Healthcare Provider       | “Health credentials for outbound and inbound passengers” (1:09:28)  
By Carly Chia - Legal Counsel, BP Healthcare | “Health credentials for outbound and inbound passengers” (5:7)  
By Andrew Safranko - Director of Product, Switch Health |
| Gov Agency or Industry Org| “Opening up international travel in a safe & secure manner” (1:25:20)  
By Jillian Chan - Manager (COVID-19 Airport Transformation Office), CAAS | “IATA Travel Pass – Giving Passengers Confidence & Control” (1:06:06)  
By Louise COLE - Head Customer Experience & Facilitation, IATA |
| Identity Tech Provider    | “Reopening borders in a post-pandemic world” (1:35:58)  
by Gaurav Gupta - Sales Director of Public Security and Identity (ASEAN), IDEMIA | “Practical Trust to Welcome the Tourist or Business Traveler” (1:23:14)  
By Mark Joynes - Entrust Government Solutions Marketing Director, Entrust |
PART 2: BREAKOUT SESSIONS
DISCUSS PROBLEM STATEMENTS & IDENTIFY SOLUTIONS

<table>
<thead>
<tr>
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<tr>
<td>1 Where are there still inefficiencies along the travel journey and how can we improve them?</td>
<td>What is the relationship among the myriad of existing solutions and applications and how to harmonize them?</td>
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<tr>
<td>2 What feedback can we provide to the government to further help the travel industry reopen?</td>
<td>What should the onward travel journey look like, especially regarding privacy protection?</td>
</tr>
<tr>
<td>3 How should the travel industry deal with different standards of health credentials and privacy regulations in different countries?</td>
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Takeaways from Presentations

We were excited to have many key players along the travel journey share their particular challenges and approaches to reopen international travel. There were a few critical themes that emerged:

Navigating the new travel reality in the midst of COVID is not easy for anyone.

We have seen all over the news how difficult and stressful it is for travellers these days to move across international borders. The summit provided an opportunity for us to dive into the why through the lens of those who were striving to provide a positive travel experience.

While travellers are struggling to navigate the new COVID reality, the entire travel industry is having to do the same. Through the presentations, we learnt that a healthcare provider serving travellers and governments, such as BP Healthcare, were expected to take on many new responsibilities, some of which went beyond their capabilities and capacity. We also saw how a single airline, such as Singapore Airlines, now needs to navigate through various and evolving health credential standards and complicated entry rules set by each country. The airline needs to ensure they can provide a safe and seamless travel experience while staying compliant with the regulations. As a technology provider serving the different parts of a travel journey, Amadeus provided a great overview of where the most common frictions emerged for both travellers and airlines.

ICTS (International Consultants on Targeted Security) Europe shared that 80% of passengers are now “conditional to travel”, meaning they are required to go through a manual check-in process with an
airline agent compared to the pre-pandemic situation where 82% were “ok to travel” and could just use the self-serve check-in options. As a result, airport operations have had to make a meaningful shift. And this was only one example of the dramatic changes facing the travellers and the travel industry.

**The constantly changing medical and travel rules are a challenge for all.**

Among all the challenges travellers and the travel industry are encountering, the constantly changing medical and travel rules was the recurring thread that almost every speaker touched upon. This challenge is two fold, one being the timely communication of new rules in a clear manner to travellers and the other being the adaptations the different parts of the travel industry need to make to existing mechanisms to implement the new rules.

The rule changes take place so frequently that it makes it hard for everyone to follow, especially passengers. The lack of clarity regarding what a traveller needs to do to meet the requirements, e.g. type of documents, is causing confusion and anxiety.

However, for the travel industry, even though they have established channels to receive the most up-to-date information, they struggle to adapt as fast as required since many of them are already under great operational stress.

**Collaboration is key to more efficiency and less confusion in this difficult time.**

We were able to bring together this great line of speakers because all of them have been working somehow with our member Affinidi, the co-host of the summit. During the presentations, we heard almost everyone mention collaborations or partnerships as a cornerstone to their operations. For example, the Civil Aviation Authority of Singapore (CAAS) talked about how they worked with the Singapore Ministry of Transport and Affinidi to create a Vaccinated Travel Lane (Air) for fully vaccinated travellers to enter Singapore via the airport without having to quarantine. Another example is healthcare and health tech providers, such as Switch Health and BP Healthcare, who are working closely with their governments and the travel industry to provide rapid testing and health credentials for international travel.

Travel is so complicated that it is impossible for any one player to unilaterally issue COVID health credentials. We were glad to learn from so many at the summit that were all working towards the same goal. Many of them were already collaborating on more coordinated efforts to provide more efficiency and less confusion to passengers.

**It’s important to leverage existing offerings when you can and build with the future in mind.**

Many of the speakers came from organizations that were providing technology solutions to the travel industry prior to COVID. While we were learning about the collaborations among them to create new tools, we also heard the mindful efforts many were taking to advance and adapt their existing offerings, especially the consumer-facing ones, with the goal of not creating new interfaces or applications unless necessary. When travellers are already confused and stressed, it certainly makes their life a bit easier if
they can just use the familiar applications they were using prior to COVID to conduct all these new additional steps.

An important perspective from IATA was that they were not only building the solution leveraging their existing application but also thinking about how their today's work could benefit the travel industry and travellers in the long run.

**We all share an ideal travel journey and trust is needed at different stages of that journey.**

Affinidi shared an ideal traveler's journey at the beginning of each session, which many other speakers echoed through similar visuals of their own. IDEMIA and Entrust helped us understand that each stage of that journey has a trust problem to solve - if travellers are presenting authentic data of their own. Solving the trust problem becomes particularly important when we are dealing with sensitive personal and health information that will leading to high-stakes decisions.

**Breakout Sessions Summary Notes**

The breakout session topics were defined after the panel presentations with the goal to identify problems that the LFPH/CCI community can potentially help solve. The notes are reflective of the discussions in the breakout rooms but not necessarily the viewpoints of the host organizations.

**APAC Session**

Breakout Room 1: Where are there still inefficiencies along the travel journey and how can we improve?

- Even though there are many players involved in the traveler journey from the beginning to end using different technology solutions the technology itself is not the real cause of inefficiencies. It is more a regulatory issue that requires governments and standard bodies to come together to create a standardized template for the travel industry to implement. The implementations will be different, but a standardized template is needed to guide the basic flow, e.g. who owns the data and how data should move from one place to another.
- Parties at different stages of the journey can have their own operational processes, but all of the processes need to be created as a part of a holistic solution so that all parties are aligned to enable a more seamless experience. This is where decentralized technology, such as verifiable credentials, can provide value.

Breakout Room 2: What feedback can we provide to the government to further help the travel industry reopen?

- Pick one of those standards for certificates and use that to prove their citizens are vaccinated.
Streamline the pre-approval verification process to provide incoming travellers/passengers a “yes” to travel so that airlines don't have to check everything other than if a passenger gets a yes from his/her destination country.

Better align policy and operations. Some policies can be quite complicated and potentially burdensome - engage with those who are in operations to understand better what policies can work practically and support a better experience for everyone.

Create cross functional government teams to support the different ministries who are all touching the travel experience. The Singapore Safe Travel Working Group that has representatives from three major ministries, as a good example.

**Breakout Room 3:** How should the travel industry deal with different standards of health credentials and privacy regulations

- Essentially, standardization provides the ability for automation. A lot of the friction today is caused by a lack of standardization. Even though we have seen four major standards emerge and countries are slowly moving towards them, the process of convergence is taking place too slowly.
- It would be helpful to create a list of what countries are using which standards and provide further explanations of each of four major standards to help countries who haven't decided on which to follow to make a faster decision among these four instead of creating one of their own.

**EU/Americas Session**

**Breakout Room 1:** What is the relationship among the myriad of existing solutions and applications and how to harmonize them?

- There is a behind-the-scenes world of data sharing between parties in the travel industry already, and that universe is largely invisible to the travellers. Work needs to be done to align that messaging so a traveller only needs one application that is already connected up to all relevant entities and wouldn't have to get a different APP for each of the different parties they are talking to.

**Breakout Room 2:** What should the onward travel journey look like, especially regarding privacy protection?

- Practicality is key given the immediacy of the situation. We need to focus on what is a good enough solution to solve today's problem.
- It will require incremental steps to provide both transparency of rules across the continuum of a travel journey as well as to implement best practices, such as selective disclosure. At the end of the day, governments need to take the responsibility to own the experience of travellers into their countries.
Next Steps

To get to what many have presented as the ideal traveler journey, there is a lot to be done. As a connector of key stakeholders in this space and a platform for technology innovation, we believe the best ways forward for us now are the following:

**Continue to provide clarity and insights to governments, industries and the public.**

LFPH/CCI has been doing this through one-on-one conversations, community activities (e.g. CCI, Cardea project, Global COVID Certificate Network), public events and speaking engagements, blog posts and reports. In the new year, we will double down on our efforts to provide further clarity and insights into the multiple issues raised and highlighted in the discussions at the travel summit.

**Develop open standards and open source software that meet the market where it is today.**

The travel summit reinforces the importance of standardization and open source tools which we have been doing since the beginning of the pandemic. We will continue these efforts by collaborating with the implementers and with a focus on the practicality and what the market needs the most today.
Host Organizations

**Linux Foundation Public Health (LFPH)**

LFPH, a project of the Linux Foundation, works with public health authorities, healthcare organizations, technology vendors, academia, industry associations, and the public to ensure that investments into public health technology meet common needs and have maximum impact.

Launched July 2020, the initial focus of LFPH has been helping PHAs deploy exposure notification apps implementing the Google Apple Exposure Notification (GAEN) system. LFPH adopted the COVID Credentials Initiative in Dec 2020, adding a second focus on better technology for health credentials. As the organization grows it will be moving into other areas of public health that can take advantage of open source innovation.

Website | Slack | Email | Twitter | Linkedin

**COVID Credentials Initiative (CCI)**

The COVID Credentials Initiative (“CCI”) is an open global community collaborating to enable the interoperable use of open-standard-based privacy-preserving credentials and other related technologies for public health purposes.

Sitting between the deep technical universe and the mass market, the CCI community is committed to achieving its mission by empowering COVID/health credential implementers (e.g. government agencies, health institutions, industry organizations, and software providers) with the knowledge, tools and resources needed to implement privacy-preserving and interoperable credentials.

Website | Email | Newsletter | Twitter | Linkedin

**Affinidi**

Affinidi is a core technology company that enables the creation, sharing and verification of digital credentials that are portable and verifiable. Affinidi’s solutions empower trusted institutions to issue verifiable credentials to users, who can provide consent to share their credentials with other institutions, applications or service providers, for verification. By sharing these verifiable data credentials, users can access valuable products and services across platforms and geographies in a trusted, open and interoperable manner.

Headquartered in Singapore with a hub in Berlin, Germany, Affinidi works with stakeholders and partners globally to realize the shared goal of driving transformational change and new business models.

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