

A photograph of a woman from the back, wearing a wide-brimmed tan hat and a brown backpack. She is looking out over a vast, misty mountain range. The image is overlaid with a grid of blue diagonal lines and arrows pointing to the right.

AMADEUS

Rebuild Travel Digital Health Survey

2021

Introduction

According to statistics from the World Health Organization (WHO) there have been over 119 million confirmed cases globally since the beginning of the coronavirus pandemic, with over 2.6 million deaths attributed to the disease.

As the crisis has evolved, Amadeus, a global leader in travel technology, has been committed to better understanding what the traveler wants during and after this unique time. To gather more insights into how the travel industry can rebuild, this latest traveler research focuses on learning more about their top concerns around digital health data, their comfort levels with sharing and storing their data, and the solutions that may help to alleviate their concerns for future travel.

Censuswide surveyed respondents between 18-26 February, 2021, across nine markets, including UK, Spain, Germany, Russia, UAE, France, India, Singapore and the US, who've traveled abroad in the last 18 months, with 1,000 respondents per market. The survey aims to understand consumer sentiment to safe travel in light of COVID-19 and traveler receptiveness to providing digital health information to enable the opening up of travel. The survey also revisits the traveler sentiment issue, which was part of our first survey, in September 2020, to see if there are notable changes. Following are key insights.

Similar, more in-depth, reports focused on each of the nine countries surveyed can be found [here](#).

Current appetite for travel



Just over 2 in 5 (41%) travelers surveyed would book international travel within six weeks of restrictions lifting, demonstrating a huge appetite for international travel from respondents. In comparison, just 2% would wait more than a year to book international travel once restrictions are lifted.

Country differences in appetite for immediate international travel

The majority of travelers surveyed in Russia (53%) and the UAE (52%) would book international travel within six weeks of restrictions lifting. The next highest percentages for travelers that would book international travel within six weeks of restrictions lifting are those in Spain (48%), India (47%) and the US (45%). With the exception of Spain, the rest of the European countries have fairly similar percentages for those that would book international travel within six weeks of restrictions lifting with 37% in France, 32% in Germany and 31% in the UK. Travelers in Singapore are the greatest outliers with less than a quarter (23%) stating that they would book international travel within six weeks of restrictions lifting. Similarly, when looking at the mean in how many months travelers surveyed would wait before booking international travel after restrictions are lifted, respondents in Singapore would wait an average of five months, the US, India, France, Germany and the UK would wait an average of four months. Finally, respondents in Spain, Russia and the UAE would wait an average of three months.

Generational differences in appetite for immediate international travel

Millennials surveyed are the most likely generation to say they would book international travel within six weeks of restrictions lifting (45%), while Baby Boomers were the least likely (31%).

Traveler concerns in light of COVID-19

The top three biggest concerns about traveling in light of COVID-19 are:

1. Fears about mixing with crowds in airports or at transport hubs such as stations (48%)
2. Trusting that the accommodation is adhering to necessary health and safety guidelines (e.g., deep cleans in between guest stays) (47%)
3. Safety and cleanliness of public transport (46%)

These come over anxiety around other travelers not wearing masks in public spaces and on forms of transport (45%), having to wear a mask for long periods of time (40%) and trusting that third party companies such as car rentals and excursions at destination are adhering to necessary cleaning guidelines (e.g. cleaning equipment and cars in between uses) (36%). Notably, 1 in 12 (8%) travelers surveyed say they don't have any concerns about traveling in light of COVID-19.

Country differences in concerns while traveling in light of COVID-19

Concerns are highest amongst travelers surveyed in Singapore, with just 3% stating that they don't have any concerns about traveling in light of COVID-19. This echoes the fact that Singapore had the lowest percentage for those that would book international travel within six weeks of restrictions lifting. This is followed by the UAE where 4% of travelers surveyed stated that they don't have any concerns about traveling in light of COVID-19, the US and India (both 5%), Spain (6%), the UK (9%), Russia (12%) and finally, France and Germany (both 14%). Top concerns across countries differ; for example, fears about mixing with crowds in airports or at transport hubs such as stations is the most cited concern for the UK (53%), Spain (55%), Germany (47%) and Singapore (63%). However, the top concern for respondents in Russia (46%) and France (39%) is having to wear a mask for long periods of time while respondents in the UAE (62%), India (56%) and the USA (52%) most cite safety and cleanliness of public transport as their biggest concern.

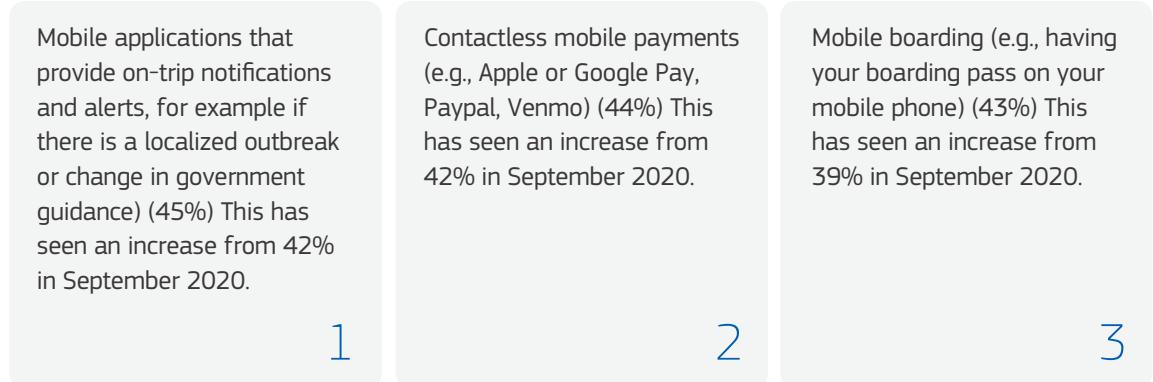
Age differences in concerns while traveling in light of COVID-19

Perhaps surprisingly, Baby Boomers surveyed were the most likely to have no concerns about traveling in light of COVID-19 (10%), while Millennials were the least likely to have no concerns (6%). While the most cited concern about traveling in light of COVID-19 is fears about mixing with crowds in airports or at transport hubs such as stations for Gen Z (40%), Gen X (49%) and Baby Boomers (59%), the most cited concern for Millennials is safety and cleanliness of public transport (50%).

Technology and increasing confidence: majority of travelers said technology would increase their confidence

Technology and innovation will be key in building traveler confidence and the recovery of the industry illustrated by over 9 in 10 (91%) travelers surveyed saying technology would increase their confidence to travel in the next 12 months. It's also striking that this confidence has increased from 84% in September 2020.

The top three most cited technologies that would increase confidence to travel in the next 12 months are:



Almost 2 in 5 (37%) travelers surveyed say facial recognition technology (e.g., at security checks or airport or hotel check-in) would increase their confidence to travel in the next 12 months, increasing from 30% in September 2020. Self-service check-in remains important with over a third (34%) citing it, a slight decrease from 36% since September 2020. Just over 3 in 10 (31%) travelers surveyed say automated cleaning processes (e.g., cleaning robotics) would increase their confidence to travel, a slight decrease from 34% in September 2020 and just under 3 in 10 (29%) mentioned self-scanning luggage, same as in September 2020 (29%). Finally, over a fifth (22%) say voice recognition technology (e.g., for hotel service requests) would increase their confidence to travel in the next 12 months, an increase from 20% in September 2020.

Country comparisons in technology increasing confidence

Over six times the number of travelers surveyed in Germany (19%) said technology would not increase their confidence to travel in the next 12 months, compared to travelers surveyed in the UAE (3%). For respondents in India (51%), Spain (50%), USA (46%), Germany (39%) and France (37%), the most cited technology that would increase their confidence to travel in the next 12 months is mobile applications providing on-trip notifications and alerts. However, for respondents in the UK (39%) and UAE (52%), the most cited technology that would increase their confidence to travel in the next 12 months is mobile boarding; and for respondents in Russia (53%), Singapore (52%) and Germany (39%), this is contactless mobile payments.

With the exception of Spain, European travelers surveyed seem to be in sync when it comes to what technologies would increase their confidence to travel in the next 12 months. This being the case, over a third of travelers surveyed in Germany (39%), France (37%) and the UK (36%) said mobile applications providing on-trip notifications and alerts would increase their confidence to travel. However, it's notable that for Spain this increases to a half (50%) of travelers who said mobile applications providing on-trip notifications and alerts would increase their confidence to travel.

Generational differences in technology increasing confidence: Millennials most receptive to technology

Technology as a means to increase confidence resonates the most with Millennials across the majority of technologies surveyed with only two instances where Gen X have the same percentage. For example, almost half of Millennials and Gen X (both 47%) said mobile applications would increase their confidence to travel in the next 12 months, compared to 2 in 5 (40%) of Gen Z and 43% of Baby Boomers. Similarly, 46% of both Millennials and Gen X said mobile boarding would increase their confidence to travel over the next 12 months, compared to 34% of Gen Z and 40% of Baby Boomers.

For all other technologies surveyed, the percentage is highest amongst Millennials for those stating it would increase their confidence to travel over the next 12 months.



Sentiments towards travel health data



Over **9 in 10** travelers surveyed said there would be some circumstance where they would be comfortable using a digital health passport for future travel

Comfort levels for digital health passports

Just over 9 in 10 (91%) travelers surveyed say there would be some circumstance where they would be comfortable using a digital health passport for future travel. More specifically, the majority (52%) of travelers say they would be comfortable using a digital health passport for future travel if it was accepted by most countries and regulated by international standards. Further, almost half (47%) of travelers surveyed say they would be comfortable using a digital health passport for future travel if their personal data was only specific to COVID-19 and 45% of travelers say they would be happy for a digital health passport to be used at all times when they travel. Finally, over a third (35%) of travelers surveyed say they would be comfortable using a digital health passport for future travel if they were traveling with a trusted brand/travel company that they use regularly. This shows that while regulations are important to travelers, trust that comes with being a loyal customer is notably important.

Country comparisons: comfort levels for digital health passports

The majority of respondents in India (57%) and the UAE (53%) said they would be happy for a digital health passport to be used at all times when they travel. This is followed by respondents in Singapore (50%), the USA (49%), the UK (45%), Russia and Spain (both 40%), Germany (39%) and France (33%). Comfort is particularly high for respondents in Singapore as almost two thirds (65%) state that they would be comfortable using a digital health passport for future travel if the digital passport was accepted by most countries and regulated by international standards; comparatively, less than half (44%) of respondents in France say the same.

Generational comparisons: comfort levels for digital health passports

It's notable that almost 3 in 5 (58%) Baby Boomers say they would be comfortable using a digital health passport for future travel if the digital passport was accepted by most countries and regulated by international standards, followed by Gen X (55%), Millennials (53%) and Gen Z (44%), perhaps showing a hesitancy to sharing data from younger generations. Millennials were the most likely of the age groups to say that they would be comfortable using a digital health passport for future travel if their personal health data was only specific to COVID, followed by Gen X (48%), Baby Boomers (47%) and Gen Z (43%). Finally, Millennials were also the most likely to trust their data with brand/travel companies that they're loyal to as almost 2 in 5 (39%) say they would be comfortable using a digital health passport for future

travel if they were travelling with a trusted brand/travel company that they use regularly, followed by Gen Z (35%), Gen X (33%) and finally Baby Boomers (28%). These results certainly show some interesting differences, and perhaps indicate that younger generations feel more comfortable sharing data with brands over the government.

Receptiveness to storing and sharing digital health data

Over two thirds (68%) of travelers surveyed agree1 that if the airlines they most frequently travel with offered a way to store travel health data in an app they already use, they would be more likely to feel comfortable sharing health data. Similarly, just over 3 in 5 (61%) travelers surveyed agree1 that they would be open to downloading a new third-party app to store their health data, irrespective of which airline or travel company they use. It seems that travelers feel more comfortable sharing data with airlines they frequently use; however, notable percentages are still open to allowing a third-party app to store their health data.

Looking in more detail at the environments in which travelers would share their digital health data, 3 in 5 (60%) travelers say they would be comfortable providing their digital health data for travel purposes (e.g., plane or rail transport) while almost half (49%) would be comfortable providing their digital health data for booking and checking in at their hotel. Interestingly, the percentages drop fairly significantly for how many would be comfortable providing their digital health data to visit or work in an office (34%) and to go to a restaurant or bar (30%).

Country comparisons: Receptiveness to storing and sharing digital health data

Following a similar pattern to the overall data, higher percentages of respondents across all countries are more likely to agree that they would feel comfortable to share their health data with airlines they most frequently travel with, over third-party apps. However, there are still high percentages of travelers that agree1 that they would be open to downloading a new third-party app to store their health data, irrespective of which airline or travel company they use. This is highest among respondents in India (75%), the US (71%) and the UAE (68%) and lowest are Germany (44%) and France (50%). The data indicates European respondents are more hesitant to share health data, both with airlines they use or a third-party app.

When looking at when travelers surveyed would feel comfortable providing their data, almost three quarters (72%) of respondents in Singapore say they would be comfortable providing their digital health data for travel purposes, followed by Russia (67%), the UAE (66%), India (62%) and the UK (60%). This compares to less than 3 in 5 respondents in the US (58%), Spain (56%) and Germany (51%) and less than half (49%) of respondents in France for such purposes.

Around 4 in 5 respondents in India (82%) and the UAE (80%) agree1 that if the airlines they most frequently travel with offered a way to store travel health data in an app they already use, they would be more likely to feel comfortable sharing their health data. This is followed by respondents in the USA where almost 4 in 5 (79%) agree1 that if the airlines they most frequently travel with offered a way to store travel health data in an app they already use, they would be more likely to feel comfortable sharing

their health data, then Singapore (74%) and Russia (69%). Percentages decrease for European respondents surveyed, with two thirds (66%) of respondents in Spain agreeing¹ that if the airlines they most frequently travel with offered a way to store travel health data in an app they already use, they would be more likely to feel comfortable sharing their health data, followed by the UK (61%), France (52%) and then Germany (50%).

Generational comparisons: Receptiveness to storing digital health data

Millennials are the most likely to agree¹ that if the airlines they most frequently travel with offered a way to store travel health data in an app they already use, they would likely feel comfortable sharing their health data (73%), followed by Gen X (68%), Gen Z (62%) and Baby Boomers (58%). Similarly, Millennials are most likely to agree¹ they would be open to downloading a new third-party app to store their health data, irrespective of which airline or travel company they use (66%), followed by Gen X (60%), Gen Z (54%) and Baby Boomers (53%). It's clear that Millennials are the most open to sharing their digital health data whether that's with an airline they use or a third-party app.

When we look at providing digital health data for travel, Baby Boomers were again the most receptive as over two thirds (67%) surveyed say they would be comfortable providing their digital health data for travel purposes, followed by Gen X (64%), Millennials (61%) and Gen Z (48%).

Willingness to store digital health data to enable benefits and concerns around doing so

The majority of respondents would be willing to store their travel health data electronically if it benefitted them in some way. For example, almost three quarters (74%) of travelers surveyed would be willing² to store their travel health data electronically if it enabled them to pass through the airport faster with fewer face-to-face interactions. This echoes fears about mixing with crowds in airports or at transport hubs such as stations as the biggest concern for respondents (48%), suggesting they are looking to technology to alleviate such fears.

Further, over 7 in 10 (72%) of travelers surveyed would be willing² to store their travel health data electronically if it enabled them to travel to more destinations, while just over 7 in 10 (71%) travelers said they would be willing² to store their travel health data electronically if they received perks such as upgrades or airport lounge access. Finally, 7 in 10 (70%) of travelers surveyed would be willing² to store their travel health data electronically if it enabled them to travel sooner. It appears respondents would be willing to store their travel health data electronically if they receive benefits for doing so.

It's important to understand the concerns that respondents still have regardless of the benefit of sharing health data. Overall, over 9 in 10 (93%) travelers surveyed have some concerns around storing their health data for travel; a percentage that the travel industry must address as it moves forward.

The three main concerns that travelers surveyed have around storing their health data for travel are:



These outrank concerns about a lack of global standards and accountability for how personal data would be treated (29%), mistrust over giving access to personal data to public authorities (27%) and price increases from travel insurance companies based on health data (22%). Further, a fifth or less of respondents have concerns about keeping data current and up-to-date with the latest regulations (20%) and loss of information while traveling or before a journey (18%).

Country comparisons: Willingness to share digital health data to enable benefits and concerns around doing so

Generally, respondents in India and the UAE were the most likely to say that they would be willing to store their travel health data electronically if it returned some benefits such as enabling them to travel sooner (79% for India and 78% for the UAE) or if they received perks such as upgrades or airport lounge access (81% for UAE and 79% for India). On the contrary, respondents in Germany were the least likely to be willing to store their travel health data electronically in all scenarios tested; however, all percentages remained over half. Once again, European countries such as the UK, Spain, Germany and France have

lower percentages of respondents who were willing to store their travel health data in return for benefits than countries outside of Europe such as Russia, the UAE, India, Singapore and the US.

Delving into the concerns respondents in the various countries have, it's interesting to note that respondents in the UK are the most likely to say that they have no major concerns about storing their health data for travel (13%), followed by France (10%) and Germany (9%). For respondents in the UK (36%), Spain (36%), Russia (50%), the UAE (39%), Singapore (47%) and the USA (33%), the main concern about storing health data for travel is the security risk of having their personal information hacked. However, for respondents in Germany, the most cited concern for storing health data for travel is a lack of transparency and control over with whom the data is shared (40%). Finally, for respondents in France, the main concern about storing health data for travel is privacy concerns about what health information needs to be shared (38%), while respondents in India are most concerned with both the security risk of having personal information hacked and privacy concerns around what health information needs to be shared (both 34%).

Generation comparisons: Willingness to share digital health data to enable benefits and concerns around doing so

Consistently, the willingness to store travel health data electronically to receive benefits is highest amongst Millennials. For example, three quarters (75%) of Millennials surveyed would be willing² to store their travel health data electronically if it enabled them to travel sooner compared to less than two thirds (64%) of Baby Boomers surveyed and Gen Z (62%). Further, almost 4 in 5 (78%) Millennials surveyed would be willing² to store their travel health data electronically if it enabled them to pass through the airport faster with fewer face-to-face interactions while less than two thirds (63%) of Gen Z would be willing. This shows the stark contrast between the two youngest generations when it comes to storing data.

Comparing the generational differences in concerns about storing health data for travel, Baby Boomers surveyed were the most likely to say that they have no major concerns about storing their health data for travel (11%) while Millennials were the least likely (5%). This demonstrates that although they are willing to share health data, they still are highly concerned about doing so.

Potential solutions to increase trust among travelers

While the data has shown a willingness to store travel data and the concerns around doing so, it's important to look at what solutions might improve and reassure travelers. For example, over 2 in 5 (42%) travelers surveyed said that if they had a travel app that could be used across the whole journey (for example, the same app shows health travel status for airline, airport, hotel, car providers, etc.), it would greatly improve their overall travel experience. The same percentage (42%) of travelers surveyed said that if they had a travel app that could be used across the whole journey it would reassure them that all of their information is in one place, and just over 2 in 5 (41%) said it would reduce their stress around travel. 2 in 5 (40%) travelers said that if they had a travel app that could be used across the whole journey, it would make them more likely to travel once restrictions are lifted, and over a third (35%) said it would make them more likely to share their health data. Further, over 3 in 5 (62%) travelers surveyed said if a travel company partnered with a trusted healthcare company it would make them more likely³ to use their app to store their health data.

Country comparisons: Potential solutions to increase trust among travelers

Over half (52%) of respondents in India said that if they had a travel app that could be used across the whole journey (for example, the same app shows health travel status for airline, airport, hotel, car providers, etc.), it would make them more likely to share their health data. This is followed by respondents in the US (44%), the UAE (42%), Singapore (42%), Spain (33%), the UK (29%), Russia (28%), Germany (27%) and France (21%). While the percentages differ across markets, it's clear that sizeable percentages of travelers are open to this concept. Responsiveness seems higher with travel companies partnering with healthcare companies to store health data, however. Indeed, 4 in 5 (80%) of respondents in India say that a travel company partnering with a trusted healthcare company would make them more likely³ to use their app to store their health data, followed by the UAE (78%), the US (74%), Russia (65%), Singapore (63%) and Spain (61%). However, with the exception of Spain, percentages are lower among the remaining European countries surveyed with about half (52%) of UK respondents saying that a travel company partnering with a trusted healthcare company would make them more likely³ to use their app to store their health data, followed by Germany (48%) and France (40%).

Generational comparisons: Potential solutions to increase trust among travelers

Over 2 in 5 Millennials (46%) and Gen X (42%) surveyed say that if they have a travel app working across the whole journey, it would greatly improve their overall travel experience. Meanwhile, 2 in 5 (40%) Baby Boomers say that if they have a travel app that works across the whole journey, it would reassure them that all of their information is in one place. Finally, 2 in 5 (40%) Gen Z surveyed say that if they have a travel app that could be used across the whole journey, it would reduce their stress around travel.

7 in 10 (70%) Millennials say that a travel company partnering with a trusted healthcare company would make them more likely³ to use their app to store their health data, compared to over 3 in 5 (63%) Gen X, almost 3 in 5 (57%) of Gen Z and less than half (46%) of Baby Boomers surveyed.

Current app usage and sentiments towards biometric facial recognition technology



Travel app usage expected to **increase** in the future

The below table outlines travelers' use of different travel apps pre-COVID-19 and since COVID-19, along with the apps they expect to use in the future. For example, 45% of travelers used an airline app pre-COVID-19, 31% used an airline app since COVID-19 and 48% expect to use an airline app for future travel.

	Pre-COVID-19	Since COVID-19	Future travel	% difference between pre-COVID & future
Airline app	45%	31%	48%	+3%
Hotel app	41%	29%	44%	+3%
Car rental app	24%	19%	30%	+6%
Train app	29%	23%	32%	+3%
Journey planning app	27%	23%	35%	+8%
Travel agent app	28%	21%	33%	+5%
Banking/credit card app	46%	39%	45%	-1%
Other travel apps	14%	11%	17%	+3%
No travel apps	8%	13%	5%	-3%

In reviewing these results, it's clear that there will be an uptake in app usage across the majority of the areas in the future, despite the decline in usage when comparing pre- and since COVID-19. The highest

increases between pre-COVID and the future are for journey planning apps, car rental apps and travel agent apps. However, it's worth noting that airline apps have been the most popular both pre- and since-COVID and look set to retain that position in the future. The general increase in app usage across the travel journey is some good news for innovative travel companies who have invested in this area.

Comfort with biometric facial recognition technology

The majority (56%) of travelers surveyed said they would be comfortable using biometric facial recognition technology if it was offered at boarding gates. Further, well over 2 in 5 (45%) said they would be comfortable using biometric facial recognition technology if it was offered at hotel check-in. Lower percentages, however, said they would be comfortable using biometric facial recognition technology if it was offered at airport duty-free shops (31%), car rental pick-ups (28%), in-destination excursions (28%) and conferences and events (27%). Once again, this openness to biometric facial recognition technology seems to be in line with the concern that travelers have around mixing with crowds in airports or at transport hubs such as stations.

Country comparisons: Comfort with biometric facial recognition technology

Following the same pattern of data, comfort around biometric facial recognition technology is highest outside of Europe with two thirds (66%) of respondents in Singapore saying they would be comfortable using biometric facial recognition technology if it was offered at the boarding gates, followed by respondents in the UAE (63%) and India (57%). On the other hand, while comfort is lowest with respondents in Germany (47%), it is still a substantial percentage.

Overall, the data seems to indicate more receptiveness towards storing health data with countries outside of Europe, with the exception of Spain where respondents appear to be more open. However, overall, there seems to be a general openness and acceptance of health data and technology across all countries.

Generational comparisons: Comfort with biometric facial recognition technology

Finally, focusing on the generational differences, using biometric technology at the boarding gates resonates the most with Baby Boomers (61%) and the least with Gen Z (45%). However, just over a third (34%) of Millennials said they would be comfortable using biometric facial recognition technology if it was offered at airport duty free shops, compared to less than a quarter of Baby Boomers (23%).

Overall, the data throughout the report shows a higher skepticism of sharing and storing health data from Gen Z, while Millennials, Gen X and Baby Boomers change their views depending on to whom, what or where it is being shared. However, older generations are more comfortable than Gen Z.

¹Combines 'strongly agree' and 'somewhat agree'

²Combines 'very willing' and 'somewhat willing'

³Combines 'much more likely' and 'somewhat more likely'

Conclusion

Amadeus is committed to supporting the industry to restart and rebuild travel. It recognizes that digital health verification will be increasingly important to both increase traveler confidence and assist in opening up international borders.

While the appetite for digital health verification among travelers, governments and the industry is high, it also presents challenges to the industry that need to be addressed by multiple stakeholders. This is why Amadeus has developed the Safe Travel Ecosystem, a global program designed to help the industry overcome these challenges and accelerate recovery.

Digital health passports or certificates – whether to demonstrate health checks or vaccination status – need to be fully integrated into airline or airport systems to avoid creating customer pain points, or friction, along the journey. In addition, travelers need to know that their personal information is safe and secure, and that they are in control of how it is used.

This is why Amadeus has added new capabilities to Traveler ID, a secure platform for its travel provider customers, that connects, digitizes and automates traveler identification and document validation across the traveler journey, while meeting regulatory requirements. This platform connects the health certification touchpoints end-to-end, integrating multiple stakeholders involved in the process, providing a secure and frictionless way for passengers to show that they have the necessary health documentation. Privacy and security are central to the design of Traveler ID, ensuring that passengers choose when and where they want to provide digital evidence of their health status.

Importantly, for airlines and airports, this solution can be integrated directly into their own digital channels, removing operational complexity and facilitating a smooth traveler experience. Amadeus is also able to connect existing identity and health validation initiatives, such as CommonPass and ICC AOKpass, to accelerate global adoption, which is critical to unlock international travel in the coming months.

Beyond digital health data, the survey shows that there is an appetite for technology able to address the concerns of today's travelers, whether it is better access to information, ensuring social distancing or reducing physical contact.

One year on from the start of travel restrictions, technology deployment has accelerated across all parts of the sector, designed to foster increased confidence among travelers and help the industry to adapt. Amadeus continues to work in partnership with customers and partners to innovate and deploy technology that improves both the traveler experience and operational efficiency.