

DELIVERING TRAVELER VALUE

Inspiring, understanding
and fulfilling expectations
throughout the travel
experience and beyond

amadeus |  Microsoft

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Foreword

Travel is one of the greatest joys in life. It brings together family and friends, it inspires adventures, enables us to explore new places and cultures. It allows us to connect, do business and prosper.

The reason for each trip is different. It may be to meet up with people we've been parted from for too long, to fulfil a long-held dream and be immersed in a new culture or to strengthen relationships, sign a business contract or make new connections. Whatever the reason, each traveler wants to focus on the reasons for a trip and to maximize them, all while ensuring their travel plans make a positive contribution to our world.

And yet, as an industry, we often don't deliver on the promise of building meaningful experiences, focused around the individual traveler. There are many reasons why. No single organization oversees all elements of each trip, fragmentation of systems and segments can make it hard to recognize the traveler at every step of the journey, traveler insight is limited.

Complexity is also on the rise. Mathematicians will argue the complexity of an interrelated system grows exponentially with the number of pieces. This is true of the travel industry. If the travel sector fails to tackle this growth in complexity – from metasearch, for example – it will slow the deployment of new solutions.

How can we overcome these challenges? How can we deliver a truly human-centric travel experience? How can travelers make better informed and more responsible choices? How can we help travelers select the best routes and combine experiences? How can we make the experience of travel better?



When it comes to delivering maximum value for both the traveler and the industry, the answer lies in deepening our understanding of context. Through an understanding of the options available, the preferences of the traveler and their history, as well as the capability to bring it all together, we can deliver what travelers increasingly expect.

This may sound obvious. However, delivering it requires a collective effort to harness data and insight and turn them into actions to deliver a truly end-to-end experience. This collective effort also extends to sustainability and ensuring travel is a force for social and environmental good.

This is why Amadeus and Microsoft have partnered to unleash the next wave of innovation in the travel experience. To support customers and to transform how travel is delivered. To deliver inspiring experiences, focused on the traveler. Connecting our industry. Using technology to drive innovation, applying data to understand traveler needs and empowering travelers to make more out of each trip. To build a more sustainable travel industry. To make the experience of travel better. This is what our partnership is about.

The travel industry stands on the cusp of a period of great opportunity. Let's work together to unlock it.

Wolfgang Krips
Senior Vice President, Corporate Strategy, Amadeus



Corine de Bilbao
President of Microsoft France



Introduction

Each year international travel becomes more accessible. Families are able to stay in contact, as mobility reaches record levels. People from most nations are able to get to know the culture of another, while students can study abroad, individuals can work remotely and friends can regularly visit each other overseas.

Some 1.4 billion international overnight trips were **recorded** in 2019 by the UNWTO, with millions of visitors flocking to every continent. WTTC **figures** reveal nearly one in ten jobs around the world are connected to the travel sector, with tourism driving up to ten per cent of global GDP. IATA **predicts** overall traveler numbers will reach four billion annually by 2024.

Travel is a force for good in many ways, and a major driver of economic value.

As it has grown, however, the sector has become more complex and fragmented, as the options to travel and the variety of new experiences on offer continue to multiply. Business processes and technology are constantly improving to help consumers manage this. Only a decade ago, paper-based records proliferated while, today, digitalization is mainstream.

The components that combine to make a trip have also become more diverse. With hundreds of airlines, thousands of hotels, millions of trip options and billions of travelers, industry stakeholders can find it increasingly hard to differentiate and provide the best offers and value for money.

More recently, corporates have begun reframing expectations of where they expect their employees to be – refocusing instead on employee well-being and work-life balance, compounding an earlier blurring of previously well-defined traveler categories. Hybrid work, for example, allows travelers to mix a business trip with a holiday, extending their stay to work remotely.

Today, leisure and business travel overlap to create a third, less defined category. New, dispersed teams are driving demand for corporations to make collaboration possible, while also protecting social capital and the value of networks, in these new settings.

The world, too, has seen the rise of new challenges, from the impact of climate change, geopolitical tension and financial uncertainty to the tightening of previously open borders in the wake of the pandemic. Much has changed and continues to do so. Over the past three years, the industry has grown used to rapidly recalibrating capacity, reshaping the workforce and responding to ever-changing restrictions – a situation often branded as the ‘new normal’.

In the wake of the COVID-19 pandemic, the need for adaptability is more pressing than ever. **According** to the WTTC, tens of thousands of tourism jobs remain to be refilled as the sector recovers. This churn has created significant challenges, with expertise lost hard to replace. Newcomers to the industry have fewer experts to learn from, and this creates further complexity.



“Advances in digital technology are rapidly redefining every aspect of work and life, including how we travel. Together with Amadeus, we will apply the power of Azure and its AI capabilities to create new frictionless experiences for travelers worldwide and reimagine the travel industry going forward.”

Satya Nadella,
Chief Executive, Microsoft

It is against this backdrop that Amadeus and Microsoft have come together to forge a new, more human-centric, sustainable, personal and better-connected travel sector.

Working side-by-side, the two partners are harnessing technology, as well as passion, to innovate and explore the new products and solutions that will create the travel experiences of the future. The partnership combines the secure cloud platforms and cutting-edge enterprise technologies offered by Microsoft with Amadeus' proven expertise and record of innovation in travel technology.

The initial steps of this process were examined in the paper ***Journey to Cloud Planet*** - published in late 2021. It explored how to unleash the next wave of innovation in the travel industry and take advantage of the possibilities cloud technology offers.

This report explores the next steps on the journey – how the industry can drive travel value through understanding context, turning masses of data into travel experiences that allow travelers to get more out of each trip.

It draws on work from Northstar Research Partners, which was commissioned to survey 2,400 business and leisure travelers in six key markets around the world – Brazil, Germany, India, Indonesia, United Kingdom and the United States. The findings provide quantifiable evidence, supported by in-depth interviews with senior leaders from across the travel sector, Amadeus and Microsoft.

The report will explore how stakeholders within the travel industry can use data

and technology to create end-to-end experiences for travelers, reducing friction and driving increased return on investment. As the sector evolves, the possibilities to bring data together are expanding. But there needs to be agreement between parties to share information, with common standards in place to facilitate this in a confidential, secure way.

The industry will not be able to move forward without more effective usage of data.

Travelers themselves will be asked to explicitly engage with this process, understanding what the industry does with their data – as well as how they personally benefit. As the travel sector develops new technologies, it should do so alongside the traveler, with them. These themes are explored in this report.

It begins with an examination of what is meant by contextualization and how it will impact on the travel industry.

The report will then look at the tools the industry can use to create a joint understanding of a trip, shared by travel providers, corporations and travelers. As travel becomes less predictable, the new tools available to travel providers will become more important. The report will examine what changes – in terms of technology and the wider industry – are needed to benefit from this development.

Finally, it will close with some specific recommendations and steps the sector can take to thrive in a new environment in order to make the experience of travel better, for everyone.

Part **1**

A route to maximizing the value of every trip

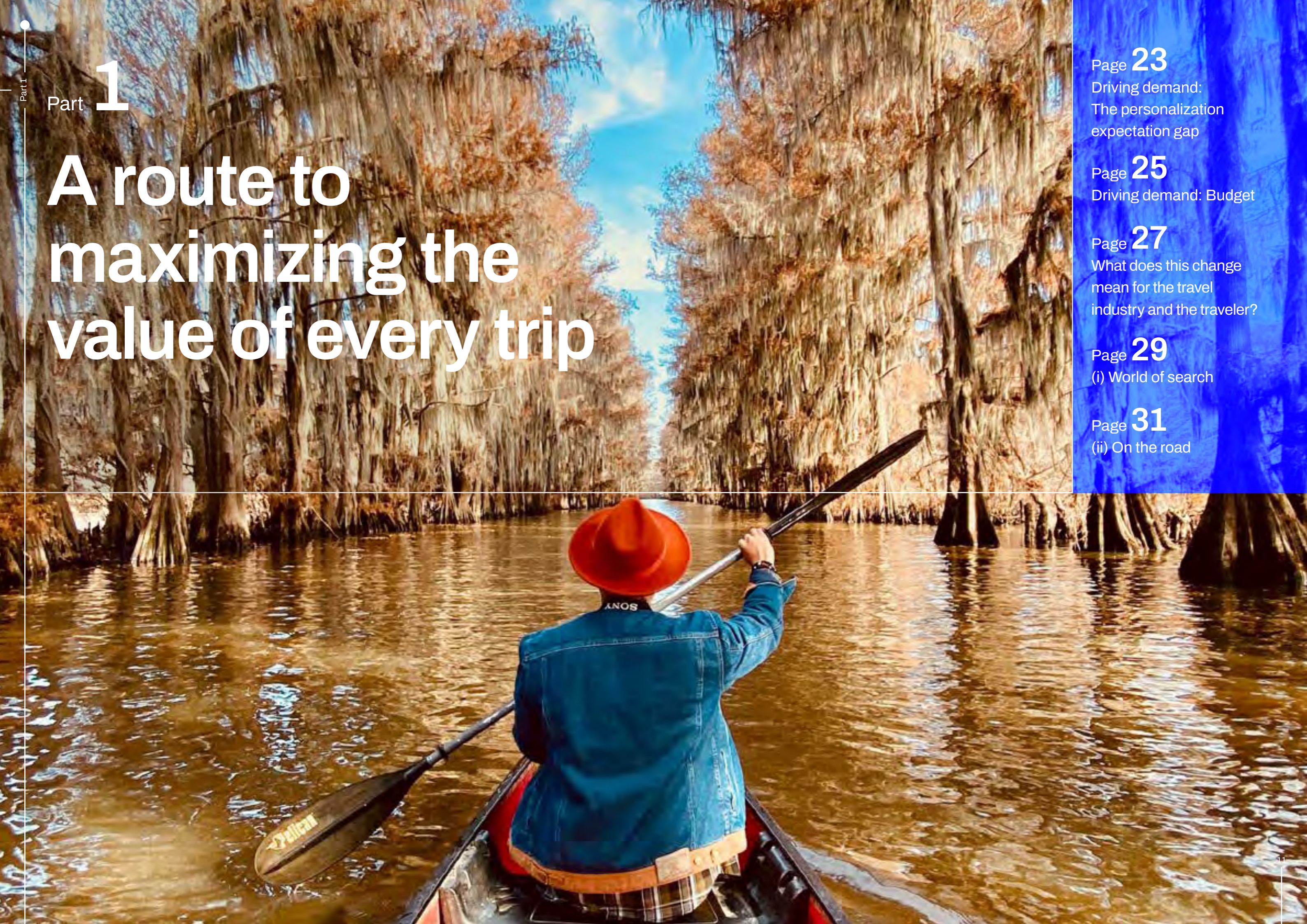
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The travel industry must respond if it is to be prepared for the new era outlined above. A new focus is required if the sector is to build the best possible future, allowing each traveler to **maximize the value** of each trip - be that building better relationships, creating memories or raising revenues.

Imagine if antiquated, disjointed journeys could be replaced by new, end-to-end experiences, those driven by an understanding of the traveler and their ambitions. The mental burden of search, organization and booking could be lifted from the traveler and taken up by new intuitive technical solutions.

Today, travel too often remains a succession of waiting times.

Lutz Vorneweg, Senior Vice President of Strategic Partnerships at Amadeus, explained:

“Many people experience traveling in a very frustrating way, they experience travel as a series of moments in which they are waiting for something. Waiting for the taxi, then to get through security, then onto the plane, then to collect their luggage, then another taxi. It takes so much away from the overall experience! We are working with Microsoft to change that.”

As new options and opportunities emerge it is essential the industry does more – otherwise there is a risk travelers will turn away. Sustainability concerns are increasingly recognized as an element of travel that needs to be addressed, while rising costs place ever more emphasis on maximizing the value of a trip. At the same time, new possibilities, from remote work to virtual reality, continue to gain acceptance. A study, carried out for this report by global research firm Northstar, suggests 56 per cent of leisure travelers think a ‘stress free, frictionless journey’ is important to a successful trip – revealing the benefits of potential new technologies.

Moreover, travelers appear open to new forms of search. Some 40 per cent of the Northstar sample said they would search by ‘purpose of trip’ if it were possible, while 27 per cent said a ‘previous experiences’ search would be of interest. Technology could be deployed to explore where travelers have previously visited, their experiences while they were there and their responses to them – with the positive elements repeated. Finally, 14 per cent of the study would even be open to a form of search drawing from friends’ social media accounts.

Demand for change is rising.

In this new world, an understanding of **context** has become more important than ever. Travel companies need to know the **purpose** of each trip, to understand what motivates a traveler to make the choices they do, what inspires them. New tools and new uses for data – both of which are explored in this report – are being developed to this end.



As the travel industry continues to realize the value of these innovations it will be able to provide a better travel experience and propose better solutions, ones that deliver the best outcome, every time.

Personalization has been a focus for the travel sector over the past decade, as new technologies drive forward what is possible. It has long been possible for advertising to target travelers with personalized offers relevant to users' online history. Loyalty programs track customer preferences and adjust offers pushed to members. Personalization of the services offered is making the hotel experience better. Another example is airline systems that notify cabin staff special treatment status for a customer who had a bad experience on their last trip.

The industry is taking the next steps on this road – developing a contextual understanding of the traveler and the journey they are on.

Context will allow stakeholders to understand if a traveler is at home, at work, already abroad or in the office, as well as with whom they are traveling. This visibility will let providers understand what a traveler is doing, be it a conference, meeting or holiday, as well as where they should be right now, perhaps in the office or on the way to the airport. In case of a delay, a solution – hotel night extension, or proactive prompt to book a cab – can be offered.

If the industry knows where a traveler is, they can be offered a warning or a service to suit their needs. This visibility will allow

travel companies and corporations to better deliver the tailored offering increasingly expected.

Other examples might include grandparents traveling as two adults for the majority of the year, with one set of needs, who then have totally different expectations if they take their grandchildren on a trip. Permanent or temporary disabilities fall into the same category. Perhaps a traveler usually takes the train to the airport, but now prefers a taxi, with special assistance at the airport and a room without stairs.



Capturing and understanding a situation at one travel touchpoint can then be extrapolated to the entire journey, giving travel sellers the ability to tailor their offering to the needs of the traveler, every time.

Successfully deployed, these new tools will not only be able to connect the dots to form a complete journey – but to make a **better travel experience**. The industry will be able to make suggestions that significantly improve the travel offering. From the inspiration phase, through the entire journey to the destination, enhancement is possible. While personalization is able to use what the industry already knows about a traveler and their previous experiences, contextualization is able to draw on (near) real-time information from multiple sources to create new options, a deeper understanding.

In this world, data insight can be used to deliver the locations, rides, meals, people connections and virtually any service travelers need – often before they even know they need them! This is the **next step** in the technological evolution of the travel industry.

Fredrik Odéen, Program Director, Corporate Strategy, with Amadeus, explained this task succinctly:

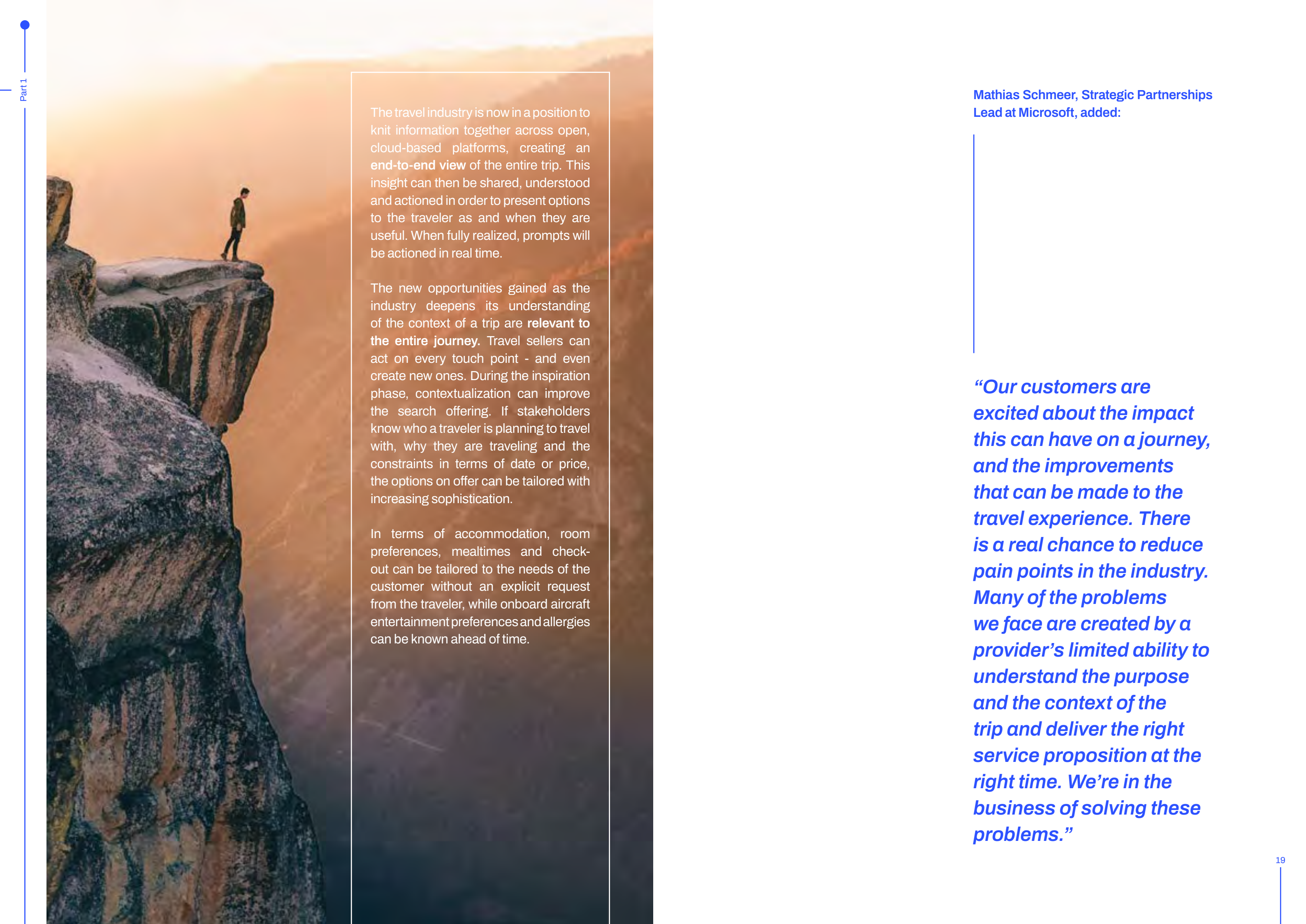
“With contextualization, we are working to mimic an interaction with a human, while using a machine. Currently, machines lack the context around a trip, they cannot understand why you are trying to do something. A human would ask clarifying questions, draw inferences and use other tools – that is what we are attempting to achieve. The solutions will therefore be able to offer options you may not even have known existed – this is the next frontier of technology”.



To make this a reality, the travel industry needs to draw data together from as many sources as possible.

- Where is the traveler?
- Do they have any special needs?
- What device are they using?
- What are their plans?
- Who are they traveling with or meeting?
- Have previous travelers behaved in similar ways?
- Are there any relevant corporate booking policies at play?
- Can the time of year or the booking window be considered?
- What do they want to do at a destination?
- What are they interested in?

Combined, these insights will offer a clearer picture of the trip than ever before.



The travel industry is now in a position to knit information together across open, cloud-based platforms, creating an **end-to-end view** of the entire trip. This insight can then be shared, understood and actioned in order to present options to the traveler as and when they are useful. When fully realized, prompts will be actioned in real time.

The new opportunities gained as the industry deepens its understanding of the context of a trip are **relevant to the entire journey**. Travel sellers can act on every touch point - and even create new ones. During the inspiration phase, contextualization can improve the search offering. If stakeholders know who a traveler is planning to travel with, why they are traveling and the constraints in terms of date or price, the options on offer can be tailored with increasing sophistication.

In terms of accommodation, room preferences, mealtimes and check-out can be tailored to the needs of the customer without an explicit request from the traveler, while onboard aircraft entertainment preferences and allergies can be known ahead of time.

Mathias Schmeer, Strategic Partnerships Lead at Microsoft, added:

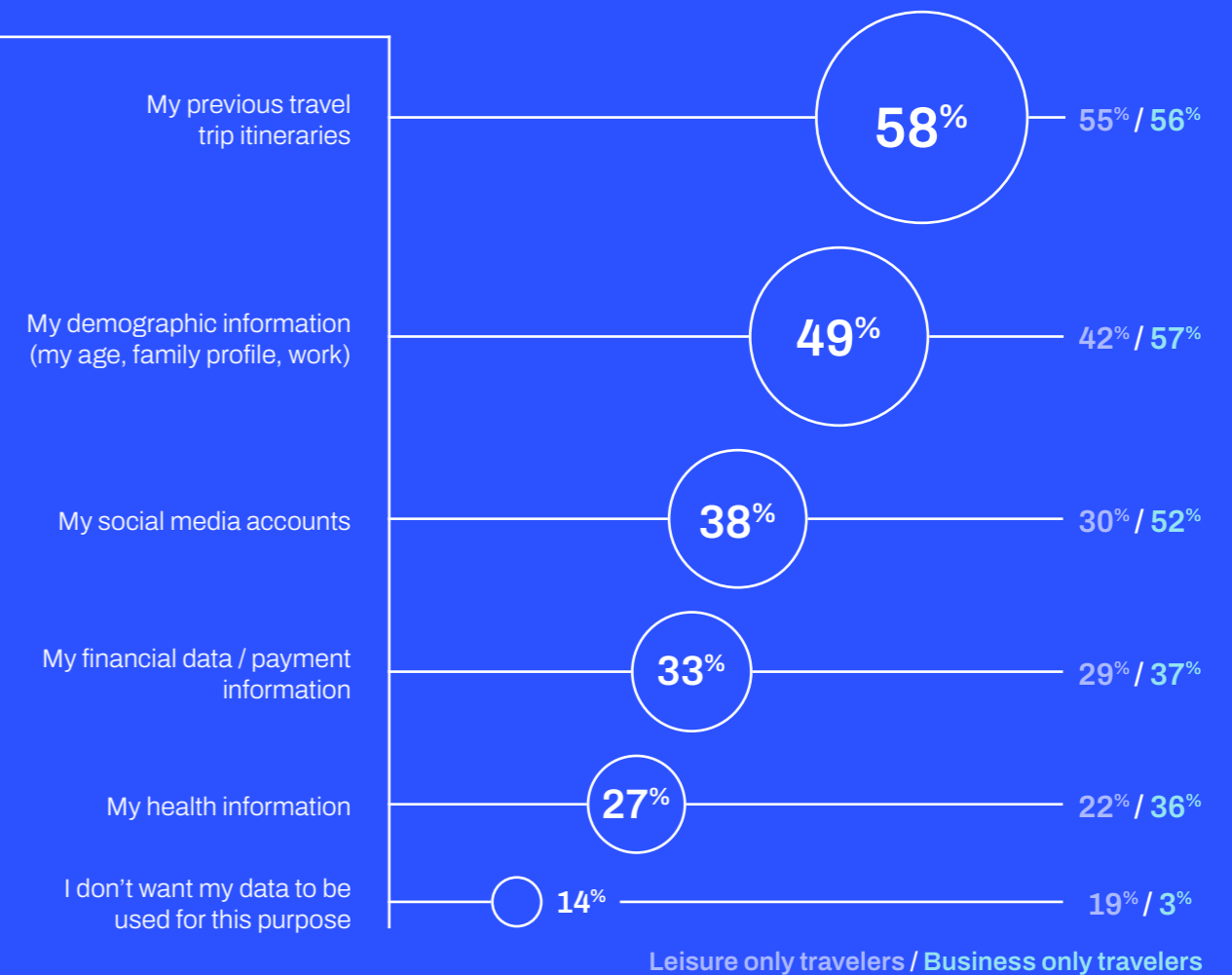
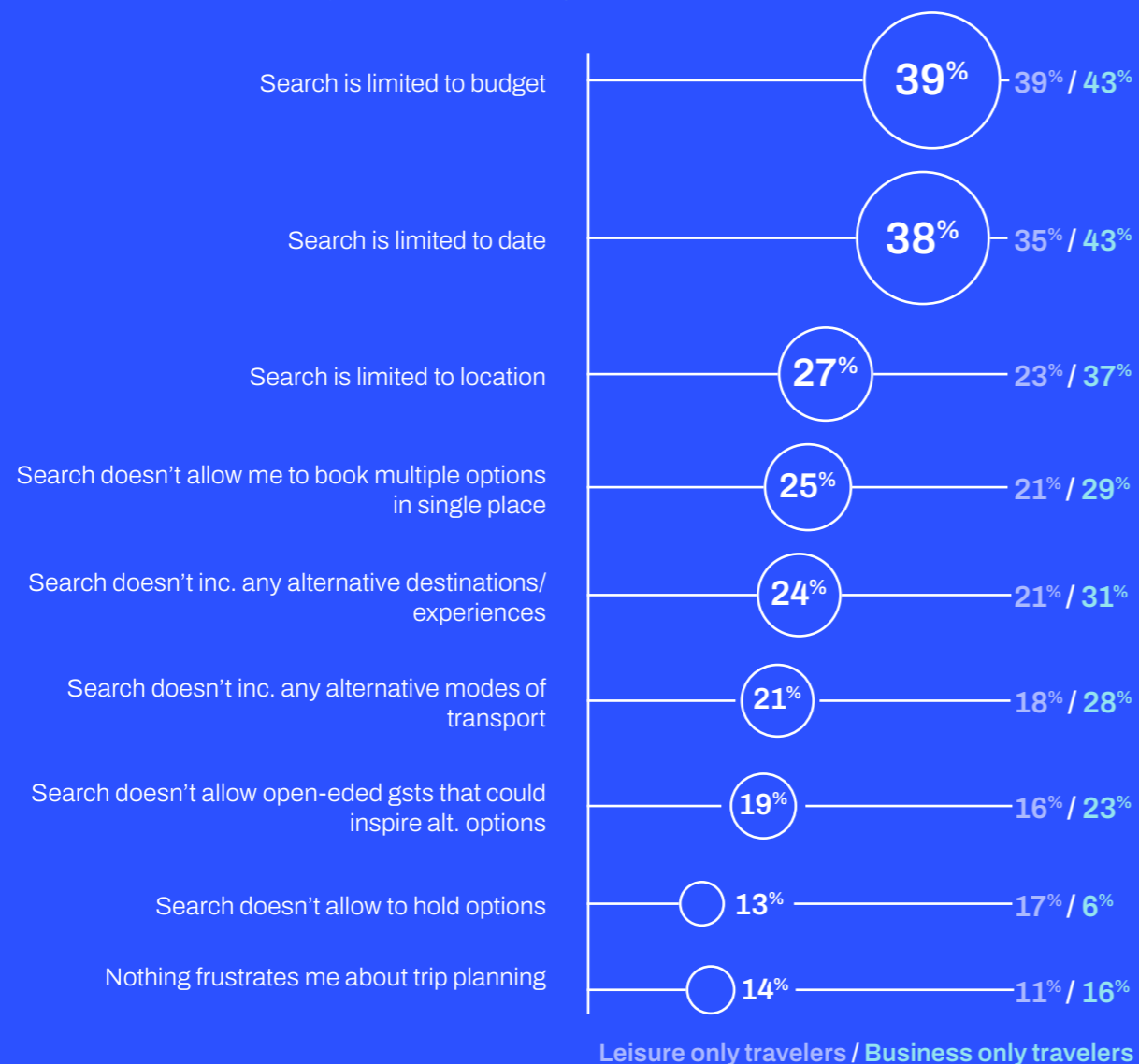
“Our customers are excited about the impact this can have on a journey, and the improvements that can be made to the travel experience. There is a real chance to reduce pain points in the industry. Many of the problems we face are created by a provider’s limited ability to understand the purpose and the context of the trip and deliver the right service proposition at the right time. We’re in the business of solving these problems.”

Privacy

Contextualization draws data from various sources in order to tailor the offering to the traveler and drive value. Used well, the technology can improve the travel experience significantly – but there are factors which need to be considered to make this a success.

Take the search process as an example. For this report, global research firm Northstar found just 14 per cent of travelers said ‘nothing’ caused them stress when planning a trip. Among those who did raise frustrations, respondents were looking for more freedom to search by budget or location.

% STATING THEIR FRUSTRATIONS WHEN PLANNING THEIR TRIP. MULTIPLE ANSWERS ALLOWED (TOTAL SAMPLE)



More effective use of data could help the travel industry build a better search experience, overcoming some of these frustrations – but are travelers willing to share the relevant information?

While over half of the sample were open to sharing previous trip itineraries with travel sellers, decreasing numbers were willing to provide demographic information, access to social media accounts, or make financial data and health documents available.

Some 14 per cent were unwilling to share *any* data at all in order to personalize a trip.

For the industry, the lesson is clear. Concerns around the sharing of data are real – and work must be undertaken to provide the right security assurances and transparency. The travel industry should explain how data is being used, when and by whom.

Right now, customers are seeking improvement – but seem reluctant to share the necessary data.

Driving demand: The personalization expectation gap

Despite the potential to improve the travel experience, the sector has been slower than others to adopt personalization and contextualization as it seeks to drive value. Demand for tailored services has been driven by technological advancements outside of the travel space,

with consumers able to see their demands met with increasing ease. Expectations have changed, for both business and leisure travelers.



Spotify

Spotify offers a strong example of contextualization. The app is able to use the time of day, previous musical choices, those of other listeners and a myriad of other factors to determine the context of listening. Logging on early in the morning on a weekday might mean a user is going for a run, with the app suggesting something motivating. Or, if tuning in late on a Friday evening, something more attuned to either downtime or socializing might be recommended.

There can be no surprise, then, travelers are seeking tailored itineraries, curated recommendations and personalized accommodation options when taking a journey. There is an 'experience gap' between what consumers see is possible elsewhere and what they are offered by the travel sector.

Driving demand: Budget

Desire for change is also coming from within the travel industry in the wake of the pandemic. Pre-COVID-19, the sector had seen a sustained period of growth, with millions of additional trips taken each year. Now, as it rebuilds, travel budgets have been tightened and there is an increased focus on securing a return on investment. If the industry understands the traveler and what they value, it can offer them new services, potentially driving increased revenue for providers and improved return on spend for travelers and corporations.

As Shane O’Flaherty, Global Director of Travel, Transportation and Hospitality, for Microsoft, explained:

“The travel industry is at risk of being disrupted by external forces. While there has been innovation in our sector, the pace has potentially been quicker elsewhere. We now have a chance to learn from the best practice we have seen to build more contextualized trips for travelers in the new era of travel.”



What does this change mean for the travel industry and the traveler?



While travel providers have known for some time that the future lies in delivering a more human-centric experience, it has been a challenge to rise to the occasion. The fragmentation of traveler information

across multiple and unconnected stakeholders creates unique problems – as nobody ‘owns’ the entire journey, or ever will.



Contextualization will allow the sector to go further. Here two examples are explored:

- (i) **World of search**
- (ii) **On the road**

(i) World of search

Returning to search as an example. Right now, a traveler has to do a large amount of work to book a trip, visiting dozens of websites and interacting with multiple travel sellers as they build their journey. Northstar research reveals 86 per cent of travelers found elements of booking a trip stressful – revealing a deep dissatisfaction with the status quo.

The current model, based on key words, continues to be challenging. A traveler usually has to know where they want to go, as well as when and who they are traveling with in advance. A truly contextualized search would be able to answer many questions before they are even asked.

As Julie Shainock, Global Leader, Travel and Transportation, for Microsoft, explained:

***“We are moving toward a point where we can offer opportunities with minimal input from the traveler. We will be able to draw data to understand the context of a trip before the search process begins.*”**

***“An example making headlines in this area has been ChatGPT, which is able to use artificial intelligence (AI) to create a conversational search, not simply inputting, but conversing with the user.*”**

“To date, success in this area has been hard; as travel is a mixed ecosystem, it requires many travel sellers to come together in order to compose an offering. Contextualization will help us to begin to overcome these obstacles.”

The data and technology required to create this new search experience is already available – but it is diffuse, held in silos inaccessible to all but a select few owners. Part 2 of this report will explore some of the technologies currently under development as the industry seeks to overcome these challenges.



(ii) On the road

How about during a trip? Digitalization has unquestionably improved efficiency, allowing travelers to book flights, hotels and request a cab from the palm of their hands. But contextualization will allow the industry to enhance the human element of an experience.

Imagine a traveler arriving at a hotel after a long journey. They may already have a digital key to access their room, allowing them to bypass reception. For travelers looking for efficiency, this might be ideal, but those looking for the human touch may require a different style. A contextualized approach might deliver a prompt inviting the latter traveler to the bar for a welcome drink or a chat with the concierge about what to check out locally.

Digging deeper, data might reveal a birthday is approaching, so locations to celebrate can be suggested, or a favorite band might be in town, leading to an invite to book tickets.

How about onboard a plane? Using NDC, if a traveler selects extra leg space each time, they can be offered it automatically, rather than having to manually select the option. Or, how about if several business travelers are arriving at a similar time and location? They can be offered the chance to share a ride from the airport to their destination.

There are many possibilities. The more the industry understands a traveler and the more data that can be actioned in real time, the better the offers that can be made. Not only does this improve the experience, but it can allow travel sellers to differentiate their offering and drive revenue growth as new opportunities are created.



Metaverse

Tomorrow, travelers will be able to explore a destination before they even leave the house, visit a hotel room or take their seat on a plane. Stepping into the metaverse through a screen will offer new opportunities for travel sellers to showcase their products and drive sales.

The booking experience will be enhanced. Planning a trip in the metaverse will be like visiting a high street travel agency today, allowing users to ask questions of virtual agents, negotiate deals, combine products, save options for later and even pay. When the customer arrives, they will be able to use the metaverse to raise issues, order food and secure services or look into attractions and experiences to visit.

86%

Research commissioned for this report from Northstar found 86 per cent of travelers felt 'sight-seeing' was an important part of a trip, revealing the potential widespread application of this technology. The metaverse could be an immensely powerful tool in a contextualized industry, generating valuable data to help stakeholders to meet the needs of the traveler as they emerge.



Part **2**

Unlocking new opportunities to drive value in travel

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Creation Platform

New technologies are driving change - new tools, solutions and platforms are deepening the ability to put the traveler at the heart of the sector.

However, to make the most of a trip is a multifaceted challenge. Too often different stakeholders – airlines, hotels, agents and ground transportation – cannot share what they know about travelers' preferences. Data is siloed,

both within organizations and across the industry. If a plane is late arriving, a hotel may not be aware, or a transfer may depart without the delayed traveler.

This will have to fundamentally change if the industry is to realize the maximum potential of each trip.



Wolfgang Krips, Senior Vice President, Corporate Strategy, at Amadeus said:

“When a person travels, they go through several channels, generating data each time. Our goal is to create a link between each of these data pools and to allow our customers to extract relevant analysis, ensuring compliance at all times with applicable legislation and the highest security standards.”

As already explored in *Journey to Cloud Planet*, the travel industry has taken a leap forward with Amadeus and Microsoft leading the charge towards building a cutting-edge, open platform that aligns with the principles of the **data mesh paradigm**. The technology, hosted on Azure Cloud, enables seamless collaboration and facilitates the efficient flow of data between various travel providers, all while ensuring the data is

secure and processed in accordance with clearly defined data governance principles. These interconnections will allow the travel industry to provide a smooth, end-to-end journey for travelers and minimize friction points. This **unified vision of travel** goes beyond just a series of separate bookings and represents a concerted effort from travel providers to deliver a seamless, integrated experience for travelers.

Vision for the future

A number of ingredients are required to secure the maximum application for these new tools.

Data needs to be **pervasive**, revealing 'cold' personal preferences, wherever they have previously been expressed, as well as 'warm' **contextual** information. The latter may include location, time of day or an upcoming booking, anything which is applicable to the current journey. Travel sellers will need to have access to the full array of services available, with information on location, reviews and schedules.

Once these resources are collated, travel providers are able to infer the need for service, to work out when an offer might be welcomed, before creating a single, optimal proposal and distributing it across the most relevant channel.

Travel sellers also require the ability to interact with the traveler, enriching or adjusting the proposal as required. This can be done in a **conversational** way – as illustrated by the ChatGPT tool mentioned earlier. Finally, the offer should be made **collaborative**, being extended to co-travelers, colleagues or family members at home.

Shane O'Flaherty, Global Director of Travel, Transportation and Hospitality, for Microsoft added:

“These technical elements, when combined, are the ‘secret sauce’ we are working to create in order to increase the value of every trip for every traveler, which in turn can lead to incremental revenue for the provider. While collating this variety of data does pose technical challenges, once overcome, the rewards have the potential to revolutionize the entire sector, I think Amadeus and Microsoft can create solutions that will add more value services, reduce cost and support the needs of travelers.”



Examples currently at play

The above is the ideal the industry is working toward. Below are three real world cases of this technology being deployed today.

(i) Cytric Easy

For business travelers, the recent introduction of Cytric Easy offers a glimpse of what is possible. The tool allows users to search, book, pay and expense for business travel within the Microsoft 365 productivity tools they use every day, like Microsoft Teams. With the new approach, employees are empowered to focus on the objectives of a trip, rather than being bogged down planning complex logistics.

Eric Bailey, Global Travel Director for Microsoft, added:

“We have an ongoing partnership with Amadeus and a joint vision, as part of a wider collaboration, to redefine corporate travel. We are pleased our employees will also benefit from this vision and experience.”

Employees can collaborate more easily by sharing travel itineraries with colleagues, who can then book a ‘copycat’ trip with a single click. This feature works even when teams are based in different locations.

Jorien Dielwart, Global Travel Manager, TomTom, said:

“Cytric Easy will simplify processes across our company, impacting positively on departments including finance, procurement and travel. With thousands of employees in more than 30 offices around the world, many of whom are frequent travelers, this is a great solution for us to boost efficiency, increase collaboration and make booking business travel easier than ever before.”

Cytric Easy will draw data from numerous sources – including contacts, – and be able to make informed suggestions on how to improve a trip. This will be possible using Microsoft Graph, a Microsoft API platform that allows to build applications leveraging rich, people-centric insights from Microsoft 365.



Rudy Daniello, Executive Vice President of Cytric Solutions at Amadeus, explained:

“The tools we are building, like Cytric Easy, aim at maximizing the value of the trip both for the individual and their organization. By enhancing the employee experience, we maximize their engagement, fostering collaboration and pushing for more sustainable and efficient travel choices, while providing the corporations with a better view and control of their costs. We consider different data points that enable us to provide a good mix between cost optimization, contextualization and personalization.”

Successfully deployed, the technologies allow travel sellers to reach travelers throughout the journey – hitting existing touch points and creating new ones.



Olivier Langlois, Principal Program Manager Lead at Microsoft, added:

“The shared Microsoft-Amadeus vision is to empower travelers and the ones visited to do more using the tools they know and use already to collaborate (for example, Microsoft Teams). By building Amadeus travel services on Azure and by integrating them with the Microsoft Graph, we open travelers to new, inclusive, and innovative experiences, now and in the future, while remaining in a world-class security environment.”

(ii) Traveler servicing thanks to data collaboration

The next stage in the travel evolution will require the industry to understand where the traveler is at any given point, why they are traveling, who they are traveling with, what are their aspirations for a trip – and so much more. As the sector develops its contextual understanding, more data will be needed, more quickly, while insights are developed and actioned. If the industry is going to be able to meet the evolving needs of the traveler, it must have the tools to do so. Amadeus and Microsoft are offering their support, building traveler-centric solutions.

These solutions are designed to overcome limitations imposed by the fragmentation of traveler information across multiple and unconnected providers. These offer a new, collaborative way for the industry to share customer insights, create new revenue streams and, at the same time, humanize the travel experience with a more personalized and joined-up service.

Marc de Gibon, Director, Traveler Servicing Solutions, with Amadeus, said:

“Building a new travel industry will require new levels of collaboration. As a traveler, you interact with various parties - a car rental company, your hotel or airline. So, in order to bring these discreet elements together, we require collaboration.”

“From a technical standpoint, the details travel sellers hold on a traveler may differ; the Passenger Name Record (PNR) number an airline holds is distinct from your reservation number at the hotel. There is no consistency across the industry nor, often, within companies. We are working to solve this. We are orchestrating the data that flows around an individual, synchronizing it across providers to allow for the trusted exchange of almost all information. Alongside Microsoft, we view this as the next step in the evolution of the travel industry.”



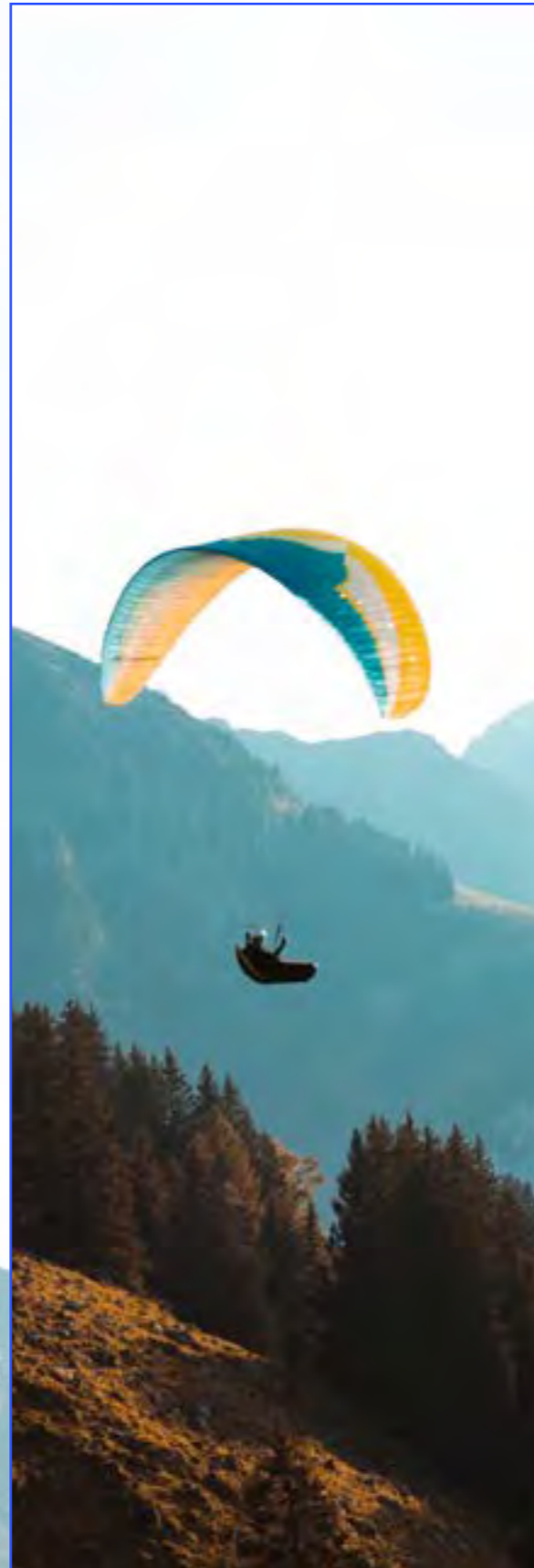
From suggesting hotels based on past preferences, to proposing possible ancillary services or completing a trip with airport transfers, traveler servicing solutions will offer travel providers an opportunity to go beyond their own vertical and generate revenue from other steps on the journey. Solutions that are highly customizable around specific business objectives and fully respect and maximize the value of existing commercial partnerships.

The data collaboration underpinning traveler servicing solutions is made

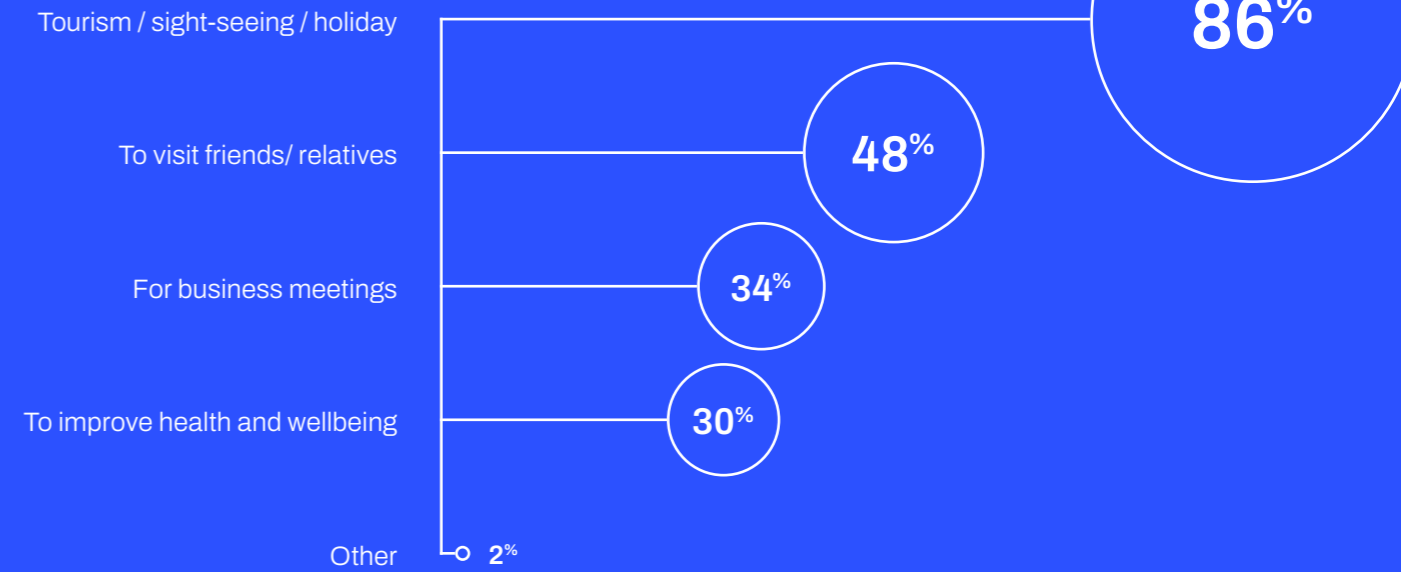
possible through capabilities to share data and insights in a secured way, respecting individual privacy, offered by Azure from Microsoft. As explored in **Journey to Cloud Planet**, the flexibility of the public cloud is already allowing vertically integrated teams of Amadeus' developers to derive value, building machine learning models to spot servicing opportunities across the entire traveler journey and to make them available to customers in real-time.

Stéphane Goudeau, Senior Partner Technical Strategist at Microsoft, added:

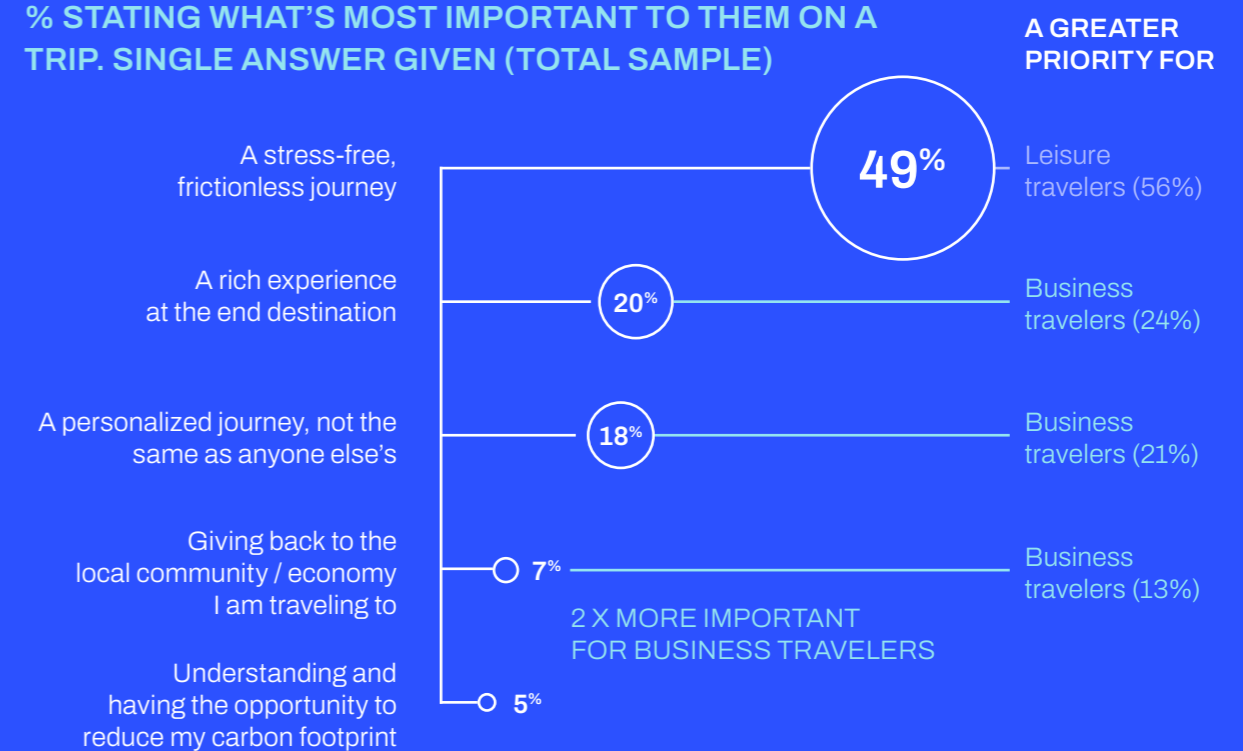
“Innovation has been intense, but user experience remains fragmented, complex and time consuming. Ameliorating this issue is the purpose of Amadeus’ traveler servicing solutions. This requires data sharing among the different ecosystem players. In the future, correlation and collaborative computation will still require data collection and exploitation across different players. However, confidentiality and privacy requirements will impede data sharing. Overcoming these difficulties calls for the ability to execute analytical queries or train machine learning models in a regulatory compliant space.”



% STATING THE MAIN REASON FOR THEM CHOOSING/GOING ON A TRIP. TWO ANSWERS GIVEN (TOTAL SAMPLE)



% STATING WHAT’S MOST IMPORTANT TO THEM ON A TRIP. SINGLE ANSWER GIVEN (TOTAL SAMPLE)



Booking

Findings from Northstar illustrate what travelers are seeking when they book a trip. Some 86 per cent are holidaying, with 48 per cent visiting friends and 30 per cent looking to improve their wellbeing. Among these leisure travelers, 49 per cent most value a stress-free holiday, suggesting there is

tremendous potential for travel sellers who are able to improve their offering through contextualization to grow market share and differentiate themselves. Among the 34 per cent of the Northstar respondents traveling for business, a fifth were seeking a personalized journey. This is the demographic most receptive to the tailored offering made possible by a better understanding and deployment of data.

(iii) Amadeus Creation Platform

One area of ambition for Amadeus and Microsoft is the aviation space, where players are seeking to quickly and cost-effectively establish the appropriate data infrastructure to meet the changing landscape. Challenges include locating the appropriate data, feeding into a central location and building the applications relevant to understanding it. In response, Amadeus has pioneered work on various data platforms, including the Dynamic Intelligence Hub.

Now Amadeus and Microsoft are launching a fresh initiative, as part of the **Amadeus Creation Platform**. Cloud-based, it is designed to make the most out of data with limited upfront investment by airlines.

These agility and analytics modules of the Amadeus Creation Platform provide a combination of ready-to-use assets and 'do it yourself' capabilities, both of which facilitate data exploration. They also enable innovation through machine learning, data science and studio capabilities. The technology enables business process automation and promotes personalization across travelers to accelerate transformation.

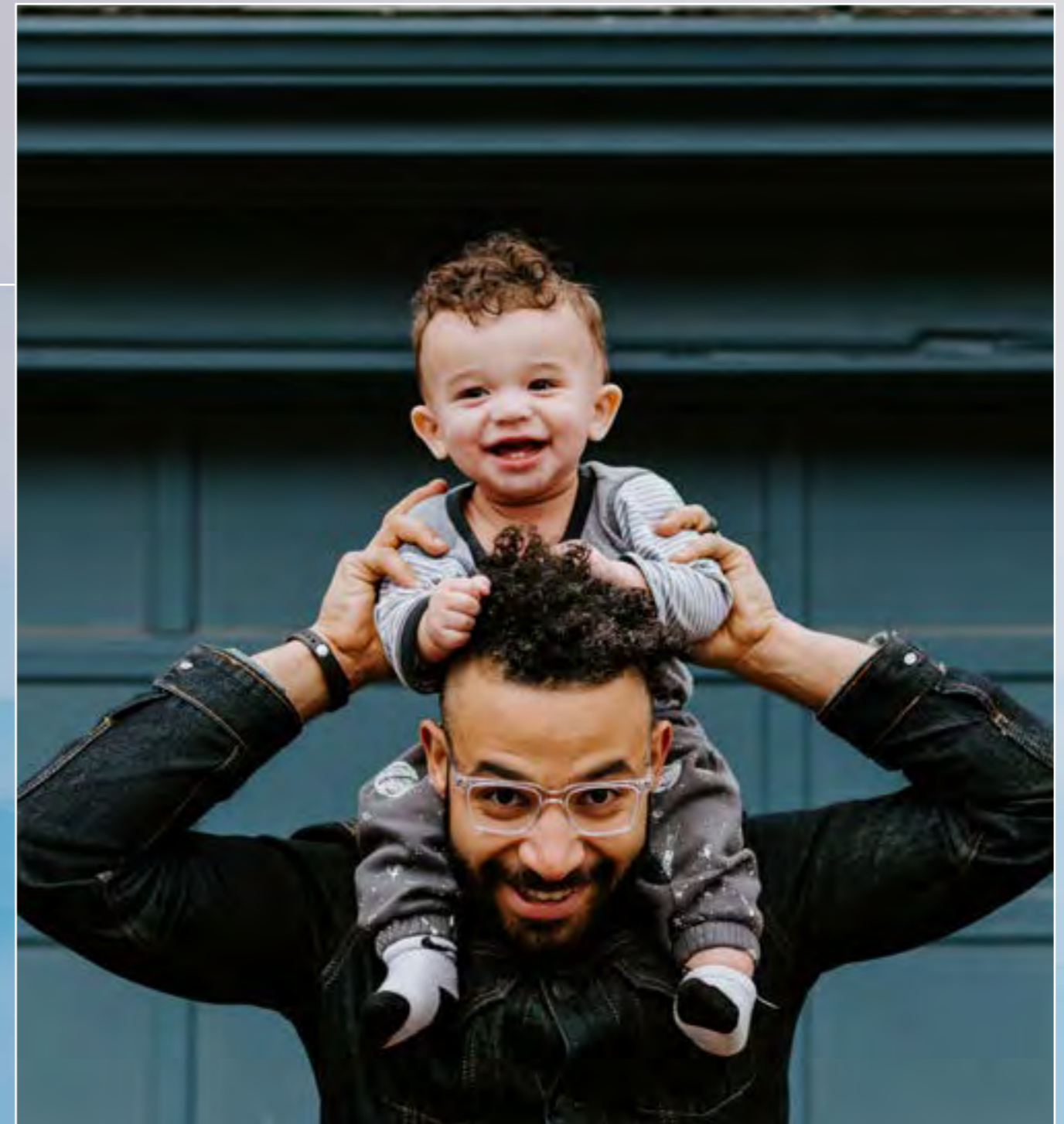
Uli Homann, Corporate Vice President and Distinguished Engineer with Microsoft, explained:

“We are jointly building a canvas for experiences, that the airlines can take advantage of to bring their product, customized, individualized to the right customer at the right time.”

These modules will help airlines generate actionable insights in a timely manner, allowing the industry to move toward a contextualized approach. They leverage the Microsoft Azure stack and require minimal customization for airlines using Azure cloud services. They have large libraries of built-in connectors to different data sources, a set of out-of-the-box business rules, quality checks and enrichment rules.

John Lonergan, Vice President, Creation Platform, with Amadeus, added:

“This is a platform designed to bring us together in order to meet the changing needs of the travel industry - we want to bring value to all travel players and their customers. With the Amadeus Creation Platform, we are working to connect the various datapoints of the travel industry in order to find patterns and similar behaviors, to build a wider understanding of the traveler.”



“If we can define a profile of a traveler, and respond to changes in their journey, this will allow us to offer the right personalization at the right time. We are creating a center for the industry, a repository of synchronized data, to the benefit of all.”

Part **3**

On the horizon – what comes next for the travel industry

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A focus on
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(i) New opportunities in
search – where next?

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(ii) Employee Experience

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Orchestrating the travel
ecosystem

Amadeus and Microsoft are working to develop the next generation of tools to drive value and deliver on the promise of a more fulfilling traveler experience. But the challenges stretch beyond the frontier of the technically feasible. A fundamental shift in mindset is required within the industry if this process is to succeed, with a renewed focus on how to foster greater collaboration, partnership, openness and creativity. Only then will the industry be able to unlock the potential of more purpose-driven trips.

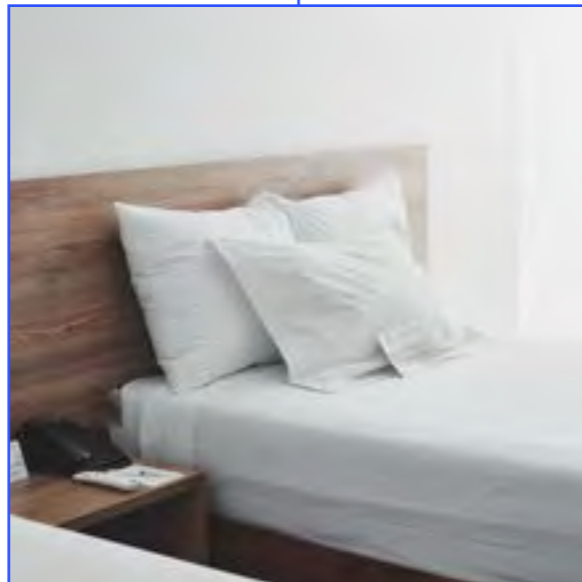


That change is examined here – alongside what it might mean for the traveler.

From an industry perspective, rethinking the experience and relaxing the concept of ‘owning’ the traveler is key. Under current conditions, an airline takes responsibility for flying a passenger to their destination, a mobility provider for getting them to the door of their hotel and then the property for their stay. These discreet processes can work well – but they are not a single journey.



To evolve, the industry will need to join the dots between the various stages to create a unified whole. Stakeholders will have to know where the traveler is at all times, what they are seeking to achieve – and offer them the tools to do so.



Javier Campo, Head of Global Partnerships, Hospitality, with Amadeus, explains:

“Within our industry, there has traditionally been a focus on efficiency and cost – making the right offer at the right time. But we need to move further, to understand the context in which the traveler is making a trip – and to act accordingly.”

“Imagine I am a business traveler, if a plane is delayed, a notification can be passed to the hotel informing them I will be late checking in and that I might require room service and a late check out. Well executed, the system will rebook my transfers and even send a Teams notification to my colleagues informing them of the delay. Similarly, if I have a presentation in the morning, but location data reveals I am still in the hotel, a prompt can be sent and a taxi ordered. We must meet the needs of the traveler in a time sensitive way, utilizing all of the available data effectively.”

Only a deeper appreciation of the benefits of collaboration can bring the next iteration of the industry to fruition. Only then will the sector be able to maximize the value of each journey. There is a need for stakeholders to come together to agree common standards for data, protocols for its use and procedures to ensure security.

Traveler Tribes

In order to drive greater value for travelers, new technology must effectively meet their needs. But what will the traveler of tomorrow look like? Amadeus sought to explore this question with Traveler Tribes 2033, a report - administered by Northstar -

which revealed four new traveler profiles set to emerge in the next decade. The work drew on a global survey of over 10,000 travelers across 15 markets, 22 expert interviews, 5.8 million data points and the application of psychographic segmentation techniques.

What do the Traveler Tribes look like?

With fast-paced lives, **Pioneering Pathfinders** (the largest of the Traveler Tribes) will be very comfortable using all forms of alternative payment methods in 2033, whether via cryptocurrency or within a virtual reality (VR) environment, while **Travel Tech-fluencers** are defined by how much technology they own. At the same time, despite a wider skepticism about technology, **Memory Makers** are excited about VR and

augmented reality (AR) preview tours, with the majority expected to use both before purchasing a trip. Finally, while **Excited Experientialists** are the 'anti-planners,' they are also open to technology that helps them accelerate certain aspects of their journey, with many expecting to use AI in the airport.



Decius Valmorbidia, President, Travel with Amadeus, said:

“As an industry we want to build travel experiences that are both inspiring and inspired. We can only do that by understanding what travelers want now and into the future. As we look ahead, it is clear that what the Excited Experientialist will require will be different from that of the Memory Maker.”

“As technology advances through AI, biometrics and the Metaverse, we are able to deliver more tailored journeys that meet the needs of different types of travelers – whether it is the desire for speed, comfort, reassurance or excitement.”



Each of the four Traveler Tribes will require different technology to create their perfect trip – the industry will not be able to offer a one-size-fits-all approach. The work suggests, while many travelers will be open to new and emerging technologies and will want to travel in more sustainable ways, others will be concerned about the proliferation of technology and the increasing need for cyber-security and data privacy.

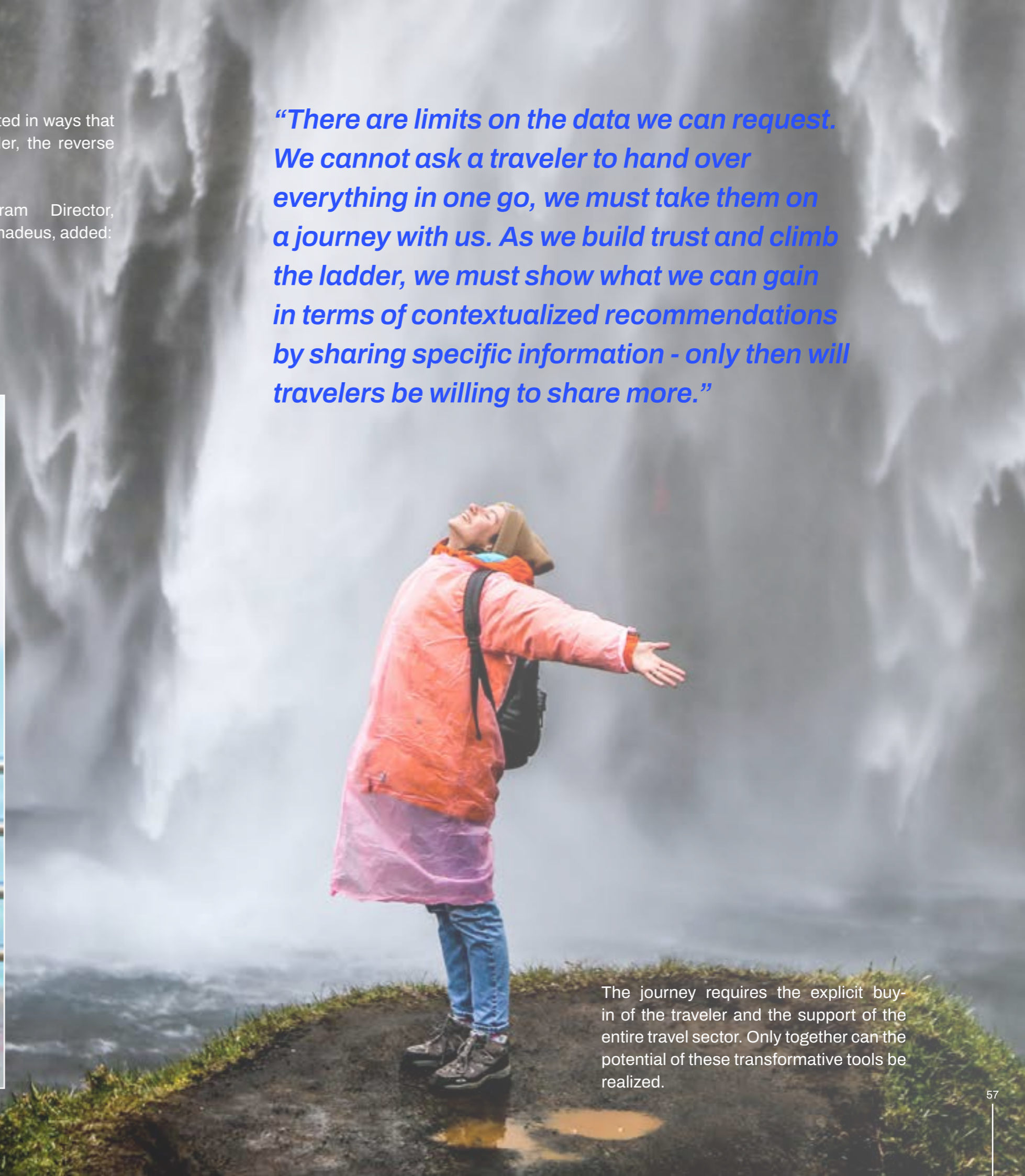
The industry must work together to ensure all travelers benefit from the technological advances discussed in this paper.

On the other side of the coin, the traveler should be convinced of the benefits of contextualization – they must see the tangible results of sharing data. If the sector can clearly demonstrate who has access to information and how they are planning to use it, the willingness to share

will grow. If data is exploited in ways that are unseen by the traveler, the reverse will be true.

Fredrik Odéen, Program Director, Corporate Strategy, at Amadeus, added:

“There are limits on the data we can request. We cannot ask a traveler to hand over everything in one go, we must take them on a journey with us. As we build trust and climb the ladder, we must show what we can gain in terms of contextualized recommendations by sharing specific information - only then will travelers be willing to share more.”



The journey requires the explicit buy-in of the traveler and the support of the entire travel sector. Only together can the potential of these transformative tools be realized.

A focus on co-innovation

Building intuitive solutions that understand the context underpinning a journey and serve the right proposal at the right time through the right channel is the future of the travel industry. In the coming years, Amadeus and Microsoft aim to bring the sector through this process of change, building better traveler experiences by integrating and responding to a deepening understanding of the 'purpose' of a trip.

Below, two examples are explored – search and employee experience – where these changes are already being felt. Both are examined over three Horizons, focusing on the short-, mid- and long-term changes expected and what that adjustment might mean for the traveler.

(i) **New opportunities in search – where next?**

(ii) **Employee Experience**



(i) New opportunities in search – where next?

Highlighted by research from Northstar, search is an area where these new technologies can have a significant impact. Here, Amadeus and Microsoft have a vision to bring a completely new experience to travelers, revolutionize processes and reduce travel players' customer acquisition costs.

The two technology companies envisage the process of change in three distinct phases, with **Horizon 1** focused on improving the performance of existing services. This means breaking away from existing constraints by adding additional processing and computing power in order to make search perform better, both in terms of cost and speed, without sacrificing accuracy.

With this foundation secured, **Horizon 2** is focused on cross-channel personalization and contextualization. Here Amadeus and Microsoft are developing tools to allow the industry to draw joined-up data from multiple sources, allowing partners to create relevant offers for travelers wherever and whenever they are on a trip. These scenarios will leverage Azure Artificial Intelligence and Azure Confidential Computing.

Looking ahead, **Horizon 3** will allow Microsoft and Amadeus to support

— HORIZON 1

— HORIZON 2

— HORIZON 3

industry transformation. New immersive interfaces, or, eventually, the metaverse or similar, will enable new ways of searching. Inputting destinations and dates manually will become a thing of the past, replaced with a new user experience. Thanks to data sharing within the travel ecosystem, a developing understanding of micro signals from both new and existing touchpoints, associated with conversational capabilities, travel sellers will be able to target travelers with recommendations like never before.

“The most successful offer is the one that the traveler was just about to search. ‘Can I arrange reschedule your meeting since the flight was delayed?’ ‘Traffic is terrible, I can book you a train/subway/helicopter that will get you to the airport on time.’ ‘We have arranged a happy hour for you and your six business partners at 19:00.’ ‘Three of your top LinkedIn connections are in New York the same day you are in town; would you like to share potential meeting times?’”

Eric Bailey, Global Director, Employee Travel and Devices, with Microsoft, explained:



Amadeus and Microsoft can enable this seamless orchestration of data and touchpoints to help travel sellers reach their customers at the right time and with the right content. For the traveler, this will mean opportunities offered as they are needed and tailored to their needs. As the ecosystem responds to changing requirements, friction will fade, pain points will diminish, and value will be maximized.

Julie Shainock, Global Leader, Travel and Transportation, for Microsoft, states:

“We are moving toward a point where we can offer opportunities with minimal input from the traveler. We will be able to draw data to understand the context of a trip, even before the search process begins.”

MELIÁ

Meliá – which expanded an existing partnership with Amadeus to become a Cytric Easy customer in 2022 – was quick to understand the value of contextualization in the travel industry and the difference it can make to travelers.

José María Dalmau, Business Development Vice President of Meliá Hotels International, explained:

“In the last few years, Meliá has been investing in a 360° digital transformation, that has been key to improve our customer value proposition and to differentiate the company from our competitors. We have built a technological ecosystem and implemented a full customer-centric digital strategy, which has been proven a long-term success.

At Meliá, we believe that, by understanding the context of each journey, we can offer more relevant and personalized services and products, which will ultimately lead to increase satisfaction and loyalty, and greater revenues.

In that context, we are deploying several strategies. One of them is data management. We are incorporating all data sources, first party and third-party data, into our data system. Thanks to the advanced analytics, we can identify high-profile prospects and activate them: from content management to providing planning recommendation or offering exclusive offerings.

Data is the new black, and we have set up rules and tasks to enrich their quality: unique customer identification, protocols to avoid poor quality data and duplicities, simplifying registration and activation, etc. Therefore, quality data helps us nurture the relationship with our guests on every single channel.

Our loyalty members demand from us more personalized experiences, from the moment they are considering us through the booking process and the hotel onsite experience. They expect personalized campaigns, incentives, rewards, and more but they are also very cautious about providing their data. That's why transparency in the whole process of data capture and management is key to

maintain their trust and get their satisfaction.

Technology will continue to evolve and data will become more sophisticated and widely available, providing us with a better understanding of the whole customer journey. The use of artificial intelligence, machine learning and big data analytics will help companies make sense of the vast amounts of data they collect, better predict and understand traveler behavior and offer personalized recommendations in real-time. At Meliá, these technologies have led us to increase conversion rates on melia.com by 5% and improve the customers' progress along the booking funnel by 32%.

It also plays a crucial role in enabling companies to deliver a more traveler-centric experience. And the fuel of any organization are their teams - it is crucial to have data-driven teams. Developing this ability to answer to the new challenges in our industry comes from the curiosity to learn more about our guests, to be empowered to create new ideas, services and experiences to make sure our guests are engaged and keep on coming back.”



(ii) Employee Experience

A second example can be found in corporations, where the COVID-19 pandemic has accelerated a desire for a new way of work. New forms of collaboration are emerging. Microsoft is making significant investments in the future of the workplace through technology like Microsoft Teams and Viva. The company aims to consolidate all employee workflows into a single platform in order to increase productivity and provide insights on the way employees engage and collaborate.

“Viewing travel as a way to define company culture and refocus business goals can jumpstart an organization’s ability to thrive in times of uncertainty. There is an opportunity to reframe business travel from a transactional mechanism to a valuable transformational tool for companies – and not seeing travel as a strategic tool will become increasingly risky.”

Evan Konwiser, Chief Marketing and Strategy Officer, American Express Global Business Travel

The trend creates an opportunity to revolutionize the way travelers collaborate, creating an ecosystem of partners focused on delivering the best employee experience. Here, the objective is to harness existing data to provide useful insights, recommendations, and proactive service propositions to employees, people leaders, HR and travel functions about the way employees work and engage most effectively.

HORIZON 1

In **Horizon 1**, Amadeus is working alongside Microsoft on the reengineering of **Cytric Travel & Expense**. Today, the tool offers an end-to-end digital solution experience, beyond solely online booking, thanks to ‘in-trip’ and ‘post-trip’ features that will be scaled in future.

HORIZON 2

Horizon 2 was discussed earlier, with the release of Cytric Easy for Microsoft Teams and its future integration with other Microsoft 365 applications. This has enabled an immersive experience for users, overhauling collaboration capabilities. Travelers can now focus on the collaboration a trip brings, the experience and value, rather than the logistics.

HORIZON 3

Finally, the vision for **Horizon 3** is to explore how the industry can make the most of any interaction, whether in-person, virtual or hybrid, thanks to data-driven capabilities and a recommendation engine. When realized, travelers could choose the best way to collaborate and, if they decide to travel, to maximize return on their investment.



Orchestrating the travel ecosystem

Composed of thousands of entities of all sizes, the travel ecosystem is one of the richest in the world – with Amadeus and Microsoft well positioned to bring together its diverse elements. In its constituent parts, the sector connects cultures, globalizes once isolated communities and enables all travelers to make lifelong memories. It is also the reason why the industry is so resilient and has pulled through extraordinary challenges over the past three years.

No single company, government, or

movement, however, can address this wave of challenges, delight consumers and win on their own. The travel industry is so much stronger together – as an ecosystem that interacts, collaborates and shares resources. There is a need for an ambitious, open and cooperative approach, not just in terms of technology and commercial partnerships, but also in addressing the global issues that impact the industry.

One organization excelling in the ecosystem space is Expedia Group.

Expedia

Expedia Group is taking an ecosystem approach to its operations, working to become more traveler-centric and building relationships across the entire traveler journey to create the best end-to-end experience. To accomplish this, the company is developing products that provide travelers with the information and actions they need when they need it, increasing their confidence, reducing stress and removing friction.

Andrew Dyer, Vice President, Connectivity and Platform Operations, at Expedia Group had, said:

“We need to create a place where startups, influencers, developers, data scientists and even marketers can work together to create new ways to enable and sell travel. Our vision is to create a platform and ecosystem that power partners of all sizes with the technology and supply needed to thrive in the travel market.”

“To this end, we are rearchitecting our platform and building it with open APIs, so that we can deliver an entire e-commerce suite of building blocks like payments, fraud, supply and service that anyone can use to accelerate, enhance, or even enter the travel market.”

To advance innovation in the travel industry and empower startups and small- and medium sized businesses to build new capabilities on their platform, Expedia Group launched its Accelerator initiative in late 2022. The first program focuses on increasing access for underserved travelers. The Accelerator initiative will launch an additional program focused on co-developing new capabilities on Expedia Group’s platform. Dyer added:

“The pandemic created more discerning consumers with higher expectations for flexibility during their travel experience, from booking a place to stay to the taxi ride home. They weigh a variety of factors when making booking decisions. Today, flexibility and price are top of mind, but other considerations are also at play. These factors are explored in the latest [Traveler Value Index](#).”

“So, in addition to ensuring the booking process is as seamless as possible, it is critical brands keep a pulse on traveler feedback after the fact to understand how customers have perceived their experience. Whether through reviews, social media, or your own channels, collecting and acting on feedback is key to optimizing the travel experience you provide.”

Conclusion: A new era of change beckons

Together, Amadeus and Microsoft are positioned to achieve an ambitious transformation of the travel industry - one focused on a deep understanding of each journey and the ability to instantly answer needs and opportunities as they surface, in order to drive maximum return.

So, how will the industry achieve this ?

Value:

with more people than ever before embarking on journeys, but facing new challenges along the way, maximizing the value of each trip will be key to success. Using the new technologies, tools and solutions outlined in this report, the travel industry will be able to better serve its

customers and drive increased return on investment.

Contextualization:

A deep understanding of the purpose of a trip, the traveler's context at a given moment, and the ability to respond accordingly, is the next evolution of the travel industry. Mastering this, travel providers and sellers will be able to build a more human-centric approach to the benefit of all.

Data:

By synchronizing data across the entire journey, sharing with relevant stakeholders, inferring the need of a traveler at a given time and responding

to it appropriately, the industry will be able to create new touchpoints, reduce friction and create personalized services, with the traveler front and center.

AI:

Artificial Intelligence will empower travel players to formulate unique proposals at appropriate times. Technology will allow them to offer prompts at any point of the trip as the need arises – with minimal direct input from the traveler.

Best practice:

Demand for change is real – and growing. Travelers are enjoying the fruits of a deeper understanding of their needs in a number of areas – including entertainment. The travel industry will be expected to meet rising expectations. Those travel brands that rise to the challenge will gain a significant advantage, being able to differentiate their offering from competitors, drive sales and win loyalty.

Whole trip experience:

A push for value will impact the entire industry – with each element of a journey ripe for disruption. A new search

New tools, new possibilities:

experience will draw all available data to offer curated suggestions, many of which previously would not have been possible, while new touchpoints will make the traveler experience better throughout the journey, with real time suggestions tailored just to them.

From AI, improved data analysis and the metaverse, a whole range of new tools are becoming available to the travel industry. It will have to learn to effectively harness them in order to deliver the personalized experiences travelers want and to increase the value of each trip.





Microsoft and Amadeus are developing the technical solutions needed to build this new travel industry – while looking for like-minded partners to join their mission. The wider sector will have to be prepared to overcome the challenges that have slowed progress to date – siloed data, a desire to own the

traveler and a failure to collaborate. While the industry is changing, if the process can be accelerated, value can be realized sooner. Technology can offer many solutions, but creativity and mindset will be critical to fulfilling the promise of a more human-centric travel experience.

The travel industry stands on the cusp of a period of great opportunity, with new tools offering a chance to understand the traveler better than ever before. Amadeus' depth of knowledge in the sector, its place at the heart of the global travel ecosystem, combined with the credentials of Microsoft has created an unrivalled collaboration to lead this next generation of change – to the benefit of all, traveler, corporations and travel companies alike.



aMADEUS



Microsoft