1. Amadeus in the travel industry
1. Amadeus in the travel industry

1.1 Travel industry market

Overall travel volumes

The contribution of travel and tourism to the world economy is estimated at USD 8.8 trillion, or more than 10% of the global GDP. This industry currently supports 319 million jobs – almost 1 in 10 globally.¹

For eight consecutive years, the travel and tourism sector has outpaced global economic growth. The direct contribution of Travel and Tourism to GDP in 2018 was USD 2.8 trillion (3.2% of GDP). This is forecast to rise by 3.6% to USD 2.8 trillion in 2019.¹

Looking ahead, in the next decade the value of the overall travel industry is expected to grow at a compound annual rate of 3.7%, reaching USD 13.09 trillion, representing almost 12% of the global GDP and supporting more than 421 million jobs.¹

The number of air travelers is expected to double over the next 20 years to 8.2 billion, representing a compound annual growth rate of 3.5%.² This growth in passengers is leading to major airport investment plans backed by governments and industry partners, with 427 new airports under construction in 2018.³

Hospitality is also growing at a healthy rate, with a 27% increase in number of rooms worldwide between 2010 and 2017.⁴ ↪

³ Source: CAPA – Centre for Aviation. Global airport construction review 2Q2018: USD803 billion costs.
⁴ Amadeus estimation based on various sources.
☞ See “Diversification areas,” p. 42.
Regional development

Developments in the travel sector will be very uneven across different regions of the world.

Growth in the travel industry is particularly strong in Asia-Pacific, the Middle East and Africa, with expected annual average growth rates in these regions in the period up to 2028 of 4.6%, 5% and 5.9%, respectively. On the other hand, Europe and North America are expected to grow at annual rates of around 2.5%.

Looking at air travel only, the same picture emerges, with Asia-Pacific, the Middle East and Africa expected to grow at annual rates of around 4.5% until 2038, while we will see more moderate growth of 2.4% and 2% for Europe and the US, respectively.

As a consequence of the regional growth differentials, the center of gravity in the travel world will shift from west to east, with Asia-Pacific being the major growth catalyst. In 2018 there are only two Asian markets among the top 10 air passenger markets. However, driven by continued robust economic growth, the upsurge in middle-income households and the increase in first-time flyers, by the mid-2020s China will have displaced the United States as the world’s largest aviation market, and by 2030 three out of four of the largest aviation passenger markets will be in Asia. Indeed, out of 43,000 airplanes projected to be delivered over the next 20 years, 16,000 will be to Asian markets. This growth is driving the increase in airports in the region, with China aiming to build 136 new airports by 2025 and India planning 100 new airports by 2035.

Amadeus is well positioned to capitalize on Asia-Pacific growth. We have a wide local presence and a workforce of more than 3,900 people based in the region, representing 21% of our total workforce, as well as a strong market position in the distribution business and many important carriers as customers in our Airline IT business.

Trends with a potential to impact travel volumes

The expected travel volumes can be affected by geopolitical events, economic growth levels, capacity constraints and sustainability issues.

Geopolitics

Geopolitical and security events in certain parts of the world are affecting travel significantly.

Political tensions and an increased level of protectionism are affecting travel negatively. Indeed, the International Air Transport Association (IATA) projects significant differences in the growth of air travel over the next 20 years under a base case scenario (“Constant Policy”: 3.5% growth p.a.) and two extreme scenarios (“Reverse Globalization”: 2.4% p.a.; “Maximum Liberalization”: 5.5% p.a.), leading to a difference of almost a factor of two between the best- and worst-case scenarios by the end of the period.

At the same time, threats of terrorism are leading to restrictions on travel, increased security and border control, and an increased administrative burden for the traveler. This, coupled with a reduced appetite for travel, can have a dampening effect on demand. Experience has shown, however, that security issues tend to affect specific countries or regions only and are generally short-lived. Amadeus’ high geographical diversification helps to limit the impact of such issues on our business.

Security is another area where technology has provided solutions in the past, and this is likely to continue, presenting a further opportunity for large travel IT providers with the required scale and reach such as Amadeus.

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8 Source: http://www.chinadaily.com.cn/china/2017-03/16/content_28576678.htm.
Economic growth

Economic growth levels have a significant impact on travel industry growth. For example, the average growth rate of air passengers is around 1.5 times that of the global GDP, although this multiplier varies substantially from one region to another. Therefore, future economic recessions or upturns will have a strong impact on travel volumes.

Capacity constraints

The increase in travel is leading to strains on travel infrastructure, and in particular in airports. In the summer of 2018, 204 airports were designated Level 3 slot-coordinated facilities, meaning that they do not have the runway, ramp or gate capacity to handle all of the flights that carriers would like to operate. At the same time, despite the strong investments in airports, Eurocontrol estimates that by 2040, 160 million passengers will be unable to fly due to a lack of airport capacity, resulting in €88 billion of lost economic activity across Europe. As technology can facilitate more efficient use of these scarce resources, the industry will need to invest in IT systems.

Sustainability

The travel and tourism sector is challenged by issues such as overcrowded destinations, income inequalities and human-induced climate variability. We expect a more specific and strict legal framework on these and other issues to emerge, which could have a negative impact on travel. However, in regards to aviation, the industry is determined to grow sustainably, committing to carbon-neutral growth from 2020 onwards, and to cutting net emissions to half the 2005 levels by 2050. Moreover, technology from IT companies such as Amadeus can contribute to the more efficient use of infrastructure and energy.

The need for technology in supporting the evolution of the travel industry

The evolution and growth of the industry is highly dependent on technology.

The travel ecosystem consists of a myriad of providers – airlines, hotels, railways, car rental companies, destination services providers, etc. – as well as countless travel sellers. Technology is powering the ecosystem by connecting all these different travel providers, allowing travelers to search for and book the optimal journey, consisting perhaps of several travel services (e.g. air, hotel and car). Amadeus plays an important role in powering this ecosystem via our distribution business, which connects travel providers with travel sellers all over the world.

For travel providers to succeed in today’s world, a strong focus is required not only on cost efficiencies but also revenue maximization, as well as the building of brand and customer loyalty. In this context, technology also plays an important role in enhancing a wide variety of core operations for travel providers. Amadeus has IT offerings for, among others, airlines, hotels and airports.

The hassle of travel can be a significant impediment to the evolution of the travel industry. However, recent and emerging technologies are making serious improvements to this situation, for example:

Uninterrupted connectivity facilitated by mobile internet and smartphones means that changes can be made on the move in case of travel disruption or a change of plans.
The use of machine learning makes it possible to fine-tune search results based on the traveler’s explicit and implicit preferences to create highly personalized and contextual offers for the traveler’s next flight, hotel room or car rental.

Emerging initiatives aimed at providing digital identity tightly linked to the user’s physical identity are enabling a more seamless and personalized processing of the traveler. Within Amadeus, we are exploring solutions and technologies to provide a trusted digital identity token, while ensuring that security and privacy is a core principle of the design.

New technologies such as blockchain are enabling a new way to share, store and use data, leading to more efficient and transparent information exchange processes during the travel journey. The application of blockchain to travel is still in its infancy, but we have identified a number of potential use cases, for example simplified and more secure passenger identification and improved baggage tracking.

Amadeus is supporting the growth of the travel industry with significant investments in technology. Having spent 18.1% of our total revenues (almost €900 million) on R&D in 2018, we are the number one investor in R&D in the travel sector worldwide and number two among software companies in Europe.15

1.2 Amadeus profile

At the heart of travel

Travel fulfills our need to explore the world; to see new places, meet new people and be near to what’s important to us. Travel builds economies, broadens cultures and creates connections between societies. Whether you provide a travel service or are in the business of buying and selling travel, we belong to an industry that is dynamic, powerful and fast-moving. As one of the world’s largest business sectors, travel powers progress.

However, the travel industry must also adapt and respond to modern challenges, such as protecting the environment, keeping us safe and secure, helping economies to grow and preserving local cultures. As our world evolves, so do travelers. The boom in digitalization means travelers are always connected. They require access to travel anytime, anywhere, and they expect personalized experiences that make journeys more rewarding. To keep up with the demands of travelers, the industry must continue to innovate – from the way we book and sell travel, to the services we offer. And we must do this in a way that is sustainable and responsible, so that we can safeguard our planet and communities for generations to come.

Amadeus sits at the crossroads of travel and technology. We power the solutions that keep the world of travel moving. And we listen and learn, directing our investment into new technologies that can drive travel forward.

Who we are

Amadeus is made up of a truly global team of close to 19,000 professionals. With over 145 nationalities, we serve customers in more than 190 countries. We are committed to helping global travel make a positive impact on communities around the world. And we are united by a common purpose: to shape the future of travel.

As shown in the map, Amadeus has built a global commercial and operational network that has become one of the key components of our value proposition. Our corporate headquarters are in Madrid, Spain. Our main research and product development center is located in Nice, France, while the core components of our operations are run from our site in Germany.

We operate under a highly resilient, transaction-based business model linked to global travel volumes. We are publicly listed and part of the Spanish IBEX 35 Index, as well as stock indices worldwide like the EURO STOXX 50.

15 The 2018 EU Industrial R&D Investment Scoreboard.
Amadeus operates across the globe

These are some of our key sites around the world

- Headquarters
- Key R&D centers
- Key sites

**Americas**
- Bogotá
- Boston
- Buenos Aires
- Dallas
- Miami
- Minneapolis
- New York
- Orlando
- Portsmouth
- Salt Lake City
- São Paulo
- Tucson

**Europe, Middle East and Africa**
- Aachen
- Antwerp
- Barcelona
- Berlin
- Breda
- Copenhagen
- Dubai
- Erding
- Frankfurt
- Istanbul
- Johannesburg
- Kiev
- London
- Madrid
- Nice
- Paris
- Sofia
- Stockholm
- Strasbourg
- Zaragoza

**Asia-Pacific**
- Bangkok
- Bengaluru
- Manila
- Seoul
- Singapore
- Sydney
- Tokyo
What we do

Our purpose is to shape the future of travel, using the latest technologies to develop solutions for our customers. We connect travel players and make journeys happen – journeys that are personalized, rewarding and purposeful.

Technology is critical to moving the travel industry forward, and we invest millions of euros each year in research and development. We power travel by providing technology solutions that connect any travel business to any potential traveler. Online, offline and mobile, we have built the largest travel ecosystem in the world, offering travelers more choice and transparency than ever before. Our technology achievements have been recognized across the industry, winning us multiple awards in areas such as innovation and sustainability.

The customers we serve

We build technology solutions that help airlines and airports, hotels and railways, search engines, travel agencies, tour operators and other travel players to run their businesses and improve the travel experience, all over the world. And we continue to innovate, bringing more products and services to market as quickly as possible, so we can deliver on customer expectations and respond to industry challenges.

Amadeus sits at the heart of every journey. Connecting travel providers, buyers and sellers, we process 20 bookings every single second – that’s more than 1.7 million bookings a day.
Where we have come from – our history and key milestones

Amadeus was formed in 1987 by our four founder airlines: Air France, Iberia, Lufthansa and SAS. From our origins supporting airline distribution and then IT, we gradually expanded our capabilities to serve customers across the entire travel industry. Fast-forward three decades and Amadeus has become one of the world’s largest technology companies for travel and tourism.

At the crossroads of travel and technology, two industries that have grown exponentially over the last three decades, the opportunities for innovation and growth have been amazing.

Over the years we have broadened our scope, launching our Airline IT business in 2000 and building on that with the acquisition of Navitaire in 2016 to broaden our offerings for low-cost carriers.

We accelerated the move into the hotel IT sector with the acquisition of Newmarket in 2014. Moreover, our acquisition of TravelClick in 2018 confirmed our strong commitment to the hospitality industry, not only broadening our product portfolio but also our know-how and global presence. In a highly fragmented market, Amadeus now has the people and the technology to help all hoteliers rise to the challenge of delivering a great experience for their guests.

We have also expanded our portfolio to merchandising, revenue management, travel intelligence and travel expense management, harnessing the potential of cloud computing, mobile and big data for our customers. Throughout our history, investment in research and development has been integral to our growth.
Where we are going

Over the last three decades, we have taken giant leaps in propelling the travel industry forward. We have gained the trust of thousands of customers thanks to our great people, cutting-edge technology and ability to adapt and evolve. We retain our unique vision, determination and commitment to working more closely than ever with our customers, existing and new, to shape the future of travel together. None of this will change.

What will change is the world around us. New technologies are bringing new opportunities and challenges at an accelerating pace. New generations want to experience travel in new ways. We are investing in these opportunities and exploring new models that will drive our own and our customers' growth, experimenting with technologies that will make travel more rewarding for all of us. We continue to recruit the best people in the industry – a workforce that is multi-cultural, multi-generational and multi-skilled. We continue to invest in innovation as a strategic priority to ensure we can future-proof our technology for all Amadeus customers. As the travel ecosystem expands, we also continue to broaden our focus, collaborating with industry partners, investing in acquisitions and nurturing start-ups to ensure we have the most comprehensive travel offer.

We are accelerating our ways of working; making processes leaner; building new and better ways to collaborate; and using new structures and systems to catalyze cooperation across teams, functions and geographies – within Amadeus and with our customers.

The future for travel looks extremely bright: innovation, collaboration and sustainable business practices. This is how we will move forward. And together with our customers and partners, we will power better, more rewarding journeys long into the future.

Recognition and awards

We are committed to investing in innovation and collaboration, developing talent, promoting sustainable business practices, advancing the travel industry and giving back to society. In 2018 respected organizations all over the globe recognized our efforts and achievements in these areas.*

- **DJSI – Europe and World indices**
- **Silver Class Sustainability Award – RobecoSAM**
- **16th Most Sustainable Corporation in the world (100 Most sustainable companies, Corporate Knights)**
- **Entry into EURO STOXX 50**

* For a full list of our awards, please visit: www.amadeus.com/awards
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Amadeus’ Executive Committee*