

amadeus



2018 Global Report

A business, financial and sustainability overview

2018 Amadeus Global Report

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The objective of this Global Report is to provide a comprehensive and transparent view of Amadeus' activities, operations and performance during 2018. We have taken into consideration a broad perspective covering financial and non-financial information and we are providing an overview of the company from an economic, social and environmental outlook.



For a more interactive reading of this report,
visit the online version at
<http://www.amadeus.com/global-report-2018>





Message from the Chairman of the Board

Dear friends,

Every year, and with increasing intensity, the travel technology sector is delivering exciting innovations and facing new challenges.

I would like to comment on three topics that potentially present both opportunities and risks to the future of the travel industry: the transforming effect of new technologies, current geopolitical events affecting the way in which the industry is developing, and the growing relevance of sustainability in the travel industry.

In relation to new technologies, the increasing connectivity of travelers, mainly through the exponential use of smartphones, is just the tip of the iceberg of what technology will deliver in the travel industry in the not-too-distant future. And the exciting news is that, in all likelihood, the speed at which new technologies will hit the market will be ever faster. Indeed, in these exciting times the number of highly qualified technology workers is larger than ever, knowledge is shared with unprecedented ease thanks to the internet and the digitalization of data, and the financing of projects has become, on average, easier than ever before.

Amadeus is well prepared to face this technological future, with a set of unique capabilities like the largest community of travel-related software developers in the industry, extremely high-performance transaction processing power, rapid response

times serving hundreds of thousands of simultaneous users, the introduction of new technologies like artificial intelligence and the progressive use of cloud services and infrastructure. You can find more information on these aspects in this report's technology and innovation chapter.

In recent times we have been witnessing geopolitical events such as increased levels of protectionism and significant disparities in economic growth between regions, which can exacerbate the differences in travel industry growth in various parts of the world. In this respect, a global geographical reach has always been an important component of Amadeus' value proposition, and in the current geopolitical context our extensive coverage becomes even more valuable. As described in this report's sections dedicated to our business units, our global presence in terms of sites, business volumes and customer segments is evenly distributed. This balanced coverage provides significant resilience to our business, since an eventual recession in one region is compensated by the advance in others, in a sector where overall travel growth, after all, remains strong.

Indeed, if there is one prediction that we can feel confident about in the travel industry, it is long-term growth. On the one hand, growth provides business opportunities for all stakeholders, but on the other, we need to factor in sustainability as a major priority. We may not feel the urgency, but if we don't address issues like climate change seriously, we will not be able to maintain exponential industry growth without affecting the capacity of future generations to enjoy the same opportunities. We need to find ways to travel more sustainably, working together with industry stakeholders.

Over recent years, regulators and governments have shown increasing concern over the value that large corporations provide toward long-term sustainability beyond economic rewards to shareholders. For example, EU Directive 2014/95 mandates that large corporations should disclose specific non-financial and diversity information relating to environmental, social, human resources and human rights issues. We are fully committed

to adhering to the vision of these new regulations and to continuing to work in the future toward a more efficient travel industry for the benefit of all stakeholders and of future generations. Amadeus' focus on R&D investment, our talented and diverse workforce, our expertise in the market and our diversification strategy all help to address the challenges ahead and shape a better future for travel.

“

If there is one prediction that we can feel confident about in the travel industry, it is long-term growth.”

In this report you will find comprehensive information about the most important milestones of our business in 2018, including details on our sustainability practices. I hope you find it informative and of interest.



José Antonio Tazón
Chairman of the Board, Amadeus

Message from the President & CEO

Amadeus can reflect on 2018 as a year in which we have continued to grow, serving more customers, reaching more travelers and expanding our global reach. This year in particular, we continued our drive to diversify our business and service the broader travel industry.

A key moment of the year came in October, when we completed the acquisition of TravelClick, the US-based hotel technology provider. Our largest ever acquisition represented a huge step forward in the Hospitality market, transforming our portfolio and footprint. We also welcomed a new team of talented and experienced hospitality professionals, bringing our total number of staff across our business to more than 18,000 worldwide.

We are now a true hospitality leader, providing a wide range of innovative solutions to hotels and chains of all sizes. By the end of 2018, we had also completed the roll-out of the Guest Reservation System in InterContinental Hotels Group's 5,600 properties. Amadeus is now well positioned for future success in this crucial market.

Our established businesses also continued to grow throughout the year. Regarding our Airline IT solutions, several new airlines migrated either to the Altéa or New Skies platform, while the number of passengers boarded rose 12% to 1.85 billion. We continued to see our global footprint evolve, in particular with growth in North America and Asia Pacific, with 60% of our boarded passengers now generated outside of Europe.

Our Distribution activity is also expanding – in a tough and competitive market, we made strong progress in Asia, the Americas and the Middle East. We see the Distribution landscape changing rapidly, as airlines continue to explore alternative strategies to distribute their content, fulfilling changing traveler expectations. As both an IT and Distribution partner, Amadeus is well placed to support our customers' choices, whatever strategy they follow.

Our operational successes continue to be translated into financial strength, giving us the flexibility to invest in our people and technology. These investments will enable us to flourish long into

the future, and in 2018, Amadeus invested 17.8% of revenues in R&D, driving strategic projects such as Amadeus Cloud Services and NDC-X while improving our solutions portfolio and strengthening the security and resilience of our systems.

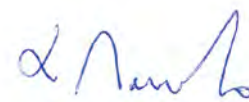
And to bring our long-term ambition to life, we rely on the talent, resourcefulness, and commitment of our Amadeus colleagues, who remain our most valuable asset and our real differentiator. Just like our business, our team is truly global, and our aim is to be established close to our customers, offering the best of Amadeus in each market in which we operate.

We are proud of the diversity of this team. We are also proud of the sense of responsibility with which they approach our business, and in particular regarding the wider impact of the travel industry in the world today. This report highlights some of the key initiatives being run to support the communities which our teams work in. In 2018, Amadeus joined the United Nations Global Compact pact, demonstrating our commitment to the universal principles on human rights, labor, environment and anti-corruption that the Global Compact promotes.

Once again, I would like to thank our Amadeus colleagues. Every day, their dedication helps make Amadeus the leading provider of technology in the travel industry.

I also want to thank our customers for their ongoing trust as together, we continue to power better journeys. It is a privilege to serve them. Finally I would also like to thank our investors for their continued support.

We look forward to working with you in the year ahead.



Luis Maroto
President & CEO, Amadeus



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Following global reporting trends and best practices, we have included these icons throughout this Global Report:

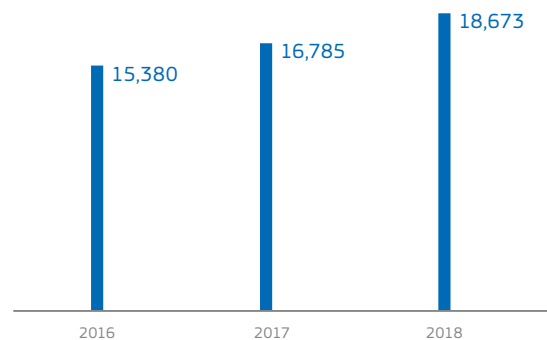
→ Further information provided in another section.

GRI 102 GRI Disclosure Label. Indicates that a Global Reporting Initiative (GRI) disclosure is reported on the page where the label has been placed.

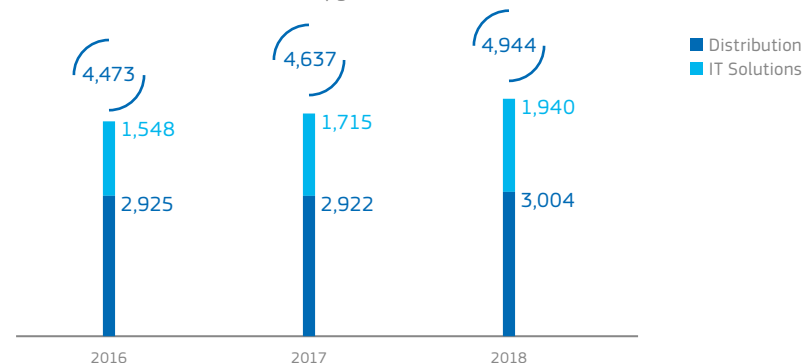
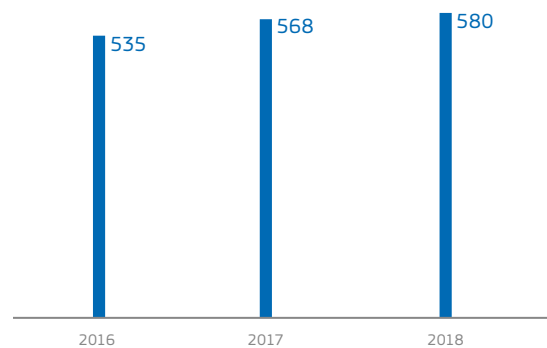
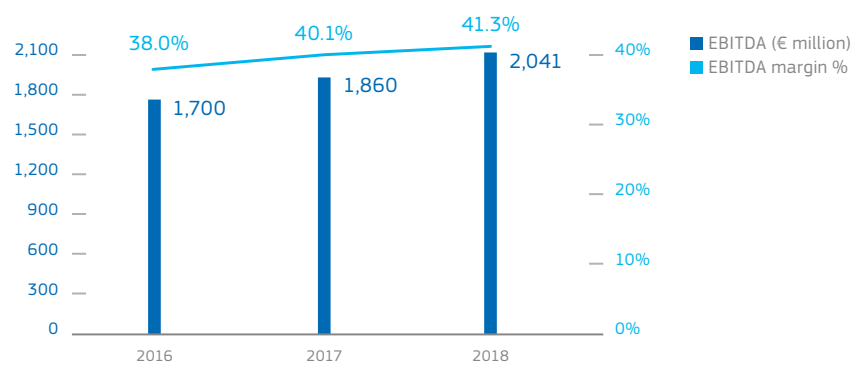
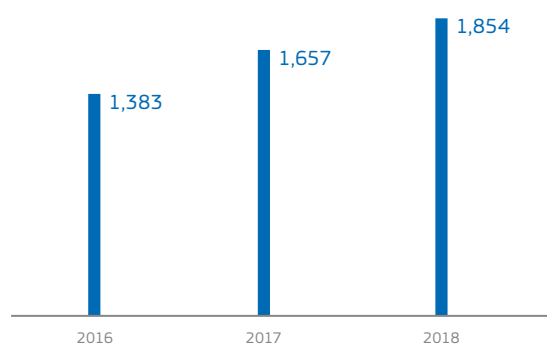


We have included the icons of the UN Sustainable Development Goals in the sections where we describe our specific contribution for each one.

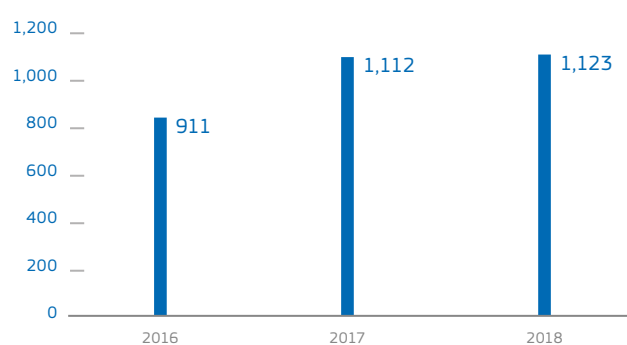


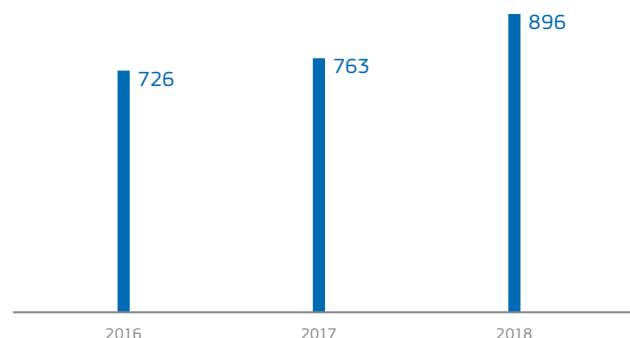
Total workforce (figures in FTEs)*

* Scope: All fully owned Amadeus companies. Figures in full-time equivalents (FTEs) as of December 31. FTE is the headcount converted to a full-time basis, e.g. an employee working part-time covering 80% of a full-time schedule is considered 0.8 FTE.

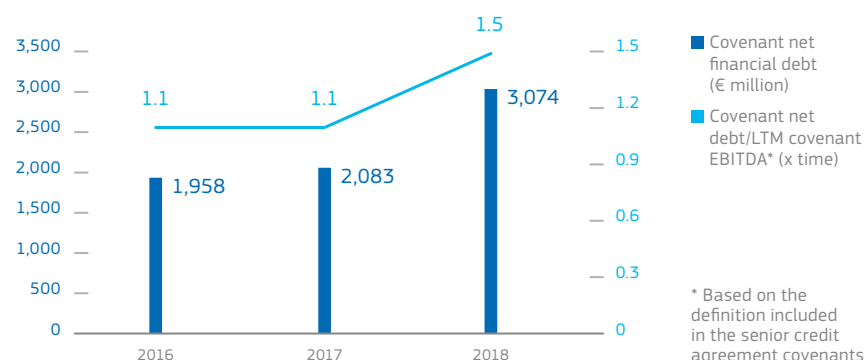
Revenue breakdown¹ (figures in € million)**Total travel agency air bookings** (figures in millions)**EBITDA¹****Passengers boarded** (figures in millions)*

* Passengers boarded, i.e. actual passengers boarded onto flights operated by airlines using at least the Amadeus Altéa Reservation and Inventory modules or Navitaire New Skies.

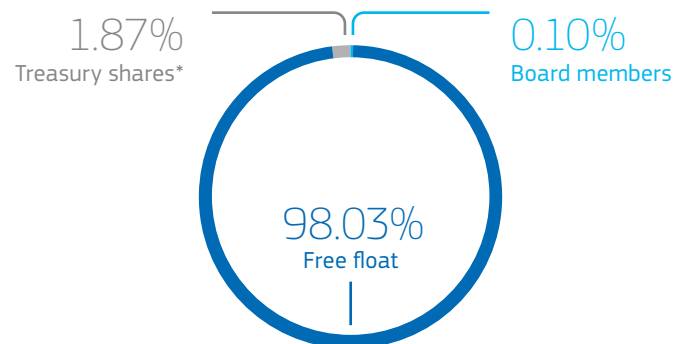
Adjusted profit¹ (figures in € million)

R&D investment (including capitalized R&D)* (figures in € million)

* Part of our R&D costs is linked to activities that are subject to capitalization, thus impacting the level of operating expenses that are capitalized on the balance sheet.

Net debt evolution*

* Based on the definition included in the senior credit agreement covenants.

Amadeus share structure

* This caption shows the Treasury Shares that the company bought to satisfy the delivery of shares to former Amadeus IT Group's minority shareholders according to the change equation established for the Merge between that company and Amadeus IT Holding.

Amadeus maintained its solid financial growth in 2018, a year marked by the acquisition of TravelClick. Our total workforce grew by 11.2%, to close to 19,000 people.

Total travel agency air bookings

In 2018, Amadeus' bookings increased by 2.1%. Asia and Pacific and North America were our best performing regions. In contrast, Amadeus' bookings in Western Europe declined, impacted by the downward industry trend and the loss of share at some mid-size online travel agencies.

Passengers boarded

Amadeus' passengers boarded grew by 11.9% in 2018. This growth was driven both by new airline implementations and by a 7.6% organic growth. Our geographical diversification was intensified in 2018, mainly due to our expansion in Asia and Pacific and in North America. In 2018, 60.3% of the total passengers boarded were generated outside Europe.

Revenue¹

Revenue grew in 2018 by 6.6%, to €4,943.9 million. Revenue from Distribution grew 2.8%, supported by an increase of both number of bookings and average revenue per booking. Revenue in IT Solutions grew by 13.1%, due to a solid volume expansion in Airline IT and double-digit growth delivered by the new areas of diversification.

EBITDA¹

In 2018, EBITDA increased 9.7% to €2,040.6 million. EBITDA growth resulted from the positive performances of Distribution and IT Solutions and a reduction in net indirect costs as a consequence of the adoption of IFRS 16 in 2018.

Excluding negative foreign exchange effects and the IFRS 16 impact on EBITDA, both revenue and EBITDA grew at high single-digit rates during 2018.

Adjusted profit^{1,2}

In 2018, adjusted profit increased by 1.0%, to €1,122m. Excluding extraordinary positive deferred tax liability adjustments in 2017, adjusted profit in 2018 grew by 6.0%.

R&D investment

In 2018, R&D investment³ amounted up to €896.4m, 17.5% higher than previous year. Growth in R&D investment in 2018 resulted from expansion of our product portfolio, diversification into new areas, shift to next-generation technologies and the impact of TravelClick's acquisition.

Net debt

Net financial debt, as per our credit facility agreements' terms, amounted to €3,074.0 million at December 31, 2018 (representing 1.47x times last-twelve-month EBITDA). The main changes to our debt in 2018 were the issuance of three Eurobond on September for a total amount of €1,500 million.

¹ Including TravelClick's 2018 consolidation effect of: revenue, EBITDA and adjusted profit contributions of €86.7m, €22.3m and €14.3m, respectively, while excluding TravelClick's related acquisition transaction costs, PPA adjustment and bank acquisition financing interest expense. Also, 2017 figures have been restated for IFRS 15 and IFRS 9, applied from January 1, 2018. In addition, we are early adopters of IFRS 16, which we applied since January 1, 2018. 2017 figures have not been restated for IFRS 16. 2016 figures have not been restated for any of these new accounting rules and have been left as reported. For full details, please see Management Report FY 2018.

² Excluding after-tax impact of the following items: (i) accounting effects derived from PPA exercises and impairment losses, (ii) non-operating exchange gains (losses) and (iii) other non-recurring items.

³ Including Research Tax Credit.

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 ➔

¹ Source: World Travel & Tourism Council (February 2019). *Travel & Tourism Economic Impact 2019 World*. WTTC, London

² Source: <https://www.iata.org/pressroom/pr/Pages/2018-10-24-02.aspx>.

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%.¹

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.⁵

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,⁶ 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.⁷ This growth is driving the increase in airports in the region, with China aiming to build 136 new airports by 2025⁸ and India planning 100 new airports by 2035.⁹

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.),¹⁰ 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.

⁵ Source: <https://www.iata.org/pressroom/pr/Pages/2018-10-24-02.aspx>.

⁶ Source: <https://www.iata.org/pressroom/pr/Pages/2018-10-24-02.aspx>.

⁷ Source: <http://www.boeing.com/resources/boeingdotcom/commercial/market/commercial-market-outlook/assets/downloads/2018-cmo-09-11.pdf>.

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

⁹ Source: https://www.aai.aero/sites/default/files/press_release_news/Press%20Release%20International%20Aviation%20Summit_04th%20September.pdf.

¹⁰ Source: <https://www.iata.org/pressroom/speeches/Pages/2018-10-24-01.aspx>.

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,¹¹ 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.¹² 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.¹³ 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 2050.¹⁴ 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.^{➔1}

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.^{➔2}

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.

¹¹ Source: <https://www.kfw-ipex-bank.de/pdf/Analyses-and-views/Market-analyses/2017-01-26-Blitz-Licht-Flugh%C3%A4fen-BIP-Faktor.pdf>.

¹² Source: <https://www.travelweekly.com/Travel-News/Airline-News/More-and-more-airports-running-out-of-space>.

¹³ Source: <https://www.eurocontrol.int/press-releases/challenges-growth-report-now-released>.

¹⁴ Source: <https://www.iata.org/pressroom/speeches/Pages/2018-10-24-01.aspx>.

➔¹ See "Distribution," p. 22.

➔² See "Business lines," p. 20.

- 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

We work in
190+
markets

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.

The customers we serve

Travel providers

- Airlines
- Airport operators
- Car rental companies
- Cruise and ferry lines
- Ground handlers
- Hospitality and hotels
- Insurance provider groups
- Rail operators

Travel buyers

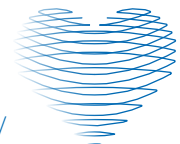
- Corporations
- Travelers

Travel sellers

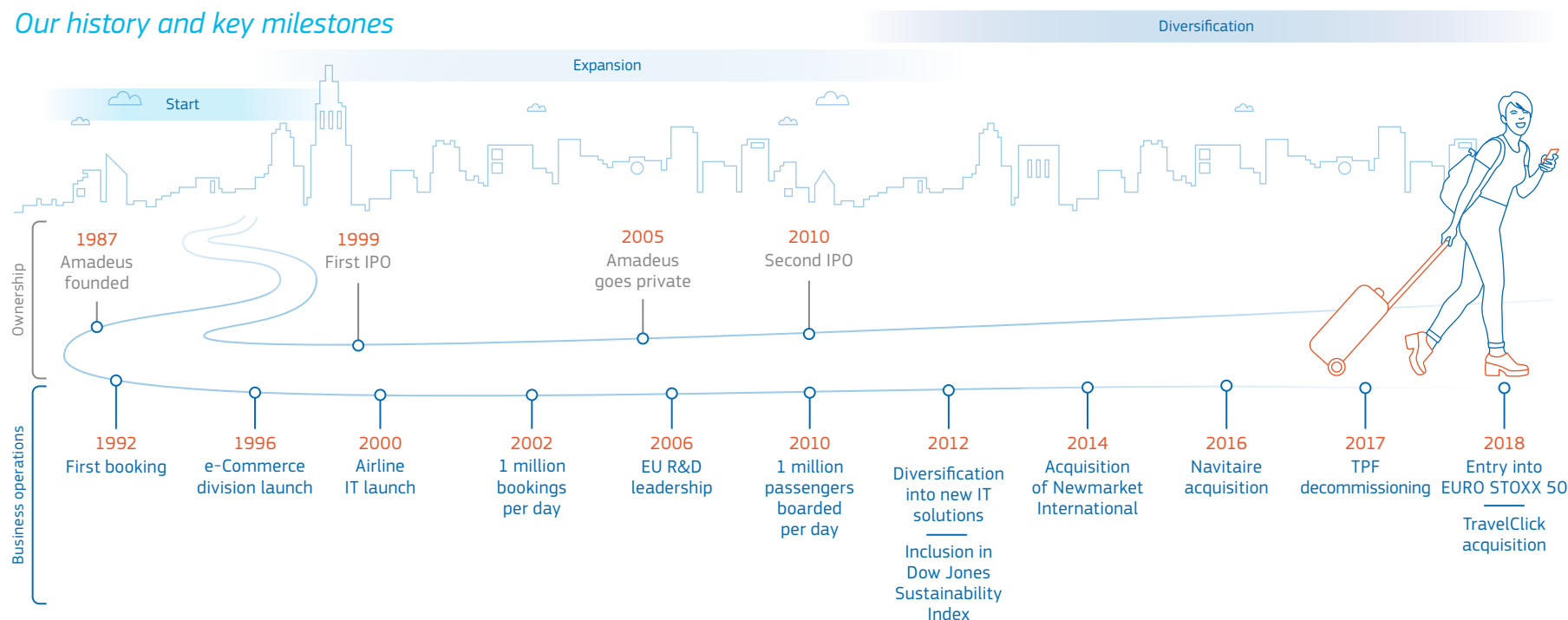
- Business travel agencies
- Online travel agencies
- Retail travel agencies
- Others

amadeus

At the heart of every journey



Our history and key milestones



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.*



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

*Amadeus' Executive Committee**

* From left to right and from top to bottom:

**Denis
Lacroix**

Senior Vice President,
Core Shared
Services R&D

**Tomas
López Fernebrand**

Senior Vice President,
General Counsel &
Corporate Secretary

**Sabine
Hansen Peck**

Senior Vice President,
People, Culture,
Communication
& Branding

**Christophe
Bousquet**

Senior Vice President,
Airlines R&D

**Stefan
Ropers**

Senior Vice President,
Strategic Growth
Businesses

**Decius
Valmorbida**

Senior Vice President,
Travel Channels

**Luis
Maroto**

President & CEO

**Dietmar
Fauser**

Senior Vice President,
Technology Platforms
and Engineering

**Ana
de Pro**

Chief Financial Officer

**Wolfgang
Krips**

Senior Vice President,
Corporate Strategy

**Julia
Sattel**

Senior Vice President,
Airlines

**Francisco
Pérez-Lozao**

Senior Vice President,
Hospitality



2. Business lines



2.1 Introduction



Amadeus operates a number of complementary business lines, which have significant commercial and technological synergies. Through these different businesses we offer solutions and services for travel companies of all types all over the world.

Distribution

We operate a two-sided distribution business. On one side we have travel providers (airlines, hospitality providers, car rental operators, railways, cruise lines, etc.) and on the other we have travel channels (travel sellers such as online travel agencies, retail travel agencies, business travel agencies, consolidators and tour operators, or buyers like corporations).

Through our platform we give travel channels customers access to content of connected travel providers so they can search, plan and book complete travel experiences for their customers (travelers). Meanwhile, we give our travel provider customers efficient global reach and help them to position their offer more effectively, for example for the sale and management of ancillaries or travel extras.

We offer travel channel customers solutions to better serve their customers (e.g. with personalized travel search and planning) and to operate their business more effectively (e.g. with front-, mid- and back-office solutions). We help our customers to deliver an integrated traveler experience with important business benefits, such as integrated travel and expense management solutions for corporations.

Within our distribution business we have a virtuous cycle: by offering more and more relevant travel content together with customized solutions, we attract more and more travel channel customers. At the same time, by offering access to the strongest global network of travel channels, we are a partner that can help travel providers grow high-margin sales. And with a platform that is flexible enough to accommodate an increasing variety of distribution models and that makes the most of the latest technologies, we help all our customers deliver better travel experiences day after day.

IT solutions

Airline IT

We help airlines deliver on their business objectives. Whether they are full-service, hybrid or low-cost airlines, we deliver solutions to help them grow revenue, optimize costs and efficiency, and build brand and customer loyalty.

How? By helping them to provide travelers with a consistent, personalized customer experience throughout every stage of the journey, from inspiration, search and booking, to pricing, ticketing, check-in and boarding.

Offering a great traveler experience helps airlines to increase customer loyalty and differentiate their brand from others. We also offer airlines unique possibilities to collaborate with their alliance, codeshare and other strategic partners to maximize sales, through the largest global network of travel agencies and through direct channels.

We work in partnership with our airline customers to deliver a broad set of technology solutions to optimize core operations, including solutions for reservations, ticketing, inventory management, departure control, disruption management, retailing and merchandising, personalization, revenue optimization and finance. We also provide them with business consulting

and process optimization services. Importantly, our platform is adaptable to accommodate airlines' evolving business models and expansion into new markets and partnerships.

Diversification into new areas

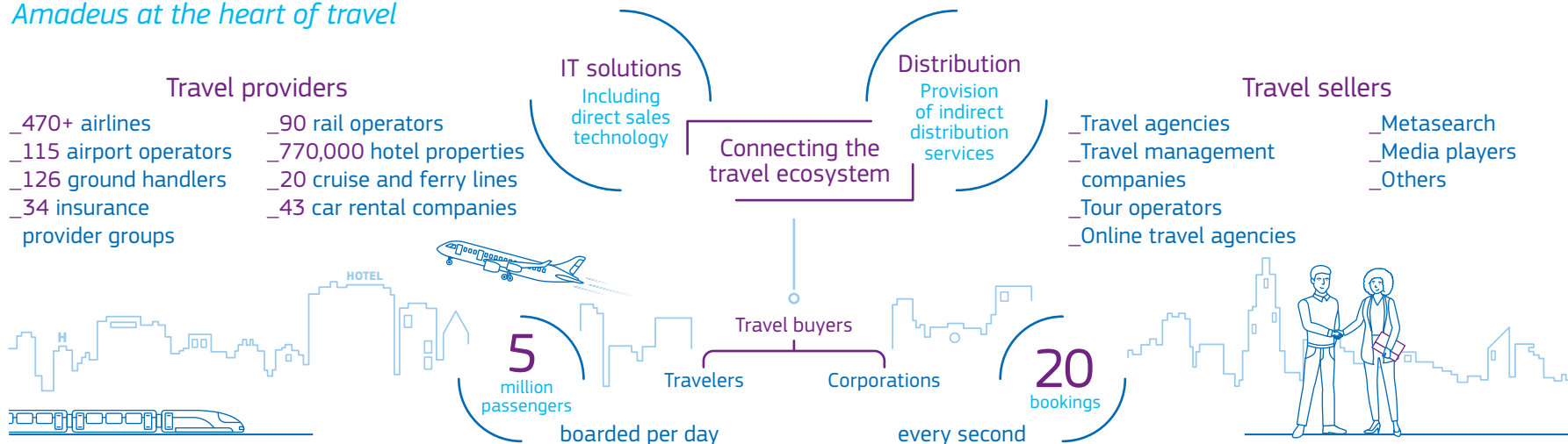
Amadeus provides technology at all stages of the traveler journey, and we have the capability to serve almost every player in the travel industry. This puts us in a unique position to diversify and grow our business in new markets.

Over recent years we have been diversifying our business to provide technology solutions to other key sectors in the industry, such as hospitality, airports and ground transportation, as well as to transversal operational areas that are relevant to all travel industry players, such as payment systems or travel advertising.

In hotels and hospitality, notably in 2018 we acquired TravelClick, which significantly boosts our already significant customer base and capabilities in this sector. We also have a relevant and increasing presence with airports and ground handlers, and railways and ground transportation.

We continue to expand our scope of solutions in areas like payments and travel advertising. As well as being strong businesses in their own right, these complement our solutions offering to customers of all profiles.

Amadeus at the heart of travel



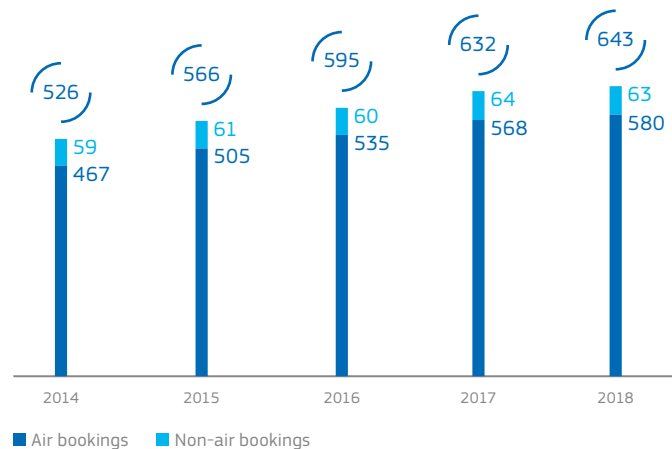
2.2 Distribution

Travelers are now more empowered and demanding than ever before. They want choice, transparency in pricing and personalization. Technology is the main driver behind this change, as new ways of working and connecting open up a myriad of possibilities for travelers and the brands that serve them, changing the way travel is bought and sold.

The goal of the distribution part of our business is to be where travelers are buying trips. We do so by allowing providers of flights, ground transportation, accommodation and other services to distribute their content to a global network of diverse travel sellers and corporations, so that travelers can have access to all the travel services they want.

To respond to these changes, we are evolving from a Global Distribution System (GDS) to becoming a Live Travel Space. The Live Travel Space is where all players can connect and collaborate to offer travelers the journeys they want via a wide range of options, right when they want them. This space enables our customers' growth so that they can serve travelers better.

*Amadeus total bookings** (figures in millions)



* Bookings processed by travel agencies using Amadeus distribution platforms.



Live Travel Space short video

Our technology and our people fuel the Live Travel Space

Technology is critical to global travel. Building on our more than 30 years of experience in the travel technology industry, we are now investing even more in new ways to serve our customers and be more open, dynamic and connected. Our Live Travel Space sits on top of the Amadeus Platform. While the Amadeus Platform brings together content from all sources, the Live Travel Space is where all players can connect and collaborate to address the desires of travelers and provide them with a wide range of options at any given moment.

The Live Travel Space is fueled by a global Amadeus network of over 18,000 professionals – 6,000+ of whom are in the Travel Channels unit. Our team includes developers, data scientists, industry experts, consultants and local market specialists. Our people are what our customers value the most, as they care about their business and strive to offer the best customer experience.

Our technology and services encompass the full travel experience, from the moment of inspiration and search, to full travel planning, post-trip evaluation, social sharing, and expense management for business travelers. Our portfolio encompasses integrated front-, mid- and back-office solutions, together with our self-booking and expense management tools.

Our technology, expertise, investment capabilities and track record make us the partner of choice to help our customers respond to change and adapt their value proposition to today's travelers.

In 2018 we continued to work closely with our travel seller customers, organizing our commercial activities around four key segments:

- 1_ Retail travel agencies
- 2_ Online travel companies
- 3_ Business travel agencies
- 4_ Corporations

Leading brands of travel agencies and corporations have joined our network, and we have further evolved the Amadeus Travel Platform so that our customers can have access to more content via more channels and devices, helping them remain competitive

while making it easier for them to sell travel in a more efficient and personalized way.

We also continued our efforts toward industrializing the New Distribution Capability (NDC)¹ standard, ensuring it works for the industry as a whole through our NDC-X program.

Our investment in creating a more personalized, connected and sustainable future for travel has led us to win four World's Leading Travel Awards this year: World's Leading Global Distribution System 2018, World's Leading Travel Technology Provider 2018, World's Leading Travel Management Solutions Provider 2018 and World's Leading Travel App 2018.

In the following sections, we describe in more detail the Amadeus Travel Platform, our four key customer focus areas, our mobile technology and our NDC-X program.

Our innovative technology: the Amadeus Travel Platform is at the core of our strategy

As changes in travel behavior continue to challenge current business models, we see technology as a key enabler to this change. We are evolving the Amadeus Travel Platform to shape the future of travel.

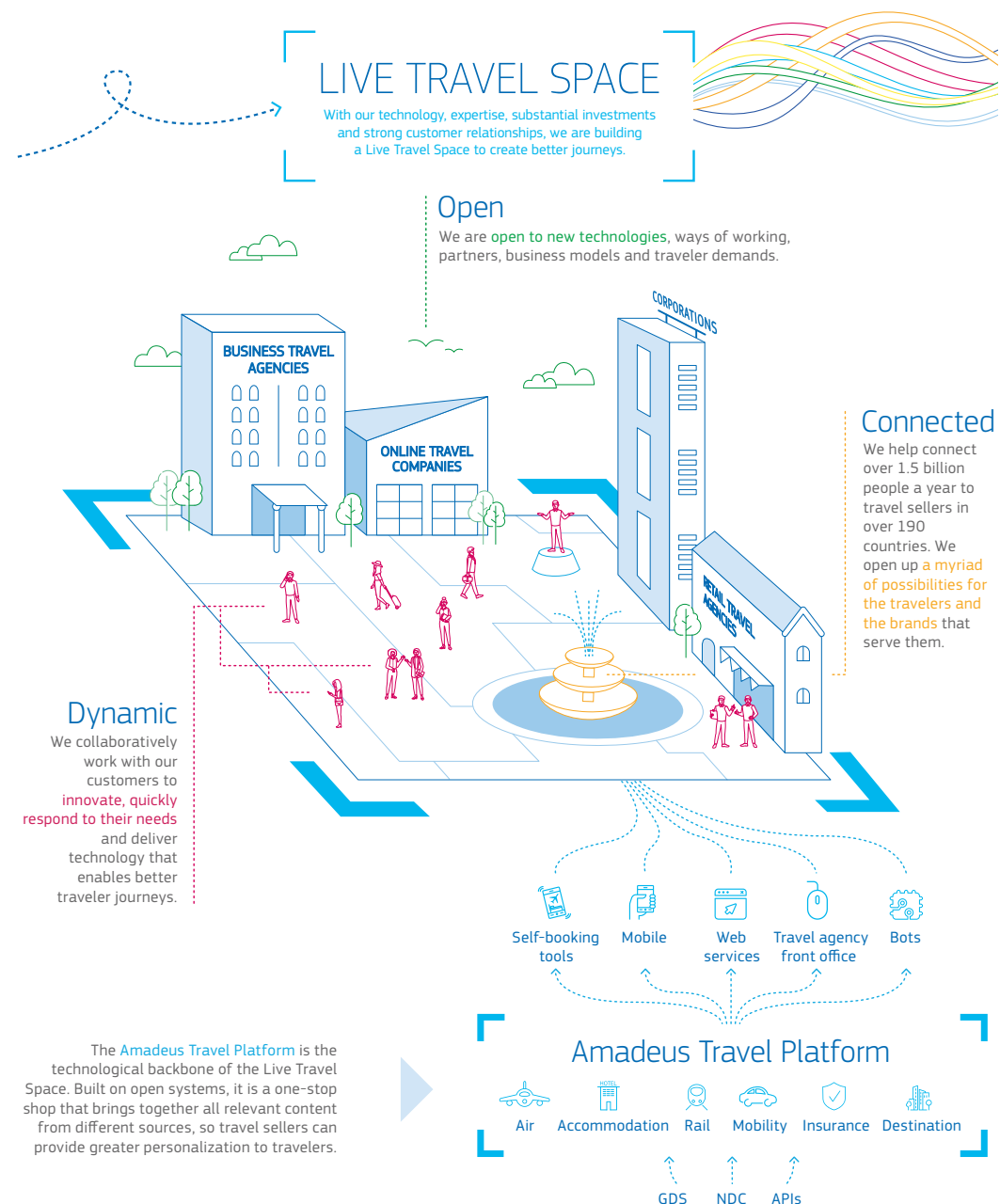
The Amadeus Travel Platform is a robust platform built on fully open systems, harnessing intelligent use of data and integrating new interfaces and architectures². It is a one-stop shop that brings together all relevant content – including air, accommodation, rail, mobility, insurance and destination – from any source (EDIFACT², NDC and other APIs³). The platform today, and the changes that we are making to it, will allow us to continue to offer the broadest range of global content to all types of travel sellers all in one place, accommodating different business models.

¹ NDC: An XML-based data transmission standard created by the International Air Transport Association (IATA).

² See "Airline IT," p. 21.

³ Electronic Data Interchange for Administration, Commerce and Transport.

⁴ Application Programming Interface.



Our customers are part of the Live Travel Space

“We are really excited about the Amadeus Live Travel Space because of what it brings in terms of technology advancements. Bringing extra-rich content to all the platforms and the whole experience with NDC. Personalization, all the ancillaries, all will come easily in one sort of single platform, but also the fact that it’s completely future-proof.”

Andrew Woodman – Lotus Group

“Travelers are looking for very personalized services, both online and offline. When they visit a website, they want the company to understand their requirements and present a very personalized set of options. One of the key concepts of the Live Travel Space is that concept of choice.”

Sam Argyle – Alternative Airlines



Andrew Woodman



Sam Argyle



With content becoming available from multiple sources, possibly under different business models, it is paramount for travel businesses to be able to manage and customize that content for their own business. With the Amadeus Travel Platform, we are able to give flexibility and autonomy over how content is sourced, managed and displayed.

We are working to further develop our system of powerful management controls to allow travel businesses to define content sources, displays, preferred options, payment systems and more – enabling agencies to develop and personalize the right offer for each traveler, and to optimize each and every trip for their business.

And of course, the platform has massive search capabilities, the same search technology that the world’s largest metasearch engines and online travel agencies rely on, with instant, easy and accurate fare comparison.

With the Amadeus Travel Platform, travel sellers are able to deliver a fully integrated customer experience by bringing together all relevant content and exposing it via multiple channels and touchpoints. It is revolutionary, giving travel sellers a transparent retailing experience that is consistent no matter where the booking is made or how they want to service their customers – via a self-booking tool, a mobile or tablet, a website, an office location or a chatbot.

The evolution of the Amadeus Travel Platform is an extensive, phased project, but we are taking an agile approach so we can deliver practical solutions faster. The first results of our development and integration efforts have already been launched, and we are committed to making the whole vision a reality in the near future – thus future-proofing our platform, our business and the businesses of our customers.

Retail travel agencies

In a fast-moving travel industry, traveler preferences continue to define the leisure travel market, as choice, price transparency and personalization are now expected by all. In addition, the dynamic travel sector is constantly reshaped by new entrants, new models and new approaches to retailing.

Amadeus serves thousands of retail agencies in every corner of the world. The human touch is a fundamental component

of the value proposition of these agencies. The success of retail travel agencies relies on evolving the types of experiences they deliver while optimizing how they operate and position themselves. Offering greater choice that goes beyond air content, such as destination services, allows retail travel sellers to compete more effectively beyond price alone, and to deliver travel experiences that generate loyalty.

In 2018 Amadeus focused on setting the foundation of the Live Travel Space to support collaboration among all players and, above all, create growth for our retail travel agency customers. With the Amadeus Travel Platform, all our retail customers (tour operators and cruise lines, small-to-medium customers, key accounts, consolidators and networks) now have at their disposal a one-stop shop with access to (among others) more than 470 airlines, 90 rail operators, 300 hotel chains and 230 tour operators, allowing them to define and personalize their offer for the end traveler.

The dedicated team that serves the needs of retail agencies understands this segment's market, goals and requirements. Our expertise in technologies such as artificial intelligence, virtual reality and machine learning enables agencies to experiment and explore new ways of engaging the traveler. We look forward to continuing to innovate with our retail customers by using technology, and where appropriate new business models, to enable them to compete in a world full of challenges and opportunities.

Online travel companies

As the online travel industry continues to grow on a global scale, it is increasingly becoming the dominant channel for purchasing travel across the world, thus creating multiple opportunities to help leisure travelers with their travel inspiration, search and booking. Online players need to embrace digitalization and adapt quickly to fast-evolving traveler needs.

2018 has undoubtedly been a year of transition in our industry, which has moved toward increased personalization, while merchandizing techniques have driven revenue and business opportunities. The empowered travelers expect brands to know their needs and provide tailored services accordingly, while the industry is embracing the NDC vision.

As part of our NDC-X program, we are working with our customer Travix in co-designing an NDC-enabled solution to help online travel agencies deliver more personalized and differentiated travel experiences.

We partner with online retailers and airline suppliers around the globe with a common strategy to create a sustainable global online travel supply chain and value for online shoppers. Our customers span from global mega online travel agencies (Expedia, Ctrip), to multinational companies that operate in multiple markets (Fareportal, ODIGEO), to smaller online travel agencies specific to a region or market (BestDay) and new online start-ups (Relovate.com). Amadeus is a partner to search providers specialized in travel such as Kayak and Skyscanner, but also works with large players such as Google, Facebook and WeChat.

Whether our online customers' focus is to convert marketing spend into revenue, monetize website traffic, get access to technologies or make use of online travel industry experts, we help online travel agencies around the world compete in this fast-evolving and crowded marketplace to optimize their businesses and drive up true differentiation.

“

In a diverse content world, it's crucial to have one single end-to-end process for booking and servicing NDC and non-NDC content. With NDC, we hope to have richer airline content for our customers, ultimately helping us deliver more personalized and differentiated travel experiences. We're excited to work alongside Amadeus and be part of the NDC-X program to drive progress for the online travel agency community.”

John Mangelaars

CEO of Travix

To enable this, and as indicated above, we have evolved to become a Live Travel Space enabled by the Amadeus Travel Platform. Thanks to our technology and unique expertise, we support:

- Online travel retailers in boosting traffic acquisition and conversion, increasing shopping cart value, driving down costs and expanding into new markets.
- Travel media companies in increasing their customers' reach and performance.
- Travel start-ups in scaling up with cutting-edge technology and expertise.

Thanks to our technology and people, we feel well equipped to support and achieve our vision and fuel our online customers' growth.

Business travel agencies

Across industries and the world, business travel makes business happen. Whether it is for building customer relationships, bringing work groups together to strengthen an organizational culture or networking at an industry conference, face-to-face interaction makes the difference. Global business travel spend is expected to exceed €1.3 trillion in 2018 and is projected to grow at 7% annually in the next four years.⁴

Digital technologies are changing the way business travel functions. Today's ways of working – for example mobile or self-service – open a myriad of possibilities for travelers and the business travel agencies that serve them. At the same time, corporations expect business travel agencies to help them optimize travel spend with access to the best content at the best value, deliver great service and a smooth experience for travelers, and ensure proper duty of care. This is where Amadeus distinguishes itself.

Amadeus' business travel agency organization focuses on powering success for the business travel agencies that serve corporations and business travelers. With a local market presence and a global mindset, we understand business travel agencies and design tailored solutions for their success.

⁴ Global Business Travel Association (2018). *GBTA BTI™ Outlook Annual Global Report & Forecast: Prospects for Global Business Travel 2018–2022*.

Amadeus offers the broadest selection of travel products to help business travel agencies sell more, while also helping them optimize their revenue per transaction. Our multi-source, multi-rep hotel offering is a great example of this. Agents can quickly compare rates and commissions from multiple sources, offering business travelers the best value while securing the best margin available on each booking.

Each year our global team of business consultants combine their expertise with Amadeus solutions to help agencies around the world automate core processes, improve IT flows, provide greater self-service options and improve agent productivity. In a nutshell, Amadeus makes the complex simple.

In 2018 Flight Centre, American Express Global Business Travel, BCD Travel and Carlson Wagonlit Travel all joined the Amadeus NDC-X program. This program will allow these agencies to realize the potential of NDC, delivering enhanced choice for corporate travelers and transforming the traveler experience.

As business travel is changing day by day, we are continually listening to travelers, business travel agencies and all other customers we work with, while keeping a close eye on trends and behaviors so we can develop technologies that benefit all.

Corporations

As business travel spending continues to grow, CEOs across the world in different industries recognize travel and expense (T&E) investment as a key driver of a corporation's business growth, as it gets commercial teams out into the field to sell effectively and provide great customer service. At the core of Amadeus' value proposition, our solutions enable corporations to optimize T&E spend at the beginning of the booking process, rather than controlling it once it is too late during the expense process.

Beyond business growth, from an HR perspective, T&E technology is used to attract and retain talent. Over 30% of respondents in a research piece conducted by the London School of Economics⁵ wanted to utilize travel to promote employee retention. T&E was also highlighted by many C-level respondents as supporting flexible practices such as remote working. In addition, new technology

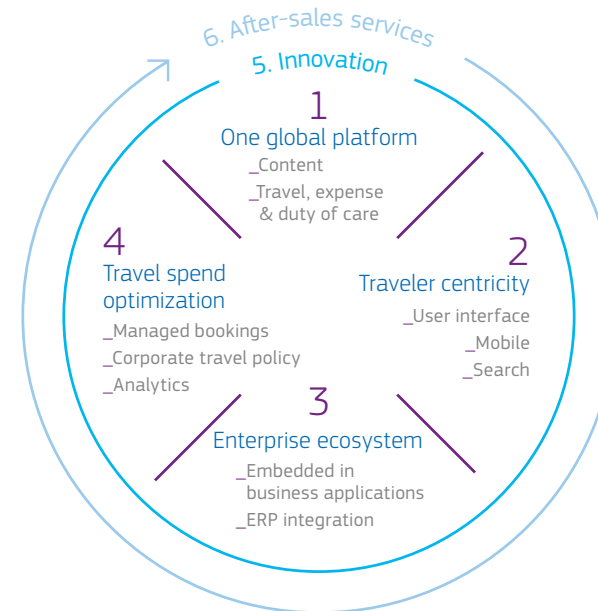
⁵ London School of Economics Consulting (2017). *Managing Every Mile: How to Deliver Greater Return on Investment from Travel and Expense*. London, LSE.

features, such as uploading expenses via mobiles while traveling, resulted in efficiency gains and improved employee morale. Important to note is that well-being and duty of care are part of the corporation's value proposition to its employees. T&E technology enables corporations to locate employees in the case of a disruption or emergency, ensuring their safety and safeguarding the company's reputation.

With corporations increasingly seeking to expand internationally while optimizing their T&E spend, Amadeus is investing in corporate solutions as a strategic pillar of our distribution strategy. We serve over 16,000 corporations worldwide and, thanks to our portfolio of T&E solutions (which includes booking and expense management, mobile, analytics and duty of care), they can optimize their T&E spend with relevant policies while providing the best traveler experience. We further support corporations' business goals through:

- 1_ Adoption: The more frequently a T&E solution is used, the more value is gained by the corporation. This is why we focus our investment on responsible user interface and user experience and mobile, as well as intuitive interfaces and smart algorithms.
- 2_ Unbiased content: With Amadeus solutions there is no need for business travelers to book outside their corporate tools, enabling corporations to efficiently implement their travel programs. Because of our position in the travel industry, Amadeus is ideally placed to make sure corporations access all the content they need via our solutions and the Amadeus Travel Platform, whether for airline, rail or ground transportation. And we are innovating and developing new ways to provide all this relevant content, both NDC and non-NDC type, so that our corporate customers can compare and decide what they want to provide to their travelers. This way, they can manage T&E in a holistic way, controlling not just their costs, but also optimizing the overall travel budget and ensuring that the corporate travel policy is observed across the entire booking and expense process.
- 3_ Integration: Finally, we work to ensure that this is all done in a seamless way, with solutions that can be integrated with office applications already embedded into the corporation's existing IT landscape - including enterprise resource planning (ERP) and customer relationship management (CRM) systems - with minimum disruption.

Amadeus value proposition for corporations



Amadeus powers smarter business travel for corporations worldwide, and with our continued investment in R&D, our people's expertise and our presence in over 190 markets, we are creating in the Live Travel Space better journeys for business travelers.

Mobile

Growing our mobile footprint

In a fiercely competitive travel app marketplace,⁶ Amadeus has developed a flexible and reliable mobile platform, putting the traveler's needs first while leveraging our core technologies. Today, over 50 of the world's top travel brands entrust their mobile strategy to Amadeus and power their travel apps through our Amadeus Mobile platform.

⁶ According to App Annie, one of the world's leading app store benchmarking sources, travelers download more than 1 billion travel apps annually.



Our approach has always been to evolve with industry developments and the needs of our customers in order to aggregate and offer the widest, most relevant content possible. We are committed to ensuring Flight Centre stays ahead of the curve in terms of GDS technology and systems, particularly as new initiatives like NDC emerge. That's why we are excited to have partnered with Amadeus in our Asia and EMEA businesses. We wanted a leading technology partner, not just a GDS supplier, who could work with us to drive our business forward with tech innovation for the benefit of our customers."

Graham Turner

Managing Director, Flight Centre Travel Group

We have not accomplished our mobile success on our own. Along the way, our mobile team cultivated the industry's best and brightest partners to join us in the Amadeus Mobile COLLECTIVE. Over a dozen top travel brands partner with us in this new strategic mobile partnership initiative to provide high-quality ancillary services at travelers' fingertips, including activities and tours, parking, and taxi and transfer. Our partnership community also includes some of the best and brightest technical capabilities in the mobile arena. For instance, Localytics, a leading mobile-first marketing and analytics platform, helps us stay connected to travelers with data-driven messaging capabilities.

The world's leading travel app

Amadeus' CheckMyTrip travel app brings all of a traveler's trip details together in one master view. CheckMyTrip improves its design, features and capabilities year to year. As a result, it now serves nearly 2 million active users through mobile apps and responsive Web sites. Our iOS app version maintains a 4.7 star rating, while our newer Android native app enjoys a healthy 4.5 star rating. Our efforts also won us the World's Leading Travel App Award in the 2018 World Travel Awards. It is an honor to receive this industry recognition of excellence, which we achieved through persistent dedication and collaboration.

Our mobile success is built on the Amadeus Live Travel Space and its open, dynamic and connected approach. CheckMyTrip and our larger Amadeus Mobile B2B platform are the gateways for buyers, suppliers and technology partners to continue thriving in the global travel economy. Mobile is a rapidly evolving channel – chatbots,

messaging, voice assistants and soon artificial intelligence and machine learning will change the landscape again. We continue to gather insights from CheckMyTrip and to work diligently alongside our partners and customers to meet the opportunities and challenges these new technologies bring.

NDC-X

At Amadeus, we think NDC has the potential to deliver new benefits for the travel industry. Therefore, Amadeus has created NDC-X, a dedicated program to drive the industrialization of NDC and ensure it works for all travel players. The program brings together all the NDC activities across Amadeus – as an IT provider and aggregator – and focuses on practical use cases of IATA's NDC standard, in a test-and-learn approach, to deliver improved capabilities for the industry.

The entire travel industry will need to work collaboratively for NDC to truly take off. By working closely together, the industry can unlock new value for travelers, and in so doing generate more business for all.

What does NDC mean for travel sellers?

NDC could bring richer content at the time of booking – more images and information of course, but also videos, traveler reviews and even virtual reality. Not only will fares be displayed, but also bundles of services – all personalized according to the traveler and the trip. Having access to this NDC content in a platform built on open systems will allow everyone to merchandize effectively in all channels and serve travelers simply, quickly and accurately.



The NDC upside for corporations

NDC content will enable corporations to define more granular corporate policies, taking into account ancillaries and personal packages. Business travelers will be able to access richer content that goes beyond the fare and includes a bundle of services like VIP parking, lounge access and priority boarding. All of this could directly be accessed on the online booking tool to simplify the business traveler's journey.

How Amadeus is approaching NDC

We are working closely with our travel seller customers, including Flight Centre, Travix, Carlson Wagonlit Travel, American Express Global Business Travel and BCD Travel. They are providing input into the design of a variety of Amadeus solutions – including Amadeus Web Services, Amadeus Selling Platform Connect and Amadeus cytric Travel & Expense – which are all backed by our Amadeus Travel Platform.

NDC is a step in the overall journey of the industry toward greater digitalization, with both travel providers and travel sellers working with Amadeus. ↪

Industry growth

In 2018 industry air bookings grew by 2.9% globally. With the exception of Western Europe, where the industry declined, all regions showed a positive evolution, although with a clear decelerating trend relative to 2017 (except for North America, which has accelerated its growth compared to last year's). Asia-Pacific reported the fastest growth rate in 2018, followed by North America. Central, Eastern and Southern Europe, the Middle East and Africa and Latin America showed limited growth over the period.

Amadeus bookings

In 2018 Amadeus' air bookings increased by 2.1%. Asia and Pacific and North America were our best-performing regions,

delivering high growth rates. The Middle East and Africa, Latin America and Central, Eastern and Southern Europe increased softly, supported by limited growth in the industry. Finally, Amadeus' bookings in Western Europe declined over the period, impacted by the industry decline and the loss of share at some European mid-size online travel agencies, as explained above.

Amadeus' non-air bookings declined by 1.5% in 2018 versus the previous year as a consequence of a decline in rail bookings, mostly driven by strikes impacting a key customer, which more than offset the double-digit increase in Amadeus' hotel bookings.

Amadeus travel agency bookings

(Figures in millions)

	2017	2018	Change
Air bookings	568.4	580.2	2.1%
Non-air bookings	64.0	63.0	(1.5%)
Total	632.3	643.2	1.7%

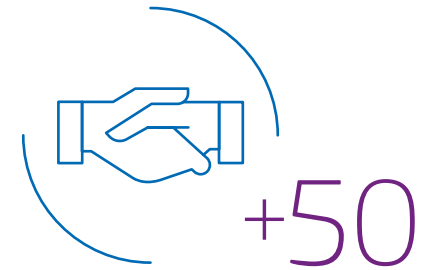
Amadeus air travel agency bookings by region

(Figures in millions)

	2017	2018	Change
Western Europe	206.0	191.7	(7.0%)
Asia-Pacific	108.6	121.2	11.7%
North America	99.0	108.1	9.3%
Middle East and Africa	69.3	71.9	3.8%
Central, Eastern and Southern Europe	48.1	48.9	1.8%
Latin America	37.5	38.3	2.2%
Total	568.4	580.2	2.1%

↪ See "Airline IT," p. 21

Key Distribution highlights in 2018



We signed 50 new contracts or renewals of content or distribution agreements with airlines, including Vistara, United Airlines, Scandinavian Airlines (SAS) and Norwegian.



Air France-KLM

We signed an agreement with Air France-KLM enabling distribution through a private channel. Amadeus travel seller customers who enact a private channel agreement with Air France-KLM will be able to book Air France-KLM content through Amadeus without a surcharge, which started to be levied from April 2018.



Our merchandising solutions continued to gather interest from our customers. A total of 18 airlines signed up for Amadeus Airline Ancillary Services for the indirect channel and 16 airlines signed for Amadeus Fare Families in 2018. As of December 31, 2018, 151 airlines had contracted Amadeus Airline Ancillary Services (from which 128 had already implemented it) and 81 had Amadeus Fare Families (of which 69 had already implemented the solution).



+13%

Subscribers to Amadeus' inventory can access close to 115 low-cost and hybrid carriers' content worldwide. Low-cost and hybrid carriers' bookings grew by 13%.

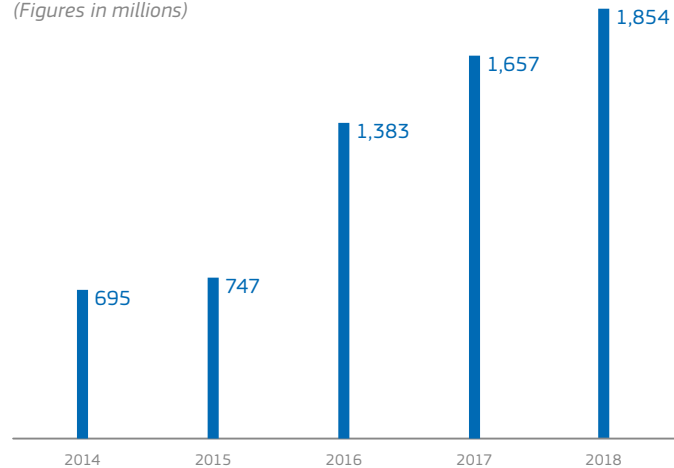
NDC-X program

Several airlines and travel sellers joined our NDC-X program during 2018, including American Airlines, Travix, Carlson Wagonlit Travel or American Express Global Business Travel. The NDC-X program, which we unveiled in February 2018, brings together all of Amadeus' NDC activities – as an IT provider and an aggregator – under one roof, so that all relevant travel content from any source (EDIFACT, NDC, proprietary APIs and other aggregated content) can be distributed via any user interface or device.

2.3 Airline IT

Passengers boarded*

(Figures in millions)



* Passengers boarded, i.e. actual passengers boarded onto flights operated by airlines using at least the Amadeus Altéa Reservation and Inventory modules or Navitaire New Skies.

Innovation happens in partnership

We operate in a traveler-led industry, where airlines must battle for attention, viewers and conversions. Changes in travel behavior continue to challenge current business models. Airlines are evolving alongside these models, influenced by new industry expectations, technological advancements and the emergence of new players.

It is within this context of constant change in the industry that over the past year Amadeus has undergone significant internal transformation. We have embraced a more open and flexible approach. We have become a united force with a clear focus on our customers, which involves continuing to listen to them at all times. We have moved toward a more open technology approach with a focus on what our airlines' customers – the travelers – want. Our business has evolved so we can work more closely with our customers by increasing our regional resources.

We support hundreds of airlines that use our IT and Distribution systems to create millions of memorable journeys on a daily basis. We are committed to thinking differently so we can support our airline customers to simplify the customer experience and deliver business growth and return on investment. We are vigilant in seeking ways to keep airlines at the forefront of the latest trends. To this end, we have created a Digital Tribe with over 300 people worldwide working closely with airlines to drive digital transformation at speed. Airlines have unique opportunities to collaborate with their alliance, codeshare or other strategic partners to maximize all sales channels, directly and through our networks. In fact, we serve the largest portfolio of the world's top airline alliances: Amadeus airline solutions are used by more than half of the members of any of the three main alliances: Star Alliance, Oneworld or SkyTeam.

We understand the complexity of the industry, and one of our objectives is to drive emerging opportunities for growth in several areas. We fully embrace standards such as the International Air Transport Association (IATA)'s New Distribution Capability (NDC)[↗], which will help airlines grow and simplify processes. We have created a dedicated program called NDC-X, where we have partnered with leading airlines to drive the industrialization of NDC and ensure its success for all travel players.

To reduce complexity, collaboration across the industry is key, especially between airlines and airports. This will be particularly important given that the number of passengers is expected to grow from 4 billion today to 6 billion by 2023. As an example, in order to reduce boarding time, we have collaborated with US Customs and the biometric gate supplier to help Lufthansa board an A380 plane, the largest in operation, in about 20 minutes at Los Angeles International Airport (LAX) using biometric facial recognition technology.

We firmly believe that real innovation only happens in partnership with our customers and the industry, and we have a solid track record of integrating innovation into our airline customers' business. We have held numerous Hackathons this year to allow our customers to test our products and build on existing solutions. We pride ourselves on our partnerships, working closely together to drive innovation and the implementation

[↗] See "Distribution", p. 22

of cutting-edge technology to solve practical issues. The Accenture Amadeus Alliance has been working to create tangible business outcomes to help airlines transform the way they do business. Amadeus technology and expertise coupled with Accenture's data analytics and machine learning models (jointly developed with the Massachusetts Institute of Technology) led to data-driven insights that helped Scandinavian Airlines (SAS) quickly boost its ancillary revenues.

Working with high-growth, innovative airlines inspires us to deliver solutions that underpin their continued development and evolution. Using our unrivaled market knowledge and technology expertise, we seek to support even the most progressive and entrepreneurial of airlines. We know that our customers are the pioneers who continue to transform the way we travel.

Airline portfolio

Airlines are on a journey of digital transformation, adapting to the changing needs of travelers and the industry as a whole. We at Amadeus are also evolving, to offer solutions and services that help airlines provide their passengers with a consistent, personalized experience at every touchpoint – from initial inspiration to arrival at their final destination.

As the business needs and strategies of our airline partners continue to evolve, and with Amadeus and Navitaire working hand in hand, we are uniquely positioned to respond to the needs of airlines of all business models.

We support airlines of all types – whether full-service carriers, low-cost airlines or hybrids – to grow sales, optimize costs and efficiency, deliver great services and build brand and customer loyalty. We also offer airlines unique opportunities to collaborate with their airline alliance and codeshare partners and maximize sales through all channels.

Our passenger service system offering includes Amadeus' Altéa Suite and Navitaire's New Skies reservation system, the industry leading solutions serving the full spectrum of high growth carriers. In addition, we have a complete portfolio of solutions designed to help airlines maximize their commercial performance, achieve operational excellence and leverage the power of data to design the best end-to-end experience for their travelers.

Our Sales and Distribution Suite offers airlines opportunities to support future growth and profitability with unrivaled technology and expertise and to access the world's largest agency network via the Amadeus Travel Platform using the connectivity of their choice: EDIFACT,⁷ NDC or Ticketless.

Amadeus' Altéa Suite consists of three modules:

- 1_ Reservation: Enables airlines to manage bookings, fares and ticketing through a single interface, and is compatible with distribution via direct and indirect channels, both online and offline.
- 2_ Inventory: Helps to create and manage schedules, seat capacity and associated fares on a flight-by-flight basis. This allows the airline to monitor and control availability and reassign passengers in real time.
- 3_ Departure Control: Covers many aspects of flight departure, including check-in, issuance of boarding passes, gate control, disruption management and other functions related to passenger flight boarding. In addition, Altéa Departure Control offers aircraft load control functionality, which enables airlines to evaluate and optimize cargo and fuel utilization.

Navitaire New Skies Reservation and Passenger Service System is a digital, *e-commerce and mobile first platform* with comprehensive retailing, analytics and passenger personalization tools. The solution is designed for efficiency using a single record approach, which manages both the offer and the order throughout the passenger life cycle. Real-time data for on-demand decision-making and omni-channel processing are hallmarks of New Skies, which has been leveraged extensively by airlines with clear leadership in innovation. In use at more than 50 of the world's most successful airlines, it is designed for fast-growing airlines, including newly launched and hybrid carriers.

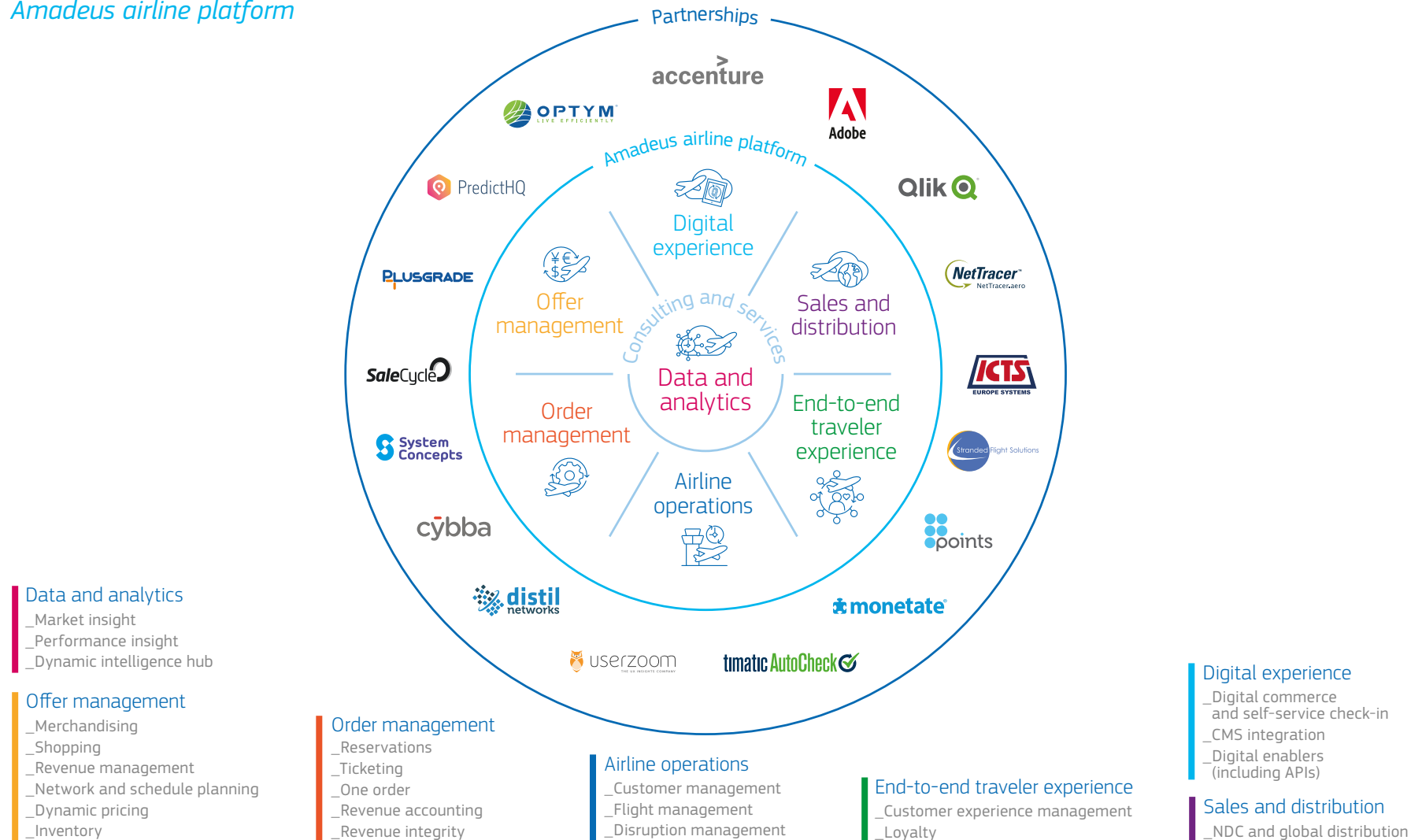
As the airline industry moves toward more integrated and open systems, Amadeus is opening its platform to airlines and developers to innovate jointly and with other IT providers and their selected travel partners.

⁷ Electronic Data Interchange for Administration, Commerce and Transport.

This open approach results in more being achieved together, and brings a high level of agility and flexibility to the implementation of new functionalities. We aim to jointly create value for airlines and their partners within a framework that empowers developers to innovate.

Our pricing model for airline solutions is primarily based on a fee per each transaction processed, for example per passenger boarded. By operating a transaction-based model, our returns are linked to the operational volumes of airlines.

Amadeus airline platform



Amadeus sees the following as opportunities in the airline industry

1. Tailoring offers to maximize value

Airlines face a range of challenges as base fares continue to be subject to downward price pressure, hastening the need to develop effective retailing strategies to secure growth and profitability. By placing the traveler at the heart of the offer, we ensure airlines reach the right traveler at the right moment and with the right offer – placing the airline in control. Our powerful omni-channel

technology adheres to industry standards while giving airlines the freedom to deliver all content across any relevant channel. We help airlines to differentiate themselves, move beyond price, predict traveler needs and tailor offers no matter the complexity involved. And we do it with the widest reach across all traveler segments and geographical regions.

The report we published jointly with Skift early this year, *A New Formula for Airline Success: Why Customized Offers Are the Future of Airline Marketing and Revenue Management*, investigates how providing customized offers could soon take a clear lead as the primary way airlines interact with travel shoppers. The resulting conclusion is that one size does not fit all, that customized offers are the way forward for airlines and that the airline industry is catching up to this “one size does not fit all” approach.



A New Formula for Airline Success: Why Customized Offers Are the Future of Airline Marketing and Revenue Management

American Airlines upgraded its digital experience with Amadeus e-Retail DX

Intro

American Airlines' strong focus on user experience created a shift in international business priorities. It needed modern e-commerce booking websites that could convert, upsell and retain more digital customers.

Challenge

American Airlines needed to improve the customer experience on its international sites and optimize them for local markets. With a focus on product expansion, online conversion and revenue generation, the airline began its search to find a technology partner capable of helping it achieve its business objectives. After a six-month evaluation process, the airline chose to partner with Amadeus on its digital journey with Amadeus e-Retail DX: the world's most widely used online airline booking system.

How did Amadeus support the airline?

American Airlines and Amadeus already have an established and successful relationship. Amadeus' e-Retail DX online booking system met all of American Airlines' needs, and also facilitated fast-to-market delivery.

Results

The implementation of Amadeus' e-Retail DX online booking system has enhanced the customer experience, growth and conversion rates.

Within a three-month period, this project:

- _ Increased American Airlines overall bookings by 17%
- _ Increased American Airlines digital revenues by 11%
- _ Improved the online experience for international customers
- _ Migrated 23 international sites to Amadeus e-Retail DX and started delivering impressive results for American Airlines and its customers

2. Delivering on-brand experiences

Airlines are engaged in a race toward digitalization to deliver a simple, compelling and intuitive experience across all channels. This means that the complex task of delivering hyper-personalized experiences is key to success.

Creating memorable journeys is more than selling a seat. Our technology enables airlines to deliver rich and engaging experiences at every point of traveler interaction, irrespective of how travelers choose to engage, even across partner airlines. Our advanced data-driven approach to personalization takes the knowledge airlines have about their customers and makes it actionable at every touchpoint, helping to deliver ongoing value and driving loyalty.

New routes, new markets: Norwegian goes global with low-cost long haul

Intro

Since entering the long-haul market, Norwegian has truly gone global, with an increase in total global passengers of over 75%. What is the secret to its success?

Challenge

In 2013 Norwegian started to pursue opportunities for growth and long-term profitability in the long-haul market, facing a number of new challenges, including:

- _ Responding to the needs and habits of travelers in new markets
- _ Ensuring high load factors and sustainable demand for new long-haul routes
- _ Competing with experienced airlines serving passengers on established routes while staying true to Norwegian's low-cost business model
- _ Efficiently managing the operational complexities of long haul at foreign, larger airports while handling more passengers
- _ Delivering differentiated long-haul services that are more affordable with a "low fares, high standards" approach

How did Amadeus support the airline?

Norwegian and Amadeus' partnership began when the airline first started its operations with a focus on Scandinavia. The turning point was in 2010, when Norwegian's focus shifted to expansion throughout Europe.

- _ To support expansion beyond its home base and capture bookings in new markets, the carrier decided to implement full ticketing capabilities. Doing so with Amadeus eTicketing means that Norwegian works with accepted travel agency booking flows in its target markets, ensuring optimal adoption.
- _ Norwegian also uses Amadeus Altéa Suite as its passenger service system. This has helped its operations run smoothly and consistently in every market, while bringing agility and efficiency to travel agencies selling the airline's offer.
- _ These unique efficiencies, combined with access to the world's largest agency network, have played an integral role in supporting Norwegian's growth and profitability when entering new markets.

Results

Norwegian has stimulated significant new long-haul demand with its affordable fares, convenient point-to-point long-haul routes and new connections, enabling people to take trips they previously would never have thought possible. Since Norwegian's first transatlantic service began, the airline has flown more than 6 million passengers between Europe and the United States. Travel agency sales through Amadeus have been a major factor in the airline's long-haul and overall growth strategy, with outstanding results:

- _ A threefold increase in agency bookings from outside Scandinavia since 2015
- _ 100% growth in Amadeus bookings over the last five years
- _ Over 110% growth in Amadeus bookings for long-haul routes since 2015
- _ An omni-channel approach that played an important role in the airline's expansion and success, with agencies accounting for one in every five bookings

3. Enabling operational efficiency

It is essential for all travelers to be able to access an airline's full range of products through whichever channel they choose. In an era of intense competition, airlines have to grapple with the best way to collaborate practically with partners of all types, in a way that does not undermine operational efficiency.

By harnessing airline data to its fullest potential, we are able to proactively detect operational opportunities or risks as they happen with automated, real-time resolution. With advanced and predictive analytics, we can help airlines make fully informed decisions. We help them simplify the complexity of selling to travelers, operating flights and running their business.

Lufthansa biometric technology boards the world's largest passenger plane in about 20 minutes

Intro

Large aircraft like the A380 can take a long time to board. Lufthansa wants to use the latest technologies to optimize the boarding process.

Challenge

It is no simple matter to quickly board several hundred passengers on the world's largest passenger plane. This can generate long waiting time for passengers and therefore dissatisfaction. There is an increasing need for airlines, airports and industry authorities to offer faster processes to travelers.

How did Amadeus support the airline?

In collaboration with various entities, Amadeus has developed a solution that boards passengers with smooth, one-step facial recognition. It is a simple process that we have piloted at Los Angeles International Airport. Self-boarding gates with cameras capture passengers' images. These images are then securely sent to the US Customs and Border Protection database for real-time verification. After a successful instantaneous match, the system recognizes the passengers as "boarded." The passengers no longer need to show their boarding pass or passport at the boarding gate.

Collaboration has been the key to this innovative project. Amadeus helped build the interfaces between Lufthansa's departure control system (Altéa), the gate hardware was provided by Vision-Box, and US Customs and Border Protection provided the database to identify passengers. All these parties worked together to make the travel experience smoother.

Results

The biometric technology implemented helps travelers move through the airport smoothly.

During initial trials, the feedback has been very positive, and the initiative has helped board approximately 350 passengers onto an A380 in about 20 minutes.

Evolution of Amadeus passengers boarded

Amadeus passengers boarded grew by 11.9% to 1,853.9 million in 2018. This double-digit growth in the year was driven by (i) the impact from the 2017 implementations (such as Southwest Airlines, Japan Airlines, Malaysia Airlines, Kuwait Airways, Boliviana de Aviación, SmartWings, Norwegian Air Argentina, Air Algerie and MIAT Mongolian Airlines on Altéa, and GoAir, Viva Air Perú, Andes Líneas Aéreas, JetSMART and flyadeal on New Skies) as well as the 2018 implementations (including S7 Airlines, Peruvian Airlines, Maldivian Airlines, Cyprus Airways and Aeromar on Altéa, and Volaris Costa Rica on New Skies); and (ii) a 7.6% organic growth.

Of our passengers boarded during 2018, 60.3% were generated outside of Europe. Our international footprint has continued to expand, particularly in Asia-Pacific and in North America, supported by the implementations of Southwest Airlines, Japan Airlines and Malaysia Airlines, among others, in 2017. Passengers boarded growth in Western Europe and Latin America during 2018 was negatively impacted by the ceasing of operations of Air Berlin and Monarch Airlines as well as the de-migration of LATAM Airlines Brazil from our platform during the second quarter of 2018, respectively.

Passengers boarded by region *(figures in millions)*

	2017	2018	Change
Western Europe	611.2	624.3	2.1%
Asia-Pacific	502.8	594.3	18.2%
North America	176.5	247.0	39.9%
Latin America	149.2	138.8	(6.9%)
Middle East and Africa	127.2	138.1	8.6%
Central, Eastern and Southern Europe	89.6	111.5	24.4%
Total	1,656.5	1,853.9	11.9%





Key Airline IT highlights in 2018

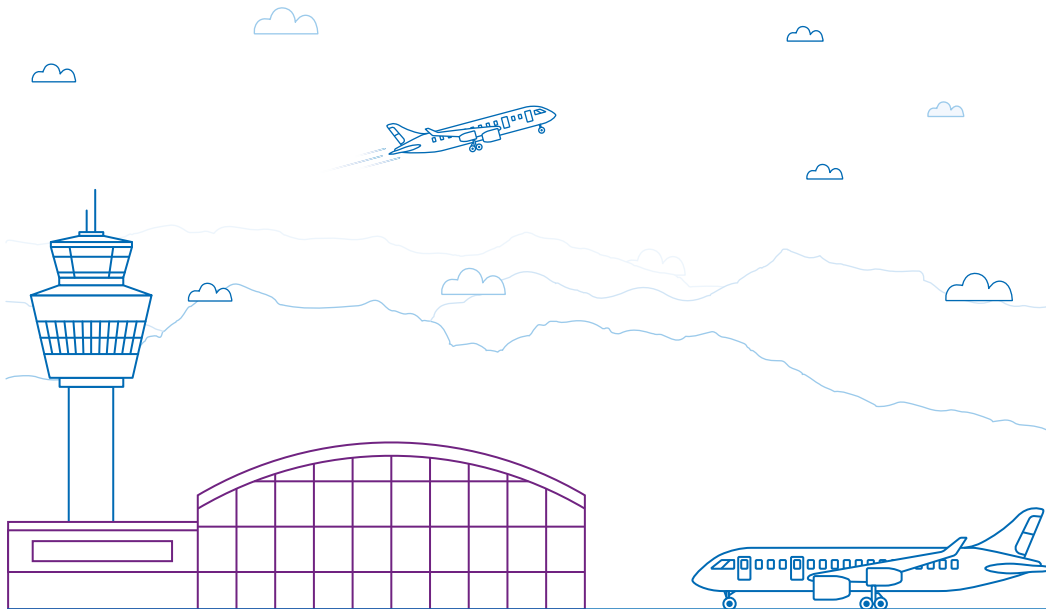


At the close of December, 214 customers had contracted either of the Amadeus Passenger Service Systems (Altéa or New Skies) and 204 had implemented them.

Amadeus SkySYM by Optym

Easyjet contracted Amadeus SkySYM by Optym to improve the reliability of its flight schedules. SkySYM simulates airline schedules in the planning stage to improve schedule reliability and ensure smooth operations on the actual day of the flight.

Singapore Airlines and Avianca have both implemented Amadeus Altéa NDC.



Amadeus Altéa Suite

Several airlines including S7 Airlines, Bangkok Airways, Philippine Airlines, Peruvian Airlines and Cyprus Airways signed up for the full Amadeus Altéa Suite, including the reservation, inventory, ticketing and departure control modules. The Amadeus Altéa Suite will help these airlines to enhance customer experience by delivering more

consistent and personalized customer service, develop new revenue streams and improve operational efficiency. KC International Airlines (a new Cambodian carrier) and Volaris Costa Rica contracted and implemented New Skies. Hawaiian Airlines, the Honolulu-based airline, selected Amadeus Altéa Departure Control Flight Management.

Southwest Airlines signed up for the full Amadeus Sky Suite by Optym with a 10-year agreement. The suite of five industry-first solutions gives Southwest Airlines the most comprehensive and advanced technology for all its network planning, simulation, forecasting and optimization needs.

Qantas completed its ambitious digital redesign. As part of this, the airline implemented some e-commerce solutions, including Amadeus e-Personalize, Amadeus Affinity Shopper and Amadeus Flex Pricer Premium.

Eight airlines contracted Amadeus Revenue Management, including Finnair; seven airlines contracted Amadeus Anytime Merchandising including Singapore Airlines; five for Passenger Recovery and seven for Customer Experience Management, including Garuda Indonesia. Also, Malaysia Airlines contracted Amadeus Revenue Accounting.



We also collaborated with Lufthansa on its new biometric boarding solution using facial recognition. This innovative pilot, enabled through a collaboration between Amadeus, US Customs and Border Protection, Los Angeles World Airports Authority, and Vision Box, is available since March 2018 for Lufthansa flights at Los Angeles International Airport. The airline intends to expand the pilot program to additional US gateways and other passenger touchpoints.

2.4 Diversification areas

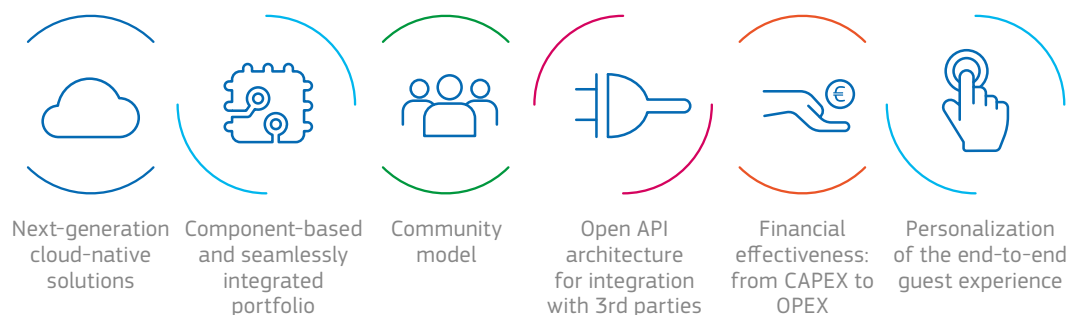
The travel industry changes rapidly. Amadeus therefore needs to be fast in making decisions, agile when working with customers and open to the evolution of the market. These are the three driving principles of our diversification strategy, where our mission is to maximize the opportunities across the travel industry. We have over recent years consolidated our activities in areas such as hospitality and rail and strengthened our offer to customers. Our investment in diversification is already delivering benefits for the industry, including the ability to transform traditional models. Amadeus offers state-of-the-art technology to replace legacy systems that are challenged by the growing demands of rapidly changing businesses.

We reached important milestones in all our new business segments in 2018, in particular in Hospitality and Airport IT, with new contracts signed and migrations. We also expanded our Rail content and launched new solutions in Payments, which captured the interest of customers.

Hospitality

The hotel industry is growing at a healthy rate, adding more than 3.7 million⁸ rooms to the global inventory in the last eight years. Asia-Pacific witnessed exponential growth with a 55% increase

Amadeus Hospitality IT solutions



⁸ Own Amadeus analysis based on various internal and external sources.

in the number of rooms added, while independent properties continued to win the hearts and wallets of travelers, growing and remaining the largest segment with the most stable market share.

At the same time, digital transformation has evolved hotel operations. Next-generation technology is changing the way people travel – from journey planning and comparing options, to booking preferred content and, finally, to sharing reviews online. Whether for a business or leisure trip, travelers expect a personalized booking experience, with relevant content integrated into booking platforms.

Amadeus is well positioned to meet both the technology and distribution needs of the hospitality industry, while incorporating new innovations to address all segments in all regions to take full advantage of these global trends.

Hospitality IT

Hospitality is all about the human connection and the ability to deliver personalized experiences for guests. Our technology solutions provide cloud-native capabilities for central reservations, property management, sales management, event management and housekeeping, as well as operations involving business intelligence, media and guest management. These not only cover the life cycle of a guest's journey, but also offer properties the added benefit of understanding customers' behavior through enriched data to build more personalized experiences and offerings. This represents a game-changer for the industry, as venues commonly work with multiple technology providers and have fragmented views of their guests.

Our investment into core hotel platform technology continues to strengthen our offerings, with notable deal wins such as Premier Inn. In addition, in 2018 we continued to progress in the roll-out of the Guest Reservation System with InterContinental Hotels Group, which was completed successfully in the fourth quarter. InterContinental Hotels Group's more than 5,600 properties across 15 brands and more than 100 countries are now live. Going forward, there will be future updates to the platform bringing enhanced features and functionality, including attribute-based selling.

Amadeus solutions provide unique value through centralized data across all hotel systems to capture a 360-degree view of business performance and guest preferences.

In August we announced an agreement to acquire TravelClick for USD 1.52 billion. TravelClick provides innovative cloud-based solutions, including an independent and mid-sized hotel central reservation system and guest management solution, as well as business intelligence and media solutions. The addition of TravelClick's solutions to the Amadeus portfolio will create a hospitality leader providing a broad range of innovative technology to hotels and chains of all sizes across the globe. In October, following the regulatory approvals, Amadeus announced it had completed the acquisition.

Hotels, Mobility and Insurance

With the evolving needs of the traveler in mind, Amadeus' Hotel Distribution unit has spent the past few years committed to sourcing new and standardized hotel content, with the vision of maximizing the choices available to our customers and offering more control to our providers in terms of how their rooms and facilities are sold. This commitment has resulted in great success and higher customer satisfaction. Our recent acquisition of the hospitality technology provider TravelClick should help accelerate growth in 2019 and beyond.

On the other hand, the mobility sector is experiencing disruption from new players, such as online hailing and on-demand car rental services. Customers are faced with an increasing variety of ways to travel. Responding to customer demand, Amadeus will be distributing car rental, transfer and online hailing providers through a single integrated Mobility Services Platform.

On the insurance side, new technologies enable travel insurers to provide ever-more segmented and personalized offers, carefully tailored to the individual traveler and their risk profile. For all kinds of travel providers, this opens up exciting cross-selling opportunities.

Bringing these three units – Hotels, Mobility and Insurance – together strengthens Amadeus' beyond air offering, and provides a more complete package for Amadeus customers. Our vision for Hotels, Mobility and Insurance is to combine efforts and to offer a more complete hospitality and mobility ecosystem where providers, sellers and guests have more opportunities to create and receive value. Insurance is the perfect product to be added as a cross-sell service, enriching our whole offering.

After one year together, we can be proud of the progress made, which translates into a series of customer wins and expanding partnerships with several travel management companies and online travel agencies.

Acquisition of TravelClick

Hospitality remains the largest diversification area for Amadeus, through significant organic and inorganic growth. From strategic R&D investments and enterprise deals, to our latest acquisition of TravelClick, we are positioning ourselves as leading technology providers for the hospitality industry, serving more than 53,000⁹ unique properties around the world. Thanks to this acquisition, we are also moving beyond our initial market focus of large chains to providing solutions for independent and mid-sized hotel chains to expand our portfolio and market reach.

TravelClick has 30 years of industry experience, operating in 176 countries with 1,100 employees. The company's 14 offices span the globe, with headquarters in New York.

TravelClick has focused on developing an interconnected suite of Software-as-a-Service, cloud-based solutions using unique and actionable data – spanning business intelligence, reservations and booking engines, media, web, video and guest management.

The acquisition of TravelClick will significantly expand Amadeus' footprint in the hospitality industry, as well as accelerate Amadeus' time to market, thanks to a well-built commercial organization that has been scaled globally. A large presence in Europe and Asia-Pacific will also enhance Amadeus' regional penetration in these two regions.

In November 2018 NH Group joined TravelClick's Demand360 program, which gives hoteliers unique access to forward-looking demand data and allows hoteliers to develop optimal strategies for maximizing revenue. Working with TravelClick's Demand360 provides hotels with an understanding of the booking trends in their local market, while giving them the ability to know what actions to take to drive performance and ensure that they are getting their fair share of bookings through the right segment and channel.

TravelClick
an amadeus company

⁹ 2018 estimated number of unique properties served including TravelClick.

At the close of 2018, 126 ground handlers, 115 airport operators and 34 airlines were using our Airport IT portfolio of solutions.



As demand for international train services continues to rise, so does the opportunity to offer a comfortable and better connected service. By working together with Amadeus, Swiss Federal Railways is harnessing the potential of new technologies to modernize the distribution of international rail tickets while offering a better experience for passengers."

Alexander Gellner

Head of International Distribution and Marketing - Swiss Federal Railways

Airport IT

In 2018 airports worldwide again tackled the dual challenge of growth in traveler numbers and capacity constraints, with the growing middle class in countries such as China and India putting pressure on airports to process more travelers, more efficiently.

Amadeus' Airport IT unit continued its growth in the airport industry in 2018, providing a suite of solutions for airports, ground handlers and airlines that helped customers address these pressing issues.

Airport IT grew its total number of clients, and helped its existing customer base improve operations and results by delivering more solutions and higher performance to their enterprises. A good example is Pristina International Airport in Kosovo, which implemented the Amadeus Altéa Departure Control for Ground Handlers and Amadeus Baggage Reconciliation System solutions.

In 2018 Airport IT continued its mission to innovate within the airport industry and to replace traditional systems with new solutions that create new opportunities and offer new value to airports, travelers and the industry as a whole.

Aeroportos e Segurança Aérea Cape Verde Airports, a customer of Amadeus' Airport Common Use Service (ACUS), contracted ACUS Mobile in 2018. We also saw increasing interest from customers in Amadeus Extended Airline System Environment and we signed contracts with airports such as Killeen-Fort Hood Regional Airport, JFK Airport, Los Angeles International Airport, Bozeman Yellowstone International Airport and Charleston County Aviation Authority.

In 2018 Billund Airport, Denmark's second-largest airport, deployed Amadeus Altéa Departure Control System and Amadeus Baggage Reconciliation System. Together, these solutions will support the airport's digitalization journey and improve the passenger experience through process automation and self-service capabilities.

Rail

Digitalization has been a reality for many years across all travel segments, including railways, who are making it top of their agenda. Rail operators are looking into creative ways to adapt to a more digital world. Amadeus is at the heart of this transformation

by delivering passenger rail technology solutions that connect railway systems and bring railways closer to their customers.

In this fast-changing digital environment, railway companies are seeking to optimize their own operations by evolving and changing their IT systems. With our suite of technology solutions, Amadeus RAILyourWAY, we bring them technology systems that are flexible and modular and that put the customer at the center of all operational decisions. We also partner with railways to develop innovative solutions and new digital means to improve customer service at train stations. For example, we are testing some use cases running on the humanoid robot Pepper, from SoftBank Robotics, to answer simple and recurring travelers' requests.

Amadeus also helps railways to sell their tickets more efficiently across direct and indirect sales channels, and with a wider geographical reach. For example, Swiss Federal Railways (SBB) contracted Amadeus to design and power its new intelligent and flexible booking solution, which will be used across all of SBB sales channels – online, at stations and third parties. Another example is making it easy for any rail operator to sell other railways' tickets on its own direct sales channels, such as websites, apps or train stations. By embracing the standardization of the rail industry, we help railways connect to each other, making international train journeys as easy to book as they are to travel.

We are the first third-party distributor to implement the Full Service Model standard promoted by the European Commission to foster rail as a transport alternative. Finally, we also take our customers well beyond the borders of their domestic market, thanks to our global distribution network. We see a growing interest from European rail operators to be sold overseas, particularly in Asia-Pacific. There is also a growing appetite from Asian travel agencies to sell regional and international train tickets.

In 2018 we expanded our distribution agreement with SNCF, the French national railway. Thanks to this agreement, travel agencies beyond Europe will have access to SNCF rail content for the first time.

Payments

In the past 10 years, the payments industry has been revolutionized by a considerable amount of innovation. The well-established ecosystem of banks, credit card schemes and other providers that routinely managed payments for nearly 50 years

has suddenly been joined by a host of new players looking to innovate and disrupt that ecosystem: PayPal, Klarna, WeChat Pay and Bitcoin, to name a few.

This represents both a cost and opportunity for travel companies. The opportunity is to deliver a seamless payment experience to their customers, or streamline internal processes to pay suppliers. However, managing payments globally is complex. Travel companies must navigate local consumer behavior, regulations, currencies and markets just to get paid at all of their points of sale, while of course complying with all the global restrictions on cash flowing around the world. And, as new payment methods come to market and governments adjust their regulatory frameworks to encourage open banking and digital payments, the environment is in a state of constant change.

All this adds up to a significant cost: the combined spend of airlines, travel agencies and hotels on payment processes is USD 74.5 billion (approximately €65.5 billion), or 5.4% of revenue, according to a survey we conducted in 2018 in collaboration with PYMNTS, a news and analysis company. This figure includes card acquisition costs, fees to other payment-related providers, capital expenditure and the operational costs associated with managing payments. It is not surprising, therefore, that 44% of airlines cited “overall cost” as their biggest payment-related pain point.

Amadeus set up a dedicated payments unit in 2012 to help travel companies manage this cost and complexity. By combining a payments functionality with Amadeus’ existing travel technology backbone, we can add significant value to travel companies. Our core offer is to provide a single entry point for travel companies to access hundreds of financial services companies worldwide. This enables them to take payments from their customers and make payments to their suppliers in 200 countries around the world from a single interface.

In 2018 we launched a major upgrade to this platform, called Xchange Payment Platform, the travel industry’s first and only end-to-end payment solution, empowering travel businesses with a single view of their entire payments ecosystem.

In April 2018 we launched a new solution to facilitate payments of bookings made through airlines’ call centers. Rather than having to discuss payment details over the phone, with Amadeus Agent Pay airline agents send their customers a link, via SMS or email, to a secure webpage, so that the traveler can then complete

the payment from their smartphone, tablet or PC. Meanwhile, the ticket is kept on hold, and issued automatically once the payment is complete. Finnair is using it not only for its call center but also for its chat-based customer service agents.

Travel advertising

Travel Audience, an Amadeus company, is on its way to becoming the most trusted digital travel advertising platform. It is accelerating growth across the entire travel industry by precisely and directly connecting travelers with our customers. The platform serves more than 300 advertising partners such as airlines, destination marketing organizations, online travel agencies and hospitality groups. It offers advertisers who want to address a target group interested in travel the opportunity to access a high-reach, high-quality premium inventory of well-known publishers via programmatic advertising on all channels.

This data-driven travel advertising platform consists of two main elements: the Premium Publisher Network, which publishes third-party content via native advertising, and the proprietary demand-side platform, which provides end-to-end, data-driven advertising solutions to our partners. Amadeus’ travel audience leverages machine learning to identify when people search for trips, when they book and, above all, when it makes sense to show them offers from our advertising partners.

Dubai’s Department of Tourism and Commerce Marketing (Dubai Tourism) entered into an agreement with travel audience in March 2018. Travel audience will help the city develop insights into visitor arrivals by widening its global reach and through advanced data analytics. The destination marketing organization will work with travel audience to build custom campaigns across a wide range of channels, including online travel publishers, social media and metasearch engines. With added visibility into online travel patterns, it will be able to measure campaign performance more effectively and gather insights into traveler intentions and behavior. Dubai Tourism is also using Amadeus Destination Insight to gather insights into global travel, including up-to-date search, booking and scheduling data.

By the end of 2018 we had over 1,000 customers and processed over €105 billion in payments during the year. The number of transactions processed showed double-digit growth compared with 2017.

“

Tourism is central to Dubai’s economic growth and diversification. With travel audience’s intelligent technology and team of experts, and Amadeus’ far-reaching travel network, we have found a platform that can provide insights that assist our decision-making. By building brand and performance campaigns tailored to specific segments in exclusive channels, we can attract new visitors from regions far and wide while we grow our established visitor base.”

Issam Kazim

CEO - Dubai Corporation for Tourism and Commerce Marketing

3. Customer experience

One of Amadeus' core principles is to place our customers at the heart of everything we do. Amadeus seeks to anticipate and fulfill the needs of all our customers, delivering value to them with accountability throughout all stages of their experience with us, from the beginning to the end.

As the travel industry evolves, our customers' expectations do as well. We listen to their voice and evolve our organization and approach to deliver an experience that meets and even exceeds their expectations.

3.1 Customer service and support

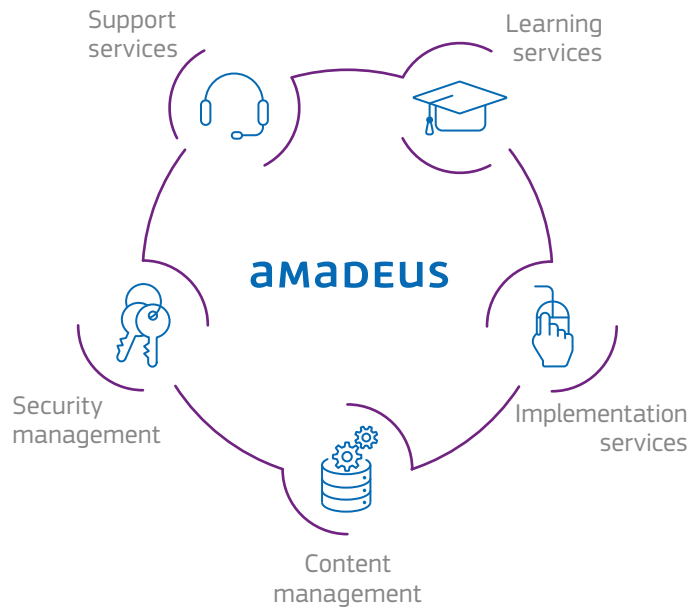
Amadeus delivers a wide range of learning, support, automation, content and security management services. These help our customers to succeed by:

- _ Helping them train, understand and use Amadeus solutions
- _ Providing the highest level of functional and technical support
- _ Securing and integrating travel industry content
- _ Offering related consulting and value-added services at key touchpoints of the customer relationship

The vision of our Customer Service teams is to provide the best customer service experience in our customers' eyes. This is achieved by continually challenging the status quo to meet evolving customer needs, as well as developing and improving our performance. In 2018 Amadeus brought customer service closer to our customers by reorganizing our service capabilities with dedicated teams that serve different segments: travel agencies, corporations, airlines, airports and hotels, among other travel industry providers worldwide. This allows us to serve our customers in the way that best fits their specific needs and expectations.



Services we offer



Support services: always there for our customers

In order to ensure proximity to our customers, we have built a strong local, regional and global presence.

Level 1 customer support is provided to our distribution customers by our local and regional helpdesk organizations. Customers have the support close to them, in the local language and with knowledge of market-specific products. Airlines can opt for an in-house helpdesk or outsource their Level 1 support to our Amadeus customer services experts.

Level 2 support is provided by the Amadeus Service Management Centers, which form a virtual support network distributed across the globe.

Amadeus employs a follow-the-sun approach that provides seamless 24/7 service from our Service Management Centers.

Amadeus support services

Level 1

Regional, local and in-house helpdesks



Level 2

Service Management Centers



Level 3

Service Management Centers R&D

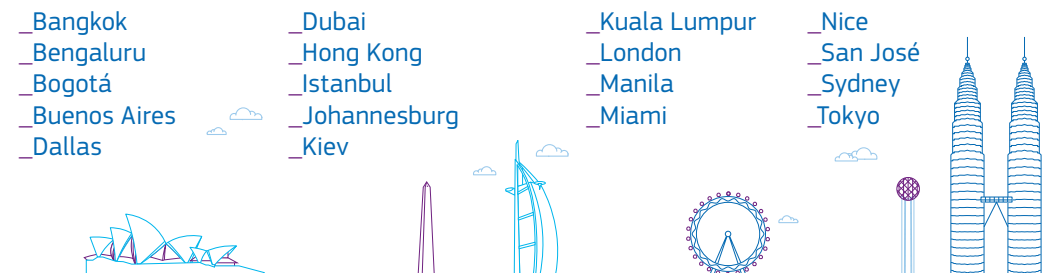
The structure of this network is designed to guarantee technical and functional support at any time for all our customers worldwide.

Our Service Management Centers located in Miami and Nice serve our travel agency, corporate and airline customers, while those in Bangkok and San José (Costa Rica) serve travel agencies and corporations.

We also have dedicated service centers for airline customers in Dallas, London, Istanbul, Dubai, Bangalore, Manila, Tokyo and Sydney.

Level 3 support: our expert teams collaborate closely with Amadeus' R&D, product management and operations teams to minimize R&D incident resolution time, reduce incident backlogs and improve the accuracy of responses. The synergies of their expertise allow for continuous improvement of the investigation and recovery of non-code-related incidents in complex areas.

Main Customer Service locations¹



¹ This diagram refers to the main locations for Customer Service, including the global sites and regional service centers. It does not include local sites.

Content management and security

Amadeus' content management and security teams integrate and secure industry and customer data.

Our data management experts ensure that relevant, reliable and quality content is available to our customers 24/7. They also ensure the quality of the data fed into the Amadeus system from external data providers such as the International Air Transport Association (IATA) or the Airline Tariff Publishing Company (ATPCO).

Their core business knowledge allows them to share expertise and provide Level 3 support to customers on a wide range of products and domains including reservations, inventory, ticketing and pricing, as well as security and access management.

These experts analyze customer issues and provide recommendations through tailored services such as on-site customer training, data reports and fare filing on behalf of customers. One of the key services in this scope is consulting to ensure that customers make the best of Amadeus solutions.

Our data experts are also responsible for worldwide and centralized security administration for Amadeus employees and customers. Their activities cover the integration, implementation and security of all travel industry content, ranging from schedules, fares, currencies and airport codes to security settings for offices, terminals and printers, as well as credentials for employees and new customers.

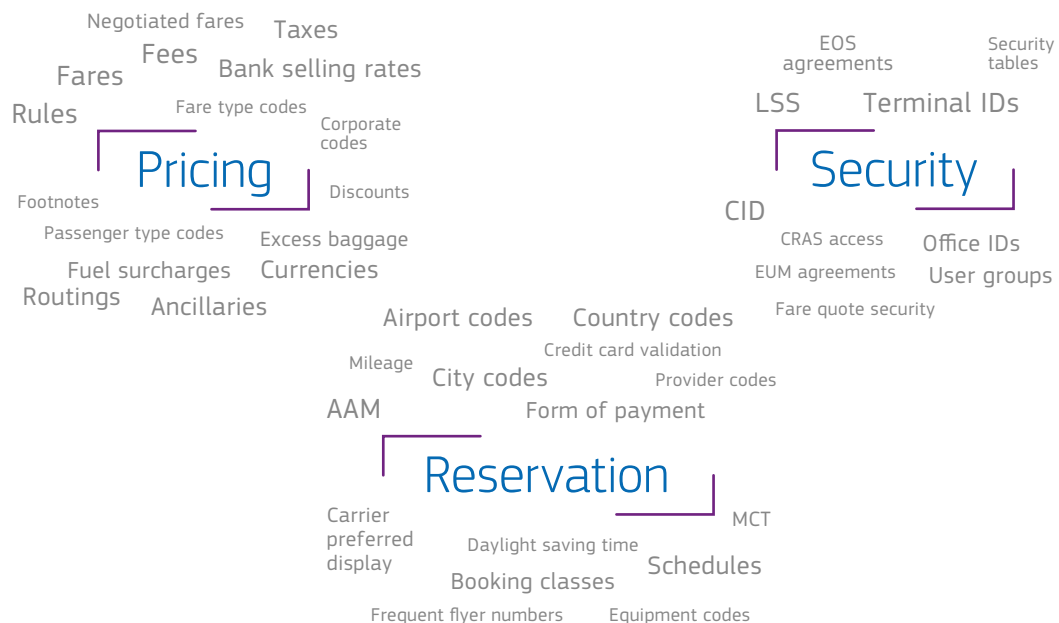
Learning services

To ensure that our customers make the best possible use of our technology, Amadeus delivers a blend of online, offline and instructor-led learning on Amadeus solutions. We use a variety of flexible formats such as self-paced e-learning, videos, instructor-led virtual training, webinars, classroom training, user guides and online help.

We support the increasing demand for customized learning services from our customers globally, regionally and locally with relevant and flexible learning solutions. Our training services are delivered as standard in English for our airline customers, and whenever possible we provide training in local languages depending on the customer segment.

We evolve as the needs of our customers evolve. In 2018 we deployed a new global online learning platform called Amadeus Learning Universe. It is available via Amadeus Service Hub, our online customer service portal, and customers can access learning and solutions information any time they need it, 24/7.

Data hosted in the Amadeus system



Implementation services

Customers place a great amount of trust in Amadeus when changing the core of their business to new technologies. Whether it is an effortless installation of front-end systems, or implementations of highly sophisticated solutions, we are present and support our customers along this journey.

Some airlines have limited resources and expertise to handle the implementation of new technologies. Since 2017, when we implemented a new approach in support of these airlines, we have been using our experience and expertise to guide them through the implementation process and challenges. This helps alleviate the pressure on their resources and ensure a smooth transition to the new systems.

Reducing incident resolution time

A team of technical analysts are fully engaged in ensuring that when technical incidents impact our system and services, our teams minimize the impact on customers and reduce the resolution time. These experts, based in our global operations center in Erding (Germany), monitor business performance to detect major issues before customers report them. The teams correlate incidents to changes made in the system, drive recovery efforts and anticipate the potential impact. When incidents happen, they proactively notify our customers to ensure their business continuity. Since the creation of this team, the results show that mean time to recover (MTTR) for major business incidents has been significantly reduced. Additionally, the teams have improved the speed of their communication with customers by reducing the time it takes for them to receive critical incident notifications by 50%. This is done via the Amadeus Critical Incidents Center online portal, and it allows our customers to make faster business decisions to manage the impact.

We use valuable insights and feedback from our customers to better respond to their needs. Our objective is to avoid any recurring issues, to proactively propose consulting services and to work with customers to enable their success.

Digital servicing

Digital transformation is at the core of our service capabilities. The Amadeus Service Hub is the heart of our digital customer service ecosystem.

Through the Amadeus Service Hub, customers can access online support, knowledge and learning resources, including online user guides, how-to videos, error codes, e-learning courses and training catalogs. Specifically, customers can:

- _ Enroll in e-learning and instructor-led training sessions in one click 24/7
- _ Log incidents or service requests online 24/7
- _ Receive notifications on the resolution of the critical incidents via the Amadeus Critical Incident Center
- _ Raise and track incident escalations with Incident Support Plus²

In 2018 we launched the Amadeus Travel Community, where our travel agency customers can exchange knowledge and experiences with Amadeus products and solutions within a community of travel experts.

We are also exploring how to enhance our support with new technologies such as artificial intelligence, and in 2018 we evolved our chatbot solution. For travel agencies, the chatbot is integrated into Amadeus Selling Platform Connect and provides a seamless online experience by answering easy how-to questions. It was deployed in Latin America, Portugal and New Zealand.

In 2018 we tested the chatbot internally with our airline service agents to enable them to be more proactive in responding to customer queries about our departure control system, inventory, reservation and ticketing solutions.

Our goal is to maximize our customers' performance and operational efficiency by offering the right service at the right time.



Watch video about our Amadeus Service Hub



Watch video about the Amadeus Travel Community

² Some airline customers only.

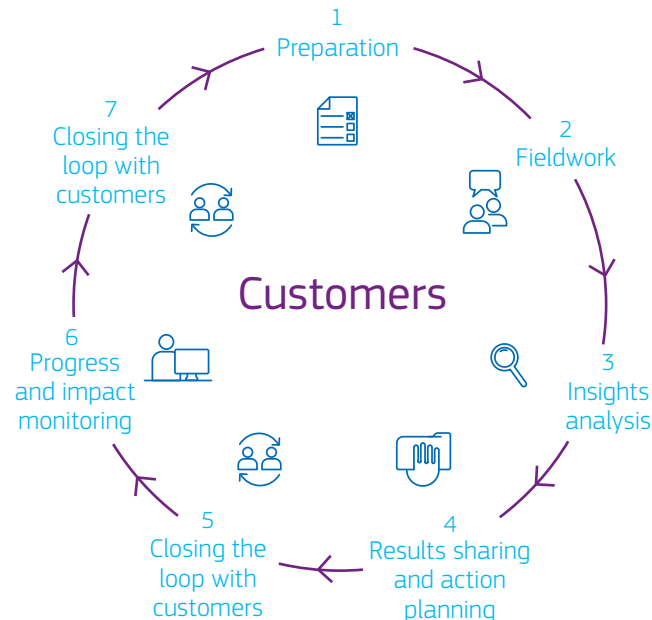
3.2 Customer satisfaction and loyalty

We welcome customer feedback, as it helps us evolve as a company and be prepared for the future challenges of the industry.

Our Voice of the Customer program monitors customer loyalty and evolves to open new feedback sources and channels between customers and Amadeus.

The main purpose of the program is to transform customer feedback into insights that teams across Amadeus will use to improve our performance. This helps us to continually revisit our way of doing things and focus on the areas that are priorities for our customers. This feedback is also key to defining Amadeus' strategic investments.

360° feedback – closing the loop with customers



Customers actively participate in the design of our action plans, and we keep them informed regularly of the progress made. This communication is always carried out face to face via our teams in the regions or the different customer forums organized throughout the year.

We vary our methodology for gathering feedback and measuring loyalty in order to adapt to the characteristics of each customer segment and market. The approach includes in-depth sessions with customers, interviews, and relationship and transactional surveys to identify main focus areas in the customer journey and where Amadeus is progressing well.

Our main measure is the Net Promoter Score, and we set targets at the beginning of the year. There are certain key satisfaction drivers measured across all customer segments:

- _ Perception of Amadeus as a solid, leading and innovative brand
- _ Quality and reliability of Amadeus solutions, as a reflection of Amadeus' focus on research and development
- _ Overall relationship with Amadeus, highlighting the engagement and service mindset of Amadeus people

Voice of the Customer in 2018

This year we have set up dedicated Customer Insights & Experience teams for our airline and travel agency customer segments. These have the mission of evolving and promoting our Voice of the Customer program, and of generating and transforming feedback into relevant insights used to develop customer journeys and deliver the right experiences. Their role is to mobilize all Amadeus' teams to focus on customer expectations and to show customers how their feedback has been actioned to result in demonstrable performance improvements.

In 2018 Amadeus also conducted both quantitative and qualitative surveys with airline, travel agency, hotel, airport, digital advertising and payment customers. To obtain a 360-degree customer view, we use our Voice of the Customer platform, which allows us to systematically collect and consolidate the feedback from different types of surveys, as well as speed up communication with teams worldwide.

The Customer Insights & Experience teams work very closely with a community of Voice of the Customer champions spread across the globe, who are accountable for sharing results and driving action in the different regions.

Customer journey mapping methodology is also used with some of our customers. Just in 2018, nearly 100 customer journey mapping sessions were held with travel agencies to understand their internal processes and how they interact with Amadeus. We have also worked with some airline customers to map expectations to the incident management journey, and we are investing more resources into this type of initiative.



4. Technology and innovation



Technology organization

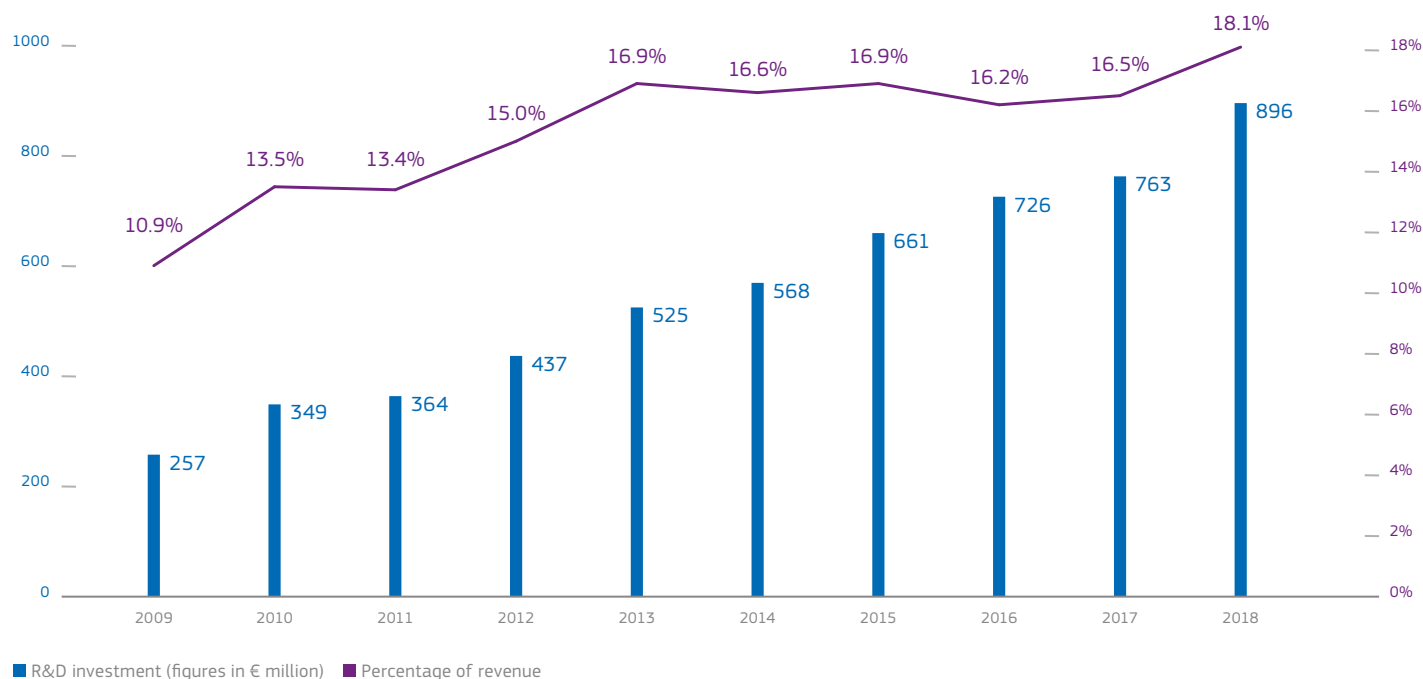
Amadeus' new technology organization, launched in early 2017, is now fully deployed. Designated the Amadeus Engineering Community, this organization brings together all Amadeus' product development and operations efforts across our technology sites worldwide. It is composed of two transversal technical units, complemented by dedicated R&D teams in each of the business units that develop travel IT applications for our customer segments.

The first of these technical units, the Technology & Platforms Engineering (TPE) unit, is responsible for the delivery of reliable platforms across all Amadeus' businesses, with a strong focus on automation of the operations cycle in the context of the ongoing transition to cloud-based architectures. The second, the Core Shared Services R&D (CSS) unit, brings together Amadeus' transversal engineering activities and shared applications across all businesses and customer segments, such as the core reservation, pricing and shopping platforms. CSS is also responsible for the executive governance of quality management, development tools and project methodologies across all components. Finally, application development for specific customer segments is delivered by dedicated R&D groups within the corresponding business units.

The set-up of the Amadeus Engineering Community reinforces our capacity to ensure a global, controllable approach to designing and running applications with the reactivity, quality, flexibility and innovation required by our large and diverse base of customers, served by a growing portfolio of functionalities and services. This is also crucial to implementing a continuous product development and operations cycle, to progress on our path toward a fully cloud-based architecture and to foster innovation across all components of Amadeus' systems, specifically around the application of artificial intelligence and advanced data analytics.



Amadeus R&D investment (including capitalized R&D)*



* Part of our R&D costs is linked to activities that are subject to capitalization, thus impacting the level of operating expenses that are capitalized on the balance sheet.

Amadeus is ranked as the second-largest R&D investor in the software and services sector in Europe.¹

Global presence

Amadeus' investment in technology is supported by a network of technology centers across the world, deployed regionally using a model of hubs with global coverage, transversal activities and satellites dedicated to specific applications and domains or, in some cases, to the support of customer projects. Amadeus pays particular attention to the support of its customers, even beyond the implementation period; we keep active centers with dedicated technology teams in the same location or region as key customers, such as our Dallas, Tokyo, Seoul, Sydney and Dubai sites.

All technology sites work closely together, and our projects and product development processes are increasingly distributed over several regions. Nice (France) is the largest technology center, with on-site and global teams developing solutions for travel distribution, e-commerce, travel agency points of sale, airlines, hotels, railway companies, airport IT and travel intelligence. Amadeus Labs in Bangalore is also a general technology center, covering a large spectrum of products and functions. In 2018 our development sites have grown in all regions, showing that this distributed development approach can scale well.

¹ The EU Industrial R&D Investment Scoreboard contains economic and financial data for the world's top 2,500 companies, ranked by investments in research and development. For more information, see <http://iri.jrc.ec.europa.eu/scoreboard18.html>.

The Amadeus global operations support organization, now part of TPE, is present in many sites and is based on a follow-the-sun model, with dedicated specialist support groups in Germany, the United States, Australia, India and the United Kingdom. The follow-the-sun model benefits from strategic locations in different time zones so that 24-hour service is guaranteed. This ensures optimal customer support from the closest available office and facilitates maintenance during off-hours.

Recruitment for Amadeus' R&D teams is oriented toward incorporating a wide range of expertise and international cultures. Staff mobility, short- or long-term, is encouraged between both business expertise domains and geographical locations. Amadeus also offers numerous internships to top international schools, with formal recognition of their contribution in the form of an annual intern contest. Over the period 2015 to 2018, Amadeus has hired close to 160 experts and specialists as a continuation of those internships in functional and technical domains.

Amadeus provides its staff with a stimulating environment that enhances creativity and helps spark innovative thinking, promoting teamwork and staff interaction. The office buildings in which we operate have a collaborative space design, fostering a dynamic deployment of teams, both on site and across sites. This is an essential component of our Agile development methodology within a geographically distributed organization.

World-class technology

The travel market is becoming increasingly complex. There are new entrants: on the one hand, major technology companies with the capacity to expand their existing portfolio of solutions in other sectors to include travel; and on the other, start-up companies that can leverage for instance cloud capabilities to quickly build niche functionalities. Amadeus enjoys a privileged position, offering a large portfolio of travel-dedicated applications combined with the capacity to quickly leverage cloud-oriented techniques on a very large scale across the widest customer base in the travel industry.

Technology sites



In this dynamic context, Amadeus maintains and develops its technical leadership through a set of unique capabilities:

- Extremely high-performance transaction processing under stringent system availability, security and dependability requirements. All applications evolve while ensuring a continuous service to our customers.
- The management of very large databases with full transactional integrity. Since 2017 we have introduced applications deployed in production over to multiple data centers and public clouds, based on new database techniques.
- Rapid response time for all functionalities from any point of access in the world, serving hundreds of thousands of simultaneous users, and a greater number of end consumers connecting to the websites of our customers. This network of travel professionals and consumers forms one of the largest web systems worldwide in terms of traffic.
- A true omnichannel approach, servicing all functionalities from a wide range of devices and interaction methods, such as agent desktops, websites, kiosks, cell phones, tablets and chatbots, as well as system-to-system integration. Whatever the channel, our customers are all accessing common data records and processing them from a single set of community applications, delivering a seamless traveler experience.

Amadeus uses a combination of intellectual property (IP) rights (notably copyright, know-how, patents, trademarks and domain names) and appropriate IP provisions in transactional agreements to protect its innovations. Amadeus also contributes to the development of open source communities, in particular in the context of its partnerships with major IT vendors.

Continuous software development and operations cycle

Amadeus has implemented an Agile methodology across all software development activities since 2014, covering the operational readiness of the software for production deployment since 2016. Our Agility program relies on a common methodology and toolset for product design, software programming, quality assurance and,

more generally, all phases of the product development cycle. It is instrumental to leveraging the high modularity of our systems, allowing applications delivered to our customers to share and reuse functionalities and technical components.

In 2018 Amadeus initiated the deployment of this Agile approach on a global scale, for product development as well as customer-related activities, based on the SAFe® methodology (Scale Agile Framework). The SAFe® standard is a set of practices used in the mainstream IT industry. It promotes collaboration and alignment for a very large number of Agile teams along the whole production cycle, from the product requirements stage to the delivery stage. It is common for major customer-oriented projects to involve many teams in different locations: for instance, the migration of Japan Airlines to Altéa involved 21 teams in 10 locations. The SAFe® methodology also provides a formal, global framework for our initiative to achieve a continuous software development and operations cycle, which started in 2016 and will be further standardized and optimized.

In 2018 Amadeus applied the Continuous Integration/Continuous Delivery (CI/CD) approach to most of its projects. CI/CD is a set of best practices and tools whose goal is to automate and monitor the production cycle from programming to delivery. This allows us to constantly monitor the progress of an application's development and to collect regular feedback from customers. It also ensures much better reactivity as well as controlled quality along the whole project.

In addition to our Agile approach, which is based on frequent iterations, Amadeus has deployed a set of tools and methods that ensure the automation and control of procedures along the delivery cycle. Since Amadeus provides its application "as a service" (SaaS), this extends to the production environment: when applicable, Amadeus has introduced DevOps² teams covering both development and operational functions to ensure smooth application management and fast responses to customer requests.

² DevOps is the term designating mixed teams of software and operational engineers collectively covering the management of applications in a production environment. This was previously referred to as "application management."

Cloud-based strategy and distributed architecture

Cloud-based architectures encompass a set of design practices and concrete technical implementations all aiming to provide the highest levels of flexibility, reliability, resilience, scalability and performance for very large systems. Amadeus began to adopt this approach as early as 2014 and has made significant progress since then, with a set of progressive product deliveries to market since 2016. 2018 has seen a substantial acceleration in our evolution toward a fully cloud-based configuration of our applications and services.

Cloud-based architectures promote an explicit separation and abstraction of the application, platform and infrastructure layers.³ Unlike mainframes, where these layers are completely interlaced and proprietary, the cloud-based technical approach enables a flexible management of computing resources and an automation of the software deployment, from development to production, leveraging standardized, low-cost, low-consumption hardware, potentially distributed across multiple data centers. The core concepts are based on redundancy, isolation and operational monitoring of components in a distributed architecture, providing built-in scalability and intrinsic tolerance to system failure. For business applications, this translates into the ability to handle extremely large volumes of data and processing with quasi-continuous system availability.

Amadeus has made technology choices based on open source technologies provisioned from mainstream IT vendors such as Red Hat⁴ to benefit from enterprise versions of software and premium support. We have also adapted a number of tools and practices used by our software engineers to automate the development and delivery of applications in a full cloud-compliant environment. The whole set of technology has been grouped under the generic term of Amadeus Cloud Services, which is our way of designing, deploying and running applications on any kind of infrastructure, whether private or public clouds. Amadeus Cloud Services is a

critical element of our technical strategy, because it keeps us relatively independent from current and future implementations of cloud hosting by external vendors, preserving our significant investment in the development of an application's functionalities.

One interesting aspect of cloud-based architecture is the ability to seamlessly distribute an application over several infrastructures and thus leverage the resilience and dynamic capacity of such a distributed architecture. For certain categories of applications essentially performing calculations from a read-only database, such as air shopping,⁵ the transition is relatively straightforward, with a repackaging of applications. We have recently transferred part of our air shopping capacity to the Google Cloud in production, following the deployment of distributed air availability for Lufthansa also on Google Cloud in 2017.

For mission-critical applications relying on large-scale transactional databases, such as Amadeus' global distribution system and its Altéa Inventory and Altéa Departure Control systems, this requires implementing a sophisticated mechanism of distributed databases in order to guarantee the full integrity of data, regardless of the access point. In 2018 Amadeus completed the deployment of such distributed architectures for applications like the Amadeus Guest Reservation System with InterContinental Hotels Group,⁶ paving the way to an extension to other applications for the coming years, including our core reservation applications.

Beyond the technical and operational benefits of distributed architectures, we believe that the evolution of our systems is fully in line with the business trends of the travel industry. The New Distribution Capability standard of the International Air Transport Association (IATA NDC) specifically promotes the concept of distributed reservation, in which performance will become a critical factor of viability and adoption. With our investment in cloud-based architectures, Amadeus will be in the best position to propose advanced solutions to both airlines and travel sellers from a common investment and organization.

³ These layers are often referred to as SaaS (Software-as-a-Service), PaaS (Platform-as-a-Service) and IaaS (Infrastructure-as-a-Service).

⁴ Red Hat was acquired by IBM in 2018 for USD 33.4 billion. It delivers the enterprise version of OpenShift, a cloud-oriented technical stack, which itself remains in the open source domain.

⁵ "Air shopping" covers search and pricing of itineraries, in particular the capacity to find the "best prices." The introduction by airlines of ancillary products and other merchandizing techniques based on personalization has made these transactions increase exponentially in complexity and size.

⁶ The largest hotel chain in the world.

Distributed operations and data centers

Data center operations are a critical element of Amadeus' strategy to deliver competitive products and services to customers. Beyond cutting-edge functionality and features, our customers also expect robust, versatile and fast systems, as their businesses increasingly rely on our platforms. Capabilities such as continuous availability, sub-second response times and flexibility of deployment are becoming mission-critical business features. Both on mobile and on the internet, response time is seen as a critical factor to adoption and conversion. Our customers need advanced security to develop trust with their users and partners, so they can assure them that their personal and financial data is safe.

Amadeus delivers its services to customers from many locations – a combination of our privately owned Amadeus Data Center, private clouds in remote locations and public clouds such as Amazon Web Services, Google Compute Engine, Microsoft Azure and Salesforce.com. As a key element of Amadeus' strategy, we always maintain full control of all operations, irrespective of the nature and location of the physical server infrastructure. This is crucial for Amadeus to hold end-to-end responsibility vis-à-vis our customers for the production systems, as well as to perform any required fundamental changes in our technical or operational frameworks without external dependencies or constraints. A good illustration of our operational freedom has been the successful decommissioning of Transaction Processing Facility (TPF) mainframes in 2017.

When moving to external cloud hosting, Amadeus will maintain a strategy of independence from third-party providers, an approach that we already follow for core systems and software. This means that we will maintain provision of services from multiple vendors and ensure the required genericity in our platforms to switch between infrastructures in a predictable manner in terms of timeframe and cost. This is one of the reasons we developed the Amadeus Cloud Services model as the foundation of all our applications, to guarantee that they can run in any location with the same level of performance, security and data protection.

The increasing customer demand for travel information and reservations has led to a rapid and ongoing increase in IT systems capacity. We have moved from a few tens of shopping requests

to thousands of "hits" per booking. This inflation in demand has resulted in exponential growth in data processing and data storage requirements. In 2018 Amadeus engaged in a plan to balance air shopping transactions between different sites, our Data Center, private hosting and public cloud, with an on-demand approach to cope with the marked variations in hourly, daily and weekly transaction volumes.

More generally, Amadeus' operations strategy is clearly progressing toward a concept of distributed data centers. This is now possible as we migrate our applications to the Amadeus Cloud Services framework, making them agnostic to the physical infrastructure where they are hosted. This distributed operations approach delivers native redundancy of systems and dynamic capacity with on-demand models, while also supporting our commitments to high performance and, when applicable, regulatory constraints by moving our systems close to the customer location.



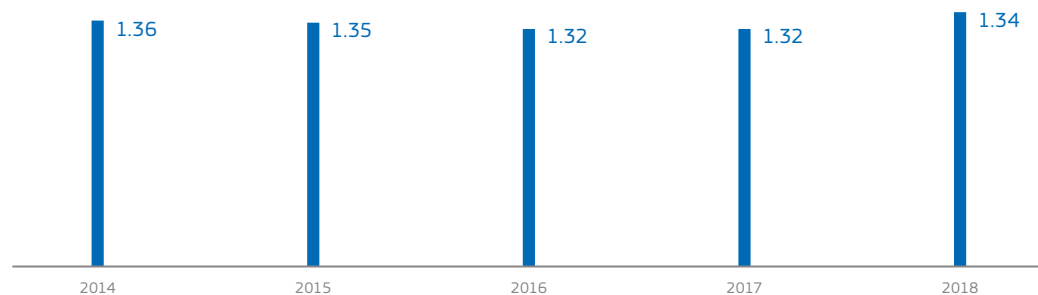
The Amadeus Data Center remains a key asset of this strategy. It is one of the largest data processing centers dedicated to the travel industry and to providing customers with continued service excellence. It is designed with embedded redundancy, using a concept of independent fire cells, and has the capacity to host a significant number of servers, supporting one of the highest rates of transactions in the whole IT industry. In 2018 Amadeus continued to invest in making the Amadeus Data Center a full private cloud facility by standardizing and virtualizing the infrastructure for transaction processing, storage and networking.

Business growth, green IT and energy efficiency

In response to the growing demand for data storage and processing capacity, Amadeus has been focusing on the energy efficiency of all its operations.^{↗1} For the Amadeus Data Center, we received Energy-Efficient Enterprise certification from TÜV SÜD in March 2010 (the certification was renewed in 2012, 2015 and 2018 and lasts until December 2021) for its power supply, cooling and climate control processes and IT equipment, as well as its procurement, installation and de-installation procedures. We have also extended our data center certification to EN 50600, the new EU standard for data centers that is even broader in scope and more difficult to achieve. Our efforts have also resulted in the continued reduction of the annual Power Usage Effectiveness



Data Center Power Usage Effectiveness



^{↗1} See "Environmental sustainability," p. 90.

(PUE)⁷ ratio from 1.49 in 2009 (when this value first began to be closely monitored) to 1.34 in 2018. The latest Uptime Institute⁸ survey places the average PUE values for data centers at 1.7.

Security

Amadeus continuously reviews and improves its processes to keep ahead of upcoming threats, ensuring that both people and technical factors are considered and addressed.

From a global operations and technology perspective, Amadeus has established an independent Security Operations Center (SOC) to monitor the security status of the services it provides to customers 24/7. This service also helps us understand emerging technical threats and invest in the most appropriate technology to mitigate new risks. The SOC covers the application development process, the Data Center infrastructure and employees' office activities. All Amadeus staff, regardless of function and location, receive yearly training on security and data confidentiality best practices.

Since January 2017 Amadeus has become a member of the Aviation Information Sharing and Analysis Center (A-ISAC), showing that we are constantly striving toward increasing our customers' trust and sharing best practices.

Security is at the heart of Amadeus' systems in terms of application design and operations. Under the supervision of the Chief Information Security Officer organization, Amadeus follows the best practices of the IT industry, securing our data, our products and our people, responding to security incidents and achieving full security compliance (for example, ISO 27001 certification or SSAE 16 compliance). In 2018 we continued our efforts toward compliance with advanced security standards, including the new evolutions of these standards.^{↗2} Amadeus also reinforced its internal training programs on security.

⁷ A common metric used to measure the energy efficiency of data centers. The closer to 1 the PUE, the more efficient the data center is.

⁸ The *Uptime Institute Journal* was founded in 2013 to promote the thought leadership, innovation and proven methodologies of various disciplines and professions within the global data center industry. The average PUE of 1.7 corresponds to a survey carried out in 2014 among 1,000 data center operators and IT practitioners across the world.

^{↗2} See "Amadeus Corporate Information Security Office Program," p. 121.

Amadeus has been working actively toward the new General Data Protection Regulation (GDPR) enforcement introduced in May 2018 by the European Community regarding data privacy.[↗] A global review of the compliance of all our systems and processes pertaining to personal private information (PII) has taken place with the support of specialized consulting firms. All immediate actions have been implemented, and a detailed plan has been laid down for further evolutions.

With the adoption of new and disruptive technologies such as social networks, mobile, big data, cloud deployment and connected objects, Amadeus must protect its systems and customers from new types of vulnerabilities, cyberattacks and frauds. In 2018 we made substantial progress toward a dynamic approach to contextual security. This will enhance our proactive detection of potential incidents and our ability to respond to new fraud practices as they emerge. We are developing threat intelligence methodologies and are extending our external community by joining the A-ISAC consortium. User and entity behavior analytics is taking a major role in our detection techniques. We are using artificial intelligence⁹ to understand the dynamics of fraud and misuse, but also to optimize alert, response and recovery mechanisms to minimize the impact of situations that might compromise business operations.

From open API to digital platforms

Amadeus was the first global distribution system to introduce a structured API,¹⁰ back in 2000. Since then, we have published new versions based on XML and Web services in 2006. Today we expose more than 1,000 services out of our central applications, not counting the API exposed for the Web front-ends and mobile. Our API powers a large ecosystem of travel actors and is becoming a business in itself with creation of value, as it keeps Amadeus in the position of being the reference source for travel services.

[↗] See "Corporate risk management," p. 116.

⁹ Supervised and unsupervised machine learning.

¹⁰ An API is a mechanism for two systems to communicate and exchange data and services. Usually, one system calls the other with a request to get an action done or return information as a set of data. This is what is referred to as a "service."

The open API concept is primarily about being more systematic in the exposure of the functionality in Amadeus systems and aligning with the best practices of the industry (i.e. being API-minded). Beyond the modernization of underlying technical frameworks, the objective is to promote our API in its business dimension. This will facilitate the creation of new generations of solutions, by associating Amadeus to third-party services, whether to enhance our own services without the upfront investment, or as a way for customers to complement the value of our services with their own custom development. In 2018 we completed the implementation of the generic frameworks for the API related to travel agencies, which are essentially multi-airlines, and for airlines and other providers as part of our IT businesses.

To support our airline customers, we have begun the development of a "digital platform," which constitutes a further step in the API model. The objective is to give airlines full autonomy to develop their own applicative services on the Amadeus platform, via a set of rules and customized scripting, while keeping close to the native functionalities and data in Amadeus Altéa. The field of application is quite large, ranging from enriching e-commerce websites to enhanced servicing of travelers during their journey with a personalized service and notifications. Amadeus' merchandizing application was developed in 2018 following a similar approach, enabling airline customers to tailor the product to their own needs without Amadeus' intervention.

The concept of platforms is general to the industry and practiced by major players, such as Facebook and Salesforce. Amadeus is investing in this direction to become the travel industry's platform of choice and to develop a service ecosystem around our applications.

Advanced data analytics and business intelligence

Our customers are very demanding in the context of offers and sales. They do not need raw data, but rather educated information on behaviors and patterns that can help them target the right offer to the right customers and boost sales conversion. Our customers need data-enriched transactions, going from data to knowledge and to action. Since 2013, Amadeus has taken on the challenge of evolving our data management framework in order to offer our customers a comprehensive view of their travelers

and the travel business environment. This entails capturing and analyzing beforehand a large amount of information about the traveler and the context in which they interact with the system – before, during and following a trip. This massive amount of information, often referred to as “big data,” must be stored, mined and transformed into meaningful parameters that can later be injected into real-time transactions.

In 2018 we rolled out our technical data management framework, leveraging techniques such as NoSQL databases and grid-based distributed data clusters (Hadoop) and relying on cloud-based architecture for deployment. This framework is capable of handling extremely large volumes of data and enabling predictive analytics, even on unstructured data, as well as using the results of these analyses to make our applications data-driven. Our framework includes powerful data analytics techniques, some in real time and others based on supervised and unsupervised machine learning, including deep learning algorithms coming from the artificial intelligence domain. We believe that this is the base of a positive feedback loop: the more data, the more relevant the pattern analysis, in turn feeding back enriched transactions and generating more data, and so on.

Innovation

In 2018 the Amadeus innovation organization received increased investment to fulfill its corporate mission of discovering and developing breakthrough business opportunities with the potential to transform travel, by promoting new ideas from internal and external sources and investing in transformational projects.

The focus of the innovation team throughout 2018 was on empowering travelers with personalization, end-to-end travel enrichment, destination content at their fingertips, stress-free trip experiences, simplification of all processes and active management of disruptions. The team also explored emerging business trends such as digital consumers, the platform economy and new mobility paradigms.



Amadeus' Innovation team is composed of:

- A dedicated research lab in artificial intelligence and optimization, now spread over several locations, staffed with scientists and domain specialists. This team participates in travel industry events¹¹ and also runs internal training programs (e.g. the Amadeus AI Academy).
- An innovation management and service team, with a strong innovation management expertise, whose mission is to foster the emergence of ideas across Amadeus and promote the most creative inputs from the staff. In 2018 we extended the scope to offer Innovation-as-a-Service to selected customers.
- A “Horizon 3” team working with the long-term view of exploring and incubating disruptive business opportunities with high potential/uncertainty.
- The Amadeus Ventures team, constantly monitoring industry trends and proposing investments in start-ups or partnerships to drive new strategic value for the travel industry.¹² Today Amadeus has a portfolio of 10 start-up investments across Europe, North America and the Middle East, with one added in 2018, the automated pedestrian analytics company CrowdVision, alongside follow-ons with Betterez (cloud-based ticket management and reservation software) and BookingPal (centralized property booking platform). In 2018 Amadeus also partnered with French global network operator Sigfox to explore the potential of the Internet of Things (IoT) in travel, and is actively working on prototypes with customers.

Amadeus maintains close relationships with the academic world through formal partnerships with universities and research institutes internationally (e.g. Université Côte d'Azur, MIT and ETH Zürich). This cooperation is leveraged for some exploratory projects, but also for organizing training for Amadeus staff in some of the most advanced IT domains.

Since 2017, Amadeus has developed an innovation partnership program, Amadeus Explore, aimed at engaging with promising

¹¹ Amadeus won the three Best Presentation awards at the AGIFORS Revenue Management Conference for our work on dynamic pricing, reinforcement learning and call-back tickets.

¹² For the first time, in 2018 Amadeus was included in the ranking of the 36 companies working most collaboratively with start-ups across Europe, receiving the Open Innovation Innovative Approach Award as part of the European Commission's Startup Europe Partnership initiative.

start-ups to explore relevant technology through testing and use case execution within strategic innovation areas such as artificial intelligence, blockchain, messaging platforms and predictive analytics. In this context, Amadeus expanded the Amadeus for Developers portal, a set of APIs offered as a sandbox (i.e. on production-alike systems) for any third party willing to access Amadeus services in the context of exploratory projects. In 2018 we enrolled seven new start-up companies.

Amadeus also regularly participates in and sometimes organizes hackathons, where customers and start-ups are invited. In 2018 Amadeus Research, Innovation & Ventures generated several patents¹³ and published numerous thought leadership papers.¹⁴

Amadeus research and thought leadership papers



1. Global Airline Industry Almanac

A spotlight on 2017 and key trends for the year ahead

2. Beyond the Wallet Wars

Toward a holistic mobile payments strategy

3. 6 Critical Success Factors for Airport Payments

4. Safeguarding Information Systems

A leverage to revenue growth

5. Open the Door to Opportunity

Collaborating to win in the hotel distribution playing field

6. The Importance of Understanding Travelers' Motivation

Understanding why people travel to unlock industry opportunities

7. Airport Digital Transformation

From operational performance to strategic opportunity

8. Better Business, Smarter Travel

Perspectives on the future of Managed Travel 3.0

9. Shaping the Future of Travel

Macrotrends driving industry growth over the next decade

10. Consumer Travel Report 2018

Middle East

11. Traveler Trends Observatory

Understanding the end consumer and traveller. (active seniors)

12. Traveler Trends Observatory

Understanding the end consumer and traveller. (corporate citizens)

13. A New Formula for Airline Success

Why customized offers are the future of airline marketing and revenue management

¹³ In 2018 Amadeus has filed 30 patent applications.

¹⁴ Such as "The Importance of Understanding Travelers' Motivation."

5. Amadeus people and culture



Amadeus employees in our Madrid headquarters.

The people at Amadeus are the company's one true competitive advantage. It is their creativity, commitment, expertise and experience that have allowed us to build a leading position in our industry. They are critical to the successful delivery of our strategy and to maintaining our long-term business performance.

The role of the People, Culture, Communications and Brand (PCCB) team within Amadeus is to ensure that the company can attract, retain and develop the best talent so that we can deliver for our customers every day.

Our aim, therefore, is to create the conditions in which all of our people can thrive, to build an inclusive culture in which diversity is valued and celebrated. We provide a culture and environment that values each individual and gives them the best possible opportunity to have a productive, stimulating and enjoyable career. The encouraging results of our 2018 Employee Engagement Survey, as well as external recognition, suggests that we are on the right path to achieving these goals, but we are ambitious to do much more.

Our PCCB team provide a wide variety of services and processes that enable this, from imaginative rewards and benefits to tailored learning and development programs and international mobility opportunities. They also manage our brand and communications. Our brand comes alive in all we do, not just through our external website but also our progressive office design. A key element is also how we communicate externally and internally. Our social media channels enjoy one of the largest followings in the industry, and we keep employees abreast of what is happening in the company through relevant storytelling and live webcasts with senior management.

All of this makes a significant contribution to a vibrant and successful company.

Workforce by type of contract (FTEs)*

	2016	2017	2018
Permanent staff	13,623	14,543	16,227
External manpower	1,590	1,752	1,963
Temporary staff	167	490	483
Total	15,380	16,785	18,673

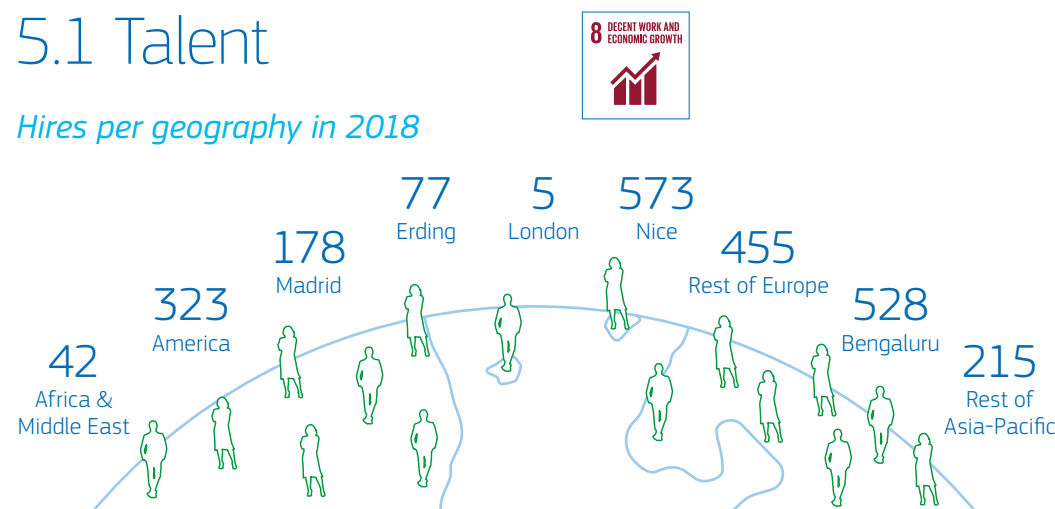
Workforce by region (FTEs)*

	2016	2017	2018
Europe	9,356	10,053	10,737
Asia-Pacific	3,167	3,688	3,959
North America	1,980	2,188	2,988
South America	555	548	549
Middle East and Africa	322	308	440
Total	15,380	16,785	18,673

*Scope: All fully owned Amadeus companies. Figures in full-time equivalents (FTEs) as of December 31. FTE is the headcount converted to a full-time basis, e.g. an employee working part-time covering 80% of a full-time schedule is considered 0.8 FTE.

5.1 Talent

Hires per geography in 2018



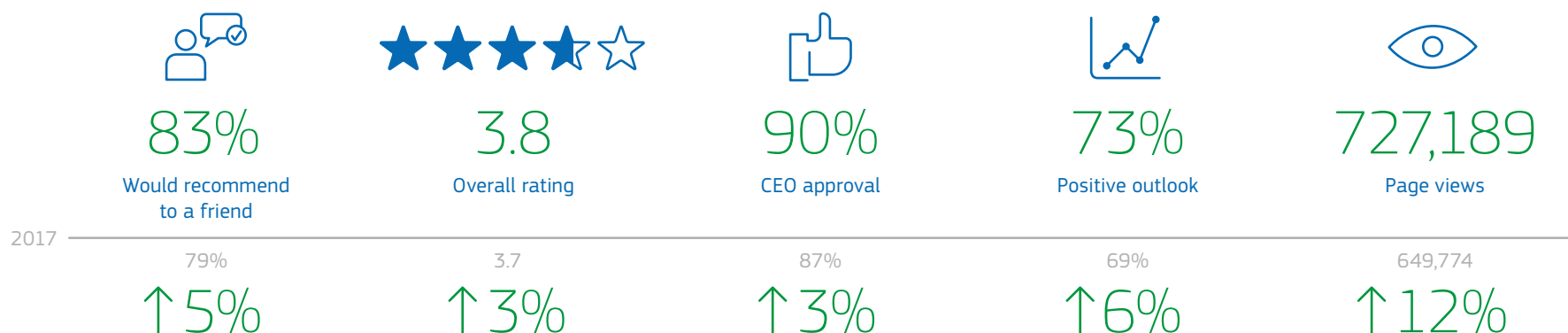
Talent attraction and recruitment

Talent acquisition is a key Amadeus strategic enabler, which ensures business sustainability and growth. As a technical company, we face additional pressure in ensuring we bring the right talent into Amadeus. Technologies and innovations reshape the workforce and we compete in a faster-paced, more competitive arena, year on year. We therefore ensure our approach to talent acquisition remains a step ahead by being agile, modern and digital, yet highly personalized in our approach to attracting talent to Amadeus.

We upskill our talent acquisition professionals and digitalize our recruitment process, which ensures a great candidate experience and excitement to join Amadeus. For this purpose, we created a Recruitment Academy, where we build capabilities not only in our recruitment professionals, but also in hiring managers, globally. This program further focuses on our employees being Amadeus talent brand ambassadors, thus strengthening our ability to attract the right talent.

We focus strongly on social media and employer branding, expanding our presence in top professional online boards, social media channels and job platforms. We consistently publish real

Amadeus' scores on Glassdoor (2017 vs. 2018)*



*Figures as of September 2018.

life content to highlight our participation in various events to promote what it is like to work at Amadeus and to increase the visibility of job opportunities to attract the best talent.

Furthermore, we use modern recruitment methodologies such as video interviews and remote real-time assessments in order to improve our recruitment process efficiency and to promote gender-neutral benefits for a wider and equitable candidate attraction.

Early in career talent attraction is particularly important in our recruitment approach. Our focus on graduates, interns, trainees, apprentices and employees in the first five years of their careers ensures that we maximize and accelerate their learning within our company.

For example, in North America we have a highly selective global two-year talent management program focused on MBA students in order to fast-track development of high-potential, technology-savvy individuals into future leaders. We also have a regional graduate program in Asia-Pacific and formal local graduate programs in the United Kingdom, Turkey and France.

We continue to enhance our employer brand, recruit technical talent and expand opportunities for innovative work through our relationships with selected top universities, recruitment fairs and sponsoring and participation in hackathons.

Learning and development

Talent management

Our people and culture are our strongest assets. Only by actively managing our talent are we able to guarantee our business continuity. Therefore, in 2018 we launched a new global talent review cycle covering all our mid-senior to senior leaders. Through this process we identify, assess, develop and retain leaders and highly qualified professionals who will continue to drive the future success of Amadeus.

This revamped talent review approach places special focus on talent assessment and talent development. This encourages line managers to deliver quality developmental feedback to employees, which in turn supports regular career conversations, aligning individuals' career interests with available opportunities for growth and development.

More than 1,200 employees were formally reviewed following a robust, business-oriented and consistent approach. Our CEO and the Executive Committee are involved in these employee reviews, dedicating extensive quality time to calibrate and ensure the health of the organization's leadership talent pipeline.

Internal development opportunities

Mentoring

The third edition of Amadeus' global mentoring program was launched in January 2018. Sixty-four employees (mentors and mentees) from all businesses and regions participated in this well-established program to develop our leaders. In order to strengthen the value of the program, we provided training on behavioral fitness and positive leadership in collaboration with Madrid's IE Business School. Areas such as leadership climate control, experience design and habit hacking were successfully addressed during the sessions, receiving exceptional feedback from attendees.

After the success of a pilot edition in 2017, we have also developed a functional mentoring template and toolkit, which we rolled out globally across the business. This template provides the basis for arranging and formalizing mentoring activities within functions. It benefits a broader audience, both junior and senior professionals, as well as providing autonomy to the functions to expand their mentoring offering as needed.

Leadership promotion processes and development

In 2018 we revised and revamped our leadership promotion processes to align more strongly with developmental methodologies and tools, e.g. including 360-degree feedback. Our promotion processes serve to acknowledge an individual's capability to manage the responsibilities of a new position, from the perspective of thought leadership, people and results management. Having clear promotion processes that we apply consistently allows a steady and well-calibrated group of strong leaders with the technical and people skills necessary to deliver business results, while also being attractive and motivational in retaining more junior talent.

Directors Leadership Program

We strengthened our development opportunities for senior management through the creation of a Directors Leadership Program, attended by 28 directors. This was facilitated by the IMD business school (Lausanne, Switzerland) and tailored to

Amadeus' needs, to empower our leaders to thrive and innovate in an environment of constant disruption and fast-paced change. Feedback from attendees and organizers was outstanding regarding its timeliness, mix of technical and leadership components, and value-add to our business.

General learning and development opportunities

Our employees benefit from over 1,300 blended learning opportunities including face-to-face, virtual and online training sessions on soft and hard skills, covering individual and business needs in a timely fashion. Development programs for employees at all levels are offered across the entire organization, spanning units and geographical locations. Some highlights include:

- _ The online Sales Learning Paths, which provide expert knowledge of our products to different groups of commercial executives across Latin America.
- _ Various learning journeys with a duration of around six months that have been designed for leaders in Bangalore. Depending on the participant profile, they include combinations of mentoring, coaching, workshops and individually crafted real-life assignments or challenges to complete.
- _ A worldwide learning program aimed at teams responsible for managing strategic accounts within our Retail segment.
- _ Within our Enterprise Agility initiative, employees benefit from structured training paths designed specifically for members and/or leaders of Agile development teams as well as employees and leaders across the rest of the organization.

5.2 Diversity and inclusion



Amadeus aims to ensure every employee shapes his or her own inclusive journey; we focus on creating value for customers, travelers and society through being diverse and inclusive. Our culture promotes respect, fairness, equal opportunity and dignity for everybody and allows our people to be the best version of themselves.

At Amadeus, we accept and respect differences between and within cultures and acknowledge and endorse differences based on gender, age, race, ethnicity, beliefs, sexual orientation and disabilities, as well as diversity of thoughts and experiences.



Amadeus hosted an Inspiring Girls workshop at our Madrid headquarters.



To make this commitment effective, we regularly review our progress in order to identify opportunities for improvement and to provide direction for our long-term diversity and inclusion strategy. Our activities this year aimed to promote diversity and inclusion within the company and also in a more granular way in the local communities where we operate. The key diversity dimensions we focused on were gender, LGBTI and people with disabilities.

As we continue working to build a workplace with equal opportunities for all employees, we regularly review our selection processes for bias and ensure our job offers are gender-neutral. We closely monitor remuneration processes for gender bias. Women at Amadeus are further empowered through cross-mentoring programs and the work of the employee-led Amadeus Women's Networks.

We have also been focusing on encouraging girls and young women to pursue careers in STEM (science, technology, engineering and mathematics) fields through our support of Inspiring Girls in Spain and our sponsorship of the Code First: Girls conference in London. Inspiring Girls is an organization that provides female professional role models to girls aged 11 to 15. The girls have an opportunity to meet women in a variety of non-traditional professions so that they can expand their view of available professions, ask questions and see that the women who work in these fields are not outliers.

Amadeus was proud to show its commitment to the LGBTI community this year as the 150th company to support the UN Standards of Conduct for Business for tackling discrimination against lesbian, gay, bi, trans, and and intersex people. Amadeus

also joined other leading Spanish companies to create REDI (Red Empresarial por la Diversidad y la Inclusión LGBTI) to promote best practices in the workplace for LGBTI diversity and inclusion. In addition to our group in Bangkok, our LGBTI employee resource group, Amadeus Proud, opened a chapter at our Madrid headquarters, increasing visibility and expanding the LGBTI and ally network.

Our largest site, in Nice (France), took the lead on inclusion of people with disabilities, hosting training sessions and other activities in honor of the European Disability Employment Week. We constantly review accessibility to all our sites, ensure appropriate equipment is available, and offer diversity awareness training for managers. In addition, we engage with schools, universities and job fairs to promote the hiring of people with disabilities.

This year three Amadeus teams took part in Free Handi'se Trophy, which brings together teams of people with mixed abilities to promote understanding and inclusion.

Three Amadeus teams took part in the 2018 edition of the Free Handi'se Trophy in France. The race went from Bordeaux to Nantes.



Diversity and inclusion campaign: “Amadeus Made by You”

We believe our role in the travel industry helps break down barriers and allows people around the world to embrace new cultures. Every day, as a business, we are making the world a more inclusive place. We recognize that we can only be champions of inclusive thinking if we act in an inclusive way ourselves. For us, an inclusive culture is shaped by people and their passion for bringing the world together. It is shaped by their openness, thoughtfulness and respect for others. To put it simply, our employees make us who we are.

This was the central premise of the global “Amadeus Made by You” campaign to all staff, which aimed to visualize the diversity of our teams and to encourage all employees to embrace and nurture that diversity.



Watch our video on Amadeus
Made by You



5.3 Engaging our people

Engage 2018

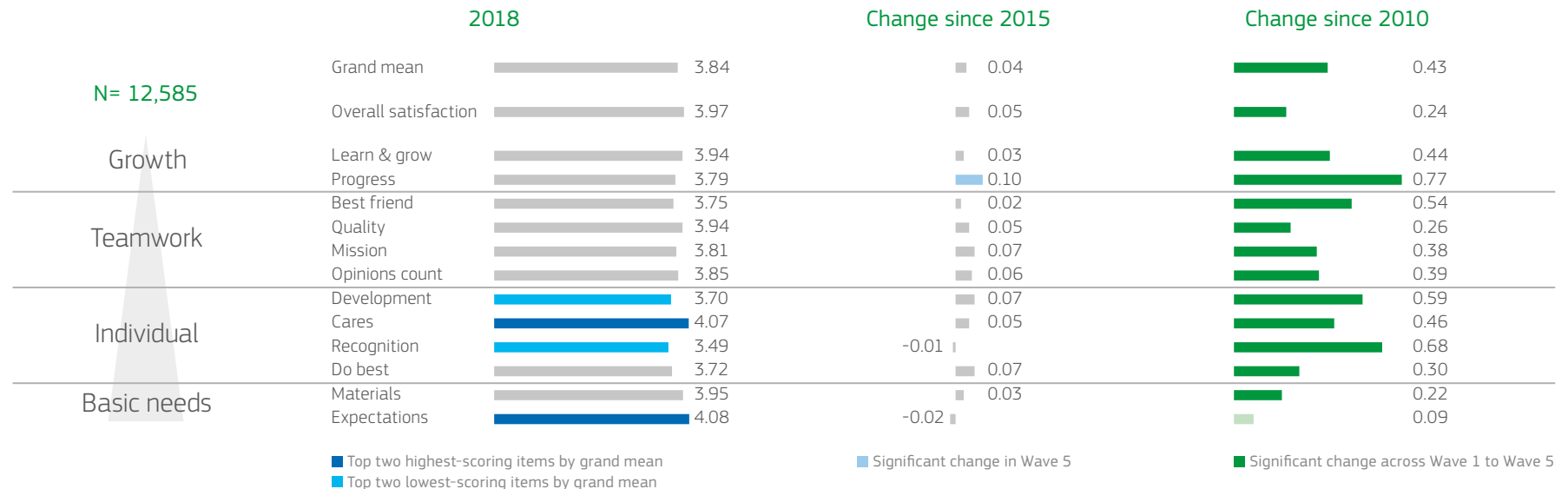
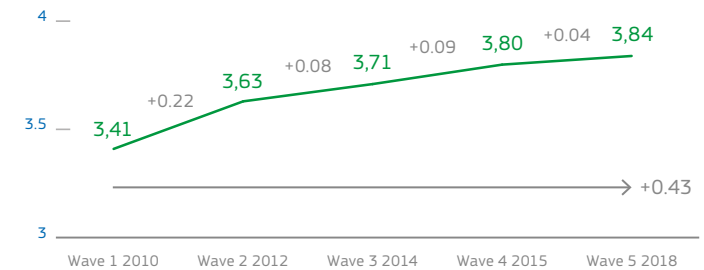


Our employee engagement survey:

- During 2018 we ran our fifth employee survey in 2018.
- Over 12,500 employees answered – an impressive 86% of the Amadeus population!
- We had our fifth consecutive year of improvement in overall company score (graph of five waves) with a 0.04 score increase since our last survey, which is in line with Gallup norms.
- The following areas showed the greatest improvements: progress, recognition and development.
- For the first time, we also introduced an employee Net Promoter Score, which produced the encouraging outcome of a score of +25.

- This year we also measured some cultural questions to gain a better understanding of our culture.
- We continued training new managers on engagement, with 300 managers trained for the survey.

Amadeus employee engagement scores from 2010 to 2018



Please note: change does not take in to account the 50% past data match rule.



Amadeus volunteers at the Habitat Build to Give event. More than 30 participants renovated two houses in the Nakorn Pathom province in Thailand.

Bangkok staff joining World Cleanup Day with eight sites in Asia-Pacific. Over 300 kilograms of waste were collected!



Ladies enjoying the cloths swap at the "Swap till you drop" event at our Bangkok office.



Amadeus Proud and Amadeus Women's Network welcome an external speaker to talk about diversity, her inspiration and success stories.



Bangkok staff having fun at the first-ever Amadeus Colors Fun Run event. Was great fun and outcome of 240 runners!

The Amadeus Team Playbook

Engagement has become everybody's responsibility in the company.

To help employees and managers, we created the Amadeus Team Playbook. It is designed to help individuals take ownership of their productivity and learn what makes a great team.

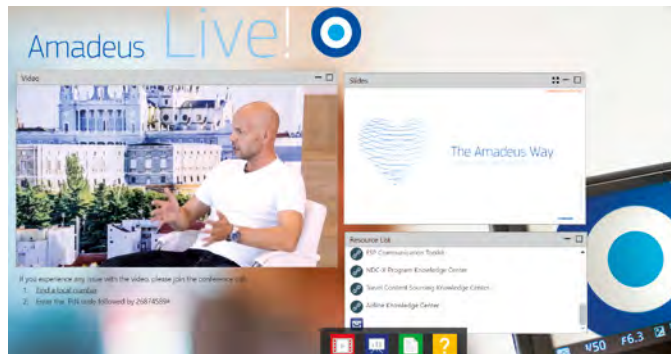
The playbook is a collection of measurement tools, activities and conversation guides that anyone can use in their team meetings.

The goal is collective ownership of everyday engagement and meaningful conversations.

Since its launch, 2,800 employees have used it.



Get-together at our Amadeus offices in London to watch Amadeus Live. In this photo Anna Kofoed and Gianni Pisanello talk about New Distribution Capability (NDC).



Amadeus' Vice President of Branding and Digital Marketing explains "The Amadeus Way": six questions that help us guide our actions every day.

Amadeus Live

- _ In 2018 we ran our very first company-wide broadcast, called *Amadeus Live*.
- _ The purpose is to strengthen the sense of belonging and connect every single employee with the strategy of the company.
- _ The format allows us to align the entire company on strategic topics in one single day, across the globe.
- _ The topics vary from business to people to culture, and anything in between.
- _ The results were impressive: more than 7,700 people registered, and there were more than 6,300 live connections throughout the day from 80 countries.

Strengthening our culture – The Amadeus Way

Amadeus' culture is a very competitive asset and our foundation for sustainable success. We are guarding this fiercely and ensure that we continue to be successful in a very volatile and ambiguous environment. To evolve our culture, we have developed six questions that guide our decisions every day – the big ones and the small ones.

The six questions work together as a whole and inspire us all together:

- 1_ What would you say if you were our customer?
- 2_ How do I show ownership of my decisions?
- 3_ What's the risk? Too big? Too small?
- 4_ Can we do this faster, better, simpler?
- 5_ How can I learn and share with my colleagues or others?
- 6_ Is this good for Amadeus?

Remuneration

To be a successful company, we know we need to attract and retain the best people in the business. One of the ways we do

that is by offering competitive rewards to our employees around the world.

We benchmark salaries regularly to make sure we are competitive against the market. Most of our employees participate in an annual performance bonus, which is linked to both company performance, so that employees have a share in the business results, and individual performance, to show that extra effort does not go unnoticed.

In addition to typical benefits such as retirement plans and health insurance, we offer different stock-based incentives that help to align the interests of employees with the interests of shareholders and create a sense of ownership. In the Annual General Shareholders Meeting held in June 2018, the three stock-based incentive plans run by Amadeus received a majority of votes in favor (93% on average).

BeSafe

At Amadeus, we want to ensure the health, safety and well-being of all our employees worldwide. We have all witnessed in the past years that incidents can happen at any time. Managing a global workforce in today's world requires timely and innovative solutions to overcome the challenges that may come our way and to keep our employees safe. For that reason, we have teamed up with Everbridge, the global leader of integrated critical event management solutions and automated crisis communications, and launched the BeSafe project at Amadeus.

The initiative brings together People & Culture, Crisis Management and Business Continuity teams to ensure that Amadeus is able to quickly respond to an emergency as and when it might occur, enabling us to contact and support employees during critical events (natural disasters, missing persons, evacuations of buildings, etc.) quickly and efficiently.

After the successful launch of BeSafe in Nice, our biggest site, in June 2018, 15 additional sites worldwide have been trained and incorporated into the IT solution during the second half of 2018, covering approximately 75% of the entire Amadeus community. During 2019 we are planning to launch the remaining sites, businesses and regions.

Navitaire Philippines' People & Culture integration – spotlight on benefits harmonization

Following our acquisition of Navitaire in February 2016, the company has managed a detailed People & Culture integration plan. This initially targeted initially the most critical processes, such as talent acquisition and retention and the pensions assets migration from the seller, to ensure business continuity and a smooth transition. During this initial phase, a new P&C team was established in Manila in order to service a large and growing organization of more than 400 employees.

In the second phase, the company embarked on and delivered an ambitious project to completely revise the benefits offering of Amadeus and Navitaire in the Philippines. The objective was to determine the value perceived by employees and managers of the existing benefits offering, to benchmark this with the market practices in the high-tech sector and to introduce a new harmonized plan for the combined entities of Amadeus and Navitaire.

To achieve this, we engaged a specialist benefits consultant and conducted focus groups and interviews with employees and managers to obtain their feedback. This was followed by extensive benchmarking with the practices in the high-tech sector, and after this a new To Be plan that outlined our intentions was designed, taking into account all these previous inputs. Several iterations and options for a To Be plan were discussed, and in the end the company proposed to introduce an innovative flexible benefits offering.

The flexible benefits offering consists of the opportunity to convert personal leave and other leave entitlements into flex points. These flex points can be used to purchase benefits in a flexible manner from a range of benefits options. These include benefits like i) adding further dependents onto the health insurance plan, ii) gasoline reimbursement, iii) gym membership, and iv) optical and medicine reimbursement, to name just a few of the options.

Amadeus and Navitaire employees are moving into a new building in 2019 and will be working closely together. The harmonization of benefits, with its flexible philosophy, provides more choice for employees in electing the benefits that are most suitable to them individually, and it makes it something to look forward to in 2019 when everyone will be working under one single roof.

Amadeus Live and Learn

At Amadeus, we love to travel. Across the globe, we bring our customers innovative solutions to make their journey an enjoyable experience. Now, as Amadeus employees, we get to experience a great way to travel with Amadeus Live and Learn.

Launched in February 2018, this global benefit gives employees and their families the opportunity to live and experience unique travel experiences.

Amadeus Live and Learn is a sharing-based online platform with two modules:

- Home Exchange enables home swaps between Amadeus colleagues around the world to live like a local instead of visiting like a tourist, while saving money on accommodation costs.
- Linguistic Exchange provides a fantastic opportunity for Amadeus employees' children to learn or improve a foreign language by staying with a fellow colleague and their family for a few weeks.

Hotel expenses can add up quickly, eating a big portion of any holiday budget. Colleagues swapping homes will not only save money, they will get to explore a new country with invaluable tips from a local, fellow Amadeus colleague.

When it comes to sending a child abroad, trusting their host family is essential. The bond colleagues will establish ensures both kids will have the experience of a lifetime developing their language skills and confidence in a safe and secure environment.

Driving collaboration, mutual trust and respect among co-workers, registering on Amadeus Live and Learn is voluntary and completely confidential. The website is a secure and private platform, available in three languages (English, Spanish and French), and is fully managed by our partner, Collaborative Perks.

Mobility

Our products and services create business requirements for employees to work internationally. We have developed international assignment policies to enable the delivery of these business requirements effectively and at the same time allow our employees to pursue exciting career opportunities.

Typically, business needs are temporary to support a customer project or to temporarily fill vacant positions in other geographies. In 2018 Amadeus had 145 employees on temporary international assignments, mainly in the US and Asia. We have also continued to see increased activities in the exchange of talent between the main European hubs.

Every so often, assignments may also be permanent to fill vacant positions where it may not be possible to source the required skills locally. Employees may also decide to settle permanently in their new host country. In 2018 more than 170 employees took permanent new positions in a country different from their country of hire.

Shadowing Navitaire

Amadeus' success is based on the creativity, experience and passion of our people. They have delivered excellence across the board and continue to do so every year.

To achieve this, we constantly offer learning experiences and training programs that focus on sharing knowledge and best practices. A good example is a job-shadowing initiative that took place between Robert Booth, Head of Marketing, Airline Offer Suite, based in Nice, and Jason Coverston, Director Optimization Products, based in Salt Lake City.

In November 2018 Robert traveled to Salt Lake City and spent a month shadowing Jason. This initiative provided Robert with the opportunity to know his co-workers, meet new customers and gain valuable insights regarding the different ways of working.

This program is one of the many different learning initiatives to provide our employees with valuable and enriching learning experiences, further develop their knowledge, advance their professional careers and provide geographical mobility opportunities.

Committed to human rights

At Amadeus we are firmly committed to globally developing an organizational culture and structure based on the principles set forth in the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights

and the International Labour Organization's Declaration on Fundamental Principles and Rights at Work.

We seek to establish relationships with entities and organizations that share the same principles and values as ours. We expect our partners to respect and not infringe upon human rights. Our senior management is responsible for ensuring adherence to these commitments as well as overseeing their implementation and guaranteeing that any breaches are duly investigated.

Amadeus adheres to national laws and regulations in each market in which we operate. In situations where Amadeus faces conflicts between internationally recognized human rights and national regulations, the company will follow processes that seek ways to honor the principles of international human rights.

5.4 Brand and communications

Amadeus' brand

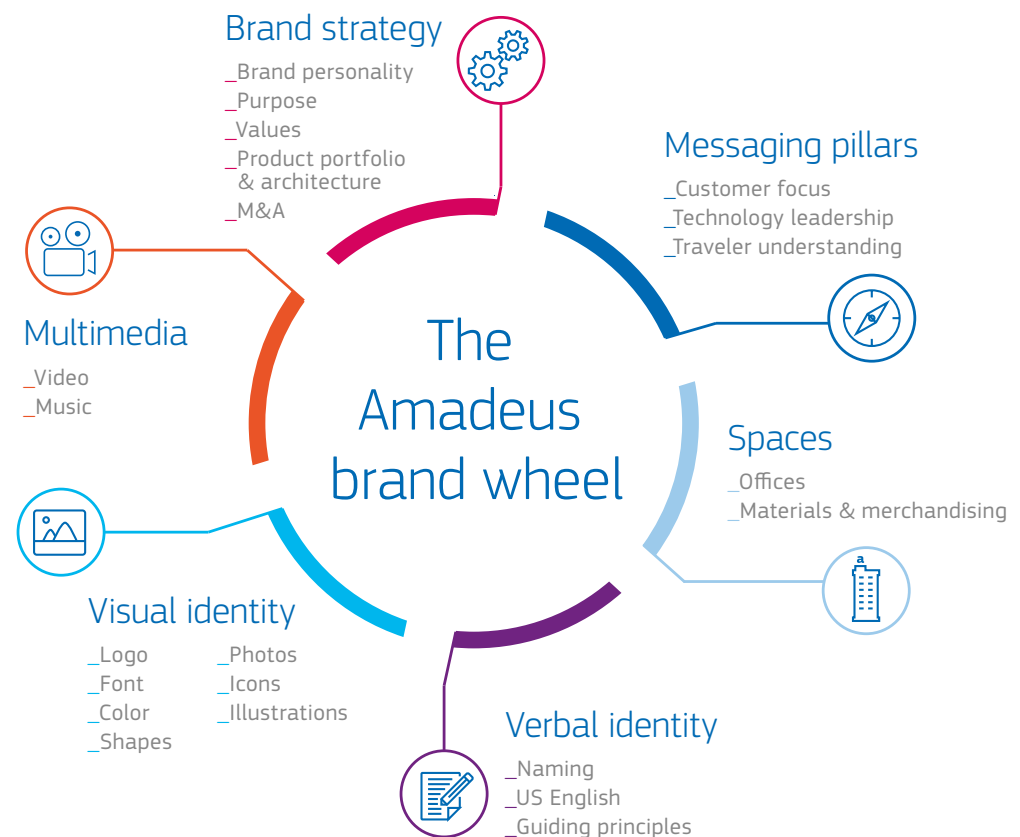
2018 was a strong year for our brand. We established a global testimonial program to bring our customer success stories to the fore. We highlighted our technology leadership to share the latest accomplishments of our tech teams around the world. And we continued to evolve our understanding of travelers to anticipate their needs.

In addition, we finalized our visual identity, developed an Amadeus brand wheel and continued on our quest to refine and simplify our verbal identity, all in an effort to establish a consistent approach to our brand. Our goal is to empower teams across the business to convey Amadeus' clear, human, dynamic and confident voice through their use of language, color, images and icons in all their communications.

These developments complement the investments we have made in a wide range of tools and resources for our Brand & Marketing

Center. This platform gives employees and agencies access to all the guidelines, assets, photographs, templates and campaign toolkits they need to quickly and easily create innovative marketing and communications campaigns in a cost-efficient and consistent way.

Finally, in order to evaluate the success of our work, we measured customer perceptions of Amadeus' brand strategy and messaging. We found that customers perceive Amadeus as an innovative company with close customer relationships and strong technology leadership; however, agility was identified as an area to focus on in the future.



➔ See "Approach to stakeholder engagement," p. 144.

With teams from more than 190 countries around the world working on solutions that tackle the entire door-to-door travel experience, Amadeus is a company with a nearly unmatched scope. Although our solutions come from many different parts of the organization, it is critical that we work as one company, with one culture, one mindset and one voice, to realize our full potential. This is why our brand vision, One Amadeus, led many of our efforts in 2018, and will continue to guide us well in the future.

External communications

Summary and overview

The Amadeus Global Corporate Communications team exists to promote and protect the company's reputation externally. Using powerful storytelling techniques and ideas, it brings to life and simplifies the often complex world of B2B technology.

This year, the Global Corporate Communications team – historically designed to engage and interact with traditional media – was merged with the Amadeus Digital, Content & Social Media team. This will ensure that in a fast-paced and ever-changing communications landscape, the company's communications are wholly aligned and fit for purpose regardless of the channel.

At Amadeus we believe that while content needs to be consistent, it must also be appropriate and relevant for different audiences who want news, information and opinions in different ways and by different means. The merging of the two teams means we now have an integrated resource that operates as one to tell Amadeus stories, whether on the blog, with journalists or across our social channels.

Our social media presence and channels in numbers

In 2018 the Amadeus blog attracted more than 1.3 million visits, while our social media followers grew to over 270,000, primarily on LinkedIn, Twitter, Instagram and Facebook. Find us online at www.amadeus.com/blog and on the main social networks as "Amadeus IT Group."

Thought leadership ↗

Delivering challenging and ground-breaking research that aims to better understand the future of our industry is something now synonymous with Amadeus. In 2018 Amadeus published a range of new research papers, including "Open the Door to Opportunity: Collaborating to Win in the Hotel Distribution Playing Field," "6 Critical Success Factors for Airport Payments" and "Beyond the Wallet Wars: Towards a Holistic Mobile Payments Strategy." All these papers and more can be found on www.amadeus.com.

Internal communications

We have a culture of open, transparent and inclusive employee communications. Our goal is to help our people connect what they do individually with the company vision and strategy, to be more engaged in their day-to-day work and to build a sense of belonging to one global team.

Good communications drive performance: we inform our employees about our business strategy, our customers, the market and technology landscape, and key events both external and internal. We work to make relevant resources and information accessible through a variety of channels. We build a sense of belonging by sharing stories that unite us as a global workforce with common values. And we work to empower our employees at all times by encouraging greater exchange, input and dialog.

Each and every employee makes a unique contribution to Amadeus' goals. We take pride in delivering better journeys, helping our customers be successful, innovating, and giving back to our communities and society. This is brought to life by the personal experiences, perspectives and stories shared on a daily basis with colleagues around the world. In 2018 our most popular communications were "five-minute jabbers" with senior leaders, and stories on the following topics: diversity and gender equality, our employee home and language exchange program, General Data Protection Regulation (GDPR) readiness, employee relocation experiences, and customer-first stories from around the world.

↗ See "Amadeus research and thought leadership papers," p. 61.

The internal communications team also played an important role in informing employees during key M&A developments and business transformation programs that took place across the company in 2018.

Digital ecosystem

Amadeus' digital marketing ecosystem has transformed our B2B marketing capabilities by creating a new account-based marketing model. This model uses the right technology stack to offer increased business intelligence and produce quality leads that can then be tracked through the full sales pipeline.

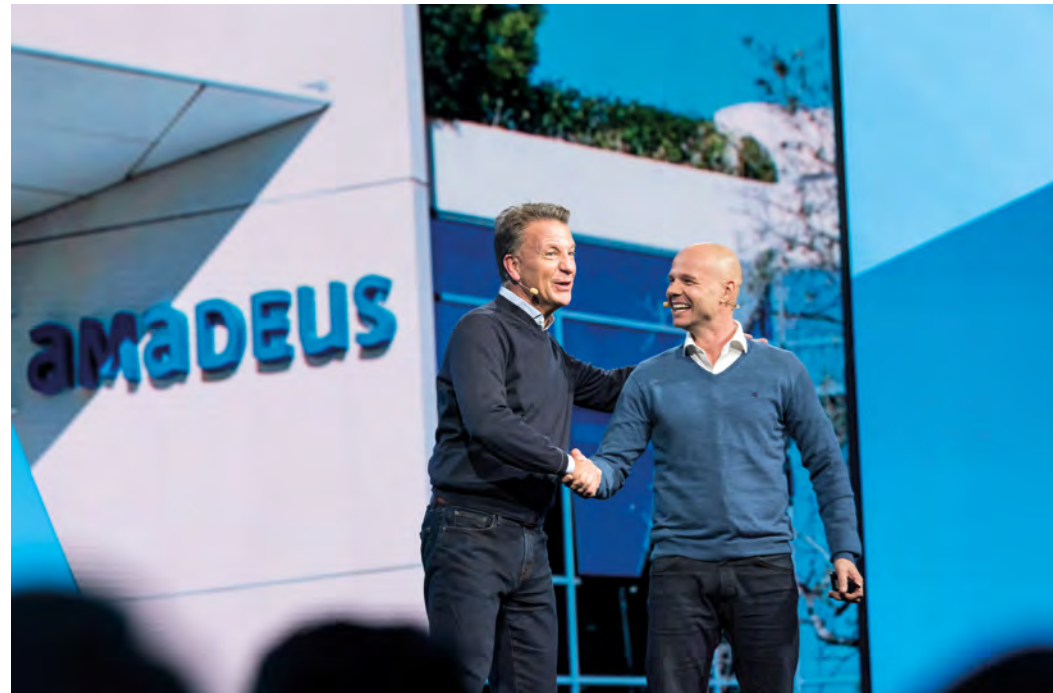
We have managed this by looking at these three pillars:

- People – identifying the key issues: who owns the process, who is involved, what are their roles and whether they have the right level of competence to solve issues.
- Process – establishing a high-level view of the end-to-end digital marketing processes to identify the key digital touchpoints. We deep-dive into the various sub-processes involved and identify exceptions. We focus on the common requirements (Pareto principle or 80/20) to benefit from standardization of our processes.
- Technology – once people are aligned and the processes developed and clarified, we deploy new technologies to support consistency in the way we approach our customers and move them through the full sales pipeline. The goal is to make it easier to follow the process than not to do so.

And here you have some proof points on how we did it:

- Collaborating with marketing and sales teams, the digital marketing team established new processes to synchronize and ensure a "Single Client View" strategy that gives full transparency and allows proper analysis of marketing impact throughout the sales pipeline – from lead capture to validation and nurturing.
- We incorporated the latest cloud technologies and introduced new digital marketing tools that take the routine work out of marketing. Specifically, and thanks to data and analytics, our marketers have a much more intimate picture of who their audiences are.

- We increased our customer targeting capabilities through automated segmentation, which allows us to personalize our content to specific audience needs.
- Our goal is to trigger a shift in organizational thinking away from traditional marketing channels toward digital media.



▲
In 2018 Adobe and Amadeus announced their partnership: together they'll deliver marketing technology solutions for the travel industry. In the picture, Jussi Wacklin, Vice President, Brand, Digital Marketing and Culture at Amadeus and Matt Thompson, Executive Vice President, Worldwide Field Operations at Adobe.

Journey of Me Insights

Amadeus' Journey of Me Insights: What Asia Pacific Travelers Want is the most comprehensive Asia-Pacific traveler research ever produced. Spanning 14 markets, it takes a multi-faceted look at what travelers want, from when and how they plan and book their trips, to how and why they want to stay connected while traveling, and what new technologies they would be most interested in.

Many surveys that claim to cover Asia-Pacific in reality only involve six to eight markets. But in a region as diverse as Asia-Pacific, a truly representative research would need to be much broader. So, we partnered with the market research company YouGov to survey 6,870 respondents from 14 markets in Asia-Pacific (Australia, China, Hong Kong, India, Indonesia, Japan, Korea, Malaysia, New Zealand, Philippines, Singapore, Taiwan, Thailand and Vietnam), more than anyone has ever done.

Evolving the industry's understanding of Asia-Pacific travelers

Asia-Pacific has moved to the forefront of travel. *Journey of Me Insights* gives the industry unique insights about the world's largest travel market and at the same time cements Amadeus' position as a thought leader in Asia-Pacific travel.

Support the business

How can we sell solutions that purport to address traveler needs if we cannot show that we know what travelers want? Our spokespeople, salespeople, product teams and account managers use a lot of data in their presentations – most of it from external sources. *Journey of Me Insights* gives them Amadeus-branded and -owned data to build their stories with customers and partners.

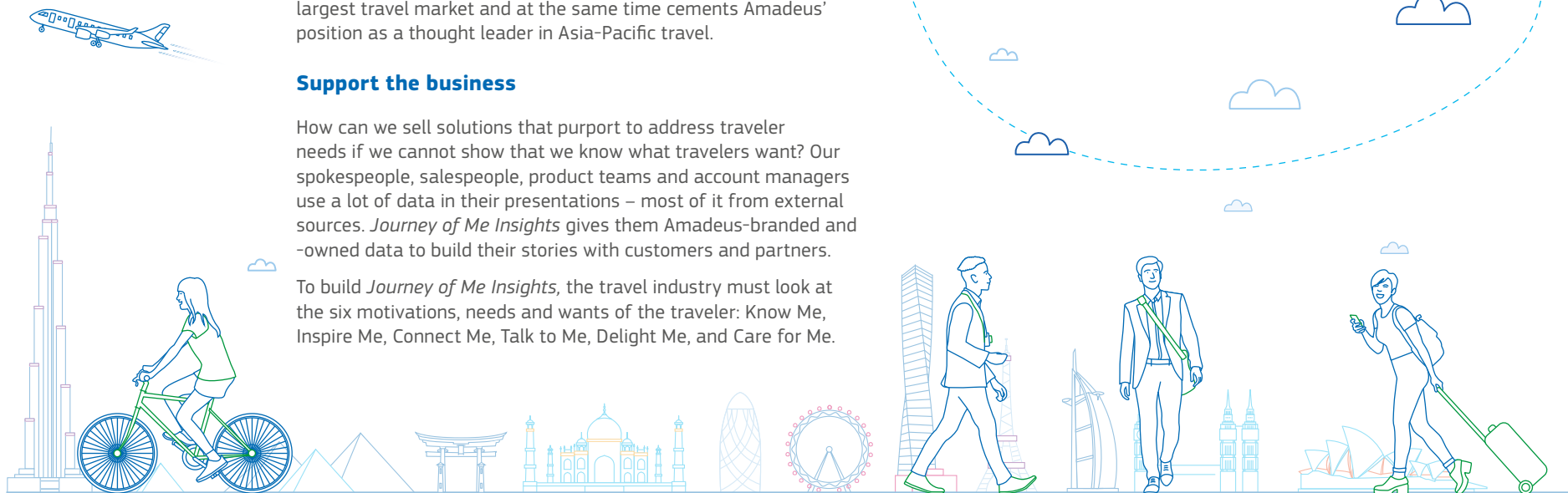
To build *Journey of Me Insights*, the travel industry must look at the six motivations, needs and wants of the traveler: Know Me, Inspire Me, Connect Me, Talk to Me, Delight Me, and Care for Me.

Journey of Me Insights: What Asia-Pacific travelers want It's all about ME!

14 markets, 6,870 travelers, infinite possibilities.

No two travelers are the same, and even more so, no two journeys will be the same. Amadeus' new Asia-Pacific study, "Journey of Me Insights: What Asia Pacific travelers want" moves the industry towards a closer understanding of travelers in the region.

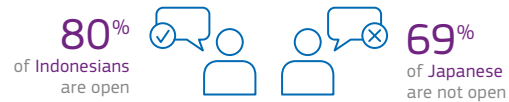
Forget 'one-size-fits-all'. It's time to embrace 'different strokes for different folks'.



Know Me...

...and what I want, before I want it

Travelers will trade data for greater personalization



Inspire Me...

...about the endless possibilities around travel and technology

Travelers take their cue from other travelers. When planning trips, top sources of influence are:



Online booking or travel sites



Friends, family and colleagues



Traveller reviews

New technology they want the most?

Augmented reality app that delivers digital overlays containing interactive information about the site

Connect Me...

...so I can stay in touch with what's important to me

Top 3 reasons why people stay connected when travelling:



To access maps & location info



Share pictures with family & friends



Let people know they're safe

Top 3 mobile apps used on trips:



Talk to Me...

...throughout the entire journey, but on my terms

Travelers want the right recommendations, through the right channels, at the right time:



41% Chinese travelers prefer messaging services like WeChat



70% New Zealanders prefer e-mail



47% Thai travelers prefer social media

Delight Me...

...and bring the magic back into travel

>65% travelers use sharing economy apps like Uber and Airbnb



72% of Indians use often



71% of Japanese travelers never use

14% of travelers say that a travel service provider has never exceeded their expectations – it's time to change that!

Hotels (24%) and booking sites (23%) are most likely to have exceeded expectations, while tour operators (11%) ranked lowest

Care for Me...

...and keep me safe and secure

62% of travelers would avoid a destination that has had a recent terror attack

78% Filipinos

74% South Koreans

Who should send me safety & security updates?



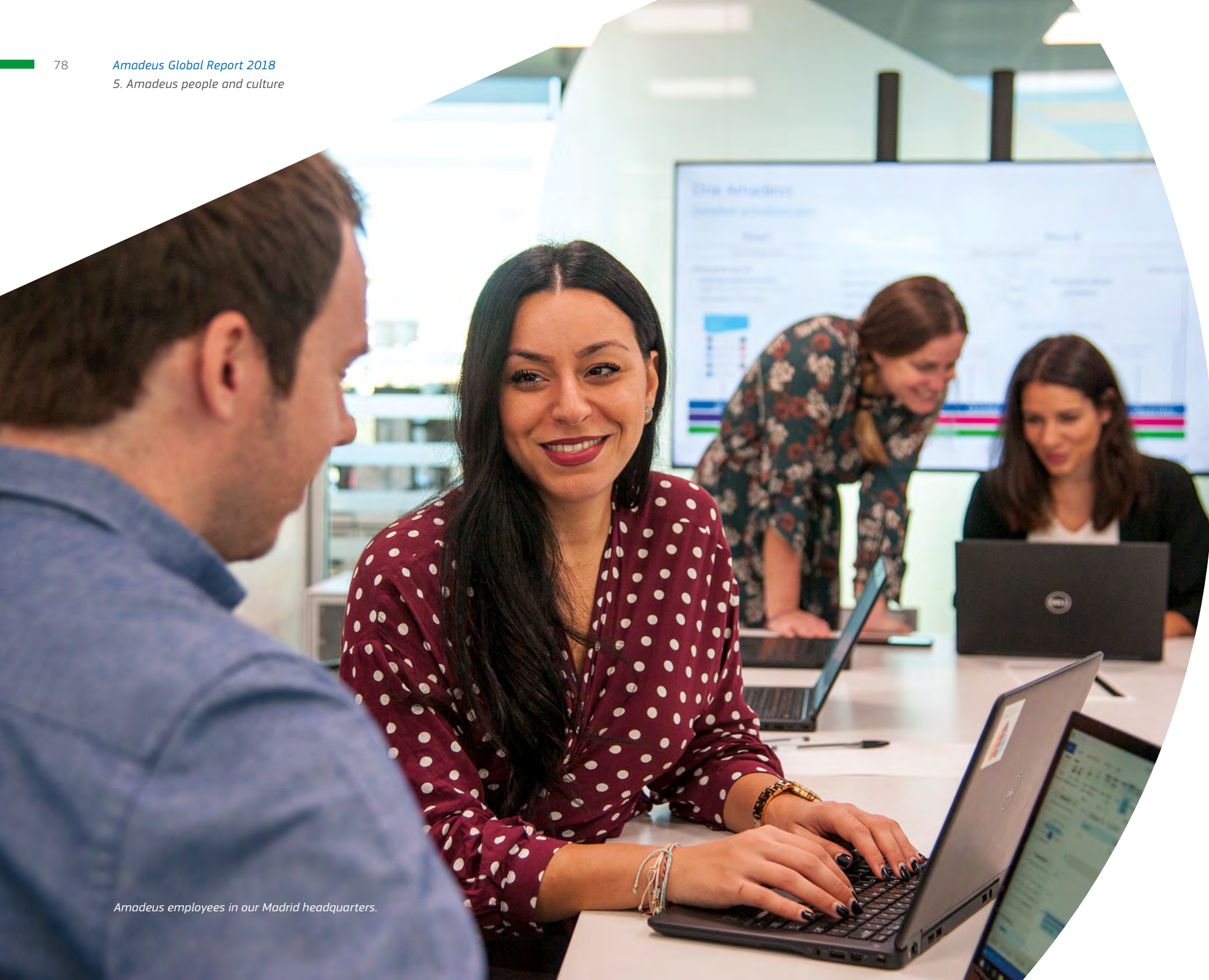
Singaporeans (74%): Embassy/government



Indonesians (63%): Friends and family



South Koreans (57%): Travel agents



Amadeus employees in our Madrid headquarters.

2018 People and Culture awards



Caring Company
Hong Kong Council of Social Service
Office: Hong Kong



**Best 2018 employers ranking
by Glassdoor (France category)**
Glassdoor
Office: Nice



Great Place to Work
Great Place to Work
Office: Bengaluru



**HRD Asia's 2018 Top
HR Teams**
HRD
Office: Singapore



Top Employer
Top Employer Institute
Office: Australia



Top Employer
Top Employer Institute
Office: Singapore



Top Employer
Top Employer Institute
Office: Thailand



**Best Employer - HR
Practices, ranked 6th**
Capital
Office: Nice



**Best Employer – Tech
Companies, ranked 11th**
Capital
Office: Nice



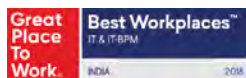
Top Employer
Top Employer Institute
Office: Madrid



Top Employer
Top Employer Institute
Office: Erding



Top Employer
Top Employer Institute
Office: UK



**Top 50 India's Best
Workplaces in
IT & IT-BPM**
Great Place to Work
Office: Bengaluru



**Times Ascent Dream
Companies to Work For,
ranked 5th***
World HRD Congress
Office: Bengaluru



**Happy Candidates,
ranked 9th in Over 1,000
Employees category**
Meilleures Entreprises
Office: Nice



**Finalist: among 3 Spanish
companies short-listed
for the Top Social
Recruiter award**
LinkedIn
Office: Spain



**Most Effective
Learning Organization**
Zinnov
Office: Bengaluru



* Amadeus ranked 5 in Dream Companies to Work, presented by Times Ascent, a leading media house in India. Amadeus was competing against 2,000 organizations to be awarded the rank in 2018.

6. Amadeus industry affairs



Amadeus' industry leadership comes with the responsibility of working with other stakeholders in the interest of the travel industry at large. Amadeus therefore engages regularly with governments, public entities, trade associations and other institutions globally.

The travel and tourism industry is becoming an increasingly strategic sector for the economies of many countries. For the industry to grow sustainably, governments and private stakeholders worldwide will have to pay more attention to how our industry improves its efficiency, reduces its carbon footprint and takes advantage of its potential as a catalyst for inclusive economic growth.

Tackling these challenges requires completely new models of collaboration between industry players and the public sector. At Amadeus, we participate in, and often initiate, the industry debate on how collaboration should evolve. We see travel technology playing a key role in an increasingly digitalized travel and tourism marketplace, and Amadeus thus also has an important role to play as a facilitator for the global teamwork that is needed to shape and safeguard a sustainable travel industry.

Amadeus' Industry Affairs unit works with stakeholders across the global travel industry – public and private – to build a common agenda based on the principles of neutrality and transparency, fair competition, consumer choice and respect for society. We take a fact-based approach to working with our partners to bridge differences and find solutions and standards that take into account the needs of all stakeholders in a fair manner, and that therefore work for everyone in the travel value chain.

In line with these principles, we have launched industry initiatives jointly with our partners in many areas, including environmental and social sustainability, regulatory and industry matters and consumer protection.



Our approach to industry engagement



Sharing our insights and balanced perspectives with public stakeholders

Amadeus contributes to regulatory reviews and provides input for policy initiatives, especially those relating to the transport, tourism and technology sectors. The travel and tourism industry is complex, and we are therefore proud to be asked to contribute to several consultations, research studies and workshops sponsored by national and regional public stakeholders.¹ We share our experience, insight and balanced perspective, always supported by evidence and fact-based analysis.

In 2018 Amadeus was asked to provide information, knowledge and advice to many EU regulatory and policy initiatives in order to establish new or improve existing legislation. In the United States and other markets, our work focused more on industry collaboration.

As part of our collaborative approach, Amadeus maintains a regular dialog with the European Commission on aviation, rail and travel distribution matters and the digitalization of travel, tourism and transport. Below are initiatives in which Amadeus has actively participated during the last year.

Promoting transparency, neutrality and fair competition in the air travel and distribution market

In 2018 Amadeus worked closely with the European Commission and the European Parliament in an advisory capacity to offer balanced, fact-based views on how best to develop the complex and challenging aviation marketplace. Amadeus was pleased to see that the importance of transparency and neutrality for air travel information and the need to safeguard the key characteristics of the EU's aviation markets are recognized by the European Commission as well as the European Parliament.

The air travel distribution market is currently facing severe threats to transparency, fair competition and consumer choice. New non-neutral players and the commercial strategies of certain

¹ Amadeus adheres to the European Union's Transparency Register: <http://ec.europa.eu/transparencyregister/public/consultation/displaylobbyist.do?id=193056815367-44>.

*We believe
in transparency
and choice
within a neutral
marketplace
to serve
the consumer's
best interests.*

incumbents challenge the open and competitive air distribution market that the Global Distribution Systems offer. This development affects primarily the ability of SME players to compete in the market, as well as consumers' ability to make the best purchasing choices in the absence of transparent comparison.

In 2018 Amadeus was especially active in responding to requests for information and support for policy initiatives relating to airline and digital distribution issues in the aviation sector. In this context, the regulatory reviews of the Common Rules for the Operation of Air Services (Regulation (EC) No. 1008/2008) and the Code of Conduct for Computerized Reservation Systems (Regulation (EC) No. 80/2009) were of utmost importance, and Amadeus provided balanced views on the need to protect transparency, neutrality and fair competition in the air travel and distribution market through regulation.

In November 2018 the European Commission opened an investigation into the air distribution market in the EU, and at Amadeus we reiterated our full and open cooperation in this process, confirming that we would address all the concerns the commission may have. This will ensure that the investigation takes into account all relevant factors, and will demonstrate that Amadeus stands for fairness and neutrality in airline distribution, providing non-discriminatory and neutral market access for airlines and choice for consumers and travel buyers.

Bringing expertise and technology to improve the European transport system and empower multimodality

Amadeus continued to support the goal of the EU to establish a smart and efficient transport system through innovation. We contributed to this important objective by assisting the EU in promoting and opening a constructive dialog in addition to sharing our technological expertise.

In 2018 the European Commission celebrated the Year of Multimodality to raise the importance of multimodality for greener passenger transport within and across the EU. In line with the objectives of the year, we worked with several EU technology projects and participated in events.

Amadeus and other industry partners engaged in technology research and development projects co-funded by the European Commission. These included Shift2Rail's long-term Innovation Program 4, which aims to provide a new seamless door-to-door travel experience for customers by integrating rail with other modes of transport like air, coach and urban transit using a new and innovative technology framework to enable an ecosystem of transport providers, distributors, retailers and customers.

Amadeus also contributed to multimodal technology in shopping, booking and ticketing for the lighthouse project of Innovation Program 4's IT2Rail initiative, establishing the critical groundwork for integrating first and last mile with longer-distance multimodal travel. Amadeus and other IT2Rail partners presented their technology at the project's closing event during the April 2018 Transport Research Area event in Vienna, Austria, and Amadeus participated in the IT2Rail panel to promote and highlight the cost-cutting business benefits of IT2Rail's semantic interoperability approach, which helps mitigate the problems posed by fragmentation between different EU transport markets. Later in September 2018, at the InnoTrans event in Berlin, Amadeus and other IT2Rail partners presented further developments, including Amadeus contributions on multimodal settlement payment technology.

In parallel, Amadeus participated in the Mobilus Consortium (which the European Institute of Innovation and Technology recently selected from among six competing consortia) to establish a Knowledge and Innovation Community (KIC) on urban mobility across Europe over the next seven years. The aim of the new Mobilus KIC is to strengthen European competitiveness in the area of urban mobility in smart cities, for both EU citizens and visitors, by improving access to more sustainable and environmentally friendly mobility to increase the attractiveness of EU cities. The project will formally kick off in 2019.

Commitment to protecting passenger rights and consumer choice

Passengers and consumers are important stakeholders in most of the policy and regulatory initiatives launched by the EU in the transport and travel distribution environments. At Amadeus, we believe in transparency and choice within a neutral marketplace to serve the consumer's best interests. That is why protecting consumer choice and ensuring consumers have access to transparent travel data to compare and shop air and other modes of travel is a critical pillar to building a competitive marketplace.

In this respect, we contributed to the rail passenger rights regulatory initiative launched by the European Commission's transport unit, as well as its consultation study conducted on passenger rights across all transport modes. Our input and contribution focused on neutrality and transparency provisions, so as to empower passengers to make informed choices and support the development of rail and multimodal travel.

We also provided input for the fitness check of EU consumer and marketing legislation with the aim of ensuring consistency across different policies and regulatory initiatives, to safeguard the right to transparent and neutral travel information and to balance regulatory mandates with the market realities of the industry.

Advising and collaborating toward an innovative and sustainable tourism sector

Amadeus strongly supports governmental policies and initiatives to support a robust and sustainable tourism sector. We engage with other travel industry and public stakeholders at national and regional levels and conduct activities to promote innovation, entrepreneurship and collaboration in travel and tourism. During 2018 Amadeus was invited to speak at several events around the globe, with special focus on digital-related issues and tourism.

In the EU, we advise on tourism development issues and collaborate in developing the industry. In line with this, we were happy to see the European Parliament dedicate a budget line of more than €300 million for the next multi-annual financial framework. The result was a true achievement resulting from work that started back in 2015 and a remarkable recognition of the increasing importance of the tourism industry at times of major cuts in different EU policies.

In our advisory role in the technology and digital marketplace, we participated in a panel at the European Tourism Day in Brussels on the disruption caused by the digital traveler on traditional tourism services. In our intervention, we highlighted the need to enable SMEs to remain competitive through innovation within a fair and competitive marketplace.

We also participate in multiple initiatives at market level in Europe sponsored by public and industry stakeholders, providing advice and support to digital transformation initiatives undertaken by travel companies. For example, Amadeus is collaborating in Spain with industry stakeholders and the government in the launch of DIGITUR, a project to support the digitalization of tourism destinations.

Engaging private sector and trade industry stakeholders

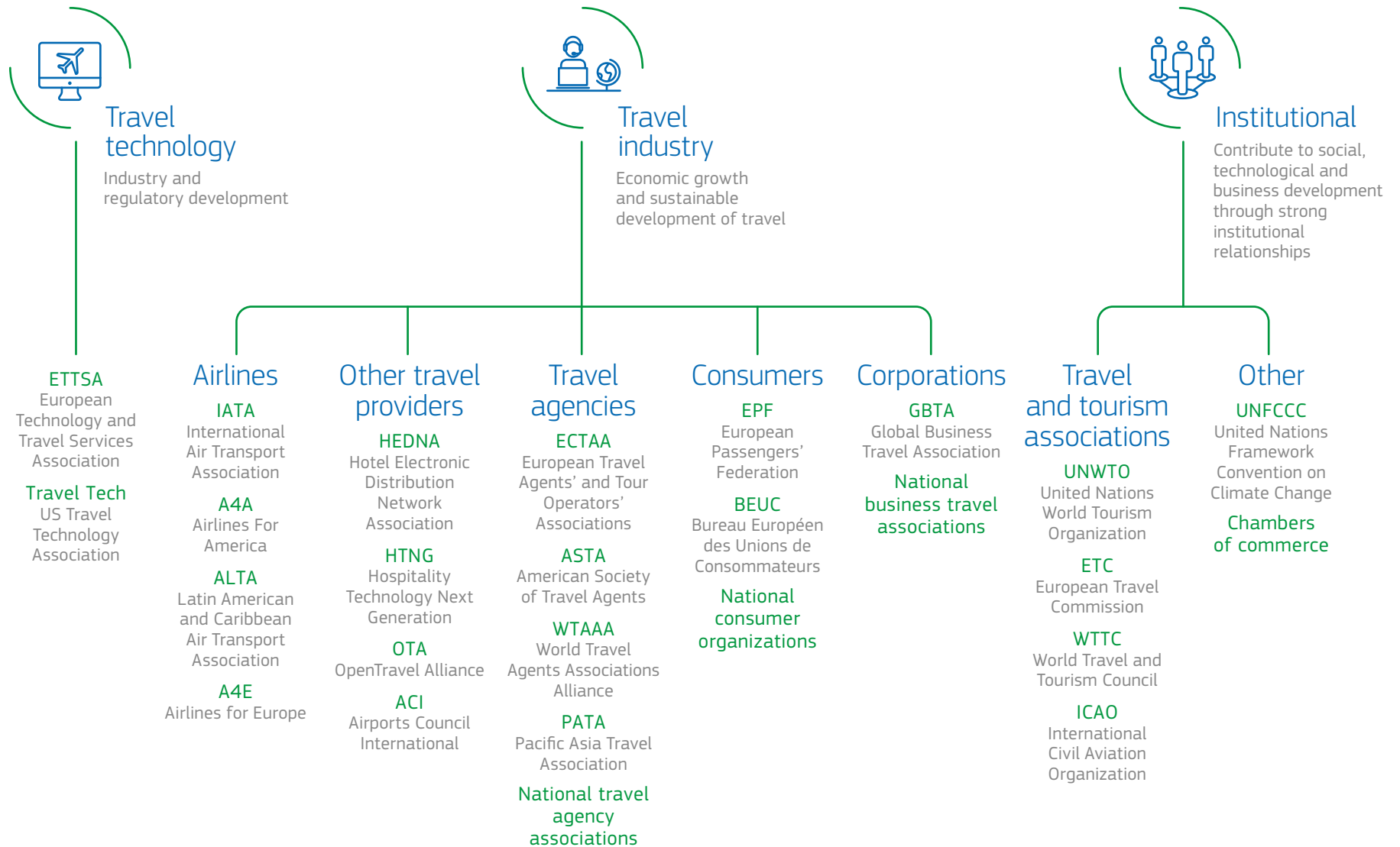
In the vast landscape of different private sector and trade industry stakeholders in travel and tourism, Amadeus engages with selected players in an open and constructive dialog on industry issues. We collaborate in our own trade associations and partner with our airline and travel agency customer organizations to work toward common public policy goals. As an active partner, our door is always open, and we maintain strong and close relationships with institutional stakeholders, consumer advocates and many other travel and tourism associations² across the globe.



Watch clips of the Amadeus
Technology & Innovation Forum

² Amadeus collaborates with private and trade associations around the globe. Our total expenditure in memberships and consultation under this category is reported in the EU Transparency Register: <http://ec.europa.eu/transparencyregister/>.

Mapping of Amadeus stakeholders in the private sector and trade industry



Travel technology associations championing fair competition, neutrality and transparency in the market

At industry level, Amadeus is represented indirectly through our memberships with the European Technology and Travel Services Association (ETTSA) and the US Travel Technology Association (Travel Tech). ETTSA and Travel Tech represent the indirect neutral distribution industry on regulatory and industry matters in the EU and the US, respectively.

In 2018 ETTSA was particularly active, engaging on key issues related to aviation and air ticket distribution, such as the regulatory reviews of the Common Rules for the Operation of Air Services (Regulation (EC) No. 1008/2008) and the Code of Conduct for Computerized Reservation Systems (Regulation (EC) No. 80/2009). During those reviews, ETTSA and its members have maintained a close dialog with the European Commission and the European Parliament to ensure that transparency, consumer choice, access to neutral information, non-discrimination and fair competition continue to be guaranteed in the revised regulation and potential policy guidelines. These are principles that have duly protected European consumers and fostered competition in the airline distribution marketplace in the past decades.

ETTSA has contributed to the debate opened by the European Parliament on the impact of some large airlines' initiatives in Europe on consumers and SMEs. In this respect, ETTSA was invited to participate in a panel discussion along with other industry stakeholders on airline distribution channel discrimination, organized by the Transport Committee of the European Parliament in July 2018.

ETTSA also actively engaged other allies representing travel agencies, passengers and travel buyers to form a coalition to protect neutrality, transparency and fair competition in the airline distribution market, and to highlight that access to neutral and transparent travel information provided by the Global Distribution Systems enables comparison and choice for European citizens and stimulates competition among airlines based on their merits, resulting in lower ticket prices. ETTSA's contribution to opening and fostering an active industry dialog with other public and trade stakeholders will continue to be factual and supported

by proper research. The studies³ conducted on relevant market developments in the airline distribution market are being refreshed, reflecting the recent commercial initiatives by large airlines and their impact, especially on the way consumers compare and buy airline tickets.

Finally, ETTSA, as a signatory to the European Tourism Manifesto, the largest industry coalition supporting the European tourism sector, will continue to contribute to any industry and public efforts to reinforce the competitiveness of the travel and tourism sector in Europe, in particular those related to innovation and technology.

In North America, Travel Tech advocates for public policy that promotes fair competition, industry standardization and improved price transparency for consumers.

Working with trade associations on common agendas

We build strong relationships with industry trade associations that represent the interests of our customers and other stakeholders in the travel sector.

Defending universal and business model-neutral standards at airline associations

Amadeus is a long-time strategic partner of the International Air Transport Association (IATA), and engages actively with the airline community in the development of industry standards. We share advice and knowledge in Amadeus' areas of expertise in working groups, advisory forums (New Distribution Capacity, Passenger Distribution Management and Transparency in Payments) and think tanks (Airline Industry Retailing, One Order, One ID and Simplify the Business).

Our active engagement in the development of new industry standards is needed to ensure that IATA's standards actually improve the efficiency of the airline distribution value chain

³ All studies available at: www.etsa.eu/policy-issues/publications.
Brunswick Insight (2016). *Consumer Views on Booking Airline Tickets*.
Infrata (2017). *Airline Distribution Costs*.
GRA (2017). *Impact of Airline Consolidation on Consumer Choice*.

and take into account the needs and requirements of all stakeholders in it. Moreover, Amadeus and other industry stakeholders are concerned about industry standards being non-discriminatory in nature, developed without favoring any one player in particular and business model-neutral.

To ensure broad industry engagement, Amadeus is also a member of the Airline Distribution Stakeholder Forum (ADSF), an open forum comprising trade associations in indirect airline distribution, including travel agencies. During 2018 ADSF and the newly formalized and operational Distribution Industry Standards Working Group (DISWG) directly engaged with IATA on developments of the agency accreditation models, IATA's settlement systems and proposed industry standards on payment, specifically referred to as "NewGen ISS" and "Transparency in Payment." Amadeus' and industry stakeholders' efforts in this area have resulted in the formalization of IATA's Distribution Advisory Council (DAC), with independent distribution stakeholders now well represented. This forum is especially noteworthy in that, after persistent insistence by Amadeus, it now brings together all airline distribution stakeholders (airlines, agencies and Global Distribution Systems and other IT providers) in a formal and IATA-sanctioned group to address strategic issues and overall industry evolution. Continued efforts by ADSF, DISWG and the newly formed DAC will demonstrate the benefits of broader industry collaboration on standardization processes by consolidating the views of the indirect distribution industry's experts on how standards should be developed for optimal impact and wider adoption in the marketplace.

Close collaboration to bring value to the travel agency community

The travel agency community represents a very relevant partner for Amadeus to develop common industry initiatives related to key policy areas. Amadeus works closely with the travel agency community across the world, represented by the World Travel Agents Associations Alliance (WTAAA), of which the European Travel Agents' and Tour Operators' Associations (ECTAA) and the American Society of Travel Agents (ASTA) are the most important members.

As an allied member of ECTAA, we work together in areas of common interest relating to air travel distribution, strategic guidance on the development of industry standards, and the

establishment of a sustainable tourism sector. In order to do so, we conduct joint research studies and promotion, and we establish open and transparent dialog with other industry parties in working groups and advisory forums.

We also partner directly with travel agency associations at both regional and national levels in the rest of the world. These organizations are important advocates for the travel industry as a whole, supporting transparency and neutrality, fair competition and the development of a sustainable travel and tourism sector.

Our representation in the travel buyer community

Amadeus is an allied member of the Global Business Travel Association (GBTA) and collaborates closely with GBTA affiliates and other business travel associations in many countries. As their industry partner, we support their industry events and awareness-raising and training initiatives, and we work together on industry issues of common interest. Comprehensive access to neutral, transparent and comparable travel content is a key requirement for travel sellers and buyers, and both the travel seller and travel buyer communities are strong proponents of fair competition and consumer choice driven by a neutral and transparent marketplace for travel services.

Protecting consumers in the travel industry

Amadeus has built an active dialog with consumer and passenger associations to jointly promote a neutral and transparent marketplace for travel, so that consumers can compare offers and select among competing providers, thus benefiting from a deregulated marketplace. During 2018 we engaged especially with the European Passengers' Federation and the national consumer representatives, the voices of European consumers on issues related to the airline distribution marketplace. Amadeus has been asked to share insights about the regulatory framework protecting consumers, how technology facilitates the passenger experience and how neutral and transparent indirect distribution is safeguarding fair competition among airlines and giving consumers neutral and transparent choice.

Public-private sector partnerships to transform the industry

In the tourism sector, we work closely with the United Nations World Tourism Organization (UNWTO), of which Amadeus is an affiliate member. During 2018 Amadeus and UNWTO renewed our partnership and set a common agenda to promote sustainable development in the sector through joint initiatives: sustainable transport and tourism systems; digital transformation of the industry; poverty reduction and social inclusion through employment in travel and tourism; and climate-neutral tourism growth. Under this collaboration, Amadeus shared our expertise in innovation, start-ups, smart destinations, social issues and sustainability in dozens of forums with public and private stakeholders in the travel and tourism industry.

Amadeus is a full member of the World Travel and Tourism Council (WTTC) in support of the broader travel and tourism industry, which generates over 10% of global GDP. Specifically, Amadeus has been directly engaged in thought leadership sessions on key concepts such as interoperable and consumer-centric industry standards; open and transparent collaboration frameworks in support of security and travel facilitation; leveraging digital technologies and biometrics; and sustainable growth for our industry. Furthermore, in 2018 Amadeus was again a partner of the WTTC Global Summit, organized in Argentina, and we initiated an even deeper collaboration for the 2019 edition of the event, which will take place in Seville, Spain.

As an associate member of the European Travel Commission (ETC), Amadeus supports a broad range of activities related to strengthening the tourism industry in Europe as an engine of economic growth and employment, through multi-stakeholder collaboration, technology to support travel destination development, and joint research on key industry topics. In line with these common objectives, we supported the ETC's 70th anniversary meeting in 2018 in Belgium, with a presentation on the role of new technologies in destination management.

Institutional relationships in key markets

Amadeus engages with chambers of commerce to contribute to the economic, social and technological development of several markets around the world. This allows us to build strong institutional relationships and strengthen stakeholder networks in key markets. In addition, chambers of commerce provide valuable information that is essential to understanding the key business and regulatory issues in the local market. Amadeus is a current member of the Spanish-Turkish Chamber of Commerce and Industry; the Spanish Chamber of Commerce in both South Africa and Japan; the EU Chamber of Commerce in China, Taiwan and South Africa; and the Spanish Business Council in Dubai.⁴

Amadeus employees in our Madrid headquarters.



⁴ Amadeus' memberships in interest organizations or trade associations do not constitute support for policy positions or initiatives these may take.

Participation in industry initiatives and events

As a trusted adviser willing to share insights and views, Amadeus is invited to participate in many sector initiatives and events across the world. We actively participate where we can make a meaningful contribution to a fact-based dialog and learn from exchanging views on factors affecting travel and tourism.

This engagement allows Amadeus to increase its visibility and build new relationships with government and industry representatives globally, while at the same time enhancing Amadeus' profile as a leading innovative technology partner for the travel and tourism industry.

These are some examples of initiatives and events that took place in 2018.

Discussing innovation and digitalization in aviation at the European Aviation Summit

Under the Austrian Presidency of the Council of the European Union, Amadeus was invited to a future-oriented discussion on the best possible development of the Aviation Strategy for Europe. We participated in a roundtable on how innovation and digitalization will transform the aviation market. The 200 participants in the summit included EU Commissioner Violeta Bulc, transport ministers from Austria and other countries, members of the European Parliament, high-level representatives of the Civil Aviation Authority and the European Commission, and leading European stakeholders.

Promoting innovation in tourism destination management with UNWTO

As a part of our ongoing collaboration with UNWTO to work toward a sustainable tourism industry leveraging innovation, digital capabilities and big data, Amadeus contributed to the second World Conference on Smart Destinations organized by UNWTO, SEGITTUR and the Principality of Asturias in Oviedo in June 2018. We participated in panels about growth, digitalization and sustainability of the industry, contributed to a hackathon on sustainable tourism and produced a study for the Principality of Asturias to help it on its road to enhanced destination management.



Industry discussion on the opportunities of new technologies in tourism

Together with our partner Pacific Asia Travel Association, Amadeus participate in the Global Tourism Economy Forum in Macau, China, where leaders in tourism and related industries gathered to discuss the future, digitalization and opportunities in the industry. With other experts from travel companies, UNWTO, academia and governments, we shared our views on the opportunities arising from applications leveraging artificial intelligence and digital technologies in tourism.

Fostering innovation in cooperation with the French government

Amadeus is very proud to collaborate with the French government and other public stakeholders such as Business France, OUI Innov and La French Tech, as well as other industry partners, academia and public stakeholders, to foster innovation and internationalization, which are considered paramount in today's corporate world. An example of this is Amadeus' support of the candidacy of Sophia Antipolis to become one of the four Institutes of Artificial Intelligence promoted by the French government in 2018.

In the Middle East, Amadeus joined forces with La French Tech during the GITEX Technology Week in October 2018 at the Dubai World Trade Centre to help the travel and tourism industry move into the digital age. During the conference, visitors could explore how Amadeus is supporting airlines and airports, hotels, search engines, travel agencies and tour operators to capture the value of digital transformation.

Building a robust and sustainable travel and tourism industry in South Africa

Amadeus partnered with South Africa's National Department of Tourism and Department of Industry and Trade to support the growing needs of the country's travel and tourism industry, with a commitment to sustainability and inclusive growth. The partnership aims to develop several programs, including a National Tourism Visitor Information System and a Travel and Tourism Training Academy. The aim is to drive inclusive and transformational

growth with a new online platform through which South Africa can develop and commercialize an expanded tourism offering, curate and analyze tourism data for valuable insights into the services and business needs of industry players, and better service the needs of visitors. With a special emphasis on the skills that the travel industry requires, and the use of digital and virtual training facilities, the active involvement of the industry in the Travel and Tourism Training Academy will ensure that training leads to employability or employment for young South Africans, with a special focus on women. It will also bring much-needed professional skills and technology solutions to boost SMEs in the tourism sector, especially in rural areas.

Industry collaboration to leverage biometrics in travel and tourism

Amadeus has participated in an industry working group on biometric identification in travel and tourism led by WTTC. The new technology offers a significant opportunity to improve the traveler experience, maximize the growth opportunity in travel and tourism and increase security and make traveling easier. Through the Seamless Traveller Journey program, WTTC's goal, in line with existing initiatives in this area, is to encourage the use of biometric technology and digital identity throughout the wider travel and tourism ecosystem so travelers can enjoy a seamless, secure and efficient end-to-end journey. Within the working group, Amadeus highlighted the need for industry interoperability, technological independence, a global standards framework and a managed, consumer-centric approach.

Recognition for our efforts in fostering start-ups

In 2018 Amadeus was delighted to earn recognition from the European Commission's Startup Europe Partnership initiative for our efforts in partnering with and nurturing start-ups. For the first time, Amadeus was included in the ranking of the 36 companies working collaboratively with start-ups across Europe, and we received the Open Innovation Innovative Approach Award. In recognition of our various start-up initiatives, Amadeus was nominated by European start-ups tasked with identifying players that have gone the extra mile to establish beneficial partnerships.

7. Environmental sustainability



Amadeus employees collaborating in our sustainability campaign.

GRI 103-1, 103-2, 103-3 (Efficiency and environmental benefits of our solutions)

The total contribution of travel and tourism to the global GDP is forecast to rise by 3.7% yearly over the next decade. By 2028 travel and tourism is expected to represent 11.5% of the global GDP (10.4% in 2019).¹

This positive economic outlook comes linked to increasing concerns around environmental sustainability. Long-term industry sustainability requires determined and joint industry action on issues like climate change, use of natural resources and comprehensive management of fast-growing tourism destinations.

Amadeus responds to this challenge with a holistic approach, conscious that action is required internally, externally and in cooperation with industry peers. Accordingly, Amadeus' environmental sustainability strategy is based on three pillars:

1. Environmental efficiency of Amadeus operations

We measure the environmental impact of our operations, identify areas for improvement, implement solutions and continue to monitor our performance for achieving continuous improvement in environmental efficiency.

2. Development of IT solutions that improve operational and environmental efficiency

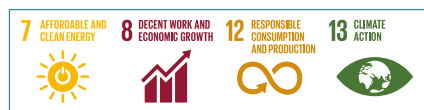
We help our customers achieve their environmental objectives, delivering IT solutions that improve customers' operational and environmental efficiency.

3. Participation in and fostering of joint industry environmental initiatives

We work in partnership with other industry stakeholders on projects to improve travel industry sustainability.

¹ World Travel and Tourism Council (WTTTC) (2019). *Travel and Tourism Economic Impact 2019: World*, London, WTTTC.

7.1 Environmental efficiency of Amadeus operations



The first step in addressing environmental sustainability is to understand the environmental impact of our operations and to nurture a company culture that reduces environmental impact as much as possible.

Amadeus introduced its materiality analysis tool in 2009 to identify and address the major causes of environmental impact in our operations. The materiality analysis is regularly updated with input from internal teams, advice from external consultants and benchmarks from other companies in similar sectors. The analysis is coordinated and led by Amadeus' Sustainability unit. The materiality analysis identified five material environmental aspects, which are described below in detail.

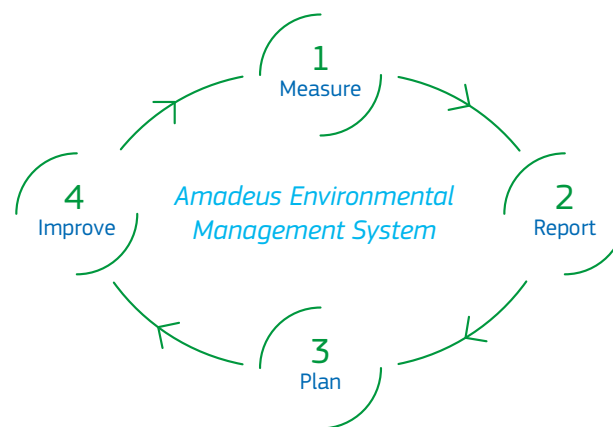
Our use of office buildings across the world as well as the Amadeus Data Center have been identified in our materiality analysis as the main contributors to the environmental impact of our operations.

The infrastructure management team at the Data Center works toward the continuous improvement of the energy efficiency of this critical installation. Our initiatives in this area are based on recommendations from external consultants and on our own experts' analyses.

Elsewhere, the Building & Facilities teams at local level are responsible for the optimization of the use of resources at our office buildings. They are supported in specific cases by technical teams that, for example, provide key performance indicators relating to the use of resources.

Amadeus' Environmental Management System

As a result of the materiality analysis, Amadeus' Environmental Management System (EMS) was designed and created as the tool we use to measure, monitor and identify best practices, and to continuously improve the environmental performance of our operations at office buildings and at the Data Center.



Material aspects of the EMS

As indicated above, we have identified five material environmental aspects:

- **Electricity consumption:** The most important component of our energy consumption is electricity. We measure electricity consumption at the Data Center and at our office buildings separately.
- **CO₂ emissions:** We follow the Greenhouse Gas Protocol (GHGP)² standards to report CO₂ emissions:

² The most widely used international accounting tool for government and business leaders to understand, quantify and manage greenhouse gas emissions. The GHGP classifies emissions into three scopes. Scope 1: direct greenhouse gas emissions from sources owned by the company; Scope 2: indirect greenhouse gas emissions produced as a consequence of the company's operations; and Scope 3: other indirect greenhouse gas emissions, such as emissions from travel providers for business travel.

- In Scope 1 we include emissions from natural gas and diesel. Fossil fuels at Amadeus are used mainly for heating purposes and to guarantee an uninterrupted power supply at the Data Center.
- In Scope 2 we include emissions linked to the use of electricity³ at our office buildings worldwide and at the Data Center.
- In Scope 3 we include emissions from paper consumption and from business travel. We gather information about business trips from our travel agency provider and we use the International Civil Aviation Organization (ICAO) carbon calculator to estimate emissions per passenger.

Paper consumption: We use paper at our office buildings worldwide for internal reports, marketing materials and internal and external documents. We report paper consumption mainly through personal badge-based printing devices. These automated systems permit a more precise monitoring and facilitate the identification of areas for improvement.

Water use: The use of water at Amadeus is divided into three categories:

- Office buildings (kitchens, toilets, etc.)
- Irrigation, in cases where we have gardens and the means of separately measuring irrigation-related consumption
- Cooling of IT equipment

Waste generation: We generate waste at our premises from kitchens and from general office use. Waste is difficult to measure. The principal sources of information for reporting our waste are the recycling companies used by Amadeus. Waste generated by extraordinary activities, like works done in buildings, is generally measured, but for comparability reasons it is reported separately from regular waste.

Geographical scope of the EMS

The EMS includes the reporting of the environmental impact of Amadeus operations. Amadeus has more than 100 offices across the world. Some of these workplaces are small and it becomes inefficient to measure and report the impact of all of them in a direct manner. Therefore, we have adopted a more efficient and pragmatic approach by which we report direct measurements of impacts in 14 of our largest sites (which represent more than 70% of total Amadeus workforce worldwide) and then we make an estimation of the remaining sites, based on the average consumption factors of the sites where we measure our impact directly. This new methodology was implemented in 2018 and broadens the scope of our reporting to 100% of our impact.

The EMS includes the environmental reporting of some of the largest Amadeus sites by number of employees:

- 1_ Nice, France
- 2_ Bengaluru, India
- 3_ Miami, United States
- 4_ Erding, Germany
- 5_ Madrid, Spain (headquarters)
- 6_ London, United Kingdom
- 7_ Bad Homburg, Germany
- 8_ Bangkok, Thailand
- 9_ Sydney, Australia
- 10_ Paris, France
- 11_ Madrid, Spain (Amadeus Commercial Office)
- 12_ Singapore
- 13_ Waltham, United States
- 14_ Manila, Philippines

³ The conversion factors applied, i.e. the amount of CO₂ emitted per kWh used, are obtained from the latest updated averages for each country, published by the International Energy Agency in its publication CO₂ Emissions from Fuel Combustion 2018. Paris, IEA Publications, pp. 182–469.

DocuSign

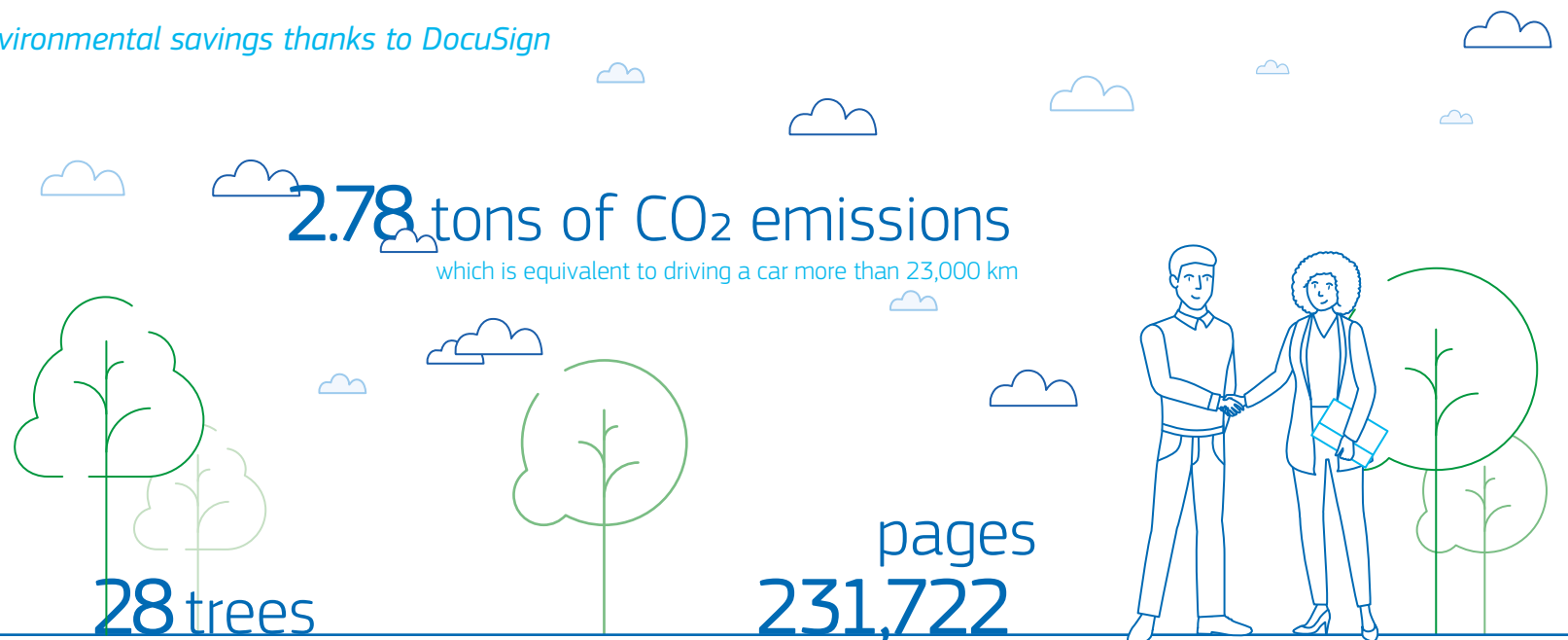
Getting contracts signed on paper is a complex process and a time-consuming task. From the environmental perspective, it also consumes resources, since contracts often span up to 500 pages and multiple physical copies need to be signed. In addition, the physical copies need to be couriered (mainly by air) back and forth between the offices of the different counterparts. Amadeus found a suitable solution to this problem, and since April 2017 we have automated this management process thanks to the e-signature tool DocuSign.

DocuSign reduces paper consumption and CO₂ emissions and makes it possible to electronically sign and manage contracts from anywhere in the world. We are using DocuSign for commercial agreements with our airlines and travel agencies, with our suppliers and internally with our employees' contracts.

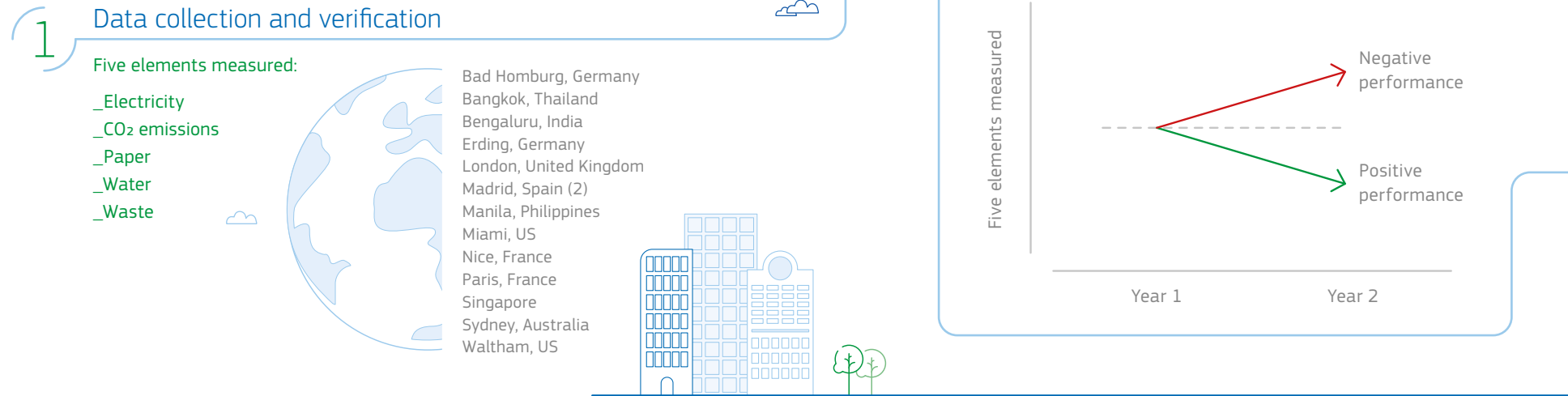
The results have been significant, saving substantial amounts of time, resources and costs for Amadeus. The financial savings, agility and convenience of DocuSign have had a positive impact on our business.

Thanks to DocuSign, we have saved more than 230,000 pages of paper since its implementation as of December 2018. Overall, DocuSign is saving the company more than €1 million per year by digitalizing processes. In addition, our customers worldwide have saved thousands of sheets of paper with this eco-friendly solution, which, in turn, saves the trees required to make paper.

Environmental savings thanks to DocuSign



Environmental performance in one single figure and commitment to continuous improvement



Amadeus has developed a tailored methodology to condense the environmental performance of our operations into one single figure that represents our results compared with the previous year. This methodology takes into consideration the elements reported in the EMS, efficiency ratios and company growth – factoring in number of employees and transactions processed.

Summarizing environmental performance in one figure facilitates the reporting to and understanding of top management, providing the opportunity to analyze aggregated results at different levels without losing any visibility of the details of both the individual performance of each geographical site and the environmental element in question.

The process of summarizing all environmental data collected in one performance figure – as shown in the diagram above – is outlined below:

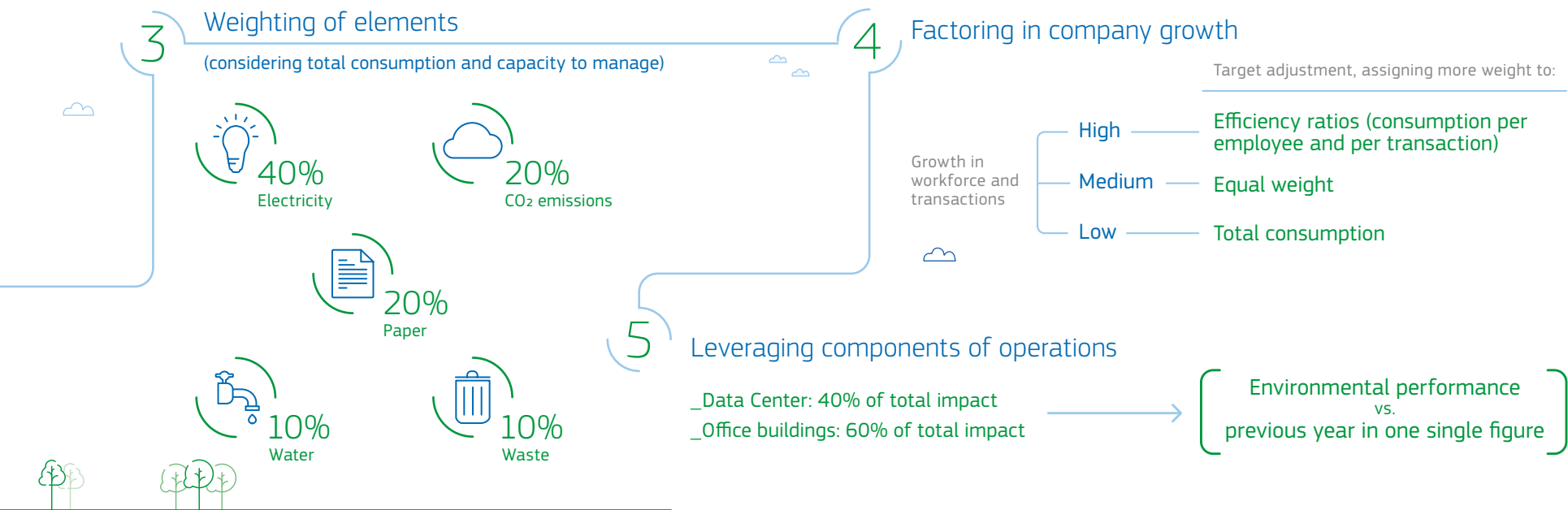
1_ Data collection for the 5 environmental elements identified in the materiality analysis from the 14 sites included in the

EMS. Data is gathered in a homogeneous way across all sites to facilitate comparison. For each environmental element, we measure total consumption and efficiency ratios:

- At the Data Center: efficiency is measured in terms of electricity consumed per transaction processed⁴
- At office buildings: efficiency is measured in terms of consumption per employee per year

2_ Measured performance versus previous year. For each factor analyzed in the EMS, we compare results with the previous year. Performance is calculated as a percentage change over the previous year, where an increase in consumption is considered negative and a reduction positive.

⁴ In this context, transactions processed at the Data Center are defined as basic operations linked directly to our business. Transactions include bookings, passengers boarded and e-commerce Passenger Name Records processed.



3_ Weighting of elements. We allocate specific weightings to each element included in the EMS based on total consumption and our capacity to manage each element. The weightings assigned are illustrated in the graphic on this page.

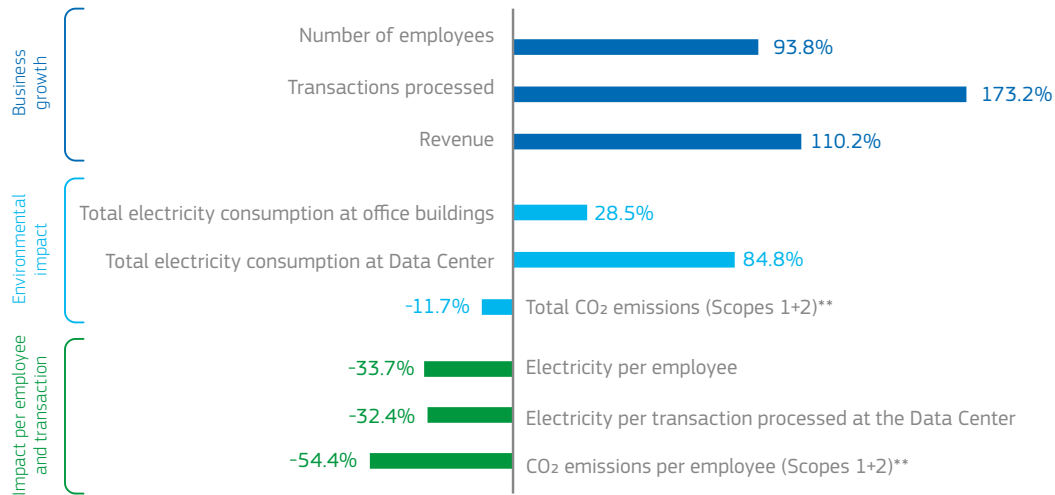
4_ Factoring in company growth. Keeping resource consumption down is easier when company growth is slow, and vice versa. Therefore, the evaluation of environmental performance takes into consideration company growth. When the company is growing rapidly, we assign more weight to efficiency ratios (resource consumption per employee or per transaction processed), but trends in total consumption of resources are always considered, as the minimum weight allocated to the evolution of total consumption is 25%. On the other hand, in a context of slow growth, we assign more weight to total consumption of resources.

5_ Leveraging components of operations. Due to the different nature of their activities, we analyze environmental

performance at the Data Center and at office buildings separately. Based on total resource consumption as well as our capacity to influence performance, we allocate 40% of the overall environmental impact to the Data Center and 60% to office buildings. For the Data Center, we evaluate impact or performance based on energy consumption. For the office buildings, we take into consideration the five elements mentioned earlier: electricity consumption, CO₂ emissions, paper, water and waste.

The process explained above is the basis from which we gain visibility on overall and detailed environmental performance, and we use it to set objectives and follow up on our performance. Our strategy is based on a combination of targets linked to the performance of the previous year, together with a long-term plan that guarantees continuous improvement.

2018 vs. 2009 business growth and environmental performance*



* Scope: Total Amadeus sites worldwide estimated from the sites included in the Amadeus Environmental System, except transactions and revenue, which include direct data for the entire company.

** Includes carbon offsetting.

Amadeus THINK GREEN

The Amadeus office in Argentina formed an interdisciplinary sustainability committee joining the Amadeus' sustainability proposals under the Amadeus Think Green logo and the slogan "We all need to be part of the change."

The initiative seeks to create environmental awareness and efficiency among workers by focusing their initial objectives on sustainable waste management. To achieve these goals, glass bottles were delivered in order to reduce the use of single-use plastics and to better classify garbage, desk wastebaskets were replaced by waste separation bins strategically distributed in all work areas.

Environmental performance of Amadeus operations in 2018

Overall, the main conclusions from the monitoring of the environmental performance of Amadeus operations in 2018 are:

- _ A moderate increase of energy used, particularly at the Data Center, influenced by increased business growth.
- _ Improved efficiency ratios in terms of resources used per employee and energy per transaction processed have improved
- _ A stable overall environmental result has remained stable (-0.06%) since the increase in overall resources consumption has been compensated for by the improvement in operational efficiency.

Energy consumption increased at the Amadeus Data Center in 2018 by 5.1%. This was mainly due to the increased number of transactions processed (6.35% growth) and to the increasing complexity of each transaction.

Environmental performance at office buildings improved by 2.28%. The improvement was driven by better performance in terms of energy consumption, greenhouse gas emissions and water consumption per employee decreased in virtually all sites, thanks in part to the use of new and more efficient equipment. Paper consumption and waste generation remained stable.

Following Amadeus' carbon-neutral growth policy, Amadeus offset 16,410 tons of CO₂ through the purchase of Certified Emissions Reductions from United Nations Framework Convention on Climate Change-accredited projects in India. This carbon offset applies to total Amadeus emissions.

Environmental performance at office buildings

The teams in charge of the Amadeus EMS usually take care not only of the environmental impact of our operations but also the comfort of employees. Looking for measures that improve environmental efficiency, while facilitating optimum workplace conditions, often becomes a challenge. A combination of environmental best practices implementation at company level and the development of pro-environmental behavioral changes is critical to enhancing sustainability performance.

Examples of best practices at office buildings



Electricity consumption

- _ Replacing incandescent bulbs with LEDs; for example, we have estimated a saving of 176,537 kWh for implementing LEDs at our premises in Bengaluru (India)
- _ Switches connected to movement-detection control systems
- _ Thorough planning of areas covered by specific light switches
- _ Automatically switching off lights at certain hours
- _ Switching off PCs after working hours
- _ Maximizing the use of natural light
- _ Adapting room temperature to the weather
- _ Use of energy-saving stickers

A number of initiatives also combine some of the initiatives above. For example, at our London site, the LED lighting system regulates the artificial light levels according to the natural light available. The lighting system is broken down into controllable zones with movement detection sensors so that lights go off if no employee is present in the zone. In addition, the introduction of photovoltaic cells on the roof is expected to reduce electricity consumption by 160,000 kWh.



CO₂ emissions reduction

- _ Adapting room temperature to the weather
- _ Promoting the use of carpooling / public transportation
- _ Purchasing carbon-neutral products and services
- _ Electric vehicle charging points



Paper consumption

- _ Implementing badge-based printing systems
- _ Using carbon-neutral paper
- _ Setting all printer defaults to black-and-white, double-sided printing

- _ Raising user awareness of the environmental and economic cost of printing
- _ Using recycled paper
- _ Sending used paper for recycling

A new global printing system with an eco-mode option is being implemented at Amadeus worldwide with a phased approach. The new system permits energy savings of up to 86%, with the corresponding positive effects also in energy costs and CO₂ emissions. In addition, we are fostering the use of recycled paper at most of our sites.



Water use

- _ Using drip irrigation systems and plants with low water consumption
- _ Implementing motion sensor taps in washrooms
- _ Using water-efficient household appliances in kitchens
- _ Implementing leak detection units to reduce water loss

In Singapore, our office building includes a condenser system to avoid water waste in the cooling system due to condensation. The building also harvests rainwater from the rooftop for landscape irrigation.

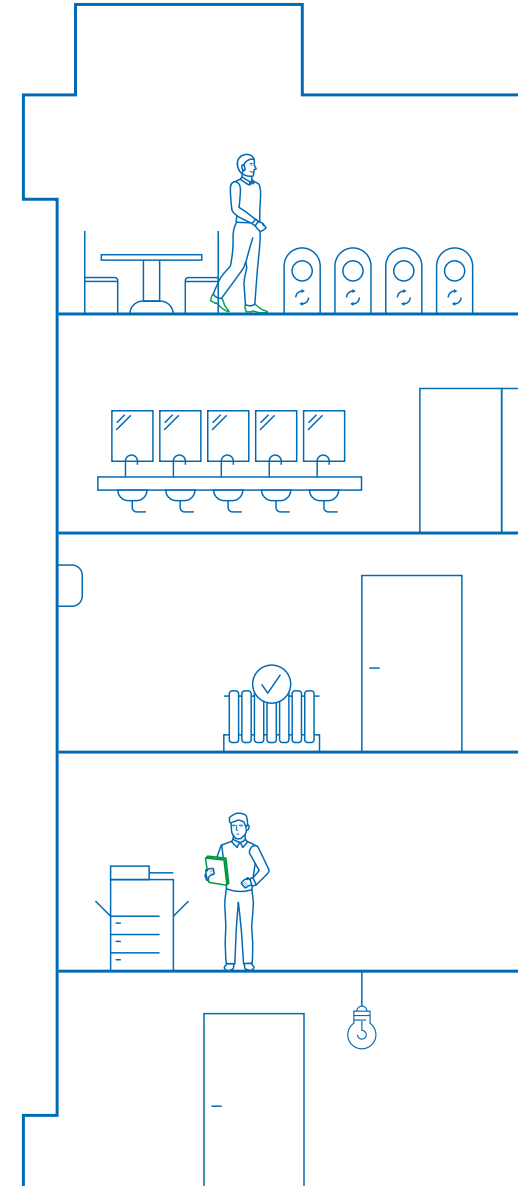


Waste generation

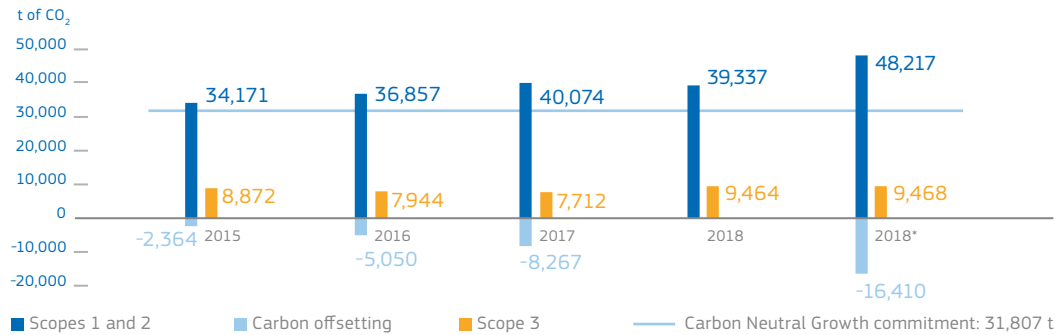
- _ Implementing a proper infrastructure to promote classification of waste
- _ Raising employee awareness to minimize waste
- _ Working with external providers to improve the measurement and management of waste
- _ Replacing plastic cups with ceramic mugs

Some of our sites, like Madrid and London, have made changes in vending machines to avoid the use of plastic cups.

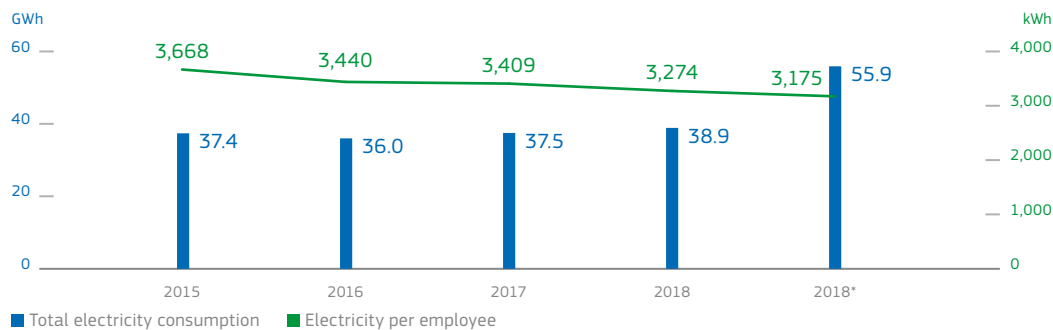
amadeus



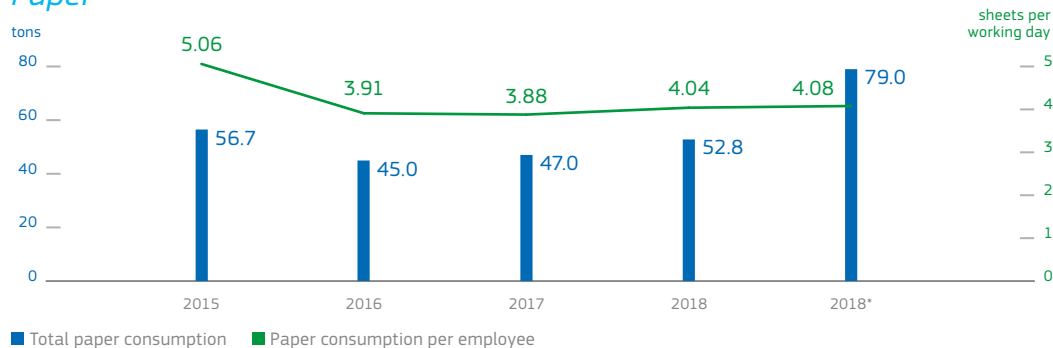
CO₂ emissions



Electricity



Paper



* Scope: for comparability purposes we have included two sets of data for 2018. One including top 13 Amadeus sites by number of employees (same scope as of 2017) and the other with the estimated total of Amadeus calculated from the top 14 Amadeus sites.

Environmental performance at the Amadeus Data Center

The Amadeus Data Center follows a strict energy efficiency policy. The measures taken come from a combination of internal analysis from our experts and reviews and recommendations from external consultants. In this respect, the Amadeus Data Center has maintained since 2010 its TÜV SÜD certification as an energy-efficient data center. The latest renewal of this certification was obtained in December 2018, following a thorough analysis of the Data Center infrastructure, and is valid until 2021. We have also extended our Data Center certification to EN 50600, the new EU standard for data centers that is even broader in scope and more demanding.

Examples of recent measures taken to improve our energy efficiency and reduce CO₂ emissions include the implementation of more efficient cooling machines that reduce the energy required to cool servers and also optimize the use of water. In addition, with the heat produced by this cooling machine and a heat exchanger, we are now able to heat the Systems and Network Control Center. The old electrical heating was dismantled. Moreover, we replaced 42 sensible coolers in the Data Center, which led to a power reduction of 50% in that area. In addition, we will replace nine transformers with more efficient ones, which should save 55,000 kWh per year.

The Data Center's Power Usage Effectiveness (PUE)⁵ in 2018 was 1.34.

Setting longer-term environmental objectives

In addition to the continuous improvement methodology described above, Amadeus has established objectives to reduce our greenhouse gas emissions and become a carbon-neutral company.

We aim to maintain our objective of not increasing net emissions until 2020. In addition, we have signed the United Nations Climate Neutral Now Pledge. In line with the objectives of the Paris

⁵ Common metric used to measure the energy efficiency of data centers. The closer to 1 the PUE, the more efficient the data center is.



Amadeus helps Braathens Regional Airlines introducing the new environmental class of service

Travelers booking in the new Braathens environmental class make an economic contribution so that their flight is powered by bio-fuel. This significantly reduces emissions of greenhouse gases, as compared with flights using traditional fuel.

Amadeus developed the technical solutions that permit the inclusion of the bio-fuel option both in the web page of the airline (www.flygbra.se) and in the travel agency channel.

We look forward to continuing our work with Braathens to maximize uptake of this initiative.



Agreement on climate change, and by signing the pledge, we have committed to becoming climate-neutral in the mid and long term.

Amadeus' carbon-neutral growth commitment

Amadeus maintains a carbon-neutral growth policy, with 2015 as the baseline year. In case we are not able to reduce emissions to reach our target, we invest in Certified Emissions Reductions (CERs) from Clean Development Mechanism⁶ projects in India to reach our carbon-neutral growth policy. We have offset an accumulated total of 32,091 tons of CO₂ (16,410 in 2018) with CERs.

The number of transactions processed at the Data Center have increased dramatically over recent years, due to the growing amount of online devices that can connect and trigger queries to our systems. In addition, transactions are becoming more complex and are carrying an increasing amount of information. At the same time, as a consequence of our growth, the number of Amadeus employees and offices around the world continues to increase. Therefore, it becomes very difficult to reduce overall energy consumption and CO₂ emissions, which is why the use of CERs becomes important in reaching our objective of carbon-neutral growth.

In addition, we encourage CO₂ reductions beyond the scope of the EMS. Amadeus headquarters in Madrid, for example, will be implementing in 2019 a new company car policy with specific environmental targets. Concretely, high-emitting cars, i.e. those that emit more than 155 gr of CO₂ per km. will be removed

from the list of available options and users will be encouraged to choose electrical cars through the implementation of a more flexible economic policy that incentivizes also fuel reduction. The target is to reduce average emissions of the company's car fleet by at least 20% in the next five years.

7.2 Environmental benefits of Amadeus solutions



Amadeus invests more than €2 million daily in R&D projects.[↪] We develop technology solutions that help to improve the operational efficiency of customers, and this increased operational efficiency is linked in many cases to improved environmental efficiency. Environmental benefits expand to a wide range of stakeholders in the industry, including airlines, airports, travelers and cities.

We describe below the environmental benefits of Amadeus solutions in the five stages of the travel cycle.

Inspiration

Information on estimated CO₂ emissions per passenger flight is included in some of Amadeus' distribution platforms. The source of information for the estimations of emissions is the ICAO⁷

“We need to reduce emissions, not travel.”

Ulrika Matsgård

*Commercial Manager,
Braathens Regional Airlines*

⁶ The Clean Development Mechanism (CDM) is one of the “market-based mechanisms” defined in the Kyoto Protocol, which provides for emissions-reduction projects. These generate Certified Emission Reduction units that can be traded in emissions trading schemes.

[↪] See “Technology and innovation”, p. 52.

⁷ The United Nations agency in charge of civil aviation. Amadeus has an agreement in place with ICAO to use its carbon calculator on Amadeus platforms for the purpose of providing emissions estimations to travelers and corporations.

Environmental benefits of Amadeus solutions at the five stages of the travel cycle



carbon calculator. Customers also have the ability to compare the environmental effects of different itineraries.

Booking

During the booking phase, some of Amadeus' solutions offer the possibility of obtaining CO₂ emissions estimations for different itineraries. Travelers can then incorporate CO₂ emissions as an additional element into their booking decision-making process, together with traditional parameters like schedules, availability and fares.

Pre-trip

Amadeus Airport Sequence Manager permits improved planning of aircraft movements at airports' runways and a sophisticated aircraft slot assignment, helping airports and airlines to reduce their operational environmental impact by minimizing the amount of time that aircraft spend taxiing on the runway. If such solutions were to be implemented at the major airports

of the European Civil Aviation Conference, the European Union estimates savings of over €120 million in fuel costs and a reduction of more than 250,000 tons of CO₂ emissions.⁸

Amadeus Airport Common Use Service helps to reduce energy consumption at airport buildings by reducing the amount of IT infrastructure required at airports.

Using advanced algorithms that estimate demand and analyze risks, Amadeus Sky Suite by Optym helps airlines to make fundamental decisions related to airline networks, flight frequencies and equipment, reducing the use of resources (fuel, aircraft, airport infrastructure, etc.) per passenger flown.

On-trip

Amadeus Altéa Departure Control-Flight Management helps airlines accurately estimate the fuel needed for a specific flight, using sophisticated algorithms and historic data. The accurate estimation of the weight of the aircraft before the fuel is loaded (zero-fuel weight) permits significant savings in fuel burn, emissions and economic costs. In this respect, a study carried out by Amadeus in conjunction with its customer Finnair analyzed more than 40,000 flights and concluded that a mid-sized carrier can save a minimum of 100 tons of fuel and more than 315 tons of CO₂ emissions per year. Assuming that a similar level of savings is achieved by all our customers using the same flight management solution, the amount of CO₂ emissions thus reduced would exceed the total emissions associated with Amadeus' operations (Scopes 1 and 2).

Amadeus Schedule Recovery helps airlines make rapid decisions in moments of operational disruption. It enables them to improve operational efficiency and customer service while minimizing negative environmental impact by finding optimum solutions for each disruption.

Post-trip

Through our presence around the world, we have observed a general trend of increased demand from corporations for solutions that help measure travel-related emissions. Some of Amadeus' solutions offer the possibility of obtaining post-trip CO₂ emissions reports aggregated at different levels and times. We are working on the expansion in scope and features of such solutions.

⁸ Eurocontrol (European Organization for the Safety of Air Navigation) (2008). *Airport CDM Cost Benefit Analysis*.

7.3 Participation in industry environmental initiatives



Long-term industry sustainability can be more easily achieved if all industry stakeholders work together toward this common objective. For this reason, the third pillar of our environmental sustainability strategy is to identify and engage in collaborative environmental sustainability projects.

In order to raise awareness of aviation carbon emissions, and to support the use of a common methodology to estimate carbon emissions per passenger and encourage mitigation actions, Amadeus and ICAO have a long-term agreement in place whereby Amadeus uses ICAO's carbon calculator on our distribution platforms, providing travelers with information about greenhouse gas emissions released during their trips. ICAO's carbon calculator brings the benefits of commercial neutrality and legitimacy to represent the aviation industry and of global reach.

Our agreement with ICAO has also encouraged the development of local initiatives to support the use of ICAO's carbon calculator and the offsetting of travel-related emissions. This includes the development of mid- and back-office solutions that include post-trip carbon reporting, as well as facilitating access to carbon offsetting schemes.

During 2018 we continued our cooperation with institutions like the World Travel and Tourism Council and academic institutions like Griffith University (Australia). In this respect, Amadeus was involved in the production of the Global Sustainable Tourism Dashboard, developed in cooperation with the University of Surrey (United Kingdom) and the Griffith Institute for Tourism, to which Amadeus contributed by sharing aggregated travel data. The Global Sustainable Tourism Dashboard provides a broad insight into how the travel sector is contributing to key sustainability goals.

Additionally, Amadeus joined the United Nations Climate Neutral Now Pledge, committing to becoming carbon-neutral and to making our contribution toward reaching the targets set by the Paris Agreement.

ICAO and Amadeus partnership

Carbon calculator

- _Legitimacy
- _Neutrality
- _Global reach



Improved industry environmental awareness

AMADEUS

Travel industry reach

- _Contact with 2+ million travelers per day
- _Operating in 190+ countries

7.4 Climate change-related risks and opportunities



The travel and tourism industry needs to make its contribution to achieving the overall targets set by the Paris Agreement to keep global temperature increase well below 2 degrees Celsius. The actions required for the achievement of the climate change targets mean that fundamental structures in the travel industry will need to change. Amadeus believes that all stakeholders in the industry need to contribute to the overall objective.

Amadeus is involved in the travel experience of more than 2 million passengers daily. We are an important player in the travel and tourism industry and we acknowledge our responsibility to contribute to the fight against climate change.

The climate change-related risks faced by Amadeus can be classified into the following categories.

Physical risks

Physical risks affecting the communities in which we operate

Amadeus operates in over 190 countries. The risk of climate change impact and/or extreme weather events affecting any of these communities is therefore very high. As part of our social responsibility efforts, we have built a global team of more than 80 social responsibility representatives who, among other things, coordinate emergency responses in the event of natural calamities occurring in the markets we serve.

Physical risks affecting our travel providers and/or customers

Risk of exposure to physical risks like extreme weather events is limited, and the impacts tend to be local. As a mitigation measure, our 24-hour follow-the-sun customer service network is set up to provide extra support in case of need.

Physical risks affecting Amadeus' operations

Amadeus' operations rely on two basic kinds of infrastructure: (1) commercial and support organizations, with offices across all continents; and (2) the Amadeus Data Center. The probability of a severe weather event affecting any of our numerous offices worldwide is relatively high, but fortunately the adverse impact of such events is mitigated by communications technology that allows for uninterrupted customer service in most cases. Moreover, our Risk & Compliance Office directly manages all infrastructure-related risks for the Data Center, where strict prevention and mitigation measures are implemented.

Regulatory risks

Climate-related discussions and initiatives at local, national and international level continue to increase, and we expect they will continue to gain momentum over the mid-term. Accordingly, many countries have introduced climate change-related regulations. A principal focus of these regulations is the reporting and reduction of greenhouse gas emissions, particularly of CO₂, as well as the promotion of renewable sources of energy. We have identified two kinds of environmental regulations that may present an opportunity and a risk to Amadeus.

Carbon-reporting regulations

Some countries like France have already passed legislation mandating that corporations should build and report carbon footprint inventories. In the specific sector of transport,⁹ travel providers are required to inform travelers about emissions released as a consequence of their trips. Amadeus can help corporations gather the data required for this reporting.

However, there is also the risk that these regulations will become too complex or heterogeneous, making it costly for Amadeus to help corporations report emissions. The Amadeus Industry Affairs team is working with several stakeholders, including the European Union and ICAO, to promote an industry standard methodology to estimate emissions related to travel.

Regulations that impose charges on emissions and/or impose emissions reductions

An example of such a regulation is the European Union's Emissions Trading Scheme (ETS). The ETS was first implemented in 2005, and extended to the aviation sector in 2012.

At the moment, we do not expect these regulations to have a significant impact on Amadeus given the relatively low cost of compliance with the ETS scheme (which is unlikely to reduce travel demand) and the geographical spread of Amadeus' operations.

⁹ Decree No. 2011-1336 (France), October 24, 2011.

In addition, Amadeus' IT solutions that help airlines to reduce fuel consumption and emissions will improve our value proposition.

Reputational risks

Travelers and the general public are increasingly aware of climate change risks and expect environmentally responsible operations from companies. Even though Amadeus' exposure to the general public is limited, we need to prioritize compliance with industry environmental standards, making sure our performance in this field excels.

The Amadeus EMS provides a solid record of our performance evolution and permits the easy identification of areas for improvement. Additionally, Amadeus has been included in external sustainability indices like the Dow Jones Sustainability Index (DJSI)¹⁰ and the CDP,¹¹ which provide recognition of commitment to sustainability. The opportunities for Amadeus relating to climate change are divided into the following two categories.

Opportunities for new products and services

As mentioned above, corporations are becoming increasingly involved in the reporting of greenhouse gas emissions associated with their operations, including emissions linked to the business travel of employees. Taking advantage of the data and information processed by Amadeus, we can offer solutions that:

- Display emissions during the booking process, comparing emissions released on different alternative itineraries.
- Provide post-trip reports to corporations so they can measure, report and follow up on their environmental impact relating to business travel.
- Facilitate mitigation measures, such as carbon offsetting programs.

¹⁰ The Dow Jones Sustainability Indices (DJSI), launched in 1999, are a family of indices evaluating the sustainability performance of the largest 2,500 companies listed on the Dow Jones Global Total Stock Market Index.

¹¹ Formerly the Carbon Disclosure Project – an international, not-for-profit organization providing the only global system for companies and cities to measure, disclose, manage and share environmental information. CDP is recognized as the main international standard for climate change reporting and management for corporations.

Opportunities for enhanced value proposition

Amadeus designs IT solutions to improve operational efficiencies for our customers. These operational efficiencies are linked in many cases to better environmental performance, particularly in relation to reduced fuel consumption and emissions for travel provider customers.

Amadeus in sustainability indices

Sustainability indices provide a valuable benchmark to assess how Amadeus compares to other companies and industries on sustainability performance.➔

Dow Jones Sustainability Index (DJSI). For the seventh consecutive year, Amadeus has been included in the Dow Jones Sustainability Indices (DJSI) in both the World and Europe categories. Importantly, the DJSI evaluate sustainability performance very comprehensively, including economic, environmental and social dimensions. Amadeus also participated in CDP in 2018 with a climate score of B.



FTSE4Good. Amadeus has also been included for the fifth consecutive year in the FTSE4Good Sustainability Index. The FTSE4Good Index Series includes companies that reflect strong Environmental, Social and Governance (ESG) risk management practices.

Corporate Knights' Global 100 Most Sustainable Corporations in the World. Amadeus ranked as the 16th most sustainable corporation in the world in 2018.

➔ See "Amadeus profile," p. 13.

8. Social Responsibility



8.1 Building a better future

Our strategy in social responsibility is to use our core strengths – our people, technology and global travel expertise – in programs and partnerships that can make a real difference. Our objective is to contribute to the inclusive development of communities in the countries where we operate, improving how travel and tourism can make a positive impact.

Amadeus Social Responsibility is the global program through which we deliver this positive change, supporting economic development, education, entrepreneurship and employment in communities in 47 countries. We develop a wide array of projects designed to respond to local communities' needs. In 2018, Social Responsibility activities were rolled out in locations where an estimated 70% of staff is based.

At Amadeus, we continuously evolve our practice to incorporate detailed indicators, and we have taken significant steps in the right direction this year. In 2018 we joined the United Nations Global Compact, the world's largest corporate sustainability initiative, to strengthen our commitment to sustainability and the 10 universal principles on human rights, labor, the environment and anti-corruption. We have also continued detailed consultations and run programs together with our key social stakeholders such as UNICEF and the Global Travel and Tourism Partnership (GTTP).

We also made good progress in the three strategic pillars of our global Social Responsibility program:

Technology for Good

In partnership with our customers and global NGOs, we provide technology and data solutions that respond effectively to their commitments toward inclusive social development. We developed the Amadeus Donation Engine to enable travelers to make a donation when they buy travel online and to meet the need for a simple and effective method of gathering funds to help local communities around the world.

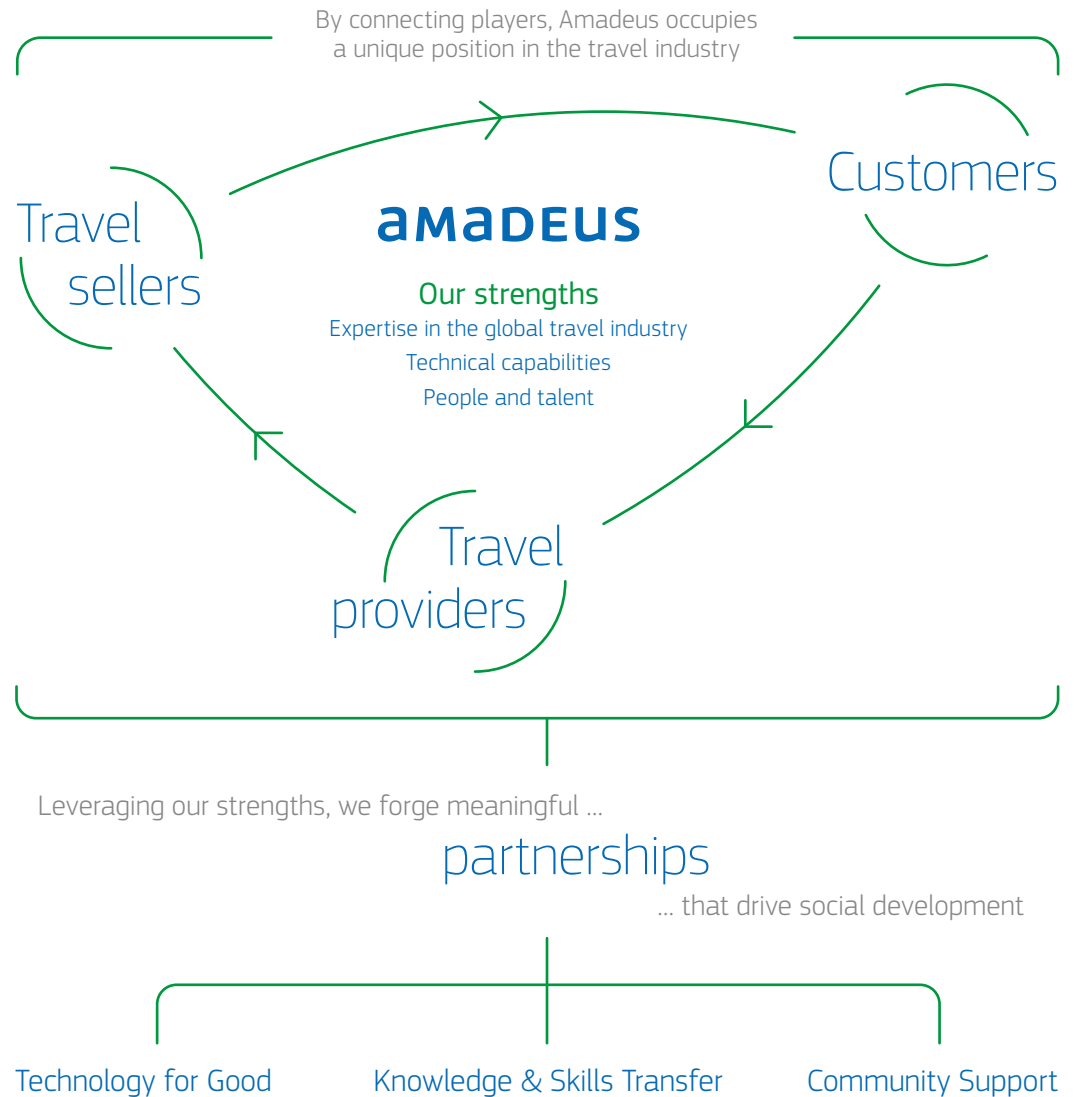
_ Knowledge & Skills Transfer

In collaboration with local governments, our customers and development organizations, we equip young people with skills that the digitalized travel and tourism industry requires. Our Training for Employment pilot in Egypt addresses the gap between formal education and the practical knowledge that is required to work in the industry.

_ Community Support

Amadeus engages in a wide array of community support programs around the world, supporting projects to reduce poverty and inequality.

In 2018 we fostered 161 partnerships with intergovernmental and non-profit organizations, educational institutions and public and private sector leaders in the travel industry.

Commitment to society

8.2 Our achievements in 2018

Our ambition for 2018 was to bolster our social responsibility engagement, by increasing the impact and reach of our strategic projects and leveraging our core strengths more systematically.

We continued to focus on our commitment to key global sustainability networks, such as the United Nations Global

Compact, the world's largest corporate sustainability initiative. In parallel, we further aligned our programs and activities with the United Nations Sustainable Development Goals (SDGs),  achieving very positive outcomes in all these cases.

We joined Fundación SERES, a Spanish non-profit organization that helps companies strengthen their role as a key agent of social change.

In addition, we continued to see encouraging results in employee engagement, and the number of Amadeus employees dedicating their time, talents and enthusiasm rose to 3,412.

Examples of social KPIs achieved in 2018

	2015	2016	2017	2018
Total value of community investment	€2.64m	€3.09m	€4.04m	€6.09m
Staff involved in projects	1,922	2,909	3,188	3,412
Computers donated	262	520	518	866

Grow strategic impact

Global advocacy for travel and tourism

- _Inclusive development in emerging and younger economies

Private and public sector partnership

- _Upskilling young people
- _Economic inclusion through travel and tourism

amadeus

Social responsibility projects

- _Expertise and business resources
- _Amadeus people

Amadeus technology solutions

- _Driving social inclusion and development
- _Customers and non-profit partners

Amadeus' social commitment in 2018: contributing to local development through technology, people and global travel

 Technology for Good
4 projects

 Knowledge & Skills Transfer
45 projects

 Community Support
125 projects

North America

15

projects

 15

Latin America

25

projects

 7
 18

Western Europe

53

projects

 6
 43
 4

Rest of Europe

21

projects

 14
 7

Asia-Pacific

38

projects

 3
 35

Africa

9

projects

 3
 6

Middle East

13

projects

 12
 1

 €6.09m

Total value of
community
investment

 3,412

Staff involved
in projects

 161

Partnerships with 107
non-profits, 44 education
institutions and 10 industry
stakeholders in 47 countries

 823

Young people trained
and mentored in travel
reservation skills
and basic IT use

 866

Computers donated
to support digital
literacy in 16 countries

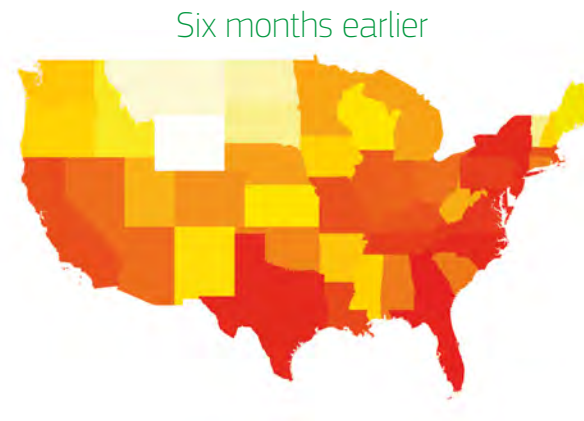
 €410k

€410k raised through Click for Change
Funds dedicated to UNICEF's immunization and
education programs in Latin America, Schools
for Asia program and regular resources

8.3 Technology for Good

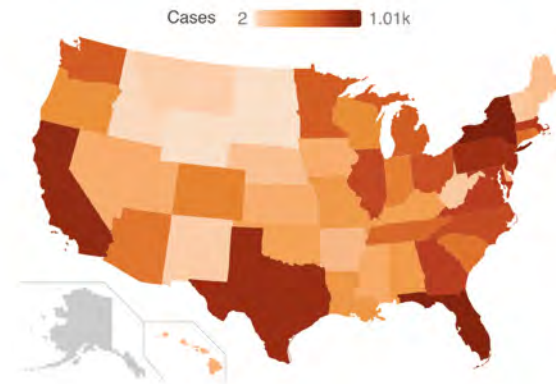
Sample of a risk map developed to predict the spread of Zika

Predictions



UNICEF Data Science Prediction. August 2016.

Actual cases



From: DirectRelief. Source: CDC. As of February 2017.

“

For us the Magic Box is a way to bring together partners like Amadeus and others who want to use their data as a global public good and to collaborate with them to build a product that allows us to have real-time insights and use that information for action.”

Chris Fabian

Ventures Lead Office of Innovation, UNICEF

Real-time predictive analytics to improve response to global emergencies

In collaboration with Amadeus, UNICEF's innovation team has developed a prototype for real-time predictive analytics to improve responses in humanitarian crises. This pioneering initiative, called “Magic Box,” aims to better understand the impact of serious emergencies at the time they happen. It provides a technology platform that can rapidly analyze many complex data sources to predict, for example, the spread of epidemics.

Over the past two years, UNICEF has used Magic Box for Ebola response in Sierra Leone and the Democratic Republic of Congo, and for Zika, Chikungunya and Dengue in Latin America.





Amadeus and UNICEF stakeholders during the annual partnership meeting in Madrid.

Tapping into the global travel market for sustained funding for projects to empower young people

In 2018 Click for Change, the global online donations campaign led by Amadeus and UNICEF, was launched on the websites of Almundio, an omni-channel travel agency in Latin America, and Avianca, a leading group of airlines in Latin America. Travelers making bookings on almundo.com have the option to donate to the general budget of UNICEF Argentina programs, and travelers booking through avianca.com are able to contribute to the UNICEF Regional Education program for Latin America and the Caribbean.

Click for Change is powered by the Amadeus Donation Engine, which gathers micro-donations from people buying travel online. Since 2013 more than USD 3.3 million has been donated by travelers purchasing travel products and services on our partners' websites including Iberia, Finnair, Almundio and Avianca. UNICEF channels these funds into multi-country programs that give thousands of children a fair start in life through education, health care and emergency response programs. Through our donation engine facilitated by our partners' websites, in 2018 Amadeus' contribution to UNICEF helped protect 125,000 pregnant women with iron and folic acid and also helped educate 200,000 children.

The Click for Change funding improves UNICEF's ability to deliver results for every child, especially those at greatest risk and in greatest need.

Increasing the reach of humanitarian campaigns through global travel communication channels

Using Amadeus' corporate and customer communication platforms, we launched four UNICEF global campaigns:

- 1_ #GoBlue for every child, in support of children's rights on World Children's Day.
- 2_ UNICEF's humanitarian response in Indonesia, to help children and families affected by the earthquake and tsunami.
- 3_ UNICEF's World Tourism campaign, with the aim of raising awareness of the possible harm of volunteer tourism in countries like Nepal, where children are separated from families to populate orphanages for financial gain.
- 4_ Children Uprooted, to raise awareness and funds for millions of children on the move displaced by conflict, poverty or disaster.

Travelers responded positively to all campaigns, driving significant traffic to the UNICEF campaign pages.

#GoBlue: campaign for children's rights on World Children's Day

Building on last year's successful campaign, Amadeus collaborated once again with UNICEF for World Children's Day in 2018. The theme this year was #GoBlue, and Amadeus went blue in various ways to raise awareness for the rights of every child. Amadeus employees were encouraged to wear blue to work on November 20 to raise awareness for the cause.

On our corporate social media channels, images and videos of children of Amadeus employees were in focus throughout the day.

Amadeus employees in Taiwan showing support for World Children's Day by wearing blue to work.



+ 8.4 Knowledge & Skills Transfer



Shaping the future of talent to meet job market requirements

Amadeus' Knowledge & Skills Transfer program brings skill-building to young people in our local communities. We do this by providing industry-relevant training, and by facilitating access to affordable computer technology. We also engage with our industry partners and customers to identify skill and resource gaps, and to get their commitment to providing employment or on-the-job training opportunities to qualified candidates.

In 2018, 823 young people benefited from our long-standing education-related projects in 9 countries. They received training and mentoring in travel reservation, tourism and business skills. Overall, Amadeus offices have ongoing partnerships with 44 education organizations – universities, vocational training centers, schools and educational non-profit organizations – in 17 countries.

Public-private partnerships to ensure that training improves employability

In 2018 we completed the Training for Employment project in Egypt. The project piloted a multi-stakeholder approach to ensure that the training offered actually provides the skills required by the travel industry, and to improve the employability of the students. In that way, the local community is positively impacted by the educational and socio-economic growth of candidates participating in the program.

For this particular initiative, Amadeus collaborated with Education For Employment (EFE), a highly recognized NGO, and Flyin.com, an online travel agency in the Middle East, to provide 16 young women and men training and work experience. The goal of this type of program is to qualify young people from underserved communities to work in travel and tourism and to motivate them to continue with further education in the sector. With the commitment of local industry players, training can help overcome the existing skill gaps and resource needs of the global travel industry.

Amadeus believes that new and innovative models for public-private collaboration are needed to address the challenges of the future.

“

At Education For Employment, we believe that when youth have the right skills and opportunities, they thrive in life and transform their communities. In Amadeus, we found a partner that shares our conviction in the positive potential of youth and enables us to make a lasting impact. Together, we equipped unemployed young women and men with the skills to succeed in work and life. We are proud to work with Amadeus in Egypt to enable youth to soar.”

Andrew Baird

President and CEO, Education For Employment

Growing our commitment to the Global Travel and Tourism Partnership (GTTP) education program

In 2018 more than 700,000 students from 13 countries¹ participated in the GTTP curriculum. This unique education program introduces secondary school students to the travel and tourism industry and the career possibilities in it. Since its launch in 1996, close to 3 million students have participated in the GTTP program.

The GTTP annual students and teachers conference was held at the Amadeus Executive Briefing Center in Sophia Antipolis in France. This year's theme was "Innovation in Tourism." Amadeus has a long-standing partnership with GTTP and is a founding Board member of the organization.



◀ The annual GTTP students and teachers conference at the Amadeus Executive Briefing Center in Sophia Antipolis, France.

¹ Brazil, Canada, China, Hong Kong, Hungary, India, Ireland, Jamaica, Kenya, the Philippines, Russia, South Africa and Tanzania.

+ Recycling used PCs to support digital inclusion

Used PCs and other computer equipment that are replaced in the Amadeus organization are put to good use around the world to help schools and training programs. Every year, hundreds of Amadeus PCs are refurbished and shipped to charitable causes, helping to improve digital inclusion. In 2018 Amadeus signed an agreement with Close the Gap, an international non-profit organization with the aim of closing the digital divide through connecting corporations and organizations with charitable projects in emerging countries.



8.5 Community Support



Collaborating in our local communities to reduce poverty and inequality

Through Amadeus' Community Support program, we support people in need in our local communities with a particular focus on children, youth and women. In 2018 we collaborated on 125 projects with 107 non-profit organizations and local authorities in 30 countries.

Sports for charity, food and clothes collection, and local fundraising and cash donations are some of the creative ways our people find to help in their local communities. Amadeus staff also dedicated 16,738 volunteer hours.

In addition, Amadeus business teams found ways to include a responsible component in their activities: volunteering in the local community as part of leadership-development and team-building activities; using donations to incentivize survey and campaign responses; and leading social responsibility projects of their own.

Amadeus employees helping with the makeover of the Little Angels ward at the Rahima Moosa Mother and Child Hospital in Johannesburg, South Africa.

Amadeus employees in Madrid before a charity run in support of Action Against Hunger.



Amadeus' community support highlights



World Cleanup Day

Amadeus' offices in Asia participated in World Cleanup Day, the biggest civic movement to rid our planet of trash. In collaboration with our partner, Let's Do It! World, more than 100 Amadeus employees and families collected 300 kilograms of trash in just 1 day.

Social Responsibility program in the Bangkok office

The program supports educational inclusion among marginalized children and youth, from early childhood education to university level. Four initiatives encompass this: (1) childcare for underserved families with Baan Dek; (2) getting street children back to school with Friends International; (3) helping displaced youth re-enter education by obtaining high school equivalency certificates with Colabora Birmania; and (4) university scholarships with the non-profit charity International Support Group Foundation (ISGF).

“The journey of your life”

In collaboration with local NGOs, employees from Amadeus' offices in Spain, Portugal and the Amadeus company Travel IMS shared a virtual journey with children who are undergoing long-term hospitalization due to life-threatening illnesses. During a three-hour journey, employees dressed in cabin crew uniforms took the children on a virtual trip around various countries and held games to teach them about the cultures and traditions of the countries included in their journey.



Employees from the Amadeus offices in Spain dressed up as cabin crew to take hospitalized children on a virtual journey.

LATAM Volunteer Day

During the 8th edition of our LATAM Volunteer Day, over 300 employees from 12 Amadeus offices in the region, together with customers, supported their local communities. IT support, general maintenance and materials were provided to shelters and support organizations for children, the elderly, vulnerable individuals and vulnerable animals.



Employees in Argentina painting the walls of a local NGO supporting children and teenagers in vulnerable social situations.

Better Days campaign

Our Digital & Transformation Services unit kicked off a series of social responsibility activities by collecting presents to fill gift boxes for underprivileged children and by raising funds for Soles4Souls, a non-profit that provides relief to those in need through the distribution of shoes around the world.

9. Corporate risk management



GRI 102-15, 102-16, 102-17, 102-30, 103-1, 103-2, 103-3 (Anti-corruption), 103-1, 103-2, 103-3 (Risk management), 103-1, 103-2

In 2015, with the endorsement of the Board of Directors and the Executive Committee, Amadeus formally adopted the Three Lines of Defense Model – a model for integrating, coordinating and aligning all support and assurance functions within the entity, ensuring the effective management of risks across the company.

Since its adoption, the Three Lines of Defense Model has fostered effective risk management across Amadeus. In 2016 we refined the Three Lines of Defense Model through the adoption of a Combined Assurance concept. Through this Combined Assurance program, we have expanded the coordinated management of oversight control activities and the sharing of results.



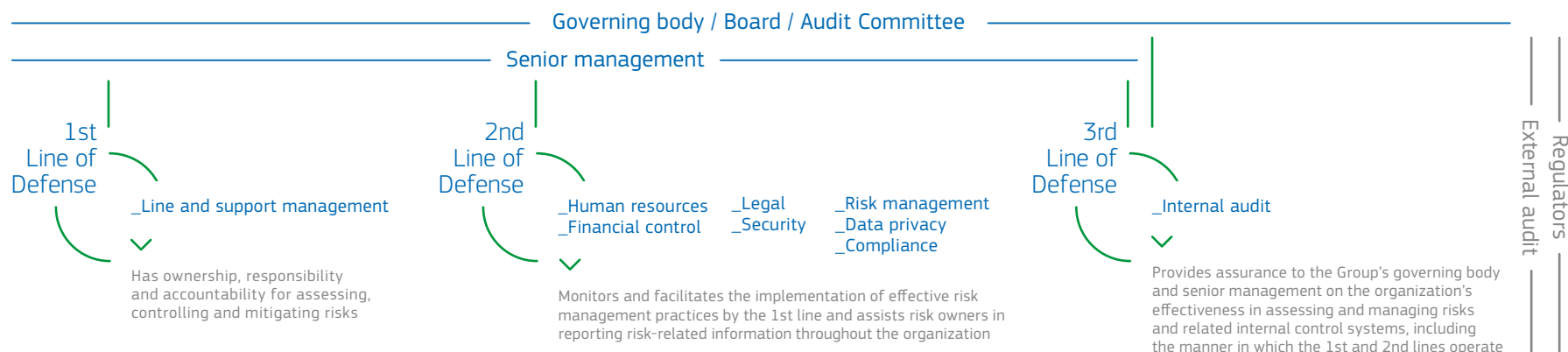
First Line of Defense: executive management, management and staff

Amadeus' commitment to integrity and transparency begins with its own staff. Amadeus employees adhere to the ethical standards set forth in the Amadeus Code of Ethics and Business Conduct and related policies. We do not see this code and our core policies purely as a "rule book," but as a mutual agreement across the company to promote positive behaviors that will add value to our business and ensure the highest standards of integrity at all times. The areas covered in the code are as follows:

- _ Commitment to the environment
- _ Avoiding conflicts of interest
- _ Protecting personal data and confidentiality
- _ Handling relations with third parties and the media in a sensitive manner
- _ Handling company property, equipment and installations with care

In 2017 we adopted a human rights policy affirming our respect and promotion of international human rights. We expect all our suppliers and business partners to uphold internationally recognized standards regarding working conditions and the dignified treatment of employees.

Three Lines of Defense and Combined Assurance



Human rights form part of Amadeus' risk analysis. We evaluate the risks of infringing on the following rights: non-discrimination, collective bargaining, freedom of association, fair wages, no child labor or forced labor, and adequately healthy and safe working conditions. Although such risks fall very low on our risk map, we have a series of mitigating and monitoring actions to manage them, both internally and with our suppliers and business partners.

Our mergers and acquisitions procedures also include due diligence on human rights-related risks. Our integration team ensures that Amadeus' policies are effectively implemented into newly integrated companies. Furthermore, our Speak Up Policy encourages employees to report any breach of the Code of Ethics and Business Conduct, including possible resulting human rights violations.

During 2018 no significant breaches to the Code of Ethics and Business Conduct were reported.

The Amadeus core policies listed on this page are supported by processes that, as with any other processes at Amadeus, undergo regular internal and external quality reviews to ensure regulatory compliance and application of best practice. We have mechanisms in place to allow the organization to seek advice on whether certain activities are considered ethical or lawful in accordance with our corporate policies. For example, the Ethics Committee acts as a vehicle to respond and give such advice as well as to report any unethical or unlawful behavior by any person.

Amadeus policies

Compliance policies

- _Amadeus Code of Ethics and Business Conduct
- _Anti-Bribery Policy
- _Anti-Fraud Policy
- _Business Continuity Policy
- _Entertainment/Gift Policy
- _Information Classification Policy
- _Speak Up Policy

Industry affairs policies

- _Amadeus Environmental Policy
- _Charitable Contributions Policy
- _Political Contributions and Lobbying Policy
- _Social Responsibility Policy and Practice

Information security policies

- _Acceptable Use Policies

Legal policies

- _Corporate Privacy Policy
- _ACO Privacy Manual
- _Antitrust and Competition Law – Compliance Manual
- _Internal Rules of Conduct to the Securities Market
- _Security and Privacy Handbook

Human resources policies

- _Amadeus Human Rights Policy
- _Health and Safety

Finance policies

- _Corporate Purchasing Policy

Second Line of Defense: internal governance functions

Control activities are embedded in all areas of the company. Major control activities are carried out from departments such as Risk & Compliance, Security, Privacy, Legal, Finance, People & Culture and others.

Risk management and controls

Risk & Compliance is responsible for centralizing the continuous monitoring of major risk and compliance issues within Amadeus, and also leads a transversal Combined Assurance program involving Risk & Compliance, the Group Privacy Unit and the Corporate Information Security Office. The Combined Assurance program also coordinates its activities with other functions focused on business control, including our Regional Business Oversight commissions (which are made up of senior personnel from Legal, HR, Finance and our business units) and our Internal Financial Controls unit (which oversees compliance with the Internal Control over Financial Reporting (ICFR) standard).

Risk & Compliance develops Amadeus' Corporate Risk Map and establishes control and monitoring procedures for each of the identified risks, in conjunction with the owner responsible for each risk. The risks ascertained from this analysis, as well as monitoring measures, are reported on a regular basis to the Risk Steering Committee and the Audit Committee, as well as the Executive Committee and the Board of Directors.

We continually monitor the most significant risks that could affect Amadeus and the companies that make up Amadeus Group, as well as Amadeus' own activities and objectives.

Amadeus' general policy regarding risk management and monitoring focuses on:

- _ Achieving the company's long-term objectives in line with its established strategic plan
- _ Contributing the maximum level of guarantees to shareholders and defending their interests
- _ Protecting the company's earnings
- _ Protecting the company's image and reputation
- _ Providing the maximum level of guarantees to customers and defending their interests
- _ Guaranteeing corporate stability and financial strength over time

The ultimate aim of the Corporate Risk Map is to provide visibility on significant risks and facilitate effective risk management. Risk analysis is a fundamental element of the company's decision-making processes, both within the governing bodies and in the management of the business as a whole.

The Corporate Risk Map also takes into account the global risks identified each year by the World Economic Forum,¹ such as economic, environmental, geopolitical, societal and technological risks.

Amadeus is concerned about near-term risks. A new edition of the Corporate Risk Map including these immediate or existing top risks was issued in 2018. But we are also focused on those other issues that have not manifested sufficiently to be managed, what is commonly known as the "known unknowns" or emerging risks. These are to us newly developing or changing risks that are difficult to identify and quantify and could have a major impact on society and the industry. The Corporate Risk Map also deals with this type of risk, examples of which are the effect of an increasingly aging population over the years on the travel sector, or the threats to our business model, especially in the context of today's fast digital development.

The latest version of the Corporate Risk Map defines the most critical risks relating to Amadeus' operations and objectives, among which the following are highlighted: technological risks; operational risks that could affect the efficiency of business processes and services; commercial risks that could affect

¹ World Economic Forum (2018). *Global Risks Report 2018, 13th Edition*.

customer satisfaction; reputational risks; security and compliance risks; the macro-economic and geopolitical environment; and trends in the travel and tourism industry. Some of these risks have evolved from the previous Corporate Risk Map, while others have been newly identified.

These highlighted risks are assigned to risk owners at the highest level of the company, who are given the duty of proposing the risk response. Progress with mitigation and evolution of key risks is submitted to the Risk Steering Committee for review and consideration, together with proposed action plans, when required, to take any necessary measures or further actions.

Due to its transversal and dynamic character, the process described above identifies new risks that affect Amadeus arising from changes in the environment or the revision of objectives and strategies.

In the current business environment, which is characterized by increasing stakeholder demand for transparency, ethics and social responsibility, reputational risk management is becoming increasingly relevant. The Amadeus Reputational Risk Map is fully integrated into the overall Corporate Risk Map of the company. Therefore, assessing the reputational impact of a particular risk is embedded into our methodology. In a similar vein, cybersecurity risks are managed through a security risk framework driven by our Corporate Information Security Office, which is also integrated into the Corporate Risk Map.

In addition to managing risks, Amadeus is very focused on ensuring compliance with emerging initiatives such as the General Data Protection Regulation (GDPR) of the European Union. In 2017 we initiated a major corporate program to ensure GDPR compliance. Our activities also extend to existing control standards such as PCI-DSS (credit cards), SOC 1 (computer controls) and ISO 27001 (security).

Moreover, Amadeus, like any other organization, is exposed to potential risks that could provoke significant disruption over key internal and external IT services that we provide to customers. To ensure minimal disruption in such catastrophic events, Amadeus is implementing a Business Resilience Program (led by Risk & Compliance), designed to protect our people, assets and infrastructure, and manage any disruption to minimize the potential impact to acceptable limits.

Finally, through the training and awareness plan under coordination of the Risk & Compliance unit, we try to ensure that all employees understand and apply best practices on ethical behavior as well as security and privacy.

The Risk & Compliance Office oversees the following committees:

- The Ethics Committee, which provides guidance on ethical behavior and compliance issues. This committee also addresses any concerns that employees may have and simultaneously assists in the implementation of the Code of Ethics and Business Conduct throughout Amadeus. We attach great importance to promoting integrity, transparency and ethical conduct in all our operations, and we are committed to applying a zero-tolerance approach regarding prohibited practices, both in our internal affairs and external operations.
- The Risk Steering Committee, which is a decision-making body empowered by the Executive Committee to provide oversight and guidance on risk management activities and issues across Amadeus, including risk assessment and prioritization, risk mitigation strategies and crisis response.

Both the Ethics Committee and the Risk Steering Committee meet several times a year.

Third Line of Defense: Group Internal Audit

Group Internal Audit provides independent and objective assurance and consulting services designed to add value and improve Amadeus' operations. It helps accomplish our goals by using a systematic, disciplined approach to evaluate and improve the effectiveness of governance, risk management and control processes, including the potential for the occurrence of fraud and how the organization manages fraud risk.

Group Internal Audit covers all companies, businesses and processes majority-owned or controlled by Amadeus. Every year, Group Internal Audit performs a thorough background and risk assessment exercise to verify and update the established audit priorities. This exercise considers, namely but not exclusively, elements such as the Group's strategic objectives and projects; the Corporate Risk Map; internal and external challenges and enablers identified through interviews with senior management and major control functions; business magnitudes; and audit cycles. The output leads to the formalization and approval by the Audit Committee of a yearly internal audit plan.

The legal entities included in Group Internal Audit reviews during 2018 represented more than 60% of the total Amadeus workforce. Main risks identified in the course of internal audit engagements are reported to senior management and the Audit Committee, and their status is periodically updated until resolution or acceptance by the governing bodies.

The coordination streams in place between Group Internal Audit and the main control, business and technology units ensure a continuous and optimum complement to Group Internal Audit's independent and objective assurance activities.

Group Internal Audit is governed according to the mandatory elements of The Institute of Internal Auditors (IIA)'s International Professional Practices Framework (IPPF), including its Core Principles, its Definition of Internal Auditing, its International Standards and its Code of Ethics. Furthermore, Group Internal Audit runs a Quality Assurance and Improvement Program that combines ongoing monitoring with periodic internal and external assessments. The program includes the evaluation

of Group Internal Audit's conformance with the International Professional Practices Framework (IPPF). The program also assesses the efficiency and effectiveness of Group Internal Audit, and identifies opportunities for continuous improvement.

Amadeus Corporate Information Security Office

Amadeus continuously reviews and improves its processes to keep ahead of upcoming threats, ensuring that both people and technical controls are considered and addressed. We follow the ISO 27001 standard, including:

- 1_ Corporate security objectives and controls set by a Corporate Information Security Office.
- 2_ The Security Risk Map, which gives priorities for the implementation of mitigations.
- 3_ A maturity assessment carried out by a third party to also identify security gaps, which are also monitored and followed in our Corporate Security Program.

All activities related to those sections are monitored and controlled by the Corporate Security Program (SHIELD).

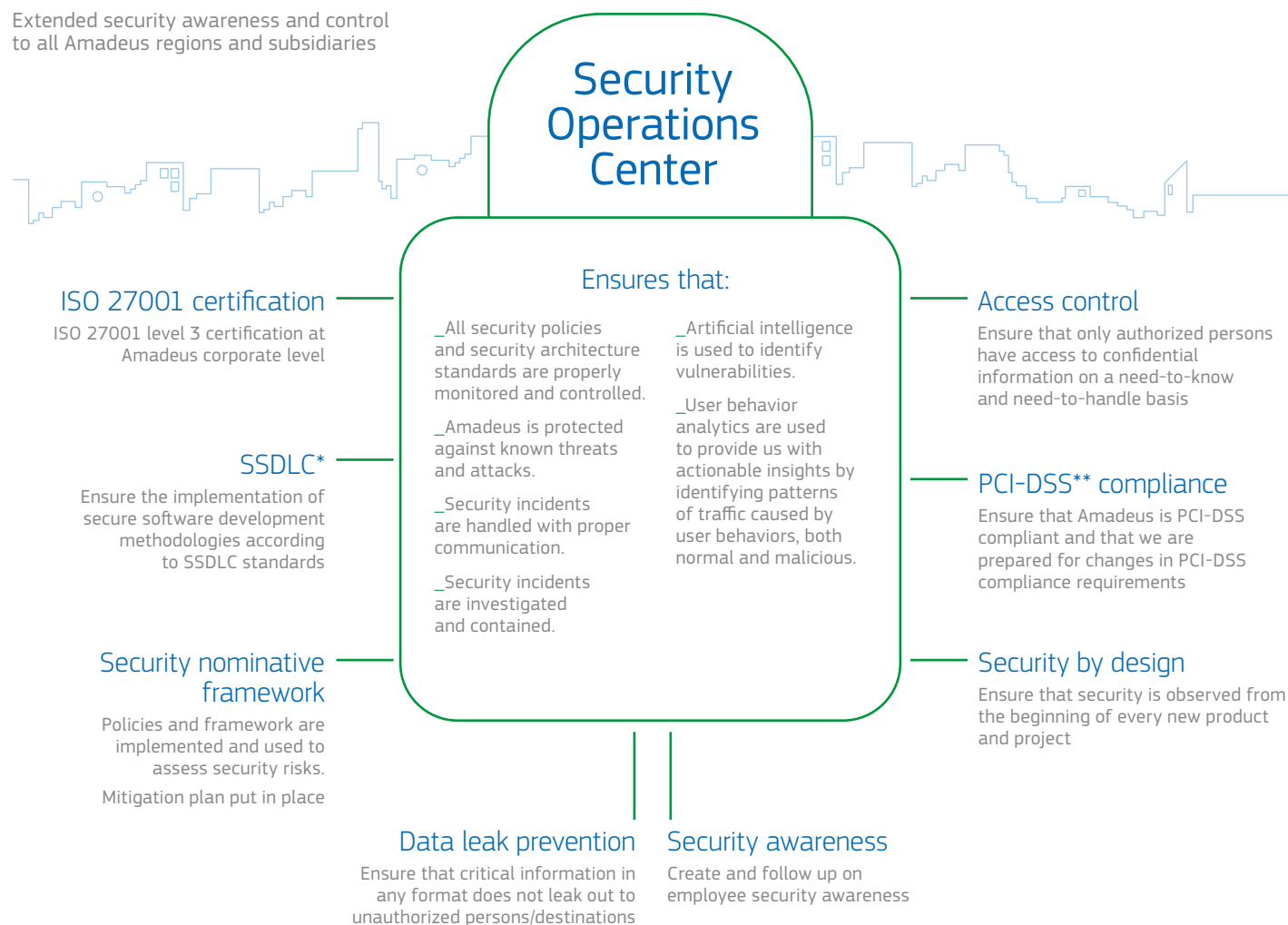
From a global operations and technology perspective, Amadeus has established an independent Security Operations Center to monitor the security status of the services we provide to customers 24/7. This service also helps us understand emerging technical threats and invest in the most appropriate technology to mitigate new risks.

Since January 2017 Amadeus has become a member of the Aviation Information Sharing and Analysis Center, showing that we are constantly striving toward increasing our customers' trust and sharing best practices.

Amadeus Corporate Information Security Office

Regional security offices

Extended security awareness and control to all Amadeus regions and subsidiaries



* SSDLC: Secure Software Development Life Cycle.

** PCI-DSS: Payment Card Industry Data Security Standard.

10. Corporate governance

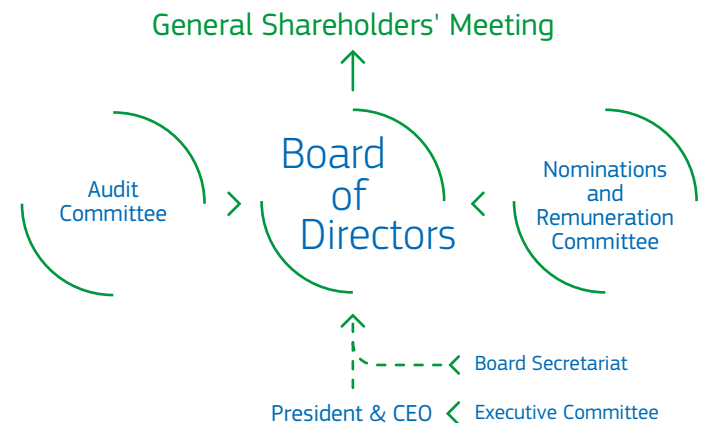


Upholding the highest levels of corporate governance helps Amadeus sustain our market leadership and consolidate the principles that have made us a trusted partner for customers, suppliers and other associates. Amadeus' corporate governance policies and procedures are designed to help the company achieve its general objectives and protect the interests of its shareholders.

The legal norms of Amadeus Group relating to corporate governance were drawn up on the occasion of the company's flotation on the Spanish stock market in April 2010. Some of these norms were adapted in 2012, 2015, 2016 and 2018 to the new mercantile framework resulting from the amendments to the Spanish Capital Companies Act as well as the European Union's Market Abuse Regulation. They are as follows:

- _ Company bylaws (updated in 2015 and 2018)
- _ Regulations of the Board of Directors (updated in 2015 and 2018)
- _ Regulations of the General Shareholders' Meeting (updated in 2015)
- _ Internal rules of conduct relating to the securities market (updated in 2016)

Amadeus' corporate governance structure



General Shareholders' Meeting

The General Shareholders' Meeting is the highest body representing Amadeus Group's share capital. It exercises its powers exclusively in the spheres of corporate law and the company's bylaws. According to these, shareholders must meet at least once a year, within the first six months, to debate and adopt agreements concerning their most important economic and legal duties. These include, among others:

- _ Appointment of Board members
- _ Review and approval of the annual accounts
- _ Appropriation of results
- _ Appointment of external auditors
- _ Authorization for the acquisition of treasury stock
- _ Supervision of the Board's activities

Both Spanish law and the company's bylaws confer upon the General Shareholders' Meeting the exclusive power of adopting other important agreements, such as bylaw modifications, bond issues and mergers.

The Spanish Capital Companies Act confers further significant powers on the General Shareholders' Meeting, which is now the competent body responsible for discussing and agreeing to the purchase, sale or contribution of essential assets from/to another company.

The General Shareholders' Meeting may also decide on business transactions the result of which may be equivalent to the liquidation of the company, as well as on the Remuneration Policy of the Board of Directors.

Board of Directors

The Board of Directors is Amadeus' highest representative, administrative, managerial and controlling body, setting out the company's general guidelines and economic objectives. The Board carries out the company's strategy (steering and implementation of company policies), supervision activities (controlling management) and communication functions (serving as a link to shareholders).

The Spanish Capital Companies Act also confers further powers on the Board of Directors, some of which are non-delegable (for listed companies). In this regard, the Board of Directors is the responsible body for policies on, among others:

- _ Corporate social responsibility
- _ Risk management and control (including fiscal risks)
- _ Corporate governance of the parent company and its group
- _ Tax strategy

The members of the Board of Directors are appointed by resolution of the General Shareholders' Meeting for an initial period of three years. After this initial period, they can be re-elected for additional periods of one year, with no limit.

Amadeus has in place a Director Selection Policy since 2016. The selection process of directors considers a range of factors, including but not restricted to:

- _ The current strategy of the business
- _ The current Board composition, in particular the industry-sector, functional and geographic experience of directors
- _ The diversity of the board, in particular but not restricted to diversity of gender

Amadeus recognizes and embraces the benefits of having a diverse Board, and sees increasing diversity of knowledge, experience and gender at Board level as an essential element in continually improving the Board's effectiveness. A truly diverse Board will include and make good use of differences in the skills, regional and industry experience, background, race, gender and other distinctions between directors. These differences will be considered in determining the optimum composition of the Board and when possible should be balanced appropriately. All Board appointments are made on merit, in the context of the skills, experience, independence and knowledge that the Board as a whole requires to be effective.

The Director Selection Policy has a stated objective of having at least 30% of total Amadeus Board places occupied by women directors by the year 2020.

Composition of the Board of Directors

Name or corporate name of director	Position on the Board	Date of first appointment	Nature	<i>Position on the committees</i>	
				Audit Committee	Nominations and Remuneration Committee
Mr. José Antonio Tazón	Chairman	12/02/2008	Independent		
Mr. Guillermo de la Dehesa	Vice Chairman	04/29/2010	Independent	Member	Chairman
Mr. Luis Maroto	President & CEO	06/26/2014	Executive		
Mr. Stephan Gemkow	Director	06/21/2018	Independent		
Dame Clara Furse	Director	04/29/2010	Independent	Chairman	Member
Mr. Pierre-Henri Gourgeon	Director	12/29/2005	Other external	Member	
Mr. Francesco Loredan	Director	02/21/2005	Other external		Member
Mrs. Pilar García	Director	12/15/2017	Independent	Member	
Mr. Peter Kuerpick	Director	06/21/2018	Independent		Member
Mr. David Webster	Director	05/06/2010	Independent	Member	Member
Mr. Nicolas Huss	Director	06/15/2017	Independent		
Mr. Tomas López Fernebrand	Secretary (non-director)	01/18/2006			
Mr. Jacinto Esclapés	Vice Secretary (non-director)	01/18/2006			



Mr. José Antonio Tazón García
Chairman

Mr. Tazón is an Engineering graduate and holds a degree in Computer Science from the Universidad Politécnica of Madrid. He was President and Chief Executive Officer of Amadeus between 1990 and 2008. Mr. Tazón was part of the initial team of experts who in 1987 laid out Amadeus' foundations and created its blueprint, functions and strategy. His 18-year tenure as Chief Executive Officer of Amadeus saw consistent growth, global expansion and the start of the company's successful diversification strategy.

Mr. Tazón served on the Board of Directors of Expedia Inc., the online travel agency, from 2009 to 2016; was appointed Chairman of Ufnet Telecom SAU (telecommunications operator) from 2014 to mid-2018; and serves as independent Director of HBG Ltd. (tourism sector) since 2016. In March 2011 he became a member of the Spanish Permanent Commission of the Tourism Board of the Confederation of Employers & Industries of Spain (CEOE).

Mr. Tazón joined Amadeus' Board of Directors in 2008, and has served as its Chairman since 2009.



Mr. Guillermo de la Dehesa Romero
Vice Chairman

Mr. de la Dehesa is a Law graduate from Complutense University of Madrid. He also studied Economics and became an economist for the Spanish government (TCE) in 1968. In 1975 Mr. de la Dehesa assumed the role of Director General of the Spanish Ministry of Foreign Trade, before moving to the Spanish Ministry of Industry and Energy to assume the roles of Director General of the Ministry of Trade and Secretary General of the Ministry of Industry and Energy. In 1980 Mr. de la Dehesa was appointed Deputy Managing Director of the Bank of Spain. He then left the Central Bank to take a role with the Spanish government and was appointed Secretary of State for Trade in 1983 and Secretary of State for Finance in 1986 at the Spanish Ministry of Economy and Finance, where he was also a member of the EEC's ECOFIN.

Mr. de la Dehesa is a member of several renowned international corporate groups, and since 2002 has been

both an independent Director and Vice Chairman of the Board of Directors of Santander Group, as well as a member of its Executive Committee. He has also been an independent director of Santa Lucía Vida y Pensiones (an international insurance company), after the integration of Aviva Vida y Pensiones into Santa Lucía Group from 2002 to September 2018. Mr. de la Dehesa has also served on the Board of Campofrío Food Group from 1997 to June 2014 and on the Board of San José Group until August 2014. He was an International Adviser for Goldman Sachs for 28 years, until December 31, 2016. He is also Chairman of the Board of IE Business School in Madrid, Honorary Chairman of the Center for Economic Policy Research (CEPR) in London and a member of the Group of Thirty (G30) in Washington.

He joined Amadeus' Board of Directors on April 29, 2010.



Mr. Luis Maroto Camino
President and Chief Executive Officer

Mr. Maroto became President and Chief Executive Officer of Amadeus on January 1, 2011.

From January 2009 to December 2010 he was Deputy Chief Executive Officer of Amadeus, with responsibility for overall company strategy as well as line management of the finance, internal audit, legal and human resources functions. He has also been instrumental to Amadeus' return to the stock market with the company's successful IPO in April 2010.

He joined Amadeus in 1999 as Director, Marketing Finance. In that role, he supported Amadeus' commercial organization throughout its international expansion and consolidation, supervising the strategic and financial

control of over 50 Amadeus subsidiaries around the world. He was promoted in 2003 to Chief Financial Officer, taking responsibility for the global Amadeus Finance organization. Prior to joining Amadeus, he held several managerial positions at Bertelsmann Group.

A Spanish citizen, he holds a degree in Law from Complutense University of Madrid, an MBA from IESE Business School and further postgraduate qualifications from Harvard Business School and Stanford.

He joined Amadeus' Board of Directors as Executive Director on June 26, 2014, and was appointed Consejero Delegado on October 16, 2014.



Dame Clara Furse
Director

Dame Clara Furse is a graduate by the London School of Economics and received her BSc (Econ) in 1979. She is the Chairman of HSBC UK, the ring-fenced bank of HSBC Group. She is also a non-executive Director of Vodafone Group PLC.

She was an External Member of the Bank of England's Financial Policy Committee (FPC), joining the new statutory body and macroprudential regulator in April 2013 and standing down in October 2016. She was a non-executive Director of Nomura Holdings from June 2010 to March

2017. Until April 2017 she was also the lead independent Director of the UK's Department for Work and Pensions. From January 2001 to May 2009 she was Chief Executive of the London Stock Exchange, a FTSE 100 company. During this period she was also a non-executive Director of Euroclear PLC, LCH Clearnet Group Ltd. and Fortis SA, and a member of the Shanghai International Financial Advisory Council. From 2009 to 2013 she was a non-executive Director of Legal & General Group. She joined Amadeus' Board of Directors on April 29, 2010.



**Mrs. Pilar García
Ceballos-Zúñiga**
Director

Mrs. García is a Law graduate from the University of Madrid, CEU San Pablo, and holds an MBA from the Open University, United Kingdom. She is an experienced executive with a long history in the field of technology, working in multinational environments and focusing on technological innovation and organizational effectiveness.

She was a leader at IBM Corporation for more than 25 years, during 12 of which she held high-level responsibilities in its European headquarters and across the world. She was Executive Vice President of IBM Global Digital Services, Cloud and Security, based in New York, in her last leadership position until 2016.

She was General Manager in Spain of INSA (currently Viewnext) and General Manager of Softinsa in Portugal for five years, a services company specialized in application development and infrastructure services.

She served as member of the Steering Committee of IBM Spain and Portugal, IBM Southwest Europe and INSA, leading IBM's Global Committees for the management and transformation in strategic and commercial areas, as well as internal process optimization.

She is currently President of the Board of Trustees for the Caja de Extremadura Banking Foundation, Liberbank.

She joined Amadeus' Board of Directors on December 15, 2017.



Mr. Stephan Gemkow
Director

Mr. Gemkow holds a degree in Business Administration from Paderborn University. He began his professional career as a consultant for BDO Deutsche Warentreuhand AG in 1988 before joining Deutsche Lufthansa AG in 1990, where he held various management positions in the Lufthansa Group, in the sales, finance and human resources areas. He served as Member of the Group Executive Board (CFO) at Deutsche Lufthansa AG until mid-2012, when he took up his current position as CEO of Franz Haniel & Cie., a globally active family-owned portfolio management company based in Duisburg,

Germany. Mr. Gemkow sat on Amadeus' Board of Directors from May 2006 to July 2013 as a proprietary Director representing Lufthansa.

Mr. Gemkow is the Chairman of the Supervisory Board of Takkt AG, the holding of an international group of B2B direct marketing companies for business equipment solutions belonging to the Haniel Group; a Director of Flughafen Zürich AG, airport sector; and a Director of JetBlue Airways Corp., airline sector.

He joined Amadeus' Board of Directors on June 21, 2018.



**Mr. Pierre-Henri
Gourgeon**
Director

Mr. Gourgeon holds a degree in Engineering from the École Polytechnique in Paris and the École Nationale Supérieure de l'Aéronautique, as well as a Master of Science from the California Institute of Technology in Pasadena. He has held various positions as an engineer for the French Ministry of Defense in its technical and aeronautical production departments. He was Director General of the French Civil Aviation Authority between 1990 and 1993, prior to joining the Air France Group in 1993 as the CEO of Servair.

Mr. Gourgeon has held various positions with Air France until he became its Chief Operating Officer in 1998, and

the Chief Executive Officer of Air France-KLM in January 2009 until October 2011, at which date he left all his seats in Air France-KLM Group. He was member of the Board of Directors of Groupe Steria, a French IT business services entity for the private and public sectors, until the merger of Steria with Sopra in September 2014, which ended his Board membership. In addition, he is President of his own professional consultancy, PH GOURGEON CONSEIL.

He joined Amadeus' Board of Directors on December 29, 2005.



Mr. Nicolas Huss
Director

Mr. Huss holds a degree in Law and a master's degree in Political Science and Government, both from the University of Toulouse.

Mr. Huss joined Ingenico Group, a global leader in seamless payment, on July 1, 2017, as Executive Vice President, Strategy and Performance. He was Executive Vice President of the Retail Business Unit at Ingenico Group until July 2018, after which he was appointed Group Chief Operating Officer. In November 2018 he was appointed Chief Executive Officer and Board member of Ingenico Group.

Mr. Huss was the Chief Executive Officer of Visa Europe until March 2017. His three-and-a-half-year tenure at Visa Europe was marked by the sale of the company to Visa

Inc. Post-acquisition, he was also a member of the Visa Inc. Executive Committee.

Previously, Mr. Huss held a variety of Chief Executive Officer roles for Apollo Global Management, Bank of America and General Electric in different European and Latin American countries. He has over 20 years of experience in the financial services industry.

He has also been a member of different Boards for Apollo, General Electric and Visa Europe. From October 2015 to March 2017 he was a Board member at Junior Achievement Europe (JAE), Europe's largest provider of education programs for youth and student entrepreneurship, work readiness and financial literacy.

He joined Amadeus' Board of Directors on June 15, 2017.



Mr. Peter Kuerpick
Director

Mr. Kuerpick holds a Ph.D. in Theoretical Physics from the University of Kassel and has conducted post-doctorate research at Kansas State University and the University of Tennessee, Knoxville. He also holds a Masters in Environmental Sciences from the University of Kassel, and a Corporate MBA from INSEAD.

Mr. Kuerpick is Chief Platform Officer at HERE Technologies. In this role he oversees the company's push into the next generation of location-based services based on platform-enabled applications and solutions in

areas such as autonomous driving, asset management and augmented reality. Mr. Kuerpick joined HERE from Unify, a global communications software and services company, where he served as Executive Vice President of its Product House organization. Previously, he has held numerous technology leadership roles at Software AG and SAP, where he was instrumental in the conception and development of SAP NetWeaver.

He is non-executive Director of EPAM Systems, a global IT services company.



Mr. Francesco Loredan
Director

Mr. Loredan is a graduate of Economics from the London School of Economics and holds an MBA from INSEAD. He worked as a credit officer for Bank of America-BAL in Milan for three years and spent four years with Boston Consulting Group in Paris and Milan. In 1989 he joined BC Partners, where he was Managing Partner and Co-Chairman until December 2014. Currently he is Vice

Chairman of White Bridge Investments SPA (private equity), a Director of Oneiros Investments SA (private equity), a Director of Spring SA (private equity), Director of Ancorotti, SRL (cosmetics), Director of MAP SRL (spas and wellness facilities operator in Italy) and Director of Nutkao SRL (chocolate spread manufacturer).

He joined Amadeus' Board of Directors on February 21, 2005.



Mr. David Webster
Director

Mr. Webster is a Law graduate from the University of Glasgow and qualified as a solicitor in 1968. He began his career in finance as a manager of the corporate finance division of Samuel Montagu & Co Ltd. During the period 1973 to 1976, as Finance Director he developed Oriel Foods, which was sold to RCA Corporation. In 1977 he co-founded Safeway (formerly Argyll Group), a FTSE 100 company, of which he was Finance Director and latterly, from 1997 to 2004, Executive Chairman. He was a non-executive Director of Reed International PLC from 1992, Reed Elsevier PLC and Elsevier NV from 1999, as well as Chairman of Reed Elsevier from 1998 to 1999, retiring from all three Boards in 2002.

He has been a director in numerous business sectors and has a wide range of experience in the hotel industry in particular. For nine years he was non-executive Chairman of InterContinental Hotels Group PLC until December 31, 2012. He was non-executive Chairman of Makinson Cowell Ltd. until November 2013 and a non-executive Director of Temple Bar Investment Trust PLC until December 31, 2017. He is also non-executive Chairman of Telum Media Group Pte. Ltd. and Vuma Ltd., as well as a member of the Appeals Committee of the Panel on Takeovers and Mergers in London.

He joined Amadeus' Board of Directors on May 6, 2010.

Mr. Stephan Gemkow was elected for a period of three years by decision of the General Shareholders' Meeting on June 21, 2018 to cover the vacancy created by Mr. Marc Verspyck's term of office expiration. The decision was submitted by the Board of Directors, upon proposal by the Nominations and Remuneration Committee.

Mrs. Pilar García's appointment, elected by co-optation method in December 2017, was validated by the General Shareholders' Meeting held on June 21, 2018 for a period of three years.

Mr. Peter Kuerpick was elected for a period of three years by decision of the General Shareholders' Meeting on June 21, 2018 to cover the vacancy created by Dr. Roland Busch's term of office expiration. The decision was submitted by the Board of Directors, upon proposal by the Nominations and Remuneration Committee.

Mr. Nicolas Huss was elected for a period of three years by decision of the General Shareholders' Meeting on June 15, 2017.

Pursuant to Article 35 of the bylaws of the company (term of office), the following directors were re-elected for an additional one-year term in the last Ordinary General Shareholders' Meeting of June 21, 2018:

- _ Mr. José Antonio Tazón
- _ Mr. Luis Maroto
- _ Mr. Guillermo de la Dehesa
- _ Dame Clara Furse
- _ Mr. Pierre-Henri Gourgeon
- _ Mr. Francesco Loredan
- _ Mr. David Webster

Their re-election or replacement, following the Director Selection Policy approved by the Board of Directors on April 21, 2016 upon proposal by the Nominations and Remuneration Committee, will also have to be submitted for decision to the General Shareholders' Meeting to take place in June 2019.

The financial expertise, broad management skills and dedication of the independent directors, as well as the industry knowledge of the other external directors, have contributed significantly toward the quality and efficiency of the Board's operations and committees.

The incorporation of the first executive of the company to the Board as Executive Director reinforces the information channel between the Board of Directors and the company's management

team, which plays an important role in achieving greater efficiency in the Board's decision-making process.

During the fiscal year 2018, six Board meetings were held with attendance by all the Board members, in person, by proxy with specific voting instructions or by telematics means.

The Chairman of the Board of Directors, Mr. José Antonio Tazón, and Amadeus Group's CEO, Mr. Luis Maroto (Executive Director), attended all Board meetings.

Remuneration Policy

With respect to remuneration for the Chairman and non-executive directors, Amadeus offers competitive fees commensurate with the required time commitment and responsibilities. As part of the Remuneration Policy, every two years the Nominations and Remuneration Committee reviews the non-executive director fee data of comparable companies in the main European indices, including the IBEX 35.

In accordance with the Directors Remuneration Policy (2019–2021), it was agreed to continue with the remuneration policy, based on a fixed amount, for membership of the Board and of the various Board committees. It was also agreed not to implement any other complementary remuneration formula.

The policy on Board remuneration does not include variable remuneration based on profits or attendance fees, nor contributions to pension plans or severance agreements in case of termination of functions. No provision is made for remunerating external directors through stock awards, stock options or instruments linked to share value.

The Executive Director receives an annual base salary, payable monthly, for the performance of executive duties for the company. The purpose of this element is to reflect the market value of the role, attract talent, and reward skills and experience. The total remuneration package of the Executive Director (Chief Executive Officer) comprises various components, primarily consisting of: (i) base salary; (ii) short-term variable remuneration; (iii) long-term variable remuneration; and (iv) other remuneration (Board fees, benefits and pension).

The Directors Remuneration Policy (2019–2021) was approved by the Ordinary General Shareholders' Meeting of June 21, 2018 with a favorable vote of 86.49%.

The corresponding Annual Report 2017 on the Remuneration of Directors of Listed Companies was endorsed by the Ordinary General Shareholders' Meeting of June 21, 2018 with a favorable vote of 88.88% (advisory vote).

Audit Committee

The powers vested in the Audit Committee by the Spanish Capital Companies Act, as well as the recommendations of the Spanish Good Governance Code of Listed Companies, give the Audit Committee a remit that makes it more than just an advisory body to the Board of Directors for certain key matters.

The Ordinary General Shareholders' Meeting held on June 21, 2018 approved the modification of Article 42 of the corporate bylaws concerning the Audit Committee. Accordingly, the Board of Directors agreed to the modification of Article 35 of the Regulations of the Board concerning the same subject to adapt its content to the new wording of the corporate bylaws.

The main function of this Committee is to provide support to the Board of Directors in its oversight duties by, among other actions, the periodic review of financial statements, internal control and risk management (including tax risk), so that major risks are duly identified, managed and disclosed properly.

The Audit Committee also provides support to the Board of Directors regarding compliance with all laws, regulations and internal rules affecting Amadeus Group. The Committee monitors compliance with the applicable rules at a national and international level, and supervises the preparation and integrity of the company's financial information, making sure it follows regulatory requirements and the proper application of accounting principles. The Audit Committee also hierarchically oversees the Internal Audit function.

The Audit Committee meets periodically, as convened by its Chairman. For this purpose, the Board Secretariat prepares an agenda for approval by the Committee Chairman, which is sent to all participants in advance of the meeting, together with the relevant documentation for each of the agenda items. Apart from the Audit Committee members, certain members of the

Amadeus management team may also attend the meetings, with prior invitation from the Committee Chairman. The external auditors, Deloitte,¹ represented by the partners in charge of Amadeus' audit, attend the meetings twice a year, unless their ad hoc attendance is required by the Committee Chairman. Minutes are drawn up by the Secretary of the Board (acting as Secretary of the Committee) on the conclusions reached at each meeting, which are included as an agenda item in the next Board of Directors' meeting, at which the Committee Chairman reports to the full Board on the most relevant points addressed and any recommendations. Three recurrent items form part of the agenda throughout the year, irrespective of others, which depending on the matter at hand are also included for discussion, analysis and recommendation. The three agenda items are: (1) external audit (for the annual and half-year financial statements), (2) internal audit and (3) risk management.

In 2018 the Audit Committee prepared the mandatory annual report on its activities for the fiscal year 2017, covering, among others, the following areas:

- _ Rules and regulations of the Audit Committee
- _ Composition of the Audit Committee
- _ Operational activity
- _ Items discussed by the Audit Committee during fiscal year 2017 (external audit, internal audit, risk management and other items)
- _ Related transactions
- _ Independence of the external auditor
- _ Assessment of the functioning and performance of the Audit Committee
- _ Incidents and proposals for improving the company's rules of governance

The Audit Committee currently consists of five external Board members.

Following the Technical Guide 3/2017 of the Comisión Nacional del Mercado de Valores (CNMV) on audit committee at public-interest entities, a new set of rules and regulations were adopted by the Board of Directors in December 2018, effective January 2019.

¹ Ernst & Young have been selected to replace Deloitte as Amadeus' external auditors for 2019 onwards. The General Shareholders' Meeting held on June 21, 2018 approved the new appointment.

The regulations of the Audit Committee address the following areas:

- 1_ Introduction
- 2_ Composition
- 3_ Requirements for appointment
- 4_ Operating rules
- 5_ Responsibilities and duties:
 - Oversight of financial and non-financial reporting
 - Supervision of risk management and control
 - Supervision of internal audit
 - Contact with the statutory auditor
- 6_ Engagement of experts and other resources
- 7_ Annual report

Nominations and Remuneration Committee



This committee is made up of five external Board members and evaluates the competence, knowledge and experience required of members of the Board of Directors. It also:

- _ Proposes independent directors for appointment to the Board of Directors.
- _ Produces the report on non-independent members' appointment to the Board.
- _ Reports to the Board of Directors on matters of gender diversity.
- _ Proposes to the Board of Directors the system and amount of the annual remuneration of its directors, as well as the remuneration policy of the members of the Executive Committee.
- _ Formulates and reviews the remuneration programs for senior management.
- _ Monitors observance of the remuneration policies.
- _ Assists the Board in the compilation of the report on the Directors Remuneration Policy and submits to the Board any other reports on compensation specified in the regulations of the Board.

The Nominations and Remuneration Committee meets periodically, as convened by its Chairman. For this purpose, the Board Secretariat prepares an agenda for approval by the Committee Chairman, which is sent to all participants in advance of the meeting together with the relevant documentation for each

of the agenda items. Apart from the Nominations and Remuneration Committee members, certain members of the Amadeus management team may attend the meetings, with prior invitation from the Committee Chairman.

In 2018 the Nominations and Remuneration Committee prepared the mandatory annual report on its operations for fiscal year 2017, covering the following areas:

- _ Competencies and duties of the Nominations and Remuneration Committee
- _ Composition of the Nominations and Remuneration Committee
- _ Operational activity
- _ Matters addressed by the Nominations and Remuneration Committee during fiscal year 2017
- _ Nature of the directors (independent, other External, Executive Director)
- _ List of companies in which the Board members also serve as directors and/or executive managers
- _ Verification of compliance with the Directors Selection Policy

In addition, the Nominations and Remuneration Committee produced the Remuneration Policy of the Board of Directors, together with the Annual Report 2017 on the Remuneration of Directors of Listed Companies.

The Directors Selection Policy was established on April 21, 2016. In accordance with this policy, the Amadeus Board of Directors is committed to applying selection criteria in such a manner as to ensure that the Board as a whole is diverse and balanced, and that a wide range of views are contributed to Board debates in a manner that ultimately fosters well-informed decision-making in the interests of the company and all stakeholders.

Both Mr. Stephan Gemkow and Mr. Peter Kuerpick have been appointed Board members in 2018 following the Directors Selection Policy.

The Nominations and Remuneration Committee will publish the report on the analysis of the Board's needs in accordance with the Directors Selection Policy concurrently with the calling of the General Shareholders' Meeting in 2019, at which time the appointment or re-election of each director will be submitted.

Minutes are drawn up by the Secretary of the Board (acting as Secretary of the Committee) on the conclusions obtained at each meeting and are included as an agenda item for the next Board

of Directors' meeting. At this time the Committee Chairman reports to the full Board on the most relevant points addressed and puts forth recommendations for approval, if applicable.

Amadeus' Executive Committee

Amadeus' Executive Committee is led by the company's Chief Executive Officer (Consejero Delegado) and comprises the senior management leaders, who each possess broad company experience.

This governance structure is designed to foster direct communication between Amadeus' business and its governing bodies, in order to facilitate an effective decision-making process.

These are the latest changes to our Executive Committee:

- _ Wolfgang Krips, former Senior Vice President of Technology Platform Engineering at Amadeus, has been appointed Senior Vice President Corporate Strategy, an appointment driven by the increasing technological profile of Amadeus.
- _ Dietmar Fauser has been appointed Senior Vice President of Technology Platforms and Engineering, taking over from Mr. Krips. Mr. Fauser, who has been with Amadeus since 1998, was until recently Vice President of Core Platforms and Middleware and played a significant role in recent years in building the TPE organization.
- _ Francisco Perez-Lozao, now Senior Vice President Hospitality, will focus exclusively on and lead the Hospitality business, recently strengthened by the TravelClick acquisition.
- _ The other new business units will be led by Stefan Ropers, appointed Senior Vice President of Strategic Growth Businesses. Mr. Ropers brings over 20 years' international experience across the technology industry, both in innovative fast-growth environments and with major tech players.

11. Shareholders and financial institutions



11.1 Amadeus Investor Relations' mission and activity

The Amadeus strategy framework has been designed to foster the company's viability and sustainable growth, providing stakeholders with long-term value. Additionally, it is of vital importance for Amadeus to maintain effective and straightforward communication with its stakeholders in capital markets, ensuring transparency with regards to our performance.

Amadeus Investor Relations' mission is to maintain an open dialog and build long-term relationships based on credibility and trust with its financial community, including current and potential shareholders, research analysts, debt holders, credit rating agencies and other participants such as the regulator of the Spanish market, the Comisión Nacional del Mercado de Valores (CNMV).

The Investor Relations function, which is part of the Finance function at Amadeus, strives to increase the awareness of Amadeus in its capital markets, ensuring that the various stakeholders are informed on relevant company or industry news, the competitive landscape and Amadeus' operational and financial performance. The team aim to communicate effectively and proactively, delivering relevant information in a consistent and timely manner.

The Amadeus Investor Relations communication policy was defined in compliance with the best practices and recommendations of good governance that are applicable to listed companies. It is based on the following principles:

- Responsibility, diligence and transparency of information disclosure
- Equal treatment and protection of rights and interests of stakeholders
- Cooperation with shareholders

In particular, Amadeus has further adapted its communication policy via its Directors' report to the recent updates made in Spanish Legislation, to be aligned with Directive 2014/95/UE, concerning detailed disclosure and external review of non-financial information. The aim is to contribute to a better understanding of

corporate risks, therefore increasing sustainability and shareholder confidence while providing stakeholders with an overall idea of the company's impact on society.

One of the main channels for the provision of information by Amadeus to its shareholders and its capital markets in general is the CNMV, as well as the channels established by other foreign authorities and supervisory entities, when applicable. These entities ensure the immediate dissemination of information through publication on their websites. These significant events are simultaneously posted on Amadeus' corporate website. The Annual General Shareholders' Meetings and our periodic Investor Day events are also means to channel information to shareholders.

At Amadeus, there is a two-way relationship between the company and the financial community. On the one hand Amadeus provides pertinent and relevant information to the financial community, and on the other it collects and receives valuable feedback from our stakeholders. This feedback is taken into account in the decision-making processes of the company's top management.

In 2018 Amadeus continued with an extensive investor relations activity program, which included:

- Participation in a number of investor conferences and roadshows all over the world. Cities visited included Barcelona, Boston, Brussels, Frankfurt, Lisbon, Milan, Montreal, New York, Paris and Toronto.
- Conference calls, face-to-face meetings and several large reverse roadshows conducted by the Investor Relations team in Madrid, reaching a large number of investors.
- Meetings and ongoing communication with the company's base of analysts. The number of analysts following the Amadeus stock stood at 38 at the end of the year.
- Website views: in June 2018 Amadeus launched the updated Amadeus Corporate website, which includes investor information as well as our newsroom. Since its launch through to the end of 2018, the new website has had over 160,000 page views by more than 70,000 unique visitors.

In January 2018 Amadeus was ranked among Corporate Knights' 2018 Global 100 Most Sustainable Corporations in the World for the second consecutive year. Only the top 2% of companies in the world are recognized for their sustainability performance on the Global 100. Furthermore, for the seventh year in a row

Amadeus has earned the prestigious recognition of being included in the Dow Jones Sustainability Indices (DJSI), in the IT & Internet Software and Services sector. The Dow Jones Sustainability Indices are made up of global sustainability leaders based on economic, environmental and social criteria. This success has been the result of our commitment to developing a sustainable business, which brings long-term rewards to all our stakeholders and places emphasis on the careful management of resources.

In September 2018 Amadeus was included for the first time in the EURO STOXX 50, a leading index comprising of 50 of the largest blue-chip stocks in Europe, ranked on the basis of a number of factors, such as market capitalization and liquidity.

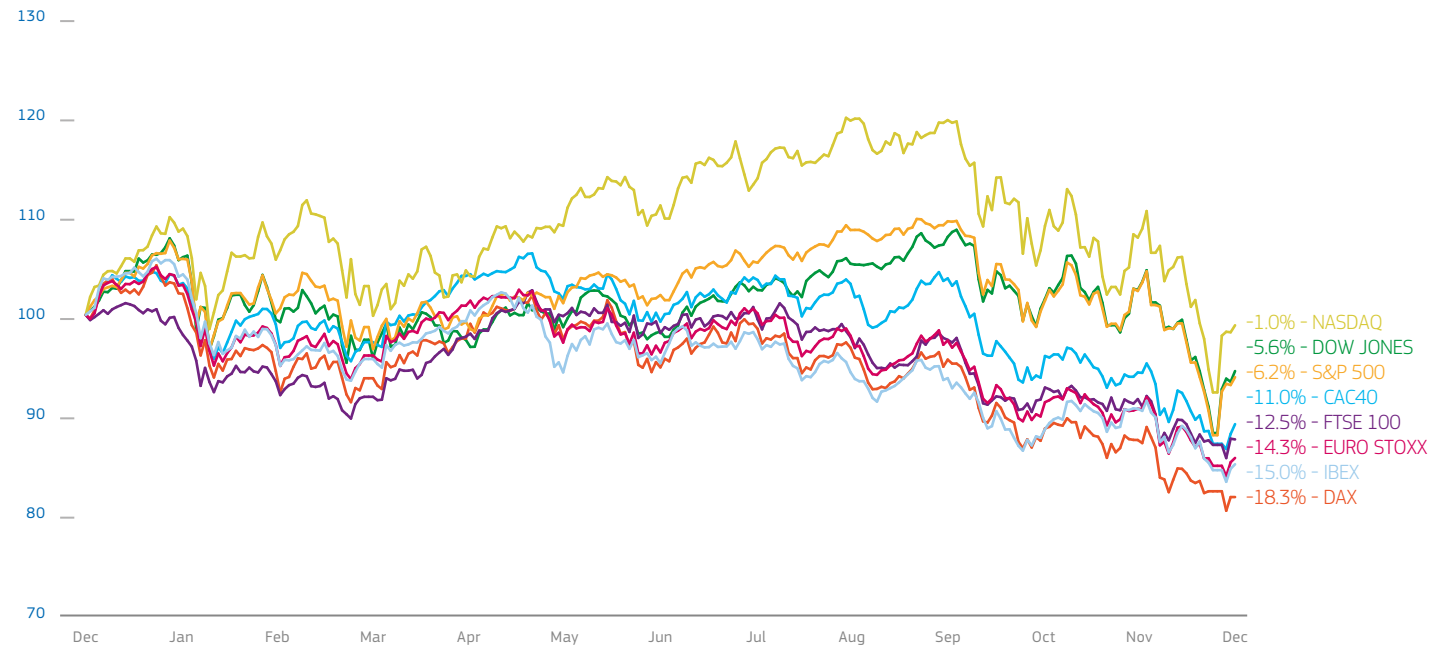


11.2 The stock market in 2018

Despite a good start to the year, driven by an initial boost from the US tax cuts and good, early economic performance in the US, 2018 proved a more challenging year for capital markets. Growth in other parts of the world, most notably Europe, decelerated, leading to a desynchronization of the homogenous growth seen in 2017. The last quarter of 2018 saw the worst quarterly performance in global markets in seven years, resulting in negative growth in most of the world's major indices over the full year.

With the US Federal Reserve interest rates gradually but continually rising, weaker economic growth in China and rising geopolitical concerns (Brexit, the Italian budget and the ongoing trade conflict between the US and China), 2018 was a difficult year for investors. The global decline mainly centered on Europe, with all major indices falling in the double-digit range (CAC40: -11%, FTSE 100: -12.5%, EURO STOXX 50: -14%, IBEX: -15%, DAX: -18%). However, the US stocks also suffered (NASDAQ: -1%, DOW JONES: -6%, S&P 500: -6%).

Equity capital markets' performance in 2018



11.3 Amadeus' share performance

Despite a challenging economic backdrop, Amadeus' share price increased by 1.2% in 2018, outperforming global markets. The share price reached its historical maximum of €82.06 on October 1, 2018 following a 37% growth over the first nine months of the year. This growth was augmented, thanks to the inclusion of Amadeus in the EURO STOXX 50 from September 21, 2018. Following a difficult fourth quarter for global markets, Amadeus closed the year at €60.84.

Our market capitalization at December 31, 2018 was €26,698 million. The average daily trading volume was 1.3 million shares, for a total traded volume of €23.5 billion for the year. The proportion of our stock in free float reached 98.03% at year-end.

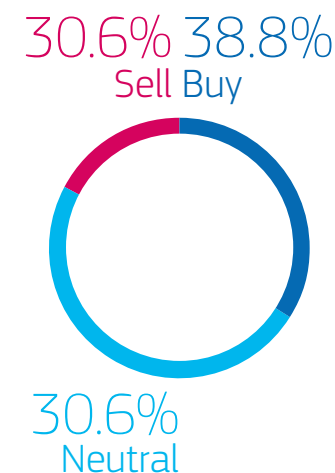
Amadeus has increased its weight within the IBEX 35 to 5.1% as of December 31, 2018, remaining the sixth largest company in the index.

In 2018 adjusted earnings¹ per share stood at €2.61 and on December 31, 2018 the price to adjusted earnings ratio was 23.3x.

Amadeus' share performance in 2018



Analysts' recommendations at year-end 2018



¹ Including TravelClick's 2018 consolidation effect of €14.3m, on the adjusted profit, while excluding TravelClick's related acquisition transaction costs, PPA adjustment and bank acquisition financing interest expense.

Amadeus key trading for the year

	2017	2018
Change in share price (%)	39.2%	1.2%
Maximum share price (figures in €)	61.95	82.06
Minimum share price (figures in €)	42.58	56.90
Weighted average share price (figures in €)*	51.75	67.38
Average daily volume (number of shares)	1,369,088	1,330,007
Average daily volume (figures in € thousand)	68,391	90,242
Annual volume (figures in € thousand)	17,781,616	23,462,832

* Excluding cross trades.

Amadeus key trading data at year-end

	2017	2018
Number of shares issued at Dec 31	438,822,506	438,822,506
Share price at Dec 31 (figures in €)	60.11	60.84
Market capitalization at Dec 31 (figures in € million)	26,378	26,698
Earnings per share (adjusted profit share), full year (figures in €)	2.54	2.61
Dividend per share, full year (figures in €)	1.135	1.175
Dividend yield, full year (%)*	1.9%	1.9%
Payout ratio, full year (%)	50%	50%
Price to earnings ratio at Dec 31 (x)	23.7x	23.3x

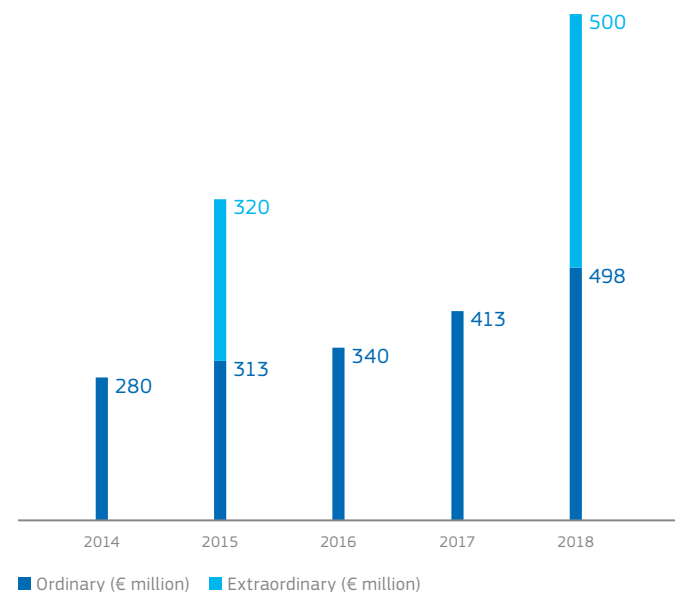
* Based on year-end share price.

11.4 Shareholder remuneration

Amadeus has a proven track record of operating a solid and resilient business model that generates strong free cash flow, allowing for continued and sustained investment in R&D and innovation as well as shareholder remuneration, while maintaining a flexible financial capital structure.

Ordinary dividends paid have grown consistently every year since Amadeus' initial Public Offering (IPO), at an average annual rate of 20%. Amadeus complemented this with share repurchase programs in 2015 and 2018. We aim to continue to support this growth in the coming years based on a healthy cash-generation profile and a sound balance sheet.

Amadeus shareholder remuneration



Total €3.2 billion returned since IPO. 20% ordinary remuneration CAGR 2011–2018.

Ordinary dividend payments

The annual gross dividend from 2017's profits was approved by our shareholders at the General Shareholders' Meeting held on June 21, 2018. The total value of the dividend increased 20.7% vs. prior year to €498.1 million, representing a pay-out of 50% of the 2017 reported profit for the year, or €1.135 per share (gross). An interim amount of €0.48 per share (gross) was paid on January 31, 2018 and the complementary dividend of €0.655 per share (gross) was paid on June 29, 2018.

On December 13, 2018 the Board of Directors of Amadeus proposed a 50% pay-out ratio for the 2018 dividend.

In June 2019 the Board of Directors will submit to the General Shareholders' Meeting for approval a final gross dividend of €1.175 per share, representing a 3.5% increase vs. the 2017 dividend and a 50% of the reported profit, adjusted to exclude TravelClick's acquisition related effects. An interim dividend of €0.51 per share (gross) was paid in full on January 17, 2019. Based on this, the proposed appropriation of the 2018 results included in our 2018 audited consolidated financial statements includes a total amount of €515.6 million corresponding to dividends pertaining to the financial year 2018.

Extraordinary shareholder remuneration

Additionally, Amadeus has stated that in low-leverage scenarios, it would complement ordinary shareholder remuneration with extraordinary remuneration.

On December 14, 2017 Amadeus' Board of Directors agreed to undertake a share repurchase program, in accordance with the authorization granted to it by the General Shareholders' Meeting held on June 20, 2013. The purpose of the share repurchase program was the redemption of shares (subject to the approval of the General Shareholders' Meeting). The maximum investment approved under the program was €1,000 million, not exceeding 25,000,000 shares (or 5.69% of share capital), to be carried out in two tranches:

— Tranche 1: up to €500 million (non-cancellable), from January 1, 2018 to March 31, 2019.

— Tranche 2: up to €500 million (cancelable at Amadeus' discretion), from April 1, 2019 to March 31, 2020.

Following the acquisition of TravelClick on October 25, 2018, Amadeus announced that the Board of Directors agreed to cancel the second (cancelable) tranche of the share repurchase program, which was due to start on April 1, 2019.

On December 10, 2018 Amadeus announced that it had reached the maximum investment under the first tranche (€500 million), thus completing the share repurchase program. Under the program, Amadeus has acquired 7,554,070 shares (representing 1.721% of Amadeus' share capital).

11.5 Financial institutions

Net financial debt, as per our credit facility agreements' terms, amounted to €3,074.0 million as of December 31, 2018 (representing 1.47 times last-twelve-month EBITDA).

The main objectives of Amadeus' financial strategy are to reduce the cost of financing, diversify funding sources as much as possible, increase flexibility and extend the maturity profile of our debt.

The main changes to our debt in 2018 were:

— Three Eurobond issues on September 18, 2018 (under our Euro Medium Term Note Programme) for a total amount of €1,500 million, with the following conditions: (i) a €500 million issue, with a three-year-and-a-half maturity and an interest rate of three-month Euribor plus 0.45% margin (with a minimum annual coupon of 0%), (ii) a €500 million issue, with a five-year maturity, an annual coupon of 0.875% and an issue price of 99.898% of nominal value, and (iii) a €500 million issue, with an eight-year maturity, an annual coupon of 1.5% and an issue price of 99.761% of nominal value.

— The use of the Multi-Currency European Commercial Paper (ECP) program by a net amount of €30.0 million.

— A repayment of €65.0 million related to the European Investment Bank loan.

In October 2018 Standard & Poor's confirmed its "BBB" long-term and "A-2" short-term ratings for Amadeus, with a positive outlook. In November 2018 Moody's confirmed its "Baa2" long-term rating for Amadeus, with a stable outlook.



Closing remarks

Year after year, Amadeus makes a significant contribution to improving the efficiency and sustainability of the travel industry. In 2018 almost €900 million was invested in research and innovation, making Amadeus the undisputed leader in R&D technology investment in our sector.

These funds are earmarked for the development and implementation of the most advanced technologies available, to enhance the operational efficiency of airlines, airports, hotels, ferry and cruise companies and other travel industry players, and to connect and serve their customers more effectively, on a global scale. Our solutions also reduce airlines' fuel consumption and CO₂ emissions and improve the environmental performance of airports around the world. Our continued success relies on the ability to deliver technology solutions and services that drive operational improvements and efficiencies for our customers and for the travel ecosystem as a whole.

Our community platform, through which customers share technology, optimizes costs for the industry and provides easy access to leading-edge technology solutions to a wide range of travel providers. Our solutions portfolio of Passenger Service Systems, for example, not only serves large network carriers but also allows small airlines, regional operators and low-cost carriers to implement top technology solutions in a cost-effective way.

In the distribution business, our solutions meet the needs of all kinds of travel sellers, from large online travel agents and travel management companies, to small, niche travel agents in more than 190 countries.

This worldwide network, connecting travel sellers and travel providers, delivers significant efficiencies to both: effective comparison of travel options for travelers and travel sellers, and better market access and visibility for travel providers. Amadeus' technology enables efficient trip management, changes and adjustments, even if the trip involves different airlines or other travel providers.

As travel providers connect to the Amadeus Travel Platform, their products become instantly visible to travel sellers globally. This facilitates market access to new entrants and competition on equal terms for large and small providers, with the consumer as the ultimate beneficiary.

The current market conditions present us with many challenges, just like we have had to contend with challenges in the past. They also provide many opportunities to grow and improve. As long as we continue to provide value to the travel industry, listening to and acting upon customer needs, we are well equipped to tackle future challenges and to exploit opportunities. Our technology leadership, our industry expertise and global presence all make us well positioned to remain an industry leader. Our people and organizational culture ensure we do.

This report provides an overview of Amadeus as a company as well as the main highlights of 2018, integrating non-financial information as an important component. I hope you enjoy the read, and we look forward to receiving your comments through the contact information included at the end of the report.

“

Amadeus makes a significant contribution to improving the efficiency and sustainability of the travel industry.”



Tomas López Fernebrand

Senior Vice President, General Counsel and Corporate Secretary, Amadeus

Annex 1. About this report



Objectives of the Amadeus Global Report



The Amadeus Global Report 2018 presents a broad overview of Amadeus' operations, including financial and non-financial information. As a communication tool, it serves as the main source of information about Amadeus for our internal or external stakeholders. Importantly, the Global Report complies with formal requirements and best practice expectations regarding the reporting of non-financial information. In this respect, it represents the main platform for detailed reporting on our approach and performance in terms of labor, social, environmental and governance matters.

We have experienced an increasing demand for non-financial information reporting in recent years, which is getting closer in terms of requirements to the compulsory financial reporting. The European non-financial reporting guidelines highlight the importance of interrelations between financial and non-financial information, as well as between the different non-financial matters.

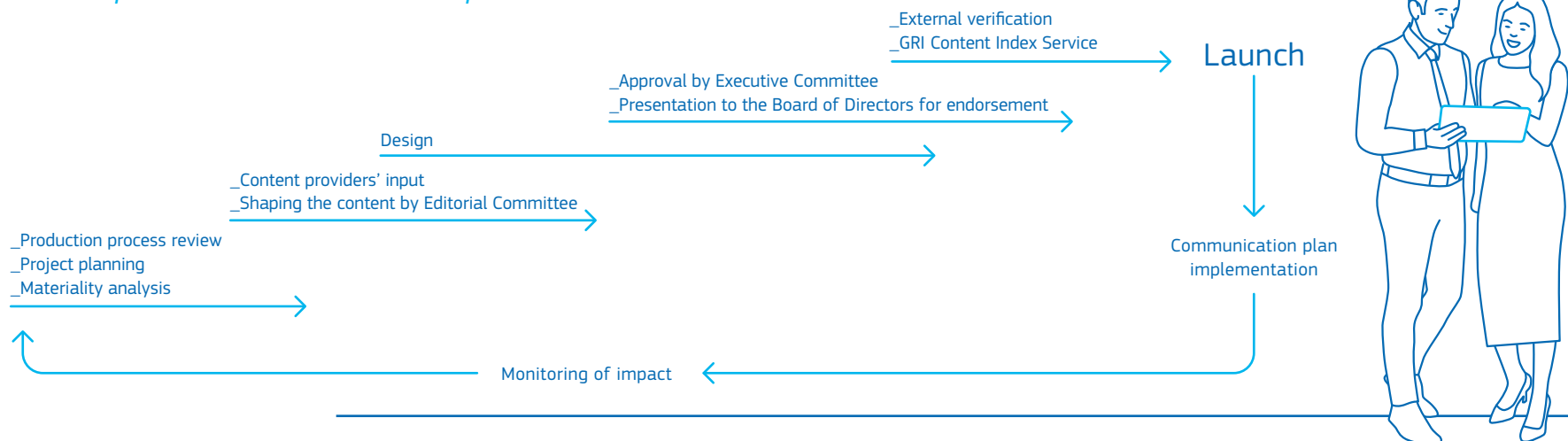
Roadmap to the Amadeus Global Report

Given the increasing relevance of non-financial information to our stakeholders, the impact of the Amadeus Global Report grows year-on-year. As a consequence, the process around the Global Report has become increasingly complex; building the content involves an increasing number of steps and more attention must be devoted to phases beyond the production stage. In addition, we constantly review the process to improve the report's balance, comparability, accuracy, timeliness, clarity and reliability.¹

The graph on the next page provides an overview of the different stages in this process. As shown, some of them are carried out concurrently, and close to 100 employees worldwide are involved in making it a success.

¹ The principles for defining report quality according to the Global Reporting Initiative (GRI) standards are explained at <https://www.globalreporting.org/standards/>.

Roadmap to the Amadeus Global Report



Among these employees, 14 internal units provide all material information regarding operational and non-financial content. In the sections below, we explain in more detail the process used to define material issues.

Shaping the content is a complex process that requires constant efforts to enhance dialog within the company. In that respect, the Amadeus Global Report Editorial Committee plays a key role. The main mission of the committee is to agree on the objectives of the report, as well as the structure and strategic overview of the content. Led by the Sustainability, Global Reporting & Certifications unit, this transversal team is composed of heads of key units at corporate level: Communications, Branding, Industry Affairs, Strategy, Investor Relations and CEO Office.

All members of the Amadeus Executive Committee [↗](#) review, validate and approve the Amadeus Global Report. Once the document is endorsed by the Board of Directors, it is released through internal and external communication campaigns at all geographical levels.

[↗](#) See "Corporate governance," p. 122.

Methodology

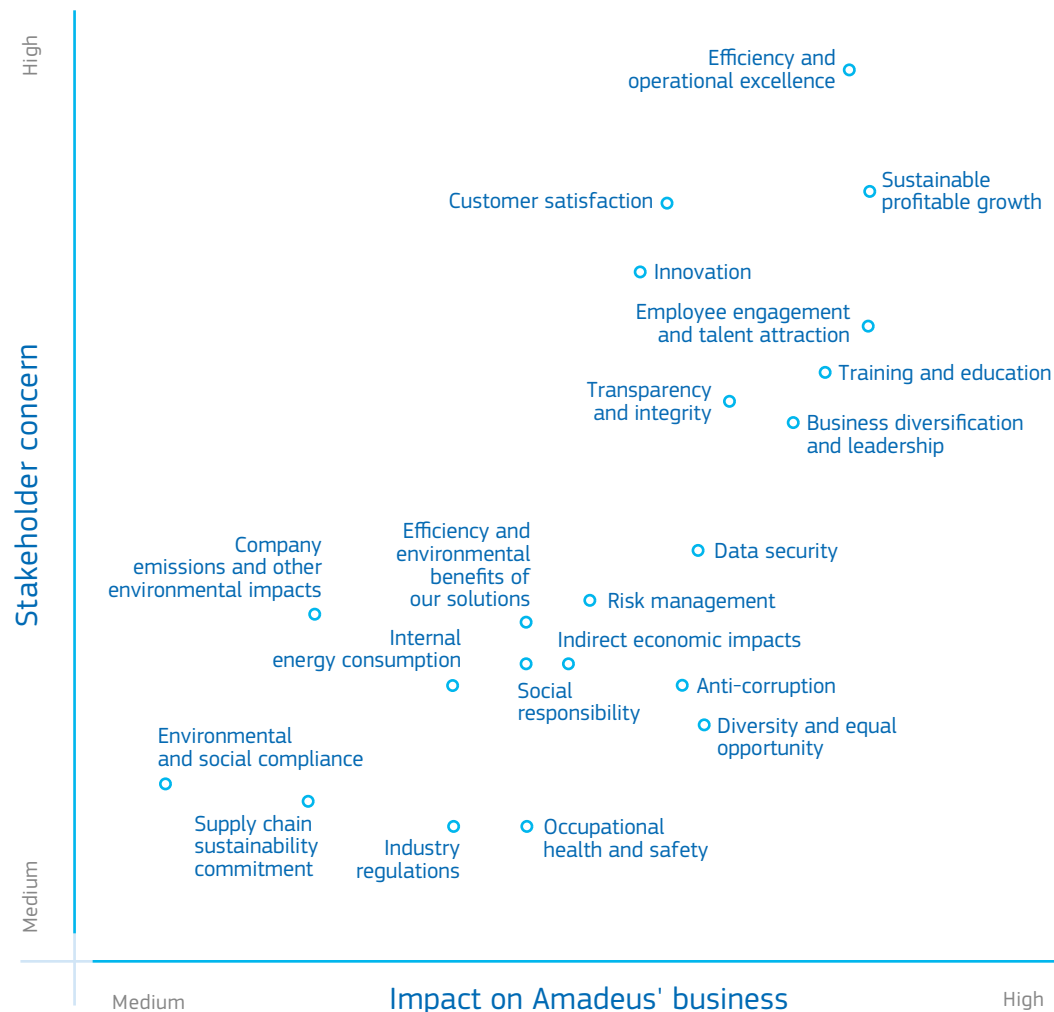
Reporting principles

The aforementioned objectives represent the starting point for defining the content of the Global Report. In addition, widely recognized reporting standards such as the Global Reporting Initiative (GRI) or the International Integrated Reporting <IR> Framework help us align the Global Report with the latest reporting trends.

The GRI reporting framework has been the main point of reference for the selection of the basic topics and metrics to be included in this report. The GRI Sustainability Reporting Standards are used to report our impact on the economy, the environment and society.

This report has been prepared in accordance with the GRI Standards: Core option. For the GRI Content Index Service, GRI Services reviewed that the GRI content index is clearly presented and the references for all disclosures included align with the appropriate sections in the body of the report.

Amadeus materiality matrix



This report brings together information about Amadeus' "capitals"² into a single corporate document. To this end, the guiding principles of the International <IR> Framework have been taken into account throughout. In this document, we aim to explain how Amadeus' strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term. In line with the <IR> concept of connectivity, we report the activities of the different Amadeus units by using cross-references to point readers to other sections of the report for more detailed information.

The external assurance of the report by an independent organization (KPMG) ensures that the quantitative and qualitative material issues listed in the GRI Content Index are reported accurately (see KPMG Assurance Report in Annex 2).

Materiality analysis

In 2018 we undertook a materiality assessment to review the environmental, social and economic aspects most critical to Amadeus and its stakeholders. In this review process we have relied on the expertise of external consultants to analyze the main reporting standards and sustainability indices: the GRI, the Dow Jones Sustainability Indices, Sustainalytics, FTSE4Good, and the United Nations Sustainable Development Goals and Global Compact. On the other hand, internal units managing relationships with key Amadeus internal and external stakeholders, as well as the teams in charge of reporting non-financial information, provided their input on the material topics, based on the impact on both their stakeholders and on our business.

The graphic on the left represents the material matters resulting from that assessment in two dimensions: their relevance to the company, and their influence on our stakeholders' decisions. For this materiality matrix, we have selected the aspects with at least a medium or high degree of materiality in both dimensions. It is also important to note that:

² As the International Integrated Reporting Council explains in its International <IR> Framework, "capitals" are stocks of value that are affected or transformed by the activities and outputs of an organization. The framework categorizes them as financial capital, manufactured capital, intellectual capital, human capital, social/relationship capital and natural capital.

- _ The materiality matrix depicts an evaluation for the short to medium term.
- _ All subjects included in the matrix form part of Amadeus' regular operations and relationships with stakeholders, and therefore should not be viewed in isolation.
- _ The chart is not meant to be a precise representation, but rather an indication of principal factors.

The materiality matrix is reviewed on a yearly basis in the first phase of the production of the Global Report.

Scope and limitations of the Amadeus Global Report

The materiality analysis identifies the information that must be reported in more detail. From that starting point, we build the content together with the relevant internal units, who define the boundaries for each topic and provide their input.

The reporting scope for each material aspect includes the entire Amadeus Group unless otherwise indicated. In terms of the data-gathering process and scope of the report, we have considered the materiality of the information on the one hand and the effort of collecting the data on the other. As a result, for some topics we cover less than 100% of the scope. In cases where data is limited, this is specified in the section in question.

In addition to the most relevant aspects determined from the materiality analysis, we report on other matters for the purpose of improving overall transparency and stakeholder engagement.

Below are specific remarks regarding the materiality of some aspects.

Amadeus' emissions and other environmental impacts

As a travel technology provider, Amadeus has a relatively low direct environmental impact. That is, we are not involved in physical manufacturing processes, and our main source of energy consumption is our Data Center in Germany. Moreover, one principal objective of the solutions we provide to our customers is to improve their operational efficiency, and this often entails the reduction of energy and natural resource consumption. Evaluating and maximizing the positive environmental benefits of our

technology is extremely important for us, given the high-energy intensity of the travel industry.↪

Amadeus' suppliers

Most of our external providers fall under the following categories:

- _ Consulting and marketing services
- _ Hardware providers
- _ Software providers
- _ Data communication providers

Although Amadeus has a worldwide presence, most of our spend, around an 80%, is concentrated in Spain, France, Germany and North America.

From a supply chain perspective, our activity is related to online transaction processing and technology development. In this context, Amadeus' exposure to third-party providers who may not comply with minimal social or environmental requirements is low, and that is why our external reporting is limited.

Despite having around 10,000 suppliers, our top 50 represent approximately 51% of our total spend with external providers. This facilitates our control and access to information in the supply chain.

The Amadeus Corporate Purchasing Policy aims at ensuring that all employees involved in the procurement of goods and services factor in social and environmental responsibility aspects in their purchasing decisions.

An organization of local, regional and global Amadeus purchasing teams oversees the operations on the supply chain side and deals with both internal stakeholders and vendors.

↪ See "Environmental sustainability," p. 90.

Stakeholder	Communication channel
Employees and external candidates	_ Direct engagement through local, regional and global Amadeus People & Culture teams _ Engagement surveys across all sites _ Collective bargaining agreements _ Employee Box email _ Intranet and internal weekly newsletter _ https://jobs.amadeus.com/
Shareholders	_ Direct engagement through Investor Relations team and periodic reports _ Roadshows and conferences _ Investor Relations Inbox _ https://corporate.amadeus.com/ (specific pages for investors)
Customers	_ Press releases _ Direct engagement through local, regional and global sales, as well as customer management teams around the world _ Voice of the Customer Program _ Local and global customer support centers
Suppliers	_ Direct contact through the Amadeus Corporate Purchasing department, other internal units and local teams across offices worldwide _ Social responsibility and environmental surveys
Industry associations	_ Direct engagement through participation in main industry associations _ Blog posts
Governments, authorities and regulatory bodies	_ Direct contact through the Industry Affairs team and local Amadeus general managers _ Participation in related meetings and events _ https://corporate.amadeus.com/ (specific pages for industry affairs)
Society and the environment	_ Direct engagement through multi-stakeholder panels _ Industry Affairs Box email _ Collaboration on joint social responsibility and sustainability initiatives _ Blog posts _ https://corporate.amadeus.com/ (specific pages for sustainability)

Approach to stakeholder engagement

At Amadeus, want to make sure that all our stakeholders have easy access to up-to-date information about the company. These are the main publications concerning our performance and activities, which help ensure clear communication and transparency:

- _ Amadeus Global Report
- _ Consolidated Annual Accounts and Directors' Report
- _ Annual Report on Corporate Governance of Listed Stock Corporations
- _ Annual Report on the Remuneration of Directors of Listed Companies
- _ Quarterly financial results announcements
- _ Blog posts on global, regional and local Amadeus websites
- _ Social media updates on LinkedIn, Facebook, Twitter, Google+, Instagram and YouTube

In addition to these publications and the specific methods of stakeholder engagement described throughout this report, [↗](#) we use additional channels to facilitate dialog (see table on the left). The specific regularity of engagement depends on the need and the type of communication tool used in each instance. In any case, we interact with each stakeholder group at least once a year.

Amadeus' contribution to Sustainable Development Goals

The United Nations has outlined 17 Sustainable Development Goals (SDGs) for member states and businesses to strive toward by 2030. The SDGs represent a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. The 17 goals balance the three dimensions of sustainable development: economic, social and environmental.

[↗](#) See "Customer experience," p. 46; "Amadeus people and culture," p. 62; "Amadeus industry affairs," p. 80; "Environmental sustainability," p. 90; "Social responsibility," p. 104; and "Shareholders and financial institutions," p. 132.

Technological innovation has a tremendous potential to make a positive contribution to the SDGs. As a travel technology company, we invest  to develop IT solutions that help make the industry more sustainable over the long term. The travel industry is growing and we need to address this growth by finding ways to travel more sustainably. Looking toward the future, we also need to join forces with other stakeholders and share different perspectives, working together with a common goal of long-term travel industry sustainability.

As a global company, we are aware that we create social and economic value. From the point of view of corporate governance, finance and labor practice point of view, we aim to increase our positive impact on society, thus contributing to the SDGs directly linked to people's welfare, for example related to standards of living, working conditions, education, economic growth and social equality.

The graph below represents Amadeus' contribution to the SDGs. We have marked in which section of the Global Report we describe our specific actions for each one. In 2018 we have reviewed our contribution to the SDGs based on the input of external consultants as well as a deep analysis by our social and environmental sustainability units.



Amadeus' Head of Sustainability participated in the congress "The Travel Future We Really Want," organized by our Belgian customer Joker.

	1 NO POVERTY	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS
Amadeus in the travel industry												
Business lines												
Customer experience												
Technology and innovation												
Amadeus people and culture												
Amadeus industry affairs												
Environmental sustainability												
Social responsibility												
Corporate risk management												
Corporate governance												
Shareholders and financial institutions												
About this report												
Quantitative information and GRI Content Index												

 See "Technology and innovation," p. 52.

Annex 2.

Quantitative information and GRI Content Index



Direct economic value generated and distributed*



Distributed economic value (figures in € million)

	2017 ¹	2018
Operating costs	1,428.5	1,525.3
Employee wages and benefits	1,334.2	1,382.1
Payments to providers of capital**	434.2	1,017.8
Payments to governments	363.4	287.6
	3,560.3	4,212.8

Generated economic value (figures in € million)

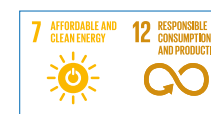
	2017 ¹	2018
Net sales	4,637.2	4,935.7
Financial incomes	1.3	2.0
Sales of assets	0.0	0.0
	4,638.5	4,937.7

* As defined by the Global Reporting Initiative (GRI Standard 201-1).

** All financial payments made to providers of the organization's capital (interests and dividends paid).

¹ Due to the implementation of the new International Financial Reporting Standards 9, 15 and 16, some figures have been reclassified and restated in 2017 for comparison purposes.

Tables related to environmental sustainability



Energy consumption

	2015	2016	2017	2018	2018 ²
Electricity consumption top Amadeus sites* (GJ)	134,594	129,596	135,107	140,101	201,124
Number of employees*	10,192	10,465	11,009**	11,887	17,598
Electricity consumption per employee* (GJ)	13.2	12.4	12.3	11.8	11.4
Electricity consumption Amadeus data center (GJ)	173,899	193,041	220,452	231,801	231,801
Number of transactions processed at the data center (millions)	1,386	1,510	1,738	1,849	1,849
Electricity required per one million transactions (GJ)	125.5	127.8	126.8	125.4	125.4
Total electricity consumption top Amadeus sites and data center (GJ)	308,493	322,637	355,559	371,908	432,925***
Natural gas (GJ)	15,166	22,106	20,327	21,240	30,110
Diesel oil (GJ)	2,704	4,438	2,834	1,750	2,481
Total energy consumption top Amadeus sites and data center (GJ)	326,363	349,181	378,720	394,898	465,516

* Does not include Amadeus Data Center.

** The methodology to report the number of employees in Miami has been corrected in 2017 to reflect only those employees that work directly from our premises. As a result, the total number has been significantly reduced.

*** Regarding renewable energy, Amadeus doesn't purchase renewable energy certificates. We report renewable energy use based on the production mix per country published by the International Energy Agency. Accordingly, the proportion of renewable energy for our Data Center, i.e. biofuel, waste, hydro, geothermal solar photovoltaic, solar thermal, wind and tide is 31% over the total. We have also calculated the proportion of renewable energy for our top 14 sites which corresponds to 20.9% over the total. The percentage of total renewable for our Data Center and top 14 sites is 27.2% which corresponds to 28,210 MWh (101,556 GJ).

Type of fuel used for electricity generation (GJ)*

	Coal	Fuel Oil	Natural Gas	Biofuel	Waste	Other**	Total
Top 14 Amadeus sites	82,653	4,062	45,497	8,731	3,278	90,376	234,597
Data Center	295,633	5,567	73,468	42,846	12,628	81,965	512,107

* All figures expressed in gigajoules equivalent, obtained from the energy mix data of each country and the energy-transformation efficiency factor for each type of energy source.

** Other: Nuclear, hydropower, geothermal, photovoltaic, solar thermal, wind power and tidal power.

² Scope: Total Amadeus sites worldwide. For comparability purposes we have included two sets of data for 2018. One including top 13 Amadeus sites by number of employees (same scope as of 2017) and the other with the estimated total of Amadeus calculated from the top 14 Amadeus sites.

CO₂ emissions*

	2015	2016	2017	2018	2018 ³
Scope 1. Direct emissions (fossil fuels)**	983	1,467	1,263	1,237	1,754
Scope 2. Indirect emissions from purchased electricity**	33,188	35,389	38,810	38,100	46,463
Scope 3. Indirect emissions from other sources***	8,872	7,944	7,712	9,464	9,468****
Carbon offset	2,364	5,050	8,267	n/a	16,410
Natural gas (m ³)	394,822	575,488	529,186	552,964	783,878
Diesel oil (L)	70,043	114,949	73,404	45,328	64,257

* All figures in t of CO₂ unless otherwise indicated.

** Carbon offset not discounted.

*** Includes emissions from air travel (7 sites until 2016, 9 in 2017 and 10 sites from the top 14 Amadeus sites in 2018) and paper use (top 11 sites until 2016 and top 13 in 2017).

**** Includes emissions from air travel (10 sites) and paper use (based on data from 14 sites).

Paper consumption

	2015	2016	2017	2018	2018 ³
Paper consumption (kg)	56,704	44,951	47,023	52,833	79,044
Number of employees	10,192	10,465	11,009	11,887	17,598
Paper consumption per employee (A4 sheets per working day)	5.06	3.90	3.88	4.04	4.08

Water consumption and waste generation

	2015	2016	2017	2018	2018 ³
Water consumption (m ³)	272,288	250,233	253,179	213,897	255,512
Total estimated waste (kg)*	320,476	235,970	315,241	348,480**	507,220

* For comparability purposes, the figures for waste since 2017 do not include obsolete equipment or hazardous waste, since this information is only available in some of our sites. In 2018 we do not include single stream waste in our reporting in Waltham as this is mainly debris generated as a consequence of the works in the building and this is not related to the normal running of the building, and therefore not comparable with other sites. For waste generation in Manila, only paper consumption has been considered due to there is no other data available. Total obsolete equipment in 2018 was 26.8 tonnes and total hazardous waste was 10.8 tonnes.

** The percentage of obsolete equipment and hazardous waste that was sent for recycling in 2018 was 100% and 82%, respectively. For non-hazardous waste, 63% was sent for recycling and 17% was sent to composting.

³ Scope: Total Amadeus sites worldwide. For comparability purposes we have included two sets of data for 2018. One including top 13 Amadeus sites by number of employees (same scope as of 2017) and the other with the estimated total of Amadeus calculated from the top 14 Amadeus sites.

Tables related to human resources information⁴

Diversity in the workforce



Workforce by employment contract by region in 2018*

	Permanent	Temporary
Europe	9,088	356
Asia-Pacific	3,692	75
North America	2,758	29
South America	483	7
Middle East & Africa	407	25
Total	16,428	492

* Scope: This scope includes all fully owned company including new acquired Travelclick as integration on concepts is still in place. Figures on headcounts unless otherwise indicated. Headcounts include permanent staff and temporary staff as of 31st Dec.

Gender diversity by employment type and contract in 2018*

	Employment type		Employment contract	
	Full-time	Part-time	Permanent	Temporary
Male	10,062	210	10,004	268
Female	5,905	743	6,424	224
Total	15,967	953	16,428	492

	VPs and directors			Senior managers and managers			Staff		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
By age range									
<30	n/a	0	0	n/a	15	10	n/a	2,787	2,836
30-50	n/a	79	80	n/a	2,598	2,677	n/a	7,015	7,426
>50	n/a	113	109	n/a	870	971	n/a	1,532	1,666
By gender									
Male	164	159	154	2,336	2,350	2,465	6,216	6,754	7,143
Female	29	33	35	1,085	1,133	1,193	4,230	4,580	4,785
Total workforce	193	192	189	3,421	3,483	3,658	10,446	11,334	11,928

⁴ Scope: This scope includes all fully owned company excluding new acquired Travelclick as integration on concepts is still in place. Figures on Headcount as of 31st Dec. Overall HC for the included population is 15,775.

Diversity in the workforce

Governance bodies

	2016	2017	2018
Percentage by age range			
<30	0%	0%	0%
30-50	20%	0%	0%
>50	80%	100%	100%
Percentage by gender			
Male	90%	82%	82%
Female	10%	18%	18%
Percentage by nationality			
Other than Spanish	70%	64%	64%

Employees with disabilities

	2016	2017	2018
Total	147	178	186

Average hours of training in 2018

	Male	Female	Total
Employee category			
SVPs, EVPs and VPs	3.87	6.45	4.17
Directors	13.76	12.51	13.51
Associate directors	10.13	11.90	10.52
Senior managers	14.51	16.04	14.94
Managers	11.21	20.46	20.35
Staff	25.18	21.21	23.59

Training on Code of Ethics and Business Conduct in 2018

	Online*	Face to face	Total
Number of employees trained	1,242	468	1,710
Percentage of employees (FTEs) trained	7%	3%	10%
Number of training hours	997	594	1,591

* Figures include active employees in December 31st, 2018.

Anti-fraud policy training in 2018

Top management trained*	27
Total number of top management**	426
% of top management trained	6%

* Breakdown by region is as follows: 24 employees in Asia-Pacific, 1 employee in Europe, Middle East and Africa and 2 employees in North America. Top management is not trained on yearly basis. Nevertheless the total amount of top management trained in the last three years represents almost the 100% of top management.

** Top management includes associate directors, directors, vice presidents, executive vice presidents, senior vice presidents and CEO.

Employees hires and turnover

	Employee hires				Employee turnover			
	2016	2017	2018		2016	2017	2018	
	Headcounts	Headcounts	Headcounts	Rate	Headcounts	Headcounts	Headcounts	Rate
By region								
Europe	764	1,132	1,288	14%	569	714	744	8%
Asia-Pacific	681	604	743	20%	410	337	439	12%
North America	288	304	287	10%	227	190	247	9%
South America	72	79	36	7%	70	58	55	11%
Middle East and Africa	49	29	42	10%	39	46	33	8%
Total	1,854	2,148	2,396	14%	1,315	1,345	1,518	9%
By gender								
Male	1,148	1,274	1,532	15%	792	820	940	9%
Female	706	874	864	13%	523	525	578	9%
Total	1,854	2,148	2,396	14%	1,315	1,345	1,518	9%
By age range								
<30	871	1,139	1,295	46%	421	469	526	17%
30-50	892	926	1,030	9%	723	675	805	7%
>50	91	83	71	2%	171	201	187	6%
Total	1,854	2,148	2,396	14%	1,315	1,345	1,518	9%

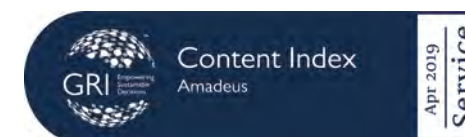
Work-related injuries in 2018

	Europe		Asia-Pacific		North America		South America		Middle East and Africa	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Injuries per type										
Neck or back	5	3	-	-	2	-	-	1	-	-
Bone	9	4	-	-	-	-	-	-	-	-
Soft Tissue	3	2	-	-	1	1	-	-	-	-
Burns	-	2	-	-	-	-	-	-	-	-
RMI	1	-	-	-	-	-	-	-	-	-
Other	41	29	1	-	-	-	20	20	-	-
Total injuries	59	40	1	0	3	1	20	21	0	0
Injury rate	5.88	6.78	0.24	0.00	1.19	0.61	38.73	37.57	0.00	0.00
Occupational diseases rate	0.01	0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
Lost day rate	0.09	0.10	0.00	0.00	0.00	0.00	0.46	0.58	0.00	0.00
Absentee rate	1.76	2.79	0.74	1.27	0.00	0.00	2.09	1.94	0.12	0.04
Work-related fatalities	0	0	0	0	0	0	0	0	0	0

Collective bargaining agreements

	2016	2017	2018
Percentage of employees covered by collective agreements	52%	51%	47%

GRI Content Index*



GRI standard	Disclosure	Page number(s) / direct answer(s)	Omission(s)
GRI 101	Foundation 2016		
GRI 102	General disclosures 2016		
Organizational profile	102-1 Name of the organization	Amadeus IT Group S.A.	
	102-2 Activities, brands, products, and services	p. 10, 13, 15, 20-21	
	102-3 Location of headquarters	p. 14	
	102-4 Location of operations	p. 14, 47, 53-54	
	102-5 Ownership and legal form	p. 9	
	102-6 Markets served	p. 20, 22, 32	
	102-7 Scale of the organization	p. 8-9	
	102-8 Information on employees and other workers	p. 8, 11, 63	
	102-9 Supply chain	p. 143	
	102-10 Significant changes to the organization and its supply chain	p. 131	
	102-11 Precautionary Principle or approach	p. 118-119	
	102-12 External initiatives	p. 81, 83, 85, 87, 101	
	102-13 Membership of associations	p. 83, 85, 86, 87, 88, 89	
Strategy	102-14 Statement from senior decision-maker	p. 2-3, 4-5	
	102-15 Key impacts, risks, and opportunities	p. 11, 101, 116	

* For the GRI Content Index Service, GRI Services reviewed that the GRI content index is clearly presented and the references for all disclosures included align with the appropriate sections in the body of the report.

GRI standard	Disclosure	Page number(s) / direct answer(s)	Omission(s)
Ethics and Integrity	102-16 Values, principles, standards, and norms of behavior	p. 72, 104, 116-117	
	102-17 Mechanisms for advice and concerns about ethics	p. 116-117	
Governance	102-18 Governance structure	p. 122-124	
	102-22 Composition of the highest governance body and its committees	p. 124-128	
	102-23 Chair of the highest governance body	p. 124	
	102-24 Nominating and selecting the highest governance body	p. 130-131	
	102-26 Role of highest governance body in setting purpose, values, and strategy	p. 122-123	
	102-30 Effectiveness of risk management processes	p. 116-117, 129	
	102-32 Highest governance body's role in sustainability reporting	p. 141	
	102-35 Remuneration policies	p. 123, 129-131	
Stakeholder engagement	102-40 List of stakeholder groups	p. 84, 144	
	102-41 Collective bargaining agreements	p. 152	
	102-42 Identifying and selecting stakeholders	p. 80, 144	
	102-43 Approach to stakeholder engagement	p. 144	
	102-44 Key topics and concerns raised	p. 142 -143	

GRI standard	Disclosure	Page number(s) / direct answer(s)	Omission(s)
Reporting practice	102-45 Entities included in the consolidated financial statements	Amadeus Consolidated Annual Accounts 2018 - pages 93-101	
	102-46 Defining report content and topic Boundaries	p. 141-142	
	102-47 List of material topics	p. 142	
	102-48 Restatements of information	There have not been any re-statements of information provided in earlier reports.	
	102-49 Changes in reporting	There have not been any significant changes from previous reporting periods.	
	102-50 Reporting period	2018	
	102-51 Date of most recent report	2018 (information regarding 2017)	
	102-52 Reporting cycle	Annual	
	102-53 Contact point for questions regarding the report	p. 170	
	102-54 Claims of reporting in accordance with the GRI Standards	p. 141	
	102-55 GRI content index	p. 153-163	
	102-56 External assurance	p. 164	

Material topics

Anti-corruption			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p. 116-120	
	103-2 The management approach and its components	p. 116-120	
	103-3 Evaluation of the management approach	p. 116-120	

GRI standard	Disclosure	Page number(s) / direct answer(s)	Omission(s)
GRI 205 Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	p. 120	
	205-2 Communication and training about anti-corruption policies and procedures	p. 150	
	205-3 Confirmed incidents of corruption and actions taken	In 2018 Amadeus did not identify any incidents of corruption.	
Business diversification and leadership			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p. 21, 42	
	103-2 The management approach and its components	p. 21, 42	
	103-3 Evaluation of the management approach	p. 21, 42	
Customer satisfaction			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p. 46, 50	
	103-2 The management approach and its components	p. 46, 50	
	103-3 Evaluation of the management approach	p. 46, 50	
Data security			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p. 58-59, 121	
	103-2 The management approach and its components	p. 58-59, 121	
	103-3 Evaluation of the management approach	p. 58-59, 121	
GRI 418 Customer privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	In 2018 there were no complaints regarding breaches of customer privacy and losses of customer data.	

GRI standard	Disclosure	Page number(s) / direct answer(s)	Omission(s)
Diversity and equal opportunity			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p. 65	
	103-2 The management approach and its components	p. 65	
	103-3 Evaluation of the management approach	p. 65	
GRI 405 Diversity and equal opportunity 2016	405-1 Diversity of governance bodies and employees	p. 149-150	
Efficiency and environmental benefits of our solutions			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p. 90-91, 94, 143	
	103-2 The management approach and its components	p. 90-91, 94, 143	
	103-3 Evaluation of the management approach	p. 90-91, 94, 143	
GRI 301 Materials 2016	301-1 Materials used by weight or volume	p. 148	
GRI 303 Water 2016	303-1 Water withdrawal by source	p. 148	
GRI 305 Emissions 2016	305-1 Direct (Scope 1) GHG emissions	p. 148	
	305-2 Energy indirect (Scope 2) GHG emissions	p. 148	
	305-3 Other indirect (Scope 3) GHG emissions	p. 148	
	305-4 GHG emissions intensity	p. 148	
	305-5 Reduction of GHG emissions	p. 12, 96-98, 148	
GRI 306 Effluents and waste 2016	306-2 Waste by type and disposal method	p. 148	

GRI standard	Disclosure	Page number(s) / direct answer(s)	Omission(s)
Efficiency and operational excellence			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p. 46, 98	
	103-2 The management approach and its components	p. 46, 98	
	103-3 Evaluation of the management approach	p. 46, 98	
Employee engagement and talent attraction			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p. 62, 63, 68	
	103-2 The management approach and its components	p. 62, 63, 68	
	103-3 Evaluation of the management approach	p. 62, 63, 68	
GRI 401 Employment 2016	401-1 New employee hires and employee turnover	p. 151	
Environmental and social compliance			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p. 117	
	103-2 The management approach and its components	p. 117	
	103-3 Evaluation of the management approach	p. 117	
GRI 307 Environmental compliance 2016	307-1 Non-compliance with environmental laws and regulations	In 2018 there was not imposed on the Group either a penalty for incidents or breaches or a significant fine on environmental issues.	
GRI 419 Socioeconomic compliance 2016	419-1 Non-compliance with laws and regulations in the social and economic area	In 2018 there was not imposed on the Group either a penalty for incidents or breaches or a significant fine on social issues.	

GRI standard	Disclosure	Page number(s) / direct answer(s)	Omission(s)
Indirect economic impacts			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p. 107	
	103-2 The management approach and its components	p. 107	
	103-3 Evaluation of the management approach	p. 107	
GRI 203 Indirect economic impacts 2016	203-2 Significant indirect economic impacts	p. 107	
Industry regulations			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p. 81-82	
	103-2 The management approach and its components	p. 81-82	
	103-3 Evaluation of the management approach	p. 81-82	
Innovation			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p. 52, 60	
	103-2 The management approach and its components	p. 52, 60	
	103-3 Evaluation of the management approach	p. 52, 60	
Internal energy consumption			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p. 91	
	103-2 The management approach and its components	p. 91	
	103-3 Evaluation of the management approach	p. 91	

GRI standard	Disclosure	Page number(s) / direct answer(s)	Omission(s)
GRI 302 Energy 2016	302-1 Energy consumption within the organization	p. 96, 147	
	302-2 Energy consumption outside of the organization	Energy consumption outside of the organization is 127,505 GJ.	
	302-3 Energy intensity	p. 96, 147	
	302-4 Reduction of energy consumption	p. 147	
	302-5 Reductions in energy requirements of products and services	p. 58	
Occupational health and safety			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p. 71	
	103-2 The management approach and its components	p. 71	
	103-3 Evaluation of the management approach	p. 71	
GRI 403 Occupational health and safety 2016	403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	p. 152	
Risk management			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p. 116-120	
	103-2 The management approach and its components	p. 116-120	
	103-3 Evaluation of the management approach	p. 116-120	
Social responsibility			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p. 104-105, 107	
	103-2 The management approach and its components	p. 104-105, 107	
	103-3 Evaluation of the management approach	p. 104-105, 107	

GRI standard	Disclosure	Page number(s) / direct answer(s)	Omission(s)
GRI 413 Local communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	p. 107	
Supply chain sustainability commitment			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p.143	
	103-2 The management approach and its components	p.143	
	103-3 Evaluation of the management approach	p.143	
GRI 308 Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	100% of new suppliers in Madrid, US, Philippines and Dubai were screened using environmental criteria. Amadeus has implemented a new Vendor Creation process. For the time being is only available in Madrid, US, Philippines and Dubai. The other main sites (Nice and Erding) will be included in early 2020 and then, gradually, the other countries. As part of this process, Amadeus has a mandatory questionnaire to be completed by all the vendors, which includes issues related to human rights, discrimination or environmental policies. If suppliers respond incorrectly they can not move forward in the process and Amadeus could not work with them.	
	308-2 Negative environmental impacts in the supply chain and actions taken	In 2018 Amadeus did not identify any environmental impact in the supply chain.	

GRI standard	Disclosure	Page number(s) / direct answer(s)	Omission(s)
GRI 414 Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	100% of new suppliers in Madrid, US, Philippines and Dubai were screened using social criteria. Amadeus has implemented a new Vendor Creation process. For the time being is only available in Madrid, US, Philippines and Dubai. The other main sites (Nice and Erding) will be included in early 2020 and then, gradually, the other countries. As part of this process, Amadeus has a mandatory questionnaire to be completed by all the vendors, which includes issues related to human rights, discrimination or environmental policies. If suppliers respond incorrectly they can not move forward in the process and Amadeus could not work with them.	
	414-2 Negative social impacts in the supply chain and actions taken	In 2018 Amadeus did not identify any social impact in the supply chain.	
Sustainable profitable growth			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p. 101, 146	
	103-2 The management approach and its components	p. 101, 146	
	103-3 Evaluation of the management approach	p. 101, 146	
GRI 201 Economic performance 2016	201-1 Direct economic value generated and distributed	p. 146	
	201-2 Financial implications and other risks and opportunities due to climate change	p. 101-102	

GRI standard	Disclosure	Page number(s) / direct answer(s)	Omission(s)
Training and education			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p. 65	
	103-2 The management approach and its components	p. 65	
	103-3 Evaluation of the management approach	p. 65	
GRI 404 Training and education 2016	404-1 Average hours of training per year per employee	p. 150	
	404-2 Programs for upgrading employee skills and transition assistance programs	p. 65, 72	
Transparency and integrity			
GRI 103 Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p. 81, 117	
	103-2 The management approach and its components	p. 81, 117	
	103-3 Evaluation of the management approach	p. 81, 117	
GRI 206 Anti-competitive behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	In 2018, there were no legal actions for anticompetitive behavior, anti-trust and monopoly practices.	
GRI 415 Public policy 2016	415-1 Political contributions	p. 117	



KPMG Auditores, S.L.

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28046 Madrid

Independent Limited Assurance Report on Amadeus Global Report 2018

To Amadeus IT Group, S.A. management:

We have been engaged by the Board of Directors of Amadeus IT Group, S.A. (hereinafter Amadeus) to provide limited assurance on the non-financial information contained in the Annex 2. GRI Content Index of the "Amadeus Global Report 2018" for the year ended 31 December 2018 (hereinafter "the Report").

Amadeus Management responsibilities

Amadeus management is responsible for the preparation and presentation of the Report in accordance with the *Sustainability Reporting Standards of the Global Reporting Initiative (GRI Standards)*, in its core option of the Global Reporting Initiative, as described in point 102-54 of the GRI content Index of the Report. It is responsible for compliance with the Content Index Service, obtaining confirmation from the Global Reporting Initiative on the proper application of these. Management is also responsible for the information and assertions contained within the report; for determining Amadeus' objectives in respect of the selection and presentation of sustainable development performance, including the identification of stakeholders and material issues; and for establishing and maintaining appropriate performance management and internal control systems from which the reported performance information is derived.

These responsibilities include the establishment of appropriate controls that Amadeus management consider necessary to enable that the preparation of indicators with a limited assurance review would be free of material errors due to fraud or errors.

Our responsibility

Our responsibility is to carry out a limited assurance review and to express a conclusion based on the work performed, referring exclusively to the information corresponding to 2018. We conducted our engagement in accordance with International Standard on Assurance Engagements ISAE 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information, and the Standard ISAE 3410, Assurance Engagements on Greenhouse Gas Statements, issued by the International Auditing and Assurance Standard Board (IAASB); and with the Performance Guide on the revision of Corporate Responsibility Reports of the Instituto de Censores Jurados de Cuentas de España (ICJCE). These standards require that we plan and perform the engagement to obtain limited assurance about whether the Report is free from material misstatements.



2

We apply the International Standard on Quality Control 1 (ISQC 1) and, in conformity with this Standard, maintain a comprehensive system of quality control including documented policies and procedures regarding the compliance with ethical principles, professional standards and applicable legal and regulatory requirements.

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the Internal Ethics Standards Board for Accountants, which is based on the fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Procedures performed

Our limited assurance engagement has been carried out by means of enquiries of management and persons responsible for the preparation of information presented in the Report, and the application of analytical and other evidence gathering procedures. These procedures included:

- Verification of Amadeus' processes for determining the material issues, and the stakeholder participation therein.
- Verification, through interviews with management and relevant staff at group level and selected business unit level, of the presence of sustainability strategy and policies and corporate responsibility to attend to material issues, and the implementation of these across the business of Amadeus.
- Assessment of the consistency of the description of the application of Amadeus' policies and strategy on sustainability, governance, ethics and integrity
- Risk analysis, including searching the media to identify material issues during the year covered by the Report.
- Review of consistency of information comparing the Universal Standards with internal systems and documentation.
- Analysis of the processes of compiling and internal control over quantitative data reflected in the Report, regarding the reliability of the information, by using analytical procedures and review testing based on sampling.
- Review of the application of the Sustainability Reporting Standards of the Global Reporting Initiative (GRI Standards) requirements, in accordance with core option.
- Reading the information presented in the Report to determine whether it is in line with our overall knowledge of, and experience with, the sustainability performance of Amadeus
- Comparison between the financial information presented in the Report and those included in Amadeus' Annual Accounts audited by independent third parties.

Our multidisciplinary team included specialists in dialogue with stakeholders, and social, environmental and economic business performance

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less wide than a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is lower than that of a reasonable assurance engagement. This report may not be taken as an auditor's report.



3

Conclusions

Our conclusion has been formed on the basis of, and is subject to, the matters outlined in this Independent Assurance Report.

We believe that the evidences we have obtained is sufficient and appropriate to provide a basis for our conclusions.

Based on the procedures performed and the evidences obtained, nothing has come to our attention that causes us to believe that the Report has not prepared, in all material respects, in accordance with the Sustainability Reporting Standards of Global Reporting Initiative (GRI Standards), in its core option, as described in point 102-54 of the GRI content index of the Report, including the reliability of data, adequacy of the reported information and the absence of significant deviations and omissions.

Purpose of our report

In accordance with the terms of our engagement, this Independent Assurance Report has been prepared for Amadeus in relation to its Global Report 2018 and for no other purpose or in any other context.

Under separate cover, we will provide Amadeus management with an internal report outlining our complete findings and areas for improvement.

KPMG Asesores, S.L.

Patricia Reverter Guillot

17 April 2019

Annex 3. Glossary



Amadeus air travel agency bookings: air bookings processed by travel agencies using Amadeus' distribution platform.

Ancillary services: additional services provided to customers beyond the ticket. Typical examples of airline ancillary services include extra baggage, priority seating, catering on board, etc.

API: Application Programming Interface, a language that enables communication between computer programs.

CRS: Computer Reservation System is a computer network containing travel-related information such as schedules, availability, fares and other services, which enables automated travel-related transactions between travel providers and travel agents.

GDS: A Global Distribution System is a computer network containing travel-related information such as schedules, availability, fares and related services, which also enables automated travel-related transactions between travel providers and travel agents. In addition to providing a Computerized Reservation System, GDSs offer travel-related content to a broad range of agents worldwide, making global reach an important element of their value proposition.

IATA: The International Air Transport Association (IATA) is the trade association for the world's airlines, representing 265 airlines or 83% of total air traffic. IATA supports many areas of aviation activity and helps formulate industry policy on critical aviation issues.

IFRS: International Financial Reporting Standards. The IFRS® Foundation is a not-for-profit international organization responsible for developing a single set of high-quality global accounting standards, known as IFRS Standards.

International Integrated Reporting Council: A global coalition of regulators, investors, companies, standard setters, accounting professionals and non-governmental organizations sharing the view that communication about value creation should be the next step in the evolution of corporate reporting.

IT transaction: defined as a single message received from a user that requires one or more responses to be sent. A user can be a person or a computer system.

KPI: Key Performance Indicators

NDC: NDC refers to New Distribution Capability, a program launched by IATA for the development and market adoption of a new xml-based data transmission standard (NDC standard) between airlines and travel agencies. IATA establishes various levels of NDC certification, depending on the NDC capabilities.

Open systems: in computing and informatics, a class of systems built using open source software (OSS) standards that offer a high level of portability and independence from the hardware platforms on which they operate, especially in contrast to the more entrenched mainframes that were once common in the travel industry.

Passengers boarded: Actual passengers boarded onto flights operated by airlines using at least the Amadeus Altéa Reservation and Inventory modules or Navitaire New Skies.

PCI-DSS: Payment Card Industry Data Security Standard, a proprietary information security standard for organizations that handle branded credit cards from major card brands. Mandated by the card brands and run by the Payment Card Industry Security Standards Council, the standard was created to increase controls around cardholder data to reduce credit card fraud.

PPA: Purchase Price Allocation

Property Management System: A computerized system that facilitates the management of hotel properties.

PNR: Passenger Name Record, a record of passengers' travel requirements containing all the necessary information to enable reservations to be processed and controlled by the booking and participating travel provider. Each PNR must contain the following five mandatory items or 'elements': name element (passenger name), itinerary element (booking), contact element (a telephone number), ticketing element (arrangement for issuing a ticket) and received from element (name of the person who made the booking).

PSS: Passenger Service System, a series of mission-critical systems used by airlines. The PSS usually comprises a Reservation System, an Inventory System and a Departure Control System (DCS).

PUE: Power Usage Effectiveness, a common metric used to measure the energy efficiency of data centers. It is equal to Total Facility Power/IT Equipment Power. The closer to 1 the PUE, the more efficient the data center is.

Transactions processed at the Amadeus Data Center: defined as basic operations linked directly to Amadeus' business, such as bookings or processed passengers boarded.

Travel agency air booking industry: defined as the total volume of travel agency air bookings processed by the global CRSs. It excludes air bookings made directly through in-house airline systems or single country operators, the latter primarily in China, Japan and Russia, which together combined represent an important part of the industry.

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