amadeus

Global Report 2017

A business, financial and sustainability overview

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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 2017. 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.



Message from the Chairman of the Board

José Antonio Tazón

Dear friends,

In 2017 we celebrated 30 years of Amadeus history. Since its inception, Amadeus has navigated through a particularly challenging business environment. Indeed, the very decision to create the company was a response to the specific evolution of the travel market at the time. I believe that most of us who worked in building Amadeus were too busy to worry much about what the company would look like 30 years later. Moreover, it would have been terribly difficult to predict the fantastic evolution Amadeus has undergone over these years; and perhaps in these reflections we can find some insight on how to face the future.

Over time, Amadeus has demonstrated an ability to make the right fundamental strategic decisions, delivering a successful value proposition to the market even when facing many challenges in the process. From the initial development of the Global Distribution System platform, with its technical, financial and marketing challenges, through the diversification strategy to airline IT systems, to the recently completed migration to open systems, Amadeus manages to lead the market with strategic decisions and to deliver on them. Interestingly, many of these key projects turned out to

be much more demanding – but also much more successful – than any plan could have possibly anticipated.

I believe that a good part of the reason for Amadeus' success lies in our company culture. From the beginning, Amadeus has drawn its strength from a multinational culture with an attractive mix of nationalities and talents. This provides the business with a powerful blend in which everybody is important, everybody plays a role. Getting together to share information and views is part of the Amadeus culture from the outset.

In addition to this key human resources factor, Amadeus has managed, in one way or another, to secure the necessary financial resources to engage in the development projects required for delivering state-of-the-art solutions to the market. Importantly, the company has successfully gone through two initial public offerings and one leveraged buyout. The healthy financial situation we enjoy today undoubtedly facilitates embarking on new opportunities and maintaining our traditionally significant investment in R&D.

Certainly, R&D investment is another pillar of our company. In 2017 Amadeus invested more than 15% of our revenues in R&D. Over the last 10 years Amadeus has dedicated more than €4.8 billion in R&D. This figure is a measure of our commitment to delivering solutions that improve the operational efficiency of our customers.

Amadeus has become a very relevant stakeholder in the travel industry. Every day, our Passenger Service Systems handle more than 4 million passengers, and we process reservations for 20 travelers every second. At the closing of 2017, Amadeus' market capitalization exceeded €26 billion, making it one of the largest companies traded on the Spanish IBEX stock exchange. Our workforce exceeds 16,000 people, and we provide services on every continent.

This important position in the travel industry comes linked to new and broader responsibilities. In my current role as Chairman of the Board, I am particularly focused on making sure Amadeus excels in governance practices. Stakeholders' expectations for transparent reporting and integrity continue to increase. These demands are positive for the sustainable growth and health of the travel industry, and we are fully committed to continuously improving our performance.

In 2017 our positioning in sustainability indices was higher than ever. We were recognized at the World Economic Forum in Davos as the 16th most sustainable company in the world by Corporate Knights, and for six consecutive years we have remained a member of the Dow Jones Sustainability Index (DJSI). Furthermore, in 2017 we were recognized as the leaders of our sector in DJSI, which comprises 86 companies.

Amadeus remains a company building for the future. We are a first-class company in every way, which is why it is my sincere belief that despite the many challenges we face, the outlook for Amadeus is positive.

This report provides an overview of the company activities in 2017 and of our organization. I hope you find it informative and of interest.

José Antonio Tazón

Chairman of the Board, Amadeus



Message from the President & CEO

Luis Maroto

In the year of our 30th anniversary, as we celebrated our history, Amadeus continued to take important steps forward, expanding our customer base and broadening our global footprint.

One of the key events took place in May, when we were proud to migrate Southwest Airlines' domestic flights to Altéa, making the Dallas-based carrier the largest airline on the system, and making our platform truly global. We also welcomed Malaysia Airlines, Kuwait Airways and Flybe to the platform and were excited to announce that Air Canada will also become a customer for the full Altéa suite.

We continued to make important progress in the distribution area also. Distribution continues to undergo a period of change with many providers revisiting their strategy and their mix of direct and indirect sales. Amadeus has the flexibility, the technology and the willingness to support every approach. So while we were pleased to sign or renew content agreements with 55 airlines in 2017, we also helped many airlines explore other strategies as well as cater to their requirements for improved merchandising capabilities.

Strength across our different businesses enabled the company to deliver growing revenues and profitability."

Our new businesses also continued to make significant progress. Our hospitality business added Premier Inn as a customer, joining our launch partner InterContinental Hotels Group. There were important steps forward in rail, payments and airports also, with the latter illustrating the practical application of our innovation with the deployment of the world's first movable check-in kiosks at Hong Kong International Airport.

Strength across our different businesses enabled the company to deliver growing revenues and profitability, which in turn ensures we can continue to invest in the products and services of the future.

In October 2017 I attended the London media launch of Amadeus' new innovation strategy. At this event our technology and business leaders shared our general approach to innovation as well as those themes we view as important in the years ahead.

The new innovation strategy recognized that our future success in the travel technology requires Amadeus to build a culture of collaboration with our customers, developers, start-ups and partners.

During a year in which we celebrated our 30th birthday, the London innovation launch was an important moment. We know that no business can afford to stand still, particularly in the technology industry. Our historic

success has been founded on our willingness to embrace new ideas and move in new directions, and we will continue to invest in the people, technology and partnerships that ensure we deliver the products and services necessary to deliver better journeys for travelers.

Our success brings with it a responsibility to our industry and to the communities in which we work. It is a responsibility our people take seriously and I am proud of the work they do to put their expertise and time, as well as Amadeus' technology and resources, to work for the good of society. This report includes many such examples, including our continued work with UNICEF and partner airlines to raise funds for children through our donation engine.

Our 30th birthday gave all our colleagues the opportunity to reflect on the work their predecessors did to build a vibrant, resilient and successful business. As the current custodians of Amadeus we feel a deep sense of responsibility to build on their vision and their legacy and to drive future growth and success by serving our customers and our industry.

Our people do so with a resourcefulness and commitment that I find humbling, and I would like to take this opportunity to thank them publicly.

I also thank our investors and customers for their support in 2017. I look forward to our continued cooperation in 2018, as together we continue to shape the future of travel.

Luis Maroto

President & CEO, Amadeus

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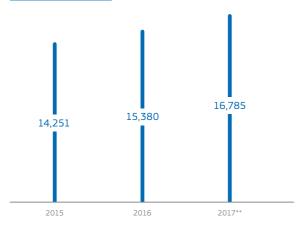
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Following global reporting trends and best practices, we have included these icons throughout this Global Report:

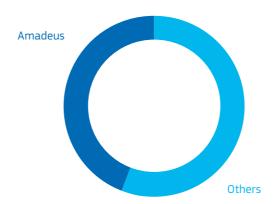
igotimes further information provided in another section.

Operational performance

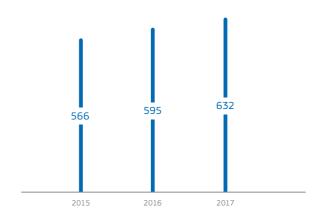
Total workforce*



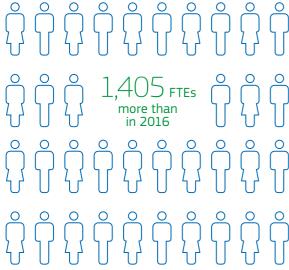
Distribution Competitive position*



Total bookings (figures in millions)



G4-9 G4-10

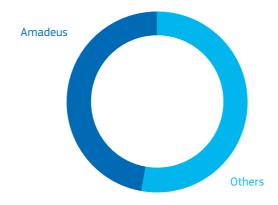


*Scope: All fully owned Amadeus companies. Figures in Full- time

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.

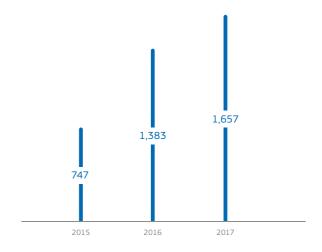
equivalents (FTEs) as of December 31. FTE is the headcount

Airline IT Competitive position*



* Competitive position: In Distribution, it is measured as our travel agency air bookings in relation to the travel agency air booking industry, defined as the total volume of travel agency air bookings processed by the global or regional Central Reservation Systems. It excludes air bookings made directly through in-house airline systems or single country operators, the latter primarily in China, Japan and Russia. In Airline IT, the competitive position of PSSs (passenger service systems) is calculated over total passengers excluding China.

Passengers boarded (figures in millions)*

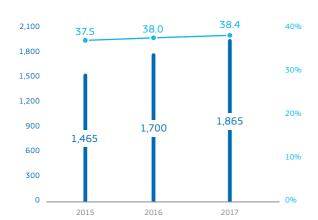


^{*} Passengers boarded, i.e. actual passengers boarded onto flights operated by airlines using at least the Amadeus Altéa Reservation and Inventory modules or Navitaire New Skies.

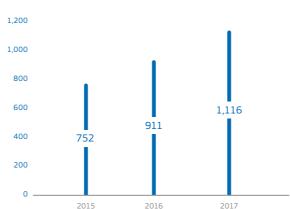
^{** 2017} scope follows a more accurate calculation, which includes additional categories like 'inactive' employees, who would be those on a long-term leave. The 2017 figure calculated with the methodology followed in previous years would be 16,262 FTEs.

Financial performance

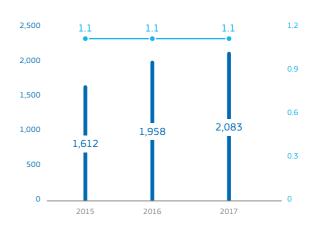
EBITDA



<u>Adjusted profit</u> (figures in € million)



Net debt evolution*

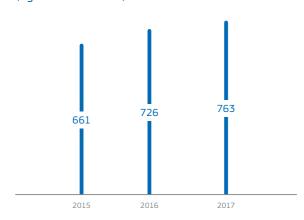


G4-DMA G4-7 G4-9

EBITDA margin %
EBITDA (€ million)

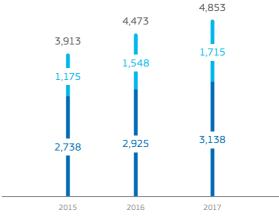
Covenant net debt/LTM covenant EBITDA* (x time)
Covenant net financial debt (€ million)

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



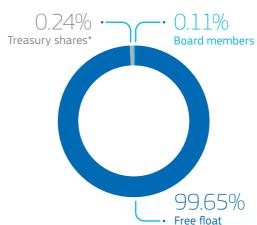
^{*} Part of our R&D costs is linked to activities that are subject to capitalization, thus impacting the level of operating expenses that are capitalized on the balance sheet.

$\underline{Revenue\ breakdown}\ (\text{figures in}\ \in\ \text{million})$



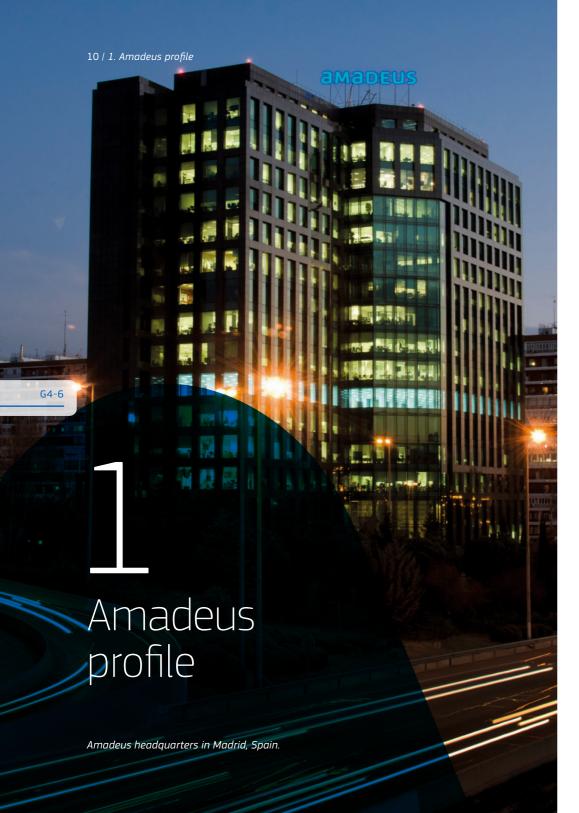
IT Solutions Distribution

Amadeus share structure



* Voting rights suspended for as long as the shares are held by the company. Includes treasury shares acquired to cover the exchange ratio related to the merger of Amadeus IT Holding, S.A. and Amadeus IT Group, S.A. not yet delivered.

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



1.1 Who we are

We all share the need to explore our world – to see new places, meet new people or be near what is important to us. Travel builds economies, broadens cultures and creates connections between societies. Travel powers progress. Amadeus powers travel.

We provide the solutions that keep the world of travel moving, developed in partnership with the industry for 30 years and counting. Every day, we deliver intelligent solutions to the world's travel agents, search engines, tour operators, airlines, airports, hotels, car rental companies, railways and more – helping them deliver more rewarding journeys to travelers. We combine a deep understanding of how people plan, book and enjoy their travels with the ability to design systems that meet our customers' most complex needs.

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. Amadeus shareholding structure has more than 99% of our equity in free float as of December 31, 2017.

Amadeus is a truly global company of more than 16,000 professionals serving 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.

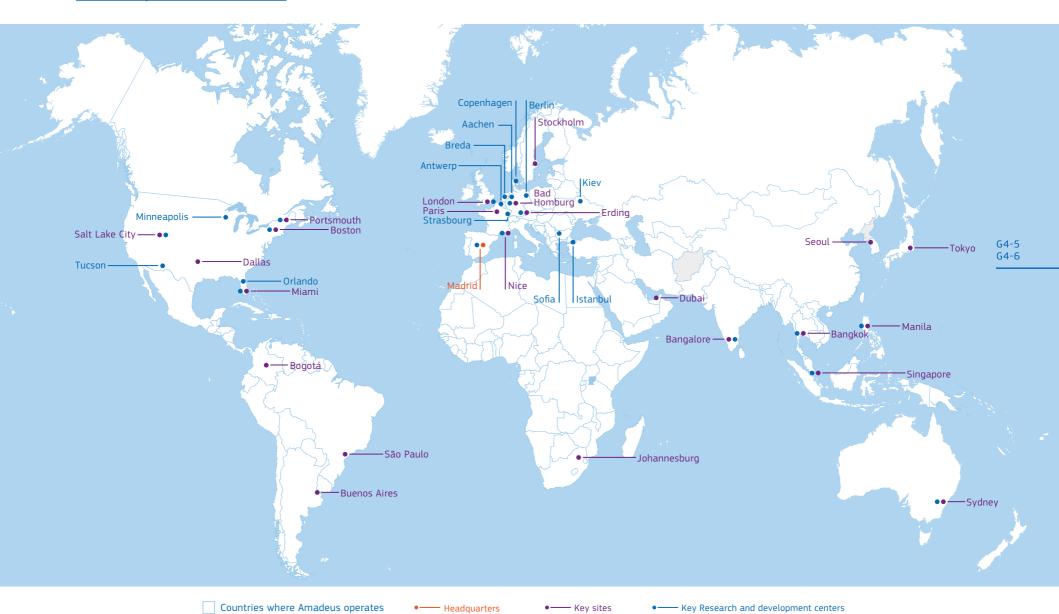
As shown in the map, over the years Amadeus has built a global commercial and operational network that has become one of the key components of our value proposition. Our corporate headquarters are in Madrid, Spain. Our main research and product development is located in Nice, France, while the core components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

1.2 What we do

Amadeus is helping travel, tourism and hospitality businesses all over the world harness the power of digital transformation to delight travelers and drive long-term business value. We work in partnership with our customers to deliver everything from mission-critical systems to emerging innovations.

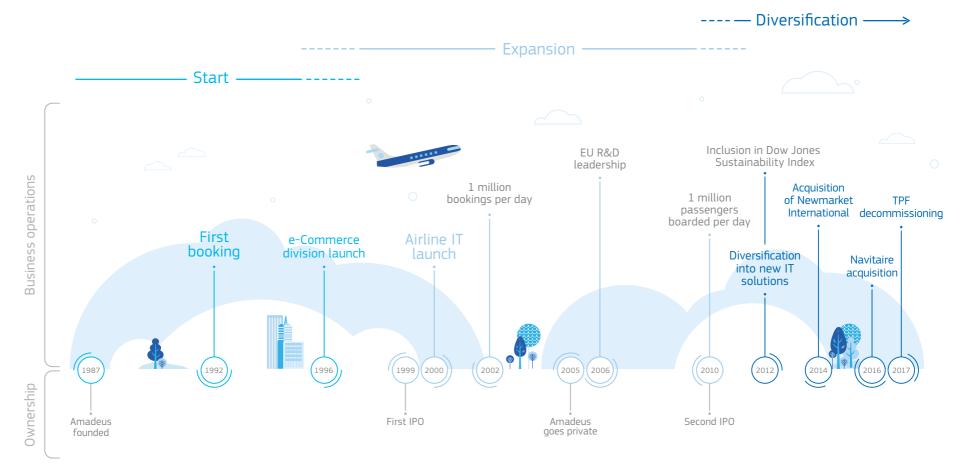
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Amadeus' presence in the world



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Amadeus' history and key milestones



For 30 years, Amadeus has powered better journeys for billions of people worldwide – by connecting the travel industry; by developing new technologies and solutions; and by finding new ways to make travel more rewarding for people and businesses all over the globe.

In 1987 Amadeus' founders – Air France, Iberia, Lufthansa and SAS – announced their shared vision of an independent and neutral Global Distribution System. With a strong culture of listening, sharing and coownership, we worked intensively with airline partners to build what became the preferred system for travel agency bookings worldwide. From our first Passenger Name Record (PNR) in 1992 to handling over 632 million bookings and boarding 1,657 million passengers in 2017, we have grown in market impact, influence and geographical reach.

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We sit at the crossroads of travel and technology. These two industries have grown exponentially over the last three decades and the opportunities for innovation have been amazing. In 1996, anticipating how the internet would transform travel, we launched our e-Commerce division. Shortly afterwards we launched our Airline IT business, partnering with British Airways and Qantas to create the breakthrough airline Passenger Service System¹ currently known as Amadeus Altéa. In 2016 we purchased US-based Navitaire. This has allowed us to broaden the scope of our services, particularly for lowcost carriers.

From our origins supporting airline distribution and then IT, we gradually expanded our capabilities and offerings to serve customers across the entire travel industry: airports, hotels, car rental companies, railways and more.

Remarkably, in 2014 Amadeus accelerated the move into the hotel IT sector with the acquisition of Newmarket International, a company that provides technologies that are a cornerstone in the global hospitality industry.

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. In fact, investment in research and development has been integral to our growth.

Celebrating 30 years of global growth

As we look back on our 30 years of innovation, collaboration and better journeys, we retain our unique vision and determination. Above all, we are committed to working more closely than ever with our customers, existing and new, to shape the future of travel together with them. Our first 30 years were just the beginning.

Throughout 2017 Amadeus people have been celebrating our 30th anniversary with customers, partners, friends and family, from Bangkok to Buenos Aires... from Sydney to Sao Paolo ... and from Madrid to Moscow.











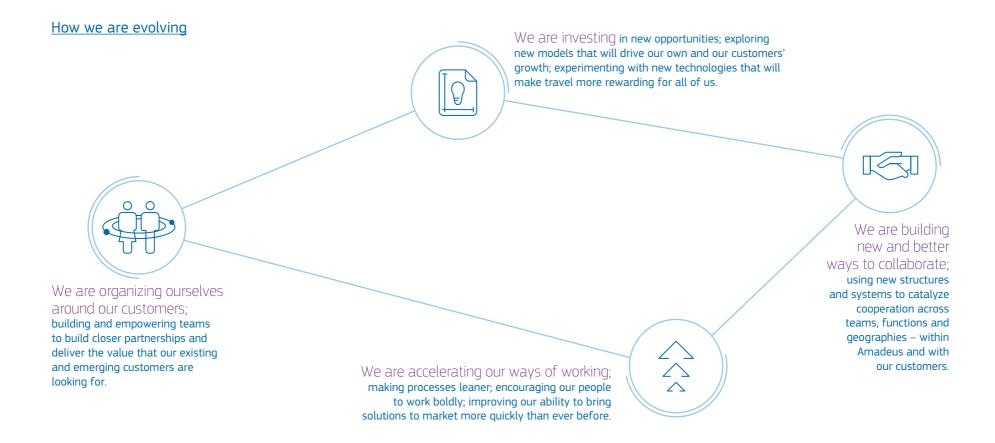
 $^{^{\}mathrm{1}}$ Or PSS – a series of mission-critical IT systems used by airlines. The PSS usually comprises a reservation system, an inventory system and a departure control system.

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1.3 Where we are going next

At Amadeus, we are proud of the growth and success we have achieved over the last three decades. One of the main reasons for our success is our ability to adapt and evolve. Today, the world continues to change. New challenges and new opportunities emerge at an accelerating pace. And Amadeus is not only adapting to change but also preparing to drive it for years to come.



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Recognition for Amadeus around the world

Amadeus is committed to investing in innovation, collaboration, developing talent and promoting sustainable business practices.

In 2017, respected organizations all over the globe recognized our efforts



- DJSI² Sustainability Leader in our sector (86 companies)
- Gold Class Sustainability Award RobecoSAM
- 16th Most Sustainable Corporation in the world (100 Most sustainable companies, Corporate Knights)
- FTSE4Good³

- CDP^4
- _ Travel Technology Company of the Year -TTG Travel Awards⁵
- _ Best Innovation Award Agifors

- To relocal awards regarding human resources practices, see "People and Culture awards in 2017," p. 90.
- ² DJSI: Dow Jones Sustainability Index. Launched in 1999, DJSI are a family of indices evaluating the sustainability performance of the largest 2,500 companies listed on the Dow Jones Total Stock Market Index.
- ³ The FTSE4Good Index Series is designed to measure the performance of companies demonstrating strong Environmental, Social and Governance (ESG) practices. Transparent management and clearly defined ESG criteria make FTSE4Good indices suitable tools to be used by a wide variety of market participants when creating or assessing sustainable investment products
- ⁴ Formerly known as the Carbon Disclosure Project, an international, not-for-profit organization providing a global system for companies and cities to measure, disclose, manage and share environmental information
- 5 TTG: Travel Trade Gazette, known as TTG, is a weekly newspaper for the travel industry. TTG was launched in 1953 by Leslie Stone and Ted Kirkham and is the world's oldest travel trade newspaper



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 and 2016 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)
- _Regulations of the Board of Directors (updated in 2015)
- 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



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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 to the General Shareholders' Meeting, which is now the competent body responsible for discussing and agreeing on the purchase or sale of, 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 implementing company policies), supervision activities (controlling management) and communication functions (serving as a link to shareholders).

The Spanish Capital Companies Act also confers further powers to 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)

Position on the committees

- _Corporate governance of the parent company and its group
- _Tax strategy

Composition of the Board of Directors

				Position on the committees		
Name or corporate name of Director	Position on the Board	Date of first appointment	Nature	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	CEO	06/26/2014	Executive			
Dr. Roland Busch	Director	07/01/2013	Other External		Member	
Dame Clara Furse	Director	04/29/2010	Independent	Member	Member	
Mr. Pierre-Henri Gourgeon	Director	12/29/2005	Independent ¹	Member		
Mr. Francesco Loredan	Director	02/21/2005	Other External		Member	
Mrs. Pilar García	Director	12/15/2017	Independent			
Mr. Marc Verspyck	Director	06/26/2014	Other External	Member		
Mr. David Webster	Director	05/06/2010	Independent	Chairman	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				

¹ Mr. Gourgeon was reclassified from "Independent" to "Other External" in the meeting of the Board of Directors of February 2018, once a continuous period of more than 12 years acting as Director of the company had elapsed.

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Mr. José Antonio Tazón García *Chairman*

Mr. Tazón is an Engineering graduate and has 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 the foundations, created the blueprint, designed the functionalities and established the strategy of Amadeus. His 18-year tenure as Chief Executive Officer of Amadeus saw consistent growth, global expansion and the start of Amadeus' successful diversification strategy.

Mr. Tazón served on the Board of Directors of Expedia Inc., the online travel agency, from 2009 to 2016, and was appointed Chairman of Ufinet Telecom SAU (telecommunications operator) in 2014, and independent Director of HBG Ltd. (tourism sector) in 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.

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Mr. Guillermo de la Dehesa Romero *Vice Chairman*

Mr. de la Dehesa is a Law graduate from the Complutense University of Madrid. In addition to his Law degree, 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 at the Spanish Ministry of Foreign Trade, before moving to the Spanish Ministry of Industry and Energy to assume the role of Director General at the Ministry of Trade and of Secretary General at 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 is both independent Director and Vice Chairman of the Board and a member of the Executive Committee of Santander Group since 2002. He has been an independent director of Santa Lucía Vida y Pensiones (an international insurance company) since 2002, after the integration of Aviva Vida y Pensiones into Santa Lucía Group. 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 Advisor 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.

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Mr. Luis Maroto Camino 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 the Complutense University of Madrid, an MBA from the 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 he was appointed *Consejero Delegado* on October 16, 2014.



Dr. Roland Busch

Director

Dr. Busch graduated in Business Administration at the University of Münster and achieved his doctorate in Political Science in 1992.

He joined Deutsche Lufthansa AG in April 1991. In September 1995 Dr. Busch was appointed Executive Assistant to the CEO of Lufthansa Group. In January 1998 he was appointed Managing Director of Lido GmbH Lufthansa Aeronautical Services, a company spin-off from the Lufthansa Group. From 2001 onward Dr. Busch was in charge of Corporate Audit at Lufthansa, and in March 2004 he took over the Corporate Finance Department, where he was responsible for corporate finance, treasury management, financial planning, payment transactions and worldwide fuel management. In June 2006 Roland Busch joined the Lufthansa Cargo AG Executive Board and was responsible for the finance and human resources functions.

Since June 2009 Dr. Roland Busch has been a member of the Lufthansa German Airlines Board, the core

business unit within the parent company Deutsche Lufthansa AG. His area of responsibility on the Board is Finance and Information Management, which includes the areas of controlling, procurement, business development and information management.

From 1 July 2013 to 31 December 2017, Dr. Busch was the Chief Financial Officer of SWISS International Air Lines Ltd and member of the SWISS Management Board, being responsible for financial accounting, controlling, taxation, procurement, treasury management, information technology and cargo.

Since 1 January 2018, he is supporting the Lufthansa Group CFO as Chief Representative. He is a member of the Supervisory Board of Lufthansa Cargo AG, member of the Supervisory Board of Lufthansa Leasing GmbH, member of the Board of Lufthansa Pension Trust e.V., member of the Investment Board of Lufthansa Malta Pension Holding Ltd. and member of the Board of Swiss Aviation Software Ltd.

He joined Amadeus' Board of Directors on July 1, 2013.

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Dame Clara Furse
Director

Dame Clara Furse 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 graduate in Law 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 the 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. Pierre-Henri Gourgeon

Mr. Gourgeon holds a degree in Engineering from the École Polytechnique of Paris and the École Nationale Supérieure de l'Aéronautique, as well as a Master of Science degree 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 the Board of Directors of Amadeus on December 29, 2005.

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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 is Executive Vice President of the Retail Business Unit at Ingenico Group, a global leader in seamless payments. He joined the Group on July 1, 2017 as Executive Vice President, Strategy and Performance.

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 has 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' 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 students entrepreneurship, work readiness and financial literacy.

He joined Amadeus' Board of Directors on June 15, 2017.



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-BAI 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), Director of Oneiros Investments SA (private equity), Director of Spring SA (private equity), Director of Campus SRL (food ingredients manufacturer), Director of Ancorotti, SRL (Cosmetics) and Director of MAP SRL (spas and wellness facilities operator in Italy).

He joined Amadeus' Board of Directors on February 21, 2005.



Mr. Marc Verspyck

Mr. Verspyck graduated from the École Supérieure de Commerce of Paris and holds a Master's degree (DESS) from Paris Dauphine University.

He started his career in Air Inter as Planning Manager and later as Ground Handling Manager.

He headed the Corporate Finance Department of Air France until 2005, in charge of long-term financing, closing numerous deals (secured financing, syndicated loans, securitization and convertible bonds, among others). He was in charge of subsidiaries and investments between 2005 and 2007, controlling their financial performance, and sat on various boards.

Mr. Verspyck was a member of the Financial Committee of the International Air Transport Association (IATA) for three years.

He was appointed Senior Vice President Finance of Air France in September 2007. He became Chief Financial Officer of Air France on July 1, 2013, in charge of accounting, cost control, finance, real estate purchasing and tax. He is a Board member of Servair, Hop and Chairman of the Board of Air France Finance.

He joined the Board of Directors of Amadeus on June 26, 2014.

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Mr. David Webster

Mr. Webster is a graduate in Law 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 at 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. and a member of the Appeals Committee of the Panel on Takeovers and Mergers in London.

He joined the Board of Directors of Amadeus on May 6, 2010.

Mr. Nicolas Huss was elected for a period of three years by decision of the General Assembly of Shareholders on June 15, 2017. The decision was submitted by the Board of Directors, upon proposal by the Nominations and Remuneration Committee.

Mrs. Pilar García was elected by co-optation method, replacing Mr. Stuart McAlpine, who resigned effective December 14, 2017. Her appointment will have to be validated by the next General Shareholders' Meeting. 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 15, 2017:

- _Mr. José Antonio Tazón
- _Mr. Luis Maroto
- _Mr. Guillermo de la Dehesa

- Dame Clara Furse
- _Mr. Pierre-Henri Gourgeon
- Mr. Francesco Loredan
- Mr. Stuart McAlpine (resigned on December 14, 2017)
- Mr. David Webster
- Mr. Marc Verspyck
- Mr. Roland Busch

Their re-election or replacement (including the Director elected by co-optation method), following the Director selection policy approved by the Board of Directors on April 21, 2016, upon proposal/information by the Nominations and Remuneration Committee, will also have to be submitted for decision to the General Shareholders' Meeting to take place in June 2018.

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 2017, 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.

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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.

For 2017 and 2018, 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).

This remuneration policy, included in the Annual Report 2014 on Remuneration of Directors of Listed Companies, was approved by the Ordinary General Shareholders' Meeting of June 25, 2015 with a favorable vote of 91.61%. By virtue of point number two of the Transitional Provision of Act 31/2014 of

December 3, it is understood that the remuneration policy included in the annual report was also approved for the next three fiscal years, and therefore it is in place until the year 2018 inclusive. The remuneration policy for the following three-year period (2019–2021) will be submitted to the next Ordinary General Shareholders' Meeting, to take place in June 2018.

The corresponding Annual Report 2016 on Remuneration of Directors of Listed Companies (with no changes with respect to the Executive Director's remuneration policy) was endorsed by the Ordinary General Shareholders' Meeting of June 15, 2017 with a favorable vote of 81.74% (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 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,² 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 2017 the Audit Committee prepared the mandatory annual report on its activities for the fiscal year 2016, covering, among others, the following areas:

- Competency and duties of the Audit Committee
- Composition of the Audit Committee
- Activities
- _Items discussed by the Audit Committee during fiscal year 2016 (External Audit, Internal Audit, Risk Management and Other Items)

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² Ernst & Young have been selected to replace Deloitte as Amadeus' external auditors for 2019 onwards, subject to the approval of the General Shareholders' Meeting.

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- Related transactions
- _Incidents and proposals for improving the company's rules of governance

The Audit Committee currently comprises five external Board members.

A new set of rules and regulations to be adopted by the Board of Directors in 2018 is under discussion, following the Technical Guide 3/2017 of the *Comisión Nacional del Mercado de Valores* (CNMV) on Audit Committee at Public Interest Entities.

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 remuneration policy of the Directors and submits to the Board any other reports on compensation established 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 2017 the Nominations and Remuneration Committee prepared the mandatory annual report on its operations for fiscal year 2016, covering the following areas:

- _Competencies and functions of the Nominations and Remuneration Committee
- _Composition of the Nominations and Remuneration Committee
- Operation
- Matters dealt with in fiscal year 2016
- _Nature of the Directors (Independent, Other External and Executive Director)
- _Composition of the Board of Directors
- _List of companies in which the Board members also serve as directors and/or executive managers

In addition, the Nominations and Remuneration Committee produced the remuneration policy of the Board of Directors, together with the Annual Report 2016 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. Nicolas Huss and Mrs. Pilar García have been appointed Board members in 2017 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 2018, at which time the ratification, 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.

In June 2017 Decius Valmorbida was appointed Senior Vice President, Travel Channels, taking over from Laurens Leurink. Mr. Valmorbida, previously Vice President Europe, Middle East & Africa for Travel Channels, joined Amadeus 13 years ago as an Operational Director in Brazil. He subsequently became Vice President for Latin America in 2009. In 2013 he Amadeus Global Report 2017 2. Corporate governance / 25

moved to Madrid, serving in the global role of Vice President Distribution Marketing, in which position he managed both the commercial and marketing strategies for the business unit. Mr. Valmorbida became a member of the Amadeus' Executive Committee in July 2017.



Travel industry overview and global trends

3.1 Travel volumes

The overall contribution of travel and tourism to the world economy exceeded USD 7.6 trillion in 2016, accounting for more than 10% of global GDP. To put that into context, if the industry were a state, only the US and China would have larger economies. This level of economic activity supports 291 million jobs – almost 1 in 10 jobs globally.

The travel industry continues to grow faster than global GDP. Based on constant 2016 prices and exchange rates, in the next decade the value of the overall travel industry is expected to grow at an annual compound rate of 3.9%, reaching USD 11.5 trillion, representing more than 11% of global GDP and supporting more than 380 million jobs by 2027.³ Remarkably, in a context of increasing concern over unemployment and job stability, the travel industry is likely to drive significant job creation.

In direct expenditure terms, leisure and domestic travel lead, representing 76.8% and 71.8% respectively in 2016.4 Nevertheless, with around 1.3 billion international travelers contributing over USD 1.4 trillion to global exports, travel and tourism clearly play a vital role in international trade, and this is likely to gain further importance at least over the next decade. Spending by international travelers is projected to rise at a slightly higher rate over the next decade than their domestic counterparts (4.3% versus 3.9% annually).5

The number of travelers is expected to nearly double over the next 20 years, from 4 to 7.8 billion, representing a compound annual growth rate of 3.6%,⁶ as such outpacing the projected global GDP growth rate over that period of 3.2%.⁷

¹ Source: World Travel and Tourism Council (WTTC). Travel & Tourism Economic Impact 2017 — March 2017

² Source: Own calculations based on World Bank's World Development Indicators and on WTTC's Travel & Tourism Economic Impact 2016.

³ Source: WTTC ibio

⁴ Source: WTTC. ibid.

⁵ Source: WITTC ibio

⁶ Source: International Air Transport Association (IATA) (2017). See http://www.iata.org/ pressroom/pr/Paqes/2017-10-24-01.aspx.

⁷ Source: Organization for Economic Cooperation and Development (OECD) (2016).

3.2 Political and economic trends

Growth in Asia and Africa

Growth in the travel industry is particularly strong in Asia-Pacific and the Middle East and Africa, with expected annual average growth rates in these regions in the period up to 2036 of 4.6%, 5% and 5.9%, respectively.8

However, due to the absolute size of the industry in Asia-Pacific, this region will be the major catalyst of growth. This is driven by, among other factors, China's massive travel investments, both domestic (e.g. in new airports and high-speed trains in China) and foreign (e.g. airports in Europe), and via mergers and acquisitions, as well as the huge growth of domestic and outbound travel in India. Within air travel, Asia-Pacific will contribute to more than half the new air travel passengers expected to be added between 2017 and 2036.

Geopolitics and security

Geopolitical and security events in certain parts of the world are affecting travel. Threats of terrorism and political tensions are leading to restrictions on travel, increased security and border control, and more administrative burdens for the traveler, all impacting travel negatively.

However, overall growth in travel remains resilient. Geopolitical and security issues tend to affect specific countries or regions and generally last only for a short period of time. At the same time, traveling in the broader sense has become much easier thanks to improved travel-related infrastructure, connectivity and more affordable prices, among other factors.

Cybersecurity

Cybersecurity is increasingly important and businesses are to spend close to USD 90 billion in 2017 on cybersecurity. ¹⁰ Travel is no exception, and Amadeus is therefore engaging actively at industry level through its membership in A-ISAC and collaboration with other international organizations to improve the industry's overall cybersecurity. At the same time, Amadeus is investing significant amounts to protect our customers' operational stability, data and related assets.

3.3 Social trends

The connected traveler

The increasing use of smartphones, fueled by the expansion of 3G and 4G mobile internet, has turned trip organization into a live activity – with search and bookings able to be made and changed on the move. As importantly, the use of the smartphone implies uninterrupted connectivity. This offers significant opportunities to provide timely information in case of disruption, for example a gate change at an airport.

Personalization

Travel industry is investing heavily to offer highly personalized and contextual offers for the traveler's next flight, hotel room or car rental.

Recent innovations in front-end technologies enable machine learning to fine-tune search results based on the traveler's explicit and implicit preferences. These range from algorithms that are constantly refining how options are ranked on the traveler's favorite travel website, to apps on their cell phone that consider past trips, expressed sentiment (thumbs-up, likes/dislikes, reviews) and volunteered information like frequent traveler numbers

When developing personalized offers, providers have to take into account the conflict between stricter privacy laws and data-backed personalization (see below under "Legal trends").

⁸ IATA, ibid.

⁹ IATA, ibid.

Sharing economy

The evolution of digitalization and the online ecosystem has led to a substantial increase in the sharing economy; it is expected to reach USD 40.2 billion by 2022, up from USD 18.6 billion in 2017.¹¹

Within travel, the most mature sharing economy segment is accommodation for leisure travelers, with providers in the industry attracting significant investment and achieving massive valuations. At the same time, online travel agencies and hotel groups are adding home rental offerings to their services. Moreover, the sharing economy model is maturing, and has expanded to cover other modes of travel, for example car sharing, as well as increasingly targeting the business travel segment.

3.4 Regulatory framework trends

Data protection and privacy

Data protection and privacy continue to be high on the agenda of regulators everywhere, and regulatory initiatives have been taken, or are currently in progress, to safeguard the interests of governments, industries and citizens in many jurisdictions. The requirement for airlines to provide advance passenger information has been in place for quite some time in many countries to enhance border control, and the EU PNR Directive will come into force during 2018. The United Nations Security Council has mandated the International Civil Aviation Organization (ICAO), a United Nations body, to strengthen aviation security. Measures taken by ICAO include assisting its member states to adopt comprehensive Advance Passenger Information systems.

The General Data Protection Regulation in the European Union, enforceable as of May 2018, will protect all EU citizens' data privacy. At the same time, the EU-US and Swiss-US Privacy Shield Frameworks provide companies on both sides of the Atlantic with a mechanism to comply with data protection requirements when transferring personal data from the EU and Switzerland to the US. These regulatory requirements will impact how companies process and store personal data, whether for customers, employees or other groups. As a service provider to the travel industry, Amadeus is working actively, also at industry level, to find effective solutions and standards that ensure that regulatory requirements are met efficiently.

Fair competition, transparency and neutrality for consumers

Legislators in many jurisdictions have in 2017 taken enforcement action against industry players that are seen to abuse their dominant position to the detriment of the consumer or the market in which they operate, or otherwise violate the principles of fair competition. The most prominent case is the Google judgment by the European Commission. 12 Reacting to the new business practices by some airlines in the EU, the EU competition authorities have also conducted a light sector inquiry among the largest airlines, travel agents and distribution providers in order to understand and assess the current state of competition in the marketing and sales of air travel in the EU. In the US, the Trump administration has stopped regulatory processes that were initiated under Obama to strengthen transparency and consumer rights in a highly consolidated airline market. Generally, authorities seem to struggle with effectively enforcing legislation passed years ago in a marketplace where business practices have evolved and new players have entered. This lack of clarity provides an uneven playing field for competitors in the same market, in which some are regulated and others are not, or where some comply and others may seemingly decide not to,

¹¹ Bizcommunity (2017). See http://www.bizcommunity.com/ Article/196/389/165295.html.

¹² The European Commission fined Google €2.42 billion for breaching EU antitrust rules. Google abused its market dominance as a search engine by giving an illegal advantage to another Google product, its comparison shopping service. European Commission press release. Brussels, June 27, 2017.

for example with the EU CRS Code of Conduct (for Computerized Reservation Systems).¹³

Against this backdrop, Amadeus welcomes the initiative by the European Commission to initiate a major review of the regulatory framework for the EU aviation market, which is scheduled to be concluded in 2019. Among the most important initiatives is the review of the EU CRS Code of Conduct, which historically was a highly effective instrument in making the EU aviation market the most competitive and consumer-friendly in the world. Given the obvious shortcomings of the regulation, the aim of the review is to update and future-proof it to safeguard fair competition between air carriers and to ensure that accurate, neutral and transparent information is given to consumers and travel buyers to allow them to effectively compare and choose travel options.

Amadeus is working closely with both the European Commission and other industry and government stakeholders to ensure that the new regulation is well adapted to existing and future market conditions. This means that the revised code must not only improve transparency and neutrality requirements on those currently regulated by the existing code, but it must also establish a wider level playing field for all market players, e.g. making sure that flight metasearch companies like Google are regulated to provide neutral and transparent information to consumers, which is not the case today.

The next few years will see the establishment of new or revised regulations that will be in place for a long time to come, and they must find a better compromise between naturally conflicting interests than what is in place today. Amadeus will continue to engage broadly with all stakeholder groups, contributing to a constructive and balanced dialogue through which new regulations will be effective and fair as possible.

Sustainability @

Governments and international institutions around the world are increasingly passing new regulation in order to meet the requirements for long-term sustainability. The Paris Agreement¹⁴ on climate change is a noticeable example, particularly for the large consensus reached. As of February 2018, 195 countries have signed the Agreement.

We have also witnessed a trend of increasing and improving sustainability reporting from corporations. There are at least three elements that foster this rise in sustainability reporting: first, increasing scrutiny and more stringent legislation – for example Directive 2012/27/EU on energy efficiency in Europe requires companies above a certain threshold to perform energy audits and report on them. Second, the general public is becoming also more demanding and ready to factor in a sustainability component in their purchasing decisions. Finally, corporations realize that long-term growth requires engagement on sustainability matters in a broad sense, and are increasingly including sustainability in their strategic plans.

From a legal perspective we expect in the future a more demanding sustainability-related regulation, both in terms of scope and enforcement. At the moment, there are fundamental differences between regions in relation to the speed of these changes, but globalization will probably force convergence in the mid-term. Indeed, the 17 Sustainable Development Goals (SDGs) set by the United Nations General Assembly in September 2015 have become a framework of reference for stakeholders within and beyond the travel industry.

The travel and tourism sector is already challenged by issues like overcrowded destinations, income inequalities or human-induced climate variability, and we expect a more specific and strict legal framework on these and other topics. Being aware of these challenges and the SDG objectives, the United Nations World Tourism Organization celebrated in 2017 the International Year of Sustainable Tourism for Development, an event in which Amadeus actively participated and sponsored.



¹³ The CRS code of conduct for computerized reservation systems sets out a harmonized code of conduct for the use of computerized reservation systems to ensure fair competition and the protection of consumers' rights. It applies to air transport (and to rail transport when this is combined with a flight).

See "Amadeus industry affairs," p. 92.

See "Environmental sustainability," p. 98.

¹⁴ The Paris Agreement was created within the United Nations Framework Convention on Climate Change (UNFCCC). The Agreement aims to respond to the global climate change threat by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels. As of February 2018, 195 UNFCCC members have signed the agreement, and 175 have become party to it.

3.5 Technology trends®

Cloud computing

The use of public cloud computing is growing strongly, with the global cloud market expected to increase from USD 220 billion in 2016 up to USD 411 billion in 2020 (17% CAGR). Cloud computing has a number of features that makes it particularly relevant to the travel industry. These include better use of infrastructure resources, allowing for economy of scale, flexibility and agility. This in turn permits easy response to peak traffic and getting new services and functionalities quickly to customers, as well as being able to have multiple data centers, ensuring data recovery capability and response time improvement by locating services closer to customers.

Amadeus has responded to this need with Amadeus Cloud Services (ACS), which can be deployed on multiple cloud environments, either on public cloud providers and/or on our private infrastructure. One of the solutions deployed on ACS is our next-generation Central Reservations System for the Hospitality industry. ACS is also available for airlines through Amadeus Airline Cloud Availability BoX.

Application programming interfaces (APIs)

APIs enable developers to easily build applications by connecting to an enterprise's data and functionalities. The increased use of APIs is due in part to companies gradually moving away from proprietary technology to open platforms. As agile methodologies spread and developers gain autonomy to work at their own pace, by improving how developers get connection to their services an enterprise has the opportunity to jointly find innovation and co-creation opportunities with third parties, while at the same time strengthening the ecosystem that the enterprise is facilitating.

Within the travel industry, developers are a key part of the ecosystem. For them, travel data and services may be the seed of a new disruptive travel offering, and they need to access these quickly and easily. Within the airline industry in particular, the approach is being promoted by IATA with the New Distribution Capability (NDC) program.¹⁶

The Amadeus for Developers Program has been conceived to improve innovators' access to our data and functionality, helping them build new applications with open APIs or integrate travel content in their applications. It offers a friendly environment to explore and start building with a new array of APIs. Thanks to the program and simple legal and go-to-market processes, developers can launch apps to the market quicker.

Messaging platforms and chatbots

At the end of 2017, 1.82 billion people worldwide regularly used mobile messaging apps. ¹⁷ Chatting via messaging platform has now overtaken other means of communication via the internet, surpassing social networks and SMS/email, and messaging apps are now the most widely and frequently used apps on a smartphone.

Within the messaging platform universe and in the case of interaction between companies and customers, there is a clear trend from chatting with people to chatting with robots (or "chatbots"), with tech giants investing heavily in cognitive services and many start-ups receiving investments from venture capital firms.

Within travel, the use of chatbots is still at an early stage, with travel players making existing services available through chat channels. However, the players in the industry have realized that there is significant potential, both in terms of service cost reduction and more revenues as a new sales channel, and they are starting to invest in intelligent conversational platforms that will be able to meet all the customer' needs without human intervention.

See "Technology and innovation," p. 58.

¹⁵ See https://www.forbes.com/sites/louiscolumbus/2017/10/18/ cloud-computing-market-projected-to-reach-411b-by-2020/#33d32f9178f2.

¹⁶ Travel industry-supported program launched by IATA for the development and market adoption of a new, XML-based data transmission standard (NDC Standard). The NDC Standard enhances the capability of communications between airlines and travel agents.

Digital identity and biometrics

Facilitating user identification while fighting against fraud and identity theft remains a challenge common to many industries, from payments to health care to public services, among others. Initiatives aimed at providing digital identity tightly linked to the user's physical identity are progressively emerging, while the usage of biometric technology is rapidly expanding and attracting significant interest from the public and private sectors.

The travel industry has recognized that this is a key enabler for a more seamless and personalized processing of the traveler, and for operational efficiency and security improvements all along the journey, and is evaluating the use of these technologies. Multiple trials introducing biometrics within airport passenger processes are going on across the globe. While IATA recently launched the One ID task force in order to create standards in this area, with a focus on airlines and airports, the World Economic Forum favors the emergence of a global, unique digital identity for the broad travel industry, and potentially beyond.

Amadeus is convinced that future-proof Digital Traveler Identity solutions should be universal and permanent, that is to say constantly reusable in any travel process requiring authentication of the traveler for any trip. We are therefore exploring solutions and technologies to provide a trusted digital identity token, while ensuring security and privacy by design. In line with Trust Framework principles promoted by Open Identity Exchange, Amadeus is also collaborating with IATA and various industry representative bodies toward a global approach for Digital Identity in Travel.

Artificial intelligence

There has been impressive progress in the use of Artificial intelligence (AI) in recent years. Within the IT industry there is heavy investment in this area, with a buoyant start-up scene, and with tech giants making significant investment both in-house and in the acquisition of start-ups. AI is a substantial catalyst behind several of the trends described above – for example autonomous vehicles (AVs), personalization and messaging platforms.

There are two main components in making advanced AI systems: the fuel and the engine. The data is the "gas" and machine learning is the "engine." Machine learning is based on the idea of giving machines access to data and letting them learn for themselves.

Within Amadeus, we are processing and mining the data with the latest big data technologies, and by applying machine learning we leverage AI in a number of areas, including revenue management, fraud detection, recommender systems for travel products (e.g. hotels, flights and ancillary services), and advertising.

Blockchain

Blockchain is the target of significant investment, with more than USD 1.2 billion invested by venture capital funds into blockchain start-ups as of today¹⁸ and with a market expected to reach USD 20 billion by 2024.¹⁹ This emerging technology holds tremendous promise in terms of changing the way in which we "exchange value" (often financial) digitally between businesses, governments and individuals.

Despite blockchain technology being much discussed, in reality the technology remains in an experimental phase, with various actors investigating potential use cases. We have identified four potential use cases: (1) simplified and more secure passenger identification; (2) improved baggage tracking; (3) more user-friendly loyalty schemes; and (4) simplified payments between travel agencies and airlines.

Our teams have developed live prototypes, and we are cultivating a network of specialist partners to experiment with this new technology, respecting the data security and privacy implications blockchain presents.

Internet of Things and connected devices

The growth potential of the Internet of Things is very significant, with the market forecasted to reach USD 561 billion by 2022,²⁰ and the number of connected devices, sensors and actuators climbing to 46 billion by 2021.²¹ Within travel, we are only just beginning to scratch the surface in terms of what internet-enabled devices will look like and be able to offer travelers in the future. Amadeus has identified a number of use cases that we are looking at today, including baggage tracking, asset monitoring in airports, predictive maintenance for airlines, and quest room automation in hotels.

¹⁸ See https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/using-blockchain-to-improve-data-management-in-the-public-sector.

¹⁹ See http://www.mynewsdesk.com/us/pressreleases/blockchain-technology-market-size-worth-usd-20\$-billion-by-2024-2248758.

²⁰ See https://www.researchandmarkets.com/reports/4308780/internet-of-things-iot-market-by-software.

²¹ See https://www.juniperresearch.com/researchstore/iot-m2m/internet-of-things/consumer-industrial-public-services.



Amadeus offers solutions and services for travel companies all over the world. We do this via our complementary business lines, which have significant commercial and technological synergies.

Distribution

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

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. We also offer additional solutions and services to travel providers to help them position their offer more effectively via all channels (e.g. for the display and management of merchandising content). And we offer travel channels valuable solutions to better serve their customers (e.g. personalized search and planning solutions) to operate their business more effectively (e.g. front-, mid- and back-office solutions) or to deliver an integrated experience with important business benefits (e.g. travel and expense management solutions for corporations).

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. By harnessing the latest technologies across all our solutions, we help all our customers deliver better travel experiences day after day.

Airline IT

We help full-service, hybrid and low-cost airlines to deliver on their objectives – to 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. This helps airlines to increase customer

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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 do this via a broad and growing set of technology solutions, built in partnership with them, that enhance a wide variety of their core operations including solutions for reservations, ticketing, inventory management, departure control, disruption management, retailing and merchandising, personalization, revenue optimization and finance. We also support airlines through business consulting and process optimization.

In a time of rapid change, when many travel providers change their business model, merge with others or expand to new markets, Amadeus offers a flexible IT platform that adapts easily to these changes and complements our offer in the area of distribution.

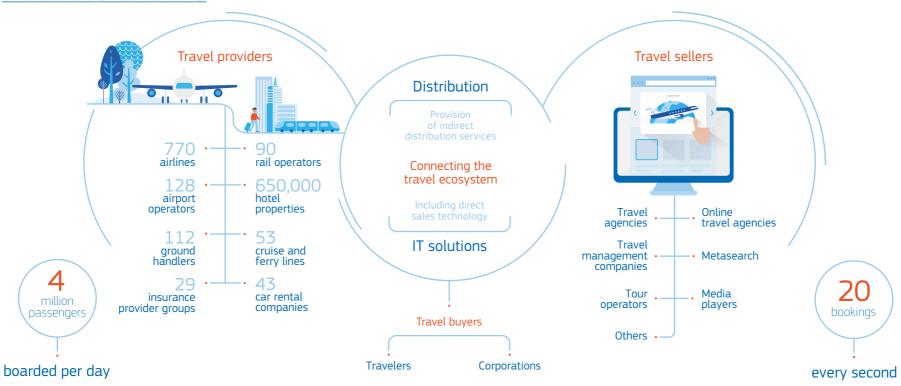
Diversification into new areas

Amadeus is uniquely positioned in the travel ecosystem. We provide technology at all stages of the traveler journey, and we have the capability to serve almost every player in the travel industry. Over recent years we have been diversifying our business to provide

technology solutions to other key sectors in the industry, such as airports, hospitality and railways, and also to transversal operational areas that are relevant to all travel industry players, such as payment systems or travel advertising.

We have already achieved a relevant presence in new markets, extending our customer base in hotels and hospitality, airports and ground handlers, and railways and ground transportation. We are gradually expanding our scope of products and solutions in key areas. As well as being strong businesses in their own right, these newer businesses for Amadeus complement our solutions offering to customers wherever they are.

Amadeus at the heart of travel



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A Journey of change

Decius Valmorbida

Senior Vice President, Travel Channels, Amadeus



The rate of change in the travel industry is accelerating. Changes in travel behavior continue to challenge current business models, and travel sellers are evolving along with these to keep up with new expectations, technological advancements and the emergence of new players.

Today's travelers are smart, tech-savvy consumers looking for unique experiences. They demand choice, transparency in pricing, differentiation and personalization. They

are always connected, relying on social interaction for travel decision-making. They draw their destination inspiration from social media and share their travels online with family and friends. These travelers also want a seamless experience through their smartphones, and they expect information and tools to be instantly available on their devices.

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Travel sellers are facing pressure on multiple fronts. From retail to online travel agencies, metasearch providers and business travel agencies, sellers are competing more fiercely than ever to attract the traveler. New players are emerging, further disrupting the industry with their advertising models. Internet giants such as Google and Facebook are gatekeepers for billions of consumers and have the influence to direct them to specific providers.

How is Amadeus helping these sellers confront these pressures and reach a larger audience of travel buyers? We provide a space for all players in the industry to collaborate, innovate and deliver better journeys. With our technology, expertise, investment capabilities and track record, we are the partner our customers need to serve travelers today and in the future. Amadeus' helps travel agencies and corporations better understand travelers and personalize their offering. With solutions tailored to their needs and the way they do business, we help them respond to change and adapt their value proposition to today's travelers.

2017 was a special year for Amadeus. We celebrated 30 years in the travel industry, but most importantly we took bold steps to shape the decades to come. This meant focusing even more on the traveler and evolving to offer a more personalized travel experience. To give travelers more options, we are moving from being just a Global Distribution System, to powering an open and flexible platform that integrates more content and connects more players across more channels. To work more closely and intimately with our customers, we organized our commercial activities around four key segments: retail agencies, online travel companies, business travel agencies and corporations.

In 2017 we saw leading brands of travel agencies join our network and an increased number of transactions in accommodation, ground transportation, cruises and insurance. We also launched new solutions to meet the travel and expense needs of corporations. This is an area with great growth potential, and it will be one of our biggest bets for the future.

Travelers will continue to change and we will travel with them, unlocking new opportunities to shape the future of travel.

Through our distribution business, we connect travel providers with travel sellers and buyers. We do this through our Global Distribution System and via other solutions and services. All of these enable travel providers of flights, accommodation and other services to provide their content to the largest global network of travel agencies, so that travelers and corporations can plan, shop for and book the travel services they need.

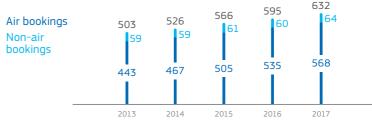
Our technology and services encompass the full travel experience, from the moment of inspiration and search through to full travel planning and post-trip evaluation, sharing and expense management for business travelers.

We put the traveler at the center of everything we do, providing them with the consistency, transparency and choice they demand, by designing systems to meet their evolving expectations. We do this by enabling providers and travel sellers, whether online travel agencies (OTAs), retail travel agencies or business travel specialists, to respond to traveler demands and deliver a personalized experience while maximizing every sales opportunity. This is changing the way travel is bought and sold.

This is possible thanks to our people and technology. At the core of our technology is our platform, which runs on open systems, harnesses intelligent use of data and integrates new devices. Our platform will further evolve to give travel sellers access to increased content from all sources (GDS, NDC-ready content, airline proprietary APIs and aggregators) via any channel or device. Likewise, it offers travel providers the best vehicle to distribute their products.

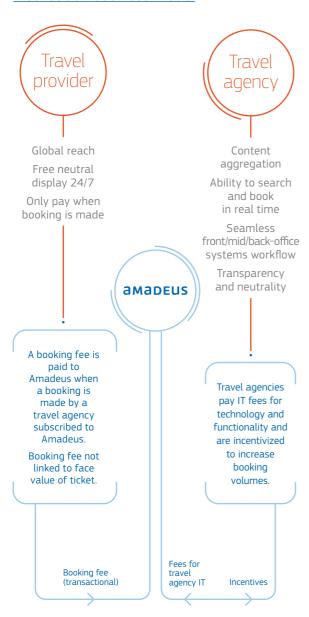
We offer other products and services to providers and sellers to personalize their offer, such as payment solutions, superior search capabilities or integrated front-, mid- and back-office solutions. Our technology for corporations includes self-booking and expense management tools.

Amadeus total bookings* (figures in millions)



^{*} Bookings processed by travel agencies using Amadeus distribution platforms.

Distribution business model



In the following sections, we describe in more detail the specific cases of four key distribution areas: retail agencies, online travel companies, business travel agencies and corporations.

Retail agencies

We serve thousands of retail agencies in every corner of the world. Human touch is a fundamental component of the value proposition of these agencies. They offer personalized treatment based on years of experience and contact with their customers. These are often agencies with a diverse business serving different types of travelers, providing comparison and a wider selection of options.

Retail agencies are facing new challenges today – from business disruption and channel complexity to the increasing cost of customer acquisition and limited customer brand loyalty. In the face of this, they embrace new technology and trust Amadeus as their partner to power their technology and content needs so they can continue to refine their niches, offering unique travel products and extraordinary service, and delivering an unparalleled personal customer experience that travelers come back for again and again.

In 2017 we helped large and complex tour operators to assemble their packages, and we offered smaller agencies a holistic self-service platform to cover their needs. We provided consolidators with improved content and search solutions, and offered tailored solutions to large multi-channel customers (our key accounts) to support them in serving their travelers better and more efficiently.

We look forward to continuing to innovate with our retail customers, using technology and where appropriate new business models to enable them to compete in a world full of challenges and opportunities.

TUI Germany

In today's travel industry, retail agencies need to make the store exciting, attractive and fun to deliver a unique customer experience and differentiate themselves from online competitors. Technology using artificial intelligence and voice recognition can help them do that.

In early 2017 Amadeus and TUI Germany, one of the country's biggest travel agencies, launched an experimental and innovative project with a humanoid robot. From developing the concept to building and testing the prototype, the co-creation brought learning and valuable experiences to both sides. Thanks to the human qualities of the robot, customers in the store easily make a connection. The robot greets the customer, asks about their travel interests and preferences and gives some ideas and recommendations for the trip. The traveler is enticed, and the travel agency takes it from there, collecting more information for consulting and booking.

In December 2017 a first prototype was successfully tested in one of the World of TUI flagship stores in Berlin. With the results we will further develop this prototype. The goal is to find out if humanoid robots can bring new business opportunities to both sides, help generate revenues and improve the in-store experience for retail agencies.

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Online travel companies

Online travel consumers today are increasingly techdependent and demanding. Amadeus provides search and shopping solutions to the world's leading online travel companies, so they can acquire, convert and retain consumers more effectively and efficiently.

Our customers span from global mega OTAs such as Expedia and Ctrip, to multinational companies that operate in multiple markets (Fareportal, ODIGEO), to smaller OTAs specific to a region or market (BestDay) and new online start-ups (Relovate.com). Amadeus is also a partner to search providers specialized in travel, such as Kayak and Skyscanner, and works also with other large players such as Google, Facebook and WeChat.

2017 showed us how crucial innovation is to providing online travel companies with the right solutions to serve travelers. Artificial intelligence, machine learning, voice recognition and chatbot initiatives are all emerging trends poised to cause disruption. Innovation is key to succeeding within the online travel space.

At Amadeus we apply artificial intelligence and machine learning to expand and improve the search capabilities of our customers. Our revolutionary instant search technology, the newest to our portfolio, uses advanced algorithms to give subscribers access to millions of prices in milliseconds. Along with superior flight, ground transport and destination content, Amadeus solutions allow online travel companies to personalize their offer, optimize marketing efforts and, ultimately, increase conversion.

Online travel truly is a fast-moving, challenging sector that pushes us to be ahead of the curve and at the forefront of new innovations.

eDreams ODIGEO

eDreams ODIGEO is one of the world's biggest online travel companies and the largest online retailer of flights in Europe. It is present in 43 markets with 5 consumer brands including eDreams, Go Voyages, Opodo, Travellink and Liligo, which together serve more than 18 million customers annually.

Passionate about travel, eDreams ODIGEO's mission is to help customers reach their destination, combining the best price and the greatest convenience in the shortest possible time. They do this with their leading technology, market leadership and air travel expertise, as well as the strength of the airline, hotel and transportation brands sold through their websites.

This online travel agency has worked with Amadeus on a merchandising strategy. It was one of the first players in Europe to implement the sale of extra baggage and seat selection as part of its wider product offering. This allowed it to offer more personalized products and services, boosting conversion levels and achieving revenue diversification targets.

This merchandising strategy is clearly paying off: eDreams ODIGEO is registering over 1.7 million bags and 1 million seats sold across its key European countries to date, and counting!

At Amadeus we believe that merchandising enables transparent choice for travelers over the best and broadest range of content, as well as superior efficiency. It makes it possible for retailers to differentiate the offer with value-added services and optimize every sales opportunity.

We believe it is paramount for online travel agencies to widen their product offering, and eDreams ODIGEO has successfully achieved this. We are delighted to support it along the way, and we look forward to innovating together for many years to come.

"We have created a successful business by becoming a one-stop-shop for travel, providing consumers with the tools to search further and faster than anywhere else online. Merchandising is a key component of our strategy. It represents a win-win situation for all parties and especially for our airline partners as it creates revenue diversification and strengthens our relationships."

Andreas Adrian, Chief Trading Officer, eDreams ODIGEO

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Business travel agencies

Business travel agencies (BTAs) are focused on the needs of corporations and business travelers. Our customers include the largest global travel management companies, such as American Express Global Business Travel, BCD Travel, Carlson Wagonlit Travel, Egencia and Hogg Robinson Group,¹ plus regional and local business travel agencies like Berg-Hansen and Click Travel. These agencies offer managed travel services to a diverse set of companies across all verticals, including financial services, consulting, manufacturing and government, as well as marine, offshore and humanitarian travel.

Corporations expect BTAs to provide the best available content, keep their travelers compliant with travel policy and enable traveler care and crisis management, while also delivering cost savings and a great traveler experience. Our customers are also looking for new ways to generate revenue and continually improve efficiency and cost effectiveness in a fiercely competitive environment.

In 2017 we continued to work hand in hand with our customers to help them be successful. They are actively migrating to our new Web-based selling platform, which offers a modern user experience, significantly improved retailing capabilities and continuous upgrades. We have addressed their cost optimization needs through automation of cumbersome manual processes (e.g. automated re-ticketing in case of change of travel plans and automated rebooking in case of price changes before ticketing). We have supported our customers in new areas such as payments and offering content from hotel aggregators, and we continue to add additional relevant content to our distribution platform.

Finally, we launched the Amadeus cytric Travel & Expense solution and worked in partnership with leading BTAs to make it available to corporations.

Looking forward, we can expect the velocity of change in business travel to continue to accelerate, driven by changing traveler and corporate expectations, continuing consolidation of the agency landscape, and new players (e.g. start-ups and online travel agencies) moving in. Content is and will continue to be a crucial element of our value proposition, but so will revenue optimization, communication and connectivity, as well as emerging technologies such as blockchain, integrated messaging platforms, artificial intelligence and social media integration. Finally, it is important to remember that each corporation, each traveler and each trip is different, and we will help BTAs deliver the personalized service that travelers expect.



Watch video on Humanitarian managed travel

Raptim

Over 65 years ago, Raptim pioneered the world of humanitarian travel by air. Raptim focuses on the complex – and at times, very urgent – travel needs of humanitarian travelers, including non-governmental organizations, charitable and faith-based organizations, aid workers and volunteers.

When humanitarian workers travel to remote places, it is key for Raptim to ensure their safety. Thanks to its close partnership with Amadeus, it has been able to implement Amadeus Mobile Messenger, a complete duty of care solution that allows companies to locate, communicate with and assist travelling employees. Raptim recently renewed its long-term partnership with Amadeus because of its global reach and unique breadth of content. Thanks to Amadeus' technology, the agency can offer a centralized and expert travel management service to its humanitarian customers so they can travel more safely to remote places.

With the integration of Amadeus Mobile Messenger, Amadeus is helping Raptim transform the way its clients manage their obligations in duty of care. The Web solution allows travel managers to track travelers in real time and provide risk intelligence and incident management. Travel managers can also send instructions to individuals or large groups of travelers at any point of their journey with easy two-way communication via SMS, email and push notifications on the iOS-, Windows- and Android-friendly apps.

¹ Hogg Robinson Group has recently been acquired by American Express. At the time of closing this report, the acquisition is only pending regulatory approvals expected by the second quarter of 2018.

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Corporations

As more companies expand their businesses both locally and globally, their staff are poised to travel more often. With this massive opportunity out there, corporations is one of Amadeus's strategic pillars for growth. Amadeus serves over 11,000 corporations today, and is in a unique position to power a smarter, safer, more productive and, of course, more satisfying traveler experience.

Better business trips mean more engaged employees and without a doubt increased productivity. Thanks to our portfolio of travel and expense solutions, corporations can concentrate on what they do best, be that pharmaceuticals, car manufacturing, consulting or drilling, while Amadeus takes care of their travelers. Via intuitive interfaces and through smart algorithms, corporate travelers can better manage their travel requirements and expenses, while corporations can benefit from large savings opportunities and ensure that their employees are well taken care of at every step of their journey.

We enable corporations to manage travel and expense in a holistic way, controlling not just their costs when these occur, but also helping optimizing the overall travel budget. Our technology ensures that the corporate travel policy is observed across the entire booking and expense process, giving corporations control and visibility over their investment in travel.

Amadeus powers smarter business travel for corporations and creates better journeys for business travelers.

Liverpool

Liverpool is one of Mexico's largest department store chains, with 70,000 people working in shops in 69 cities across the country selling everything from clothes to household goods and technology. Recently the company acquired Suburbia, the biggest low-cost fashion chain in Mexico.

Liverpool's vision is to be the leading department store chain with the most efficiency, growth, innovation, prestige, service, profitability and adaptation to specific markets. It has created synergies with its retail business via two other units dedicated to credit card provision and real estate.

The company's management looked for a technology provider that could keep up with its growth plans and could take it from a manual travel process to an automated one that puts travelers in control of their travel plans. With such diverse business interests, Liverpool needed a partner that could understand its different types of travelers and provide a travel and expense management solution that responds to the needs of travelers and optimizes travel cost. It also wanted to ensure access to relevant and global content and optimize spend with its providers through booking data and analytics.

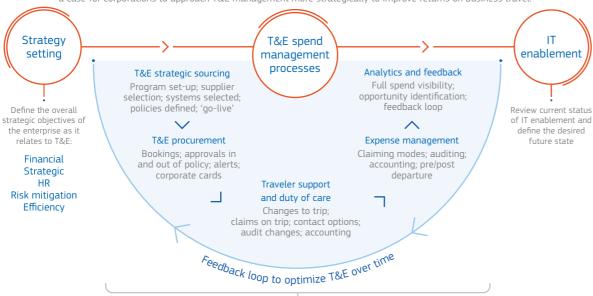
Liverpool wanted travelers to have an intuitive user experience during all journey stages, independently of the device used. The goal was for travelers to benefit from the same experience and access to content on all touchpoints, enforcing the corporate travel policy but taking into account travel preferences. After rolling out Amadeus' cytric Travel & Expense solution in 2017, the initial targets have been exceeded by 10% and adoption of the tool across the company is at 100%.

"As Travel Manager, I don't need to worry anymore about having time to inform travelers about their journey, because they work on their own journey from the beginning to the end and have all the information they need. I can then focus on doing analysis and supporting travelers who need more help, for example on changes or cancelations."

Pedro Cepeda, Travel Manager, Liverpool

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Amadeus commissioned LSE (London School of Economics and Political Science) to carry out a study that makes a case for corporations to approach T&E management more strategically to improve returns on business travel.



Optimize across the T&E spend management process to minimize the total cost of ownership to the enterprise



Download white paper Managing Every Mile: how to deliver greater return on investment from travel and expense

Amadeus air travel agency bookings by region (figures in millions)

	2016	2017	Change
Western Europe	202.1	206.0	2.0%
Asia-Pacific	97.4	108.6	11.4%
North America	90.8	99.0	9.0%
Middle East and Africa	65.9	69.3	5.1%
Central, Eastern and Southern Europe	44.5	48.1	7.9%
Latin America	34.1	37.5	10.0%
Total	534.9	568.4	6.3%

Industry growth

Global travel agency air bookings increased by 4.5%, outperforming the growth of 3.1% in 2016. In 2017 all regions performed positively. Central, Eastern and Southern Europe and Asia-Pacific were the best-performing regions, supported by robust growth reported by their largest markets (Russia and India, respectively). In comparison, Middle East and Africa, North America and Western Europe delivered slower growth rates in the year. Latin America, which showed a volatile performance during the year, delivered healthy growth, mainly driven by Argentina and Brazil.

Amadeus bookings

In 2017 Amadeus' travel agency air bookings increased by 6.3%, supported by industry growth and a 0.6 p.p. enhancement of our competitive position. Asia-Pacific (particularly India and South Korea), Latin America and Central, Eastern and Southern Europe, which benefitted from robust industry growth, as well as North America, were our best-performing regions. Middle East and Africa delivered a sustained growth rate, while Western Europe delivered slower growth.

Amadeus' non-air bookings increased 5.9%. This positive performance was mostly due to the growth of rail and hotel bookings.

<u>Amadeus travel agency bookings</u> (figures in millions)

	2016	2017	Change
Air bookings	534.9	568.4	6.3%
Non-air bookings	60.4	64.0	5.9%
Total	595.3	632.3	6.2%

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Key Distribution highlights in 2017



In 2017 we signed 55 new contracts or renewals of content agreements with airlines, including TUI fly, Air Canada, Westjet Airlines, Korean Air, Delta Air Lines, El Al and Avianca Argentina, as well as 12 low-cost carriers.

Subscribers to Amadeus' inventory can now access over 110 low-cost carriers' and hybrid carriers' content worldwide, including Eurowings, which signed up for Amadeus Light Ticketing in 2017. Thanks to this XML connectivity, travel agents connected to Amadeus can book all the Eurowings' published fares and add ancillaries to the booking. Low-cost carriers' and hybrid carriers' bookings grew 9% in 2017.

New Distribution Capability

We achieved New Distribution Capability (NDC) Level 1 certification as an aggregator from IATA in October. This certification follows on from Amadeus becoming one of the first technology companies to

Salesforce

We continued to strengthen our corporate customer portfolio during 2017. In July we launched a new mobile application for Salesforce. Amadeus cytric Travel & Expense is now available to all corporations using Salesforce and will allow them to calculate the return on investment of every business trip, as the solution provides a complete view of travel spend by connecting Salesforce opportunities with the cost of each business trip. It will also offer a smooth travel booking experience for frequent business travelers.

receive NDC Level 3 certification as an IT provider, the highest level of certification, in June 2016. Our aim is to become NDC Level 3 certified as aggregator in 2018.



350,000+

Expedia Affiliate Network (EAN)

In December we signed a deal with Expedia Affiliate Network (EAN) that will allow travel sellers worldwide to book EAN's rates and availabilities at more than 350,000 hotels worldwide through Amadeus. The agreement includes full-service hotel brands, boutique hotels and serviced apartments.

Amadeus Airline Ancillary Services



At the close of the year, 143 airlines had signed up to Amadeus Airline Ancillary Services, including Air Canada, Malaysia Airlines and All Nippon Airways, and 115 had implemented the solution. A total of 66 carriers had contracted Amadeus Fare Families, which allows airlines to distribute branded fares, with 50 of them already

implemented. Emirates signed up and implemented both Amadeus Airline Ancillary Services and Amadeus Fare Families during the first quarter. In 2017 close to 70% of the global air bookings processed through Amadeus were eligible to carry an attached ancillary service.



A journey of innovation

Julia Sattel

Senior Vice President, Airlines, Amadeus



The airline industry builds economies. broadens cultures and creates connections between societies. It helps global and local businesses boom and expand. It connects people, drawing them closer together than ever before. Our vocation is to make that connection even stronger and simpler. Technology has always been critical to developing global travel. We have developed ours in partnership with airlines and are committed to supporting them in doing

what they do best: fly and serve travelers around the world.

Every year we help close to 200 airlines fly more than 1.6 billion passengers around the globe. Before they even get to the airport, our people and our technology play a part – behind the scenes – in getting them there. Airlines aim to provide the traveler with an experience they

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will remember throughout every stage of the journey, from inspiration, search and booking to pricing, ticketing, check-in and boarding. The challenge airlines face today is how to evolve to fully embrace digital transformation, open technology, the cloud and application programming interfaces, among others, to support their vision of the future ... and we are excited to partner with them on this journey.

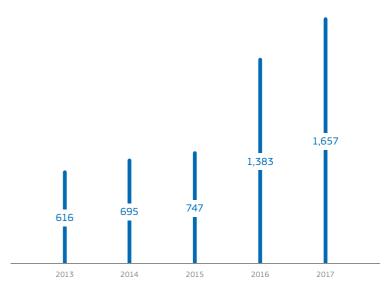
We are always looking for ways to keep airlines at the forefront of the latest trends. We empower full-service, hybrid and low-cost airlines to deliver on their objectives (to grow revenue, optimize costs and efficiency, and build brand and customer loyalty) according to whatever strategy they choose to follow. Airlines have unique opportunities to collaborate with their airline 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 69% of Star Alliance members, 71% of Oneworld carriers and over half of the members of SkyTeam.

Together with the industry we have enjoyed 30 years of innovation, collaboration and better journeys. We continue to invest heavily in our people at regional centers of excellence across the globe. Innovation is in our DNA; we are one of the biggest investors in R&D in the travel and tourism sector. We are a company of firsts. The first searches to combine price and flight availability. The first departure control system based on open technology. The first to come up with a Passenger Name Record. And we will keep on speaking to experts in our industry, partnering and developing technology so we are the first to do something else for our customers next month or next year.

By simplifying processes and managing the complexity of working with third parties across the travel industry and beyond, Amadeus supports airlines as they drive transformation and innovation throughout their businesses to shape the future of travel. We are together in this journey.

Our solutions and services enable airlines to provide the passenger with a consistent, personalized experience throughout their journey. From inspiration, search and booking to ticketing, check-in and boarding. We help airlines of all types – whether full-service carriers, so-called hybrid or low-cost airlines to grow sales, optimize costs and efficiency, deliver great service and build brand and customer loyalty whatever their business model. We also offer airlines unique possibilities to collaborate with their alliance and codeshare with strategic partners to maximize sales through all channels.

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.

G4-4

The PSS Amadeus Altéa Suite consists of three modules:

- 1_ Reservation: enables our airline customers 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: its functionality 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. Altéa Inventory also incorporates a seat-mapping functionality.
- 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 fuel utilization.

On the other hand, Our New Skies PSS offers solutions tailored to the needs of low-cost carriers, covering reservations, distribution, travel commerce, loyalty revenue management, revenue accounting and data storage.

Our pricing model for Airline IT 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.



We work closely with our customers to understand key industry trends and traveler demands and to get deep insights into airline needs. For example, over the years Amadeus has actively contributed to evolving IATA NDC.

We believe IATA NDC has now reached a level of maturity that allows for its industrialization. Amadeus has the expertise and capabilities to do this, and it is our aim to deploy NDC at industrial scale assuming the industry follows the IATA NDC and its standard implementation to ensure efficiencies for all parties. In the short term, Amadeus will become Level 3 certified as aggregator in 2018. However, Amadeus' ambition is to continue beyond NDC to deliver unique and advanced capabilities that will benefit travel providers and sellers alike.

In addition, we regularly commission specific research on important industry topics. The white paper Embracing Airline Digital Transformation: A Spotlight on what Travellers Value, focused on how airlines need to better understand passenger needs and how to service them more appropriately. These combined insights are incorporated to our investment strategy and portfolio, which are designed to address the following opportunities in the airline industry:

¹ Passenger Service System (PSS) is a series of mission-critical solutions used by airlines. The PSS usually comprises a Reservation System, an Inventory System and a Departure Control System (DCS).

See "Environmental sustainability," p. 98.

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1. Articulating the right offer to the traveler

According to our research, only 14% of travelers find it easy to compare airline offers based on attributes other than price, while 37% of travelers say that competitive price is the most important factor when choosing an airline. Closely behind comes convenience of flight time and departure airport, which 31% say is the most important.

Our whitepaper A spotlight on Total Offer Optimization: Fast-Forward to Customer-Centric Revenue Management highlights the evolution of revenue management in the age of personalization, where the right price is offered to the right customer at the right time.

Ultimately, what travelers value will change depending on the context of their trip. This provides an opportunity for airlines to present their offers seamlessly across all channels, all touchpoints and all devices so that other aspects of the product, apart from price, can help drive choice. Leveraging data to provide a more personalized offer improves likelihood of purchase, satisfaction and brand loyalty.

Garuda

Garuda Indonesia proves that ancillary services and customer satisfaction go hand in hand.

Challenge

In recent years, steep competition has led to a declining average ticket price. In Asia-Pacific the challenge lies in both the domestic and international markets, and in full-service and low-cost carrier segments. Ancillaries presented an opportunity to grow the airline's revenue, in line with its brand image. Sales of airline ancillary services globally have skyrocketed over the past few years. As Indonesia's flag carrier, Garuda is committed to putting passengers first, which is its core value and competitive differentiation. Garuda asked Amadeus how we could adhere to this value while maximizing revenue.

Results

Ancillary services were the answer. Together with Amadeus, a large-scale ancillary strategy was developed that reinforced Garuda's commitment to hospitality while enhancing the travel experience for its passengers. The implementation of Amadeus Airline Ancillary Services helps Garuda sell any service through any channel, offering customers the right products and services at the right time throughout their journey.

Garuda has increased its ancillary revenue by giving customers more choice and attention far beyond "just" the ticket. Today, Garuda Indonesia has one of the highest ancillary adoption rates in Asia-Pacific. It has seen an increase in ancillary revenue of +34% in four years. At the same time, its customer satisfaction rating is also on a steady rise at +0.8 points year-over-year in 2016. And the proof is in the pudding: in 2017 Garuda Indonesia was named "The World's Best Cabin Crew" for the third consecutive year, as well as "The World's Most Loved Airline."



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2. Optimizing sales channels

Driving traffic to an airline's site is a highly intermediated process, with an estimated average 70% of "airline.com" bookings sourced through the third-party referral. Amadeus MetaConnect provides innovative new ways for airlines to partner with metasearch companies, attract customers to an airline's website and boost conversion rates.

In addition to finding new revenue streams, airlines can increase their sales through revenue optimization technologies. This is especially important in the current landscape, where there is increased complexity due to the rise in online shopping, mobile channels and the proliferation of multiple traveler touchpoints. Amadeus' Revenue Management solution helps optimize the results offered by the airline for each shopping request. Airlines can maximize the revenue potential in every transaction. Simulation results show a 5% to 7% revenue increase for airlines that move to our solution

Amadeus' Revenue Integrity product protects airlines against revenue leakage due to, for example, fraud, and is proven to improve revenue between 2% to 4%.

Amadeus' Advanced Ground Operations product delivers timely insights to help the ground operations and IT departments improve operational performance and make better business decisions. The processing capabilities of Amadeus Altéa Departure Control System (DCS) data help airlines save time, reduce costs and increase revenue.

Middle East Airlines

Challenge

The key challenge faced by Middle East Airlines (MEA) is how to have a competitive edge while maintaining the highest achievable yields in each operating market. This requires complex algorithms to forecast demand and optimize the sale of each seat. MEA was facing a number of limitations with its prior revenue management solution, resulting in an overall loss of potential revenue. Productivity was also impacted by the number of manual tasks (schedule and capacity changes, seasonality and competition monitoring) and limited reporting tools.

Results

Amadeus Altéa Segment Revenue Management has fueled MEA's business growth, helping the airline to exploit its network potential: it has managed to significantly improve the load factor and at the same time secure unit yield, all while reinforcing its offer – a feat highlighted by outstanding financial KPIs.

Altéa Segment Revenue Management helps airlines:

- _Make the most of route opportunities and align the airline's availability strategy with its fare commercialization
- _Boost revenue management and pricing performance
- Ensure a higher return on investment

"90% of flights are now steered automatically by Altéa Segment Revenue Management with excellent end results, reducing our overall workload on a daily basis and allowing us far more time to undertake more analysis on revenue and traffic trends, market trends and competition."

Walid Abillama, Head of Commercial Strategy and Alliances. Middle East Airlines

All Nippon Airways

Challenge

All Nippon Airways (ANA) has plans to increase its growth, with aims to improve efficiency and increase international passenger revenues. ANA sought to use data insights to understand patterns in demand, react to an always-changing environment with tailored pricing strategies, and identify new revenue opportunities.

To facilitate its growth plans and make pricing and strategy decisions faster, ANA chose Amadeus Booking Analytics. This travel intelligence solution provides ANA with enhanced information about its own bookings, updated in near real time, and a more accurate picture of the current global market.

Results

"Thanks to Amadeus Booking Analytics we have become more competitive. We receive the information we need, when we need it, to react faster and make better pricing decisions."

Ryota Shimazawa, Data Analyst, All Nippon Airways

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3. Improving the traveler experience

To improve traveler experience, airlines must deliver a high-quality personalized customer experience. Amadeus personalization techniques help airlines to increase ancillary revenues. We are the industry leaders, with more than 100 airlines using Amadeus Ancillary Services and Fare Families.

Amadeus' Customer Experience Management tool enables airlines to have a comprehensive view and understanding of customers, and to act on these insights in the form of highly personalized offers.

Our merchandising and personalization suite integrates merchandising logics with any step of the shopping process. We provide servicing of post-sales activities (e.g. in case of travel disruption) and simultaneously offer a multi-channel approach (at check-in, with travel agencies, etc.).

Amadeus' in-depth understanding of data also ensures that the fragmented data sets are processed in an efficient way. This results in data being connected, allowing airlines to access consistent, fast and reliable insights. Amadeus' Travel Intelligence solution brings the technology and the know-how to deliver advanced analytical capabilities. These are key elements of our merchandising strategy; our solution uniquely leverages data from all traveler interactions.

Swiss International Air Lines

Swiss is the first airline in the world to adopt a fully automated and customized system to rebook passengers whose travel plans have been disrupted by flight cancellations. Amadeus helped Swiss in this process.

Challenge

Manual rebooking of all passengers on other flights was a lengthy and costly process. When rebooking passengers from canceled flights caused by a general operational disruption such as a severe weather event, an airline needs to be quick or it will lose out to more responsive competitors.

Results

Swiss had to cancel a flight between Nice and Zurich and decided to use that opportunity to bring the new disruption rebooking tool into operation for the first time. According to Jan-Christian Schraven, VP Operations for Swiss, the results represented a dramatic improvement over the airline's previous system of manually rebooking all the passengers from a canceled flight.

Swiss' new automated rebooking tool accomplished rebooking for every passenger on the canceled flight within three minutes. Within the first 30 seconds of the flight being canceled, the tool was able to rebook 61 passengers onto the carrier's later flight the same

day. Within the next 2.5 minutes it had rebooked every other passenger from the canceled flight onto other carriers' flights.

According to Schraven, the new Swiss automated travel disruption rebooking tool also links automatically to the Amadeus Altéa Reservation booking system it uses and to the systems of all its interline partners, so their passengers interlining with any canceled Swiss flight suffer as little inconvenience as possible. The introduction of the automated rebooking tool has represented for Swiss a flight disruption management evolution that has gone from passenger by passenger, flight by flight, to global recovery, with no impact to its rebooking policies and quality of service.



Watch video: Reinventing disruption management at Swiss International Air Lines Ltd.

Avianca

Avianca has embarked on a journey to enhance the customer experience – an important requirement in today's highly competitive marketplace. As one of the leading airlines in Latin America, Avianca is continually differentiating the services it offers, leveraging the latest technologies to provide more personalization.

Challenge

To achieve these goals, Avianca required a solution primarily for front-line customer touchpoints that would give the airline a comprehensive and meaningful view of each traveler, placing the customer at the center of all the airline's activities.

Results

By integrating Amadeus Customer Experience Management, which provides Avianca with a comprehensive view of each customer through the 360-degree customer user interface, Avianca can collect relevant information and insights about the customers it serves.

In addition, the Amadeus Knowledge Computation Engine calculates metrics such as disruption score, customer lifetime value, preferences, etc. These indepth insights make it possible for Avianca to set up personalized alerts and propose additional services that passengers are likely to value. Avianca is already using personalized alerts in the airline's call centers, at check-in, at the boarding desk and on board. This

helps agents identify specific customers to enhance their experience based on the particular situation. For instance, Avianca has set up alerts to ensure that Avianca's top passengers are well recognized, to deliver a personalized welcome message to all first-time flyers, and to provide preferential treatment to passengers traveling on their birthday or honeymoon.

"The agreement with Amadeus guarantees us security, reliability and efficiency in Customer Experience Management. Avianca works to provide its customers with a memorable travel experience, from the purchase of their ticket to arrival at their final destination, supported by the latest information technology by Amadeus."

Hernán Rincón, CEO, Avianca Holdings SA



See video: Avianca on Anytime Merchandising

<u>Passengers boarded by region</u> (figures in millions)

	2016	2017	Change
Western Europe	562.4	611.2	8.7%
Asia-Pacific	428.5	502.8	17.3%
North America	64.9	176.5	171.9%
Latin America	134.9	149.2	10.5%
Middle East and Africa	119.7	127.2	6.2%
Central, Eastern and Southern Europe	72.0	89.6	24.5%
Total	1,382.5	1,656.5	19.8%

In 2017, Amadeus' passengers boarded grew by 19.8%. This growth rate was fueled by:

- _7.6% organic growth (resulting from a mid singledigit Amadeus Altéa passengers boarded growth and Navitaire's double-digit growth)
- carrier implementations on our PSS platforms, both in 2017 (including Southwest Airlines, Japan Airlines, Malaysia Airlines, Kuwait Airways, Boliviana de Aviación, SmartWings, Germania, Norwegian Air Argentina, Air Algerie and MIAT Mongolian Airlines on Altéa, as well as, GoAir, Viva Air Peru, Andes Líneas Aéreas, JetSmart and flyadeal on New Skies) and in 2016 (including Swiss International Air Lines, Brussels Airlines, China Airlines and Ukraine International Airlines on Altéa and Viva Group on New Skies).

The Navitaire consolidation impact also contributed, to a lesser extent, to the passengers boarded volume growth.

In 2017, 57.7% of our passengers boarded were generated outside of Europe. Our international footprint has continued to expand, particularly in Asia-Pacific and in North America, supported by the acquisition of Navitaire and the implementations of Southwest Airlines, Japan Airlines and Malaysia Airlines, among others, in 2017.

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Key Airline IT highlights in 2017

% 199

Air Canada

Air Canada contracted the full Amadeus Altéa Suite in October. In addition to this, the airline also signed up for a range of other Amadeus airline IT and payment solutions, including Anytime Merchandising, Revenue Integrity and Passenger Recovery. This contract further reinforces our partnership with Air

Canada, following the launch of the new aircanada. com in March. Powered by Amadeus' technology, the website offers a new booking and shopping experience to the carriers' customers, while bringing new selling opportunities for the airline.

Amadeus Passenger Service Systems

At the end of 2017, 199 customers had contracted either of the Amadeus Passenger Service Systems (Altéa or New Skies) and 195 had implemented them.

Southwest Airlines migrated its domestic flights to Amadeus Altéa in May.

In Latin America, LATAM contracted Amadeus Altéa DCS Flight Management, and GOL contracted Altéa DCS Customer Management, as well as Amadeus Revenue Integrity, Amadeus Flex Pricer and Altéa Reservation Gateway.

We also strengthened our relationship with flydubai with the launch of OPEN, the airline's unique loyalty program, which uses Amadeus Loyalty Management. Singapore Airlines implemented Altéa Revenue Management solutions during the first quarter of 2017, while Swiss International Air Lines, launch partner of Amadeus Passenger Recovery, started using the solution in March.

Malaysia Airlines and Kuwait Airways also implemented Amadeus Altéa, while Go Air, Viva Air Peru, Andes Líneas Aéreas, JetSmart and TUY fly Belgium were among the carriers that implemented New Skies.

Boliviana de Aviación, MIAT Mongolian Airlines, Air Algerie and Germania contracted Amadeus Altéa while Swoop, WestJet new ultra-low-cost carrier and flyadeal, Saudia Airlines' new low-cost subsidiary, contracted New Skies.

Flybe

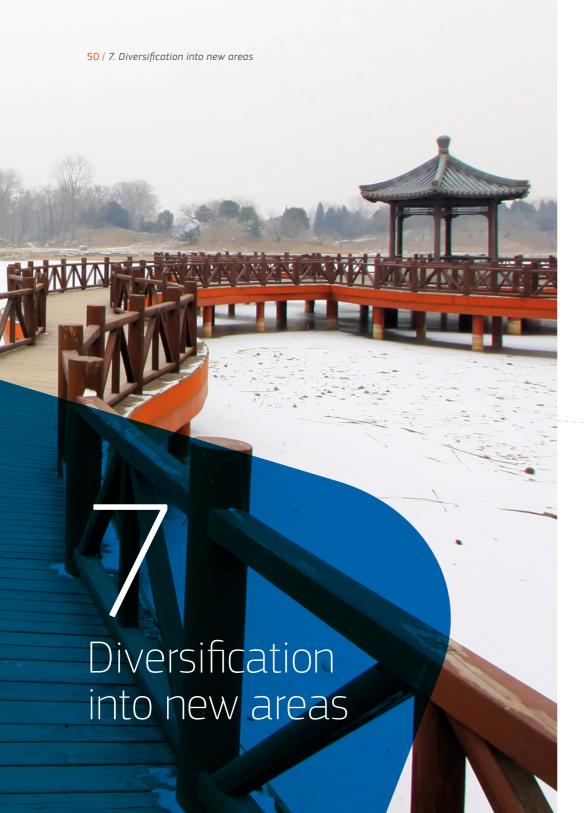
Flybe, Europe's largest regional airline, signed up for the full Amadeus Altéa Suite in November. Thanks to the Altéa Suite, Flybe's passengers will benefit from an enhanced digital experience including personalized offers, tailored pricing and mobile disruption management. Additionally, Flybe contracted Amadeus e-Retail, Amadeus Anytime Merchandising, and Amadeus Customer Experience Management.

Finnair

Our upselling efforts for our airline IT portfolio continued in 2017. In March, Finnair and Amadeus launched the Amadeus Altéa NDC solution. This new NDC API offers an additional distribution option for travel retailers to integrate Finnair's flights, seats and ancillaries. Finnair is piloting the solution with Skyscanner and now travelers purchasing Finnair flights from Skyscanner can complete their purchase without leaving the platform. Later in the year we also signed with Finnair Amadeus Digital API to make its booking process easier and more flexible.



Other upselling deals included flyadeal, which contracted and implemented Amadeus Altéa DCS Flight Management; All Nippon Airways, which contracted Airline Cloud Availability; and SmartWings, which signed up for and implemented Altea DCS Customer Management.



Growing in new areas

Francisco Pérez-Lozao

Senior Vice President, Strategic Growth Businesses, Amadeus



The pace of change in our industry is rapid. This requires us at Amadeus to be fast at making decisions, agile when working with customers and open to evolution when the market demands it. These are also three driving principles of our Strategic Growth Businesses where our mission is to accelerate the diversification of Amadeus and to maximize the opportunities across the travel sector. Since 2012, when this unit was created.1 we have consolidated our activities in

areas such as hospitality and rail into viable stand-alone businesses and strengthened our offer to customers.

Our investment in strategic growth business areas is already delivering real benefits for the industry, including the ability to transform

¹ Called New Business Units (NBU) at the time.

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traditional models. Amadeus offers state-of-the-art technology to replace legacy systems that are challenged by the growing demands of rapidly changing businesses.

For example, the development of Amadeus' Hospitality Platform overcomes the problems of fragmented IT systems and decentralized data that have long challenged those global hotel chains wanting to deliver a personalized quest experience.

Similarly, airport systems that are interlinked with airline departure control systems have not traditionally been well integrated. However, with the development of a full suite of Amadeus Airport IT solutions, this lack of integration can now be overcome, delivering value to airports, airlines and passengers.

We foster diversification by expanding into new areas such as travel advertising, as well as by enhancing the portfolio of products and services we offer our customers to address their evolving needs, for instance in the payments sector.

In recent years the payments industry has become increasingly complex, and this is impacting our travel customers too. Amadeus Travel Payments has developed a portfolio of solutions to simplify and manage our customers' payment needs, whether airlines, hotels or other travel players.

For example, payment tools used at check-in counters are often outdated, which means that passengers may have to invest a lot of time and effort at different desks to just pay for things like excess luggage or upgrades. Amadeus Airport Pay solves this problem for both providers and passengers.

We are responding to changes driven by customer expectations, changing market dynamics and new technology advancements.

The scale of the addressable market, estimated at €11.7 billion in 2018, shows the potential of our diversification areas. Our cloud-based technology and flexible payas-you-use model, coupled with Amadeus' reach and connectivity to all players, is proving an attractive combination to customers.

If we are to continue shaping the future of travel, it is important for us to support each part of the travel ecosystem. The siloes that have long dominated the travel industry do not work for the end customer, passenger, guest or user. By investing in strategic growth areas, we can drive greater value for our customers and make traveler focus a reality.

7.1 Airport IT

For many travelers, the airline check-in process at an airport is one of the most time-intensive and frustrating parts of the journey. To combat this problem and to help airports better manage passenger capacity, Amadeus is providing versatile new solutions such as portable wireless kiosks that can be rapidly deployed and relocated for use by passengers wishing to check-in themselves. This is the case for example for Hong Kong International Airport: the airport will gain greater freedom and flexibility to serve passengers throughout their journey, to and around its terminals.

Equally, airlines are no longer restricted in the way they manage passenger flow. With solutions such as Amadeus' Airport Common Use Service (ACUS), ground handlers servicing airline passengers can quickly set up an off-airport, fully mobile check-in service at any location, whether it be a cruise terminal, hotel, train station, or major conference or event. Travelers can drop off their bags at a convenient location and make the most of their luggage-free day. With ACUS, customers can access any airline's check-in system in the cloud with just a laptop and internet connectivity.

Regarding our 2017 business highlights, these are some examples of the expansion of our Airport IT customer portfolio:

- _ Adelaide Airport announced in March that it will implement
 Australasia's first fully automated and cloud-based airport
 management system. The airport will implement three Amadeus
 airport solutions: Airport Operational Database, Airport Fixed Resource
 Management Solution and Flight Innovation Display System.
- _We signed new contracts with Aktau International Airport, which signed up for ACUS; and Heydar Aliyev International Airport, which contracted the full suite of Amadeus airport solutions including ACUS, Baggage Reconciliation System and Airport Operational Database. Almaty International Airport successfully implemented ACUS and Baggage Reconciliation System.

G4-2 G4-8

- _We signed new customers in the North American market, including Louis Armstrong New Orleans International Airport, Pittsburgh International Airport, Calgary International Airport and Fort Lauderdale-Hollywood International Airport.
- Hong Kong International Airport and Amadeus announced an agreement to deploy the world's first movable check-in kiosks with both self-service and full-service mode. The versatile kiosks are powered by Amadeus' common use technology and can be rapidly deployed and relocated for use by the traveler to check-in themselves or the airport staff to provide full-service operations.

7.2 Rail

Amadeus and Deutsche Bahn's joint project is very new and challenging to the industry as we are one of the first railway companies selling tickets of other railway companies – tickets dynamically priced. So, we intend to sell tickets other railways want to sell on a particular route, at a particular point in time, at a particular price to the right people."

Tobias Heussler Head of International Sales, Deutsche Bahn

Demand for rail travel is increasing in many markets around the globe. Yet, booking a rail ticket often stays within the remit of the national rail operator, disconnected from other travel modes. Our goal is to change this to make rail easy to book for any traveler around the globe, be it a business traveler connecting from a flight to a train or a bus at an airport, or a tourist from Asia discovering Europe by train. For this, we are powering all types of travel agencies, including online booking tools, online and traditional offline agencies, and travel management companies.

As the rail industry is adapting quickly to this growing demand and to new market trends, railways are evolving their services, products and systems to focus on the customer. Amadeus helps them by developing innovative and flexible technology solutions to better meet customer needs, now and in the future.

In 2017 Amadeus unveiled a new merchant model for railways that provides travel agencies around the world with one link to sell multiple railways across Europe.

7.3 Hospitality

Amadeus is a trusted technology partner for the travel industry, and we are excited to partner with them to offer cutting-edge technology and enterprise-class support so that Amadeus can deliver more choice to all travelers."

Alfonso Paredes Vice President of Sales, EMEA and LATAM, Expedia Affiliate Network

Hotel distribution

The last few years have witnessed significant change in the hospitality industry. Digital transformation has given guests more power than they have ever had to tailor their own travel and hospitality experiences. This, in addition to the rise of the sharing economy, home and room rental businesses and new competition from related non-traditional players, has forced both hotel providers and booking agencies to adapt and evolve.

Engaging with this choice-driven world means that travel agents and hotels, whether part of a global chain or an individual independent property, must be able to provide all the information travelers need to make informed choices. But both travel agents and hoteliers face long-standing barriers to enabling choice.

To address these issues, over the last two to three years Amadeus has invested significantly in providing quality and standardized content to offer information

G4-8

in an easy-to-use format to make the selling process easier and more comprehensive for travel sellers and to enable hotel providers to have greater control over how their rooms and facilities are being sold.

At Amadeus, we are focusing on providing quality information on each hotel option beyond just the room rate, and including sentiments and specific hotel attributes such as pillow options, quiet locations and pet-friendly facilities. All of this information will help travel sellers provide personalized experiences that their travelers are looking for.

Hospitality IT

The global hospitality industry reported steady growth in 2017 and shows no signs of slowing down. Hoteliers are predicting prices to increase by 2.8% in 2018, and demand for unique meeting space like art galleries, rooftops or museums to grow by 3.8%. The forecast over the next 10 years also looks favorable, with predicted growth rates of over 3.9% annually. To stay competitive, companies are relying increasingly on technology to help them differentiate themselves, deliver on their brand promise and create unforgettable quest experiences.

The new, integrated cloud-based CRS and PMS will also have a real-time view of our business, and will help us make more informed decisions and allow us to continue not only meeting, but exceeding our quests' expectations."

Simon Jones
Managing Director for Premier Inn & Restaurants UK

At Amadeus, we are constantly innovating by examining the needs of the industry and our customers. Our vision is to offer cloud-native solutions (Amadeus Sales & Event Management, Property Management System, Central Reservation System, and Service Optimization) on a single platform with a centralized guest profile. These products cover the entire life cycle of a guest's journey and offer properties the added benefits of usability, functionality and visibility of quest preferences.

In 2017 Premier Inn signed up for two key capabilities of our hospitality platform: the Central Reservation System and the Property Management System. Together, both solutions will offer the hotel chain a 360-degree view of all its properties and will allow the company to better personalize its offering. Premier Inn also became the first hotel chain to adopt the Amadeus Payment solutions.

Together with InterContinental Hotels Group, we have initiated the planned Guest Reservation System roll-out, with full deployment expected by late 2018/early 2019.



7.4 Payments

The financial services industry will see more change in the next 10 years than it has in the last 100."

Anand Sanwal
Chief Executive Officer of data consultancy CB Insights

For travel companies, this huge wave of change brings opportunities to reach more customers and reduce payment costs, already estimated by the International Air Transport Association (IATA) at USD 8 billion a year for airlines alone. Amadeus Payments' mission is to bring this change to travel by making payments flow freely so travelers can pay when they want and how they want, and so travel companies can accept and make payments from around the world guickly and easily.

Paying to check bags in at an airport can be a difficult process. The check-in staff may send the traveler (and their luggage) to pay at a different desk in a different part of the airport, or may take payment by swiping the magnetic strip on the back of the traveler's credit card. However, this method of taking payment is notoriously complex and insecure.

In 2017 we partnered with Ingenico to launch Amadeus Airport Pay. Thanks to this payment solution, carriers and ground handlers can take payments anywhere in the airport, as the solution is independent from airport technology. Lufthansa Group, as launch partner, has already started the roll-out of the solution, to be deployed at check-in desks and ticket offices in over 170 airports worldwide.

² American Express 2018 Global Meetings and Events Forecast.

³ World Travel and Tourism Council, Economic Impact 2017 World.

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Another travel-specific payment challenge is the settlement between travel agencies and their suppliers. Amadeus B2B Wallet, a digital wallet for business-to-business payments, addresses this problem by allowing travel agencies to access a range of ways to pay their suppliers all through a single connection.

As these two examples show, our mission is to bring the "financial technology revolution" to travel. We do this by applying a unique combination of travel, payment and technology skills to travel-specific payment problems. We convert these skills into travel payment solutions through our Amadeus payment hub: a platform through which we integrate generalist payment partners into the travel technology environment. As a result, our travel customers gain access to a full range of payment services provided either by a partner or by Amadeus in-house technology, to help them pay suppliers and receive payments from their customers.

7.5 Travel advertising

We are thrilled to be working with Travel Audience. They met the challenge head-on and created a campaign that fit our strategy and needs. We worked closely together as partners, with great success in terms of awareness of the Canary Islands brand. Even more, we gained an incredible 8,000+ new visitors to the Canary Islands. This is the first time we have a clear return on investment in terms of conversions, understood as real purchases."

María Méndez Castro Managing Director, Canary Islands Tourism Board

Travelers do not want to spend a lot of time booking, but they want to find a great destination at a good price and book what they fall in love with. Advertisers want to reach and inspire their potential customers and look for effective ways to target specific audiences. And publishers want to deliver value to their users, while monetizing their solutions as best as possible.

This is what Amadeus' travel audience team does. It reaches millions of travelers and serves more than 300 advertising partners such as airlines, destination marketing organizations, online travel agencies and hospitality groups with its data-driven travel advertising platform, which generates up-to-date travel offers automatically and efficiently.

It consists of two major components: the Premium Publisher Network publishes third-party content via native advertising, and the proprietary demandside platform provides end-to-end data-driven advertising solutions to its 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 its advertising partners.

Travel Audience optimizes advertising across the entire traveler journey, identifies and creates new audiences and increases partners' reach, relevance and booking volumes.

In the first quarter of 2017, the Canary Islands Tourism Board partnered with Amadeus to promote its archipelago to millions of consumers with a clear travel intent and to increase the volume of bookings to the islands. The campaign "The Best Climate in the World" was aimed at identifying travelers who were searching for competitive destinations in the Canary Islands and influencing them to book their holiday there during all stages of the customer journey, from the initial inspiration phase to the travel booking.

Premium travel inventory, superior data and machine learning technology enabled Travel Audience to communicate effectively to millions of potential travelers that the Canary Islands have "the best climate in the world."

The online ads were shown as part of automated programmatic campaigns, including social media platforms, private premium travel deals and handpicked tourism websites in Travel Audience's Premium Publisher Network. The result? A clear return on investment for the Canary Islands, with more than 8,000 incremental visitors. Consumers were targeted across all stages of the customer journey to the final booking and this has proven to be extremely effective.

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Strengthening the Airport Value Proposition



Cloud-native vs. cloud-based technology



BilletKontoret presents Amadeus B2B Wallet





In 2017 revenue increased by 8.5%, negatively impacted by foreign exchange effects. This growth was supported by the positive evolution of our segments, as explained below.

EBITDA expanded 9.7% in 2017 to €1,865.1 million, as a result of growing contributions in both Distribution (6.8%) and IT Solutions (13.1%), partly offset by an increase in net indirect costs (9.6%). EBITDA margin expanded 0.4 p.p. to 38.4% of revenue. Both EBITDA and EBITDA margin were positively impacted by foreign exchange effects in the year.

Distribution

Revenue

In 2017 revenue increased by 7.3% versus 2016, negatively impacted by foreign exchange effects. The positive performance in the year was the result of an increase in both booking and non-booking revenue:

- _Booking revenue expanded 6.9%, resulting from a 6.2% increase in bookings coupled with a 0.6% growth in average revenue per booking. Average unitary booking revenue expansion was supported by booking mix, as the weight of global bookings over our total bookings increased in the period, as well as customer mix and positive impacts from contract renegotiations.
- _Non-booking revenue increased 9.9% in 2017 versus the prior year, driven by higher revenue from:
 - Search solutions provided to metasearch engines and online travel agencies
 - Enhanced functionalities provided to travel agencies
 - Tools for corporations, including i:FAO
 - Advertising solutions
 - · Our payment offering for travel agencies

Contribution

Contribution increased by 6.8%, amounting to €1,306.0 million, in 2017. As a percentage of revenue, contribution was 41.6%, 0.2 p.p. lower than in 2016. Both contribution and contribution margin benefitted from positive foreign exchange impacts. Contribution growth was supported by an increase in revenue of 7.3%, partly offset by 7.6% growth in net operating costs, driven by:

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- _ An increase in variable costs, due to higher volumes and a unitary distribution cost expansion, as expected, due to competitive pressure and a negative customer mix on incentives paid to travel agencies.
- A net fixed cost contention, which mainly resulted from (i) annual salary and variable remuneration reviews and (ii) the expansion of our commercial teams devoted to corporate IT and non-air distribution solutions, offset by (iii) an increase in the capitalization ratio in the year versus prior year.
- _A positive foreign exchange impact.

IT Solutions

Revenue

IT Solutions revenue grew by 10.8%, supported by the performances of Airline IT and our new businesses, as well as the consolidation of Navitaire (from 26 January 2016). Full-year revenue was negatively impacted by foreign exchange effects and the divestment of a non-core business by Hospitality IT on July 21, 2016 (Meeting Intelligence business).

Transactional revenue

IT transactional revenue

In this category we include revenues from (i) our PSS (Passenger Service Systems) offering for airlines, (ii) our e-commerce solutions, (iii) our range of stand-alone IT solutions (in the areas of merchandising, personalization, revenue optimization and disruption management, among others), which are complementary to, and fully compatible with, our Amadeus Altéa solutions, and (iv) other revenue from our Airport IT and Payments (the Merchant Hub offering) businesses.

IT transactional revenue increased by 12.3% in 2017, driven by:

- Volume expansion, resulting from organic growth and customer implementations, coupled with dilutive PSS average pricing, as a consequence of customer mix (given the increasing weight of lowcost and hybrid carriers' volumes).
- An increase in revenue from our airline IT portfolio of solutions, including e-commerce, merchandizing and personalization tools, revenue management systems and Airline Cloud Availability, among others, supported by customer implementations and organic volume growth.
- A healthy performance of our Airport IT business, most notably in the passenger processing area, and of our Payments Merchant Hub, through which we help travel merchants receive payments.

_Direct distribution transactional revenue

Direct distribution revenue includes (i) fees charged for bookings made through the direct sales channel of an airline using our Amadeus Altéa Reservation solution and for certain types of air bookings made through the direct sales channel of Altéa customers for which we charge a booking fee, not a passenger boarded fee, and (ii) fees charged to airlines using our Altéa Reservation solution for complementary functionalities that are closely related to the booking process.

Revenue from direct distribution declined by 2.0% in 2017, impacted by non-recurring items. Excluding these items, direct distribution revenue increased, supported by organic booking growth.

Non-transactional revenue

Non-transactional revenue comprises among others, (i) the recognition of deferred customization and implementation fees of our solutions, (ii) the provision of bespoke and consulting services, and (iii) revenues related to our Hospitality IT solutions.

Non-transactional revenue increased by 10.3% in 2017, as a combination of:

- _An increase in airline IT revenue from bespoke IT and consulting services.
- _The positive evolution of Hospitality IT, mainly in the Sales & Catering business, supported by organic growth and customer implementations. Hospitality IT revenue growth was negatively impacted by the divestment of a non-core Meeting Intelligence business in July 2016.

Contribution

IT Solutions' contribution amounted to €1,177.0 million in 2017, 13.1% higher than in 2016. As a percentage of revenue, contribution margin increased by 1.4 p.p. to 68.6%. Foreign exchange effects had a negative impact on revenue and a neutral impact on contribution, resulting in a positive impact on contribution margin. Excluding these effects, revenue increased at a low double-digit rate and the contribution margin expanded.

The increase in contribution was the result of 10.8% revenue growth, and a 6.1% increase in net operating costs, which was driven by:

- _Annual salary and variable remuneration reviews.
- Reinforcement of our commercial teams to better support the expansion of our product offering and customer base.
- _Increased R&D expenditure (most of which is capitalized) dedicated to our Airline IT portfolio evolution and expansion and our new businesses, partly offset by lower resources required to implement new carriers to our core Altéa platform.
- An increase in the capitalization ratio.
- _The consolidation of Navitaire since January 26, 2016.
- A positive foreign exchange impact.



9.1 Global operations

Amadeus' global operations is responsible for delivering our technology services to our customers. It transforms our services software into systems, databases and networks for airlines, hotels, airports, travel sellers and travelers, with the purpose of facilitating travel-related operations and transactions. These services are delivered from a global organization and multiple processing locations to provide optimal services to our customers.

The work of global operations begins with setting the standard and ensuring compliance for the operation of services across the whole of Amadeus. These standards ensure that customer and traveler data is properly secured, and that customers receive the service they need no matter who delivers it. These standards are enforced across the company as well as with our third-party suppliers.

In most cases, we begin with testing the applications to ensure that they function in a live context. We then build and manage the necessary server systems, data storage units and communication networks. Finally, we ensure that continuous high-performance services are delivered to customers 24/7. We now deliver services from many locations, including a privately owned data center, private cloud in remote locations and public cloud such as Amazon Web Services, Google Cloud Storage and Salesforce.com.

Amadeus Data Center operations

Across all IT sectors, increasing customer demand for data has led to rapid and ongoing growth in IT systems capacity. Two decades ago a travel agent may have received approximately 20 requests for a single booking, whereas today an online travel agency might receive thousands of "hits" per booking. This inflation in demand has resulted in exponential growth in data processing and data storage requirements at the Amadeus Data Center.

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Introduction

Wolfgang Krips

Executive Vice President,
Technology Platforms & Engineering, Amadeus



Over the last years, the travel industry has been evolving quicker than ever. It is becoming more and more traveler-centric and traveler expectations are continuously growing. Travel retailing is undergoing a deep transformation in response to the need for increased customer experience and personalized services. To deliver upon traveler requirements, Amadeus' customers expect fast, flexible and robust service delivery, while ensuring data security. This increasingly complex landscape calls for powerful and modern

technology frameworks. At Amadeus, our investments in technology are centered on what we see as the key enablers to make it happen.

Leveraging on big data. A better understanding of travelers' preferences and behaviors enables our customers to create more personalized offers. This means analyzing masses of information that must be stored, mined

and transformed into meaningful parameters. Using such big data and machine learning methods, creates considerable complexity and brings the need for significantly higher back-end speed and agility.

Agility is key in our business. Using modern Application Programming Interface (API) concepts enable us to accelerate the creation and inclusion of new solutions into the Amadeus ecosystem. This may well even be outside of the travel sector, but it enables our customers to offer any service they need all within one environment. We are fostering increased innovation with our Open API program, which enables our customers to work and develop their own applications on top of our solutions.

Moving to the cloud, with the move to a cloud-based architecture we can deliver our services faster and in a highly reliable and performant way. From a technology perspective, all of our applications are capable of being ported to the cloud, which brings important stability and agility advantages to us and our customers, for instance due to cutting-edge deployment and operations automation.

Security is of vital importance. While driving innovation, security is a crucial part of our business. In an environment of increasing threat levels, our customers need to build and sustain the trust granted by their clients. At the same time, we at Amadeus need to do the same for our customers. The key evolution in security today is to be able to dynamically detect threats and incidents and to have isolation capabilities to control the propagation of any breach. Security is a current topic for everyone and for which we continue to invest, deploy resources and advance from a technology perspective.

In summary, our competitive advantage in the market relies not only on our ability to deliver cutting-edge functionality, but also delivering it in a sustainable, scalable and secure environment – which is the foremost customer need.

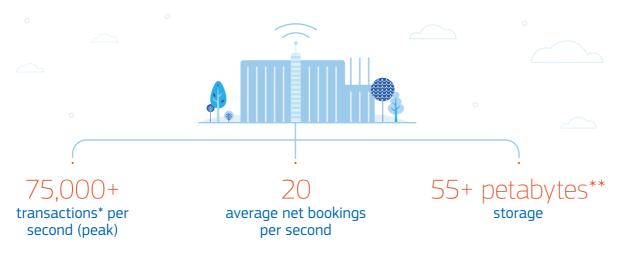
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Amadeus has therefore moved in recent years toward cloud-based technology and distributed deployment of services. Although the Amadeus Data Center remains as key company infrastructure, we have implemented the Amadeus Cloud Services foundation technology enabling Amadeus to use automated cloud methods to deploy services to remote locations nearer to customers. These locations are a flexible mix of private data centers and public cloud.

The Amadeus Data Center was designed by experienced engineers. Ownership of the facility gives Amadeus full control of the physical environment and removes any reliance on third parties for security and data protection matters. Additionally, this optimizes the efficiency of our development organizations, not only through integrated processes and tools but also through the flexibility it allows and the dedicated support we can give to new, creative solutions.

Our experience in running a first-class data center, coupled with a strong commitment to investment in the latest technology, progressive automation and adaptation to international and industry standards, keeps Amadeus ahead of the curve. Today, thousands of travel providers rely on the systems hosted and maintained at our Data Center facility. We deliver over 20 travel-related bookings per second. The facility also hosts and manages passenger service and departure control systems for more than 100 airlines, as well as numerous other IT solutions for travel management companies, hotel companies and many other players throughout the travel and tourism industry.

Amadeus' solutions are offered in a Software-as-a-Service (SaaS) model, hosted primarily on open systems¹ and highly scalable hardware on more than 19,500 servers at the facility. The Amadeus Data Center is one of the largest data processing centers dedicated to the travel industry and devoted to providing customers with continued service excellence.



^{*} A transaction is 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.

Amadeus' global operations are continuing to move into open source operating systems. With the transition from proprietary systems to Linux completed, we now see Amadeus Altéa Reservations, Inventory and Departure Control systems running completely on open systems. The move to open systems is the basis for the creation of a "software-defined data center." During 2017 we completed our TPF Decommissioning project, moving our systems from legacy mainframes to open source systems. This gives us more flexibility, scalability and agility so that we can meet the changing requirements of our customers as they adapt to the needs of travelers.

Cloud operations

Amadeus is taking advantage of cloud technology and operating models to provide more flexible services to customers. This is of particular benefit where the service has high-volume and high-performance requirements. Amadeus Cloud Services, developed jointly by our R&D and global operations teams, enables the company to flexibly and easily deploy applications in any location using automation. This is in active use already to support Amadeus' service to InterContinental Hotels Group launched in 2017 and the Amadeus Cloud availability service for Lufthansa in remote locations. In the case of the new Amadeus hotel Guest Reservation System, the service is based in private data centers rented by Amadeus, and in the case of Lufthansa, Google Cloud is being used for hosting.

Broadly across Amadeus, Microsoft Azure and Salesforce. com are further examples of cloud services used for example by customers of Amadeus Hospitality, which Amadeus is leveraging to provide services to customers in as flexible and cost-efficient a way as possible.

Private data centers are being used to host mission-critical services that benefit from closer proximity to customers.

^{**} One petabyte is equal to 1015 bytes of digital information.

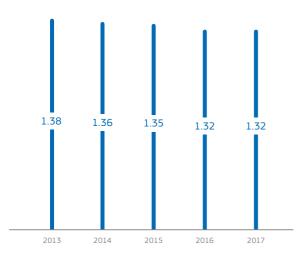
Open systems in computing refers to a class of systems built using open source software (OSS) standards offering a high level of portability and independence from the hardware platforms on which they operate, especially in contrast to the more entrenched mainframes that were once common in the travel industry.

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Business growth, green IT and energy efficiency

In response to this growing demand for data storage and processing capacity, Amadeus has been focusing on the energy efficiency of all its operations. We received Energy-Efficient Enterprise certification from TÜV Süd in March 2010 (the certification was renewed in 2012 and 2015 and lasts until December 2018) for the Data Center power supply, cooling and climate control processes and IT equipment, as well as for the Center's procurement, installation and de-installation procedures. We have also extended our Data Center certification now to EN50600, 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 Effectiveness² (PUE) ratio from 1.49 in 2009 (when

Data Center Power Usage Effectiveness



² Power Usage Effectiveness (PUE) is 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.

this value first began to be closely monitored) to 1.32 in 2017 (see graphic below). The latest Uptime Institute³ survey places the average PUE values for data centers at 1.7.

Global presence

Amadeus global operations is based on a follow-thesun model, with specialist support groups in Germany, the US, Australia, India and the United Kingdom. The global operations sites are the first points of contact for customers during business hours, strategically located 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.

Our global operations are supported by more than 900 employees.⁴

LEAN management

In 2015 Amadeus' global operations launched a LEAN management program. The core concepts of LEAN, including customer-centric, data-driven decision-making, ensure that Amadeus continues to increase its focus on customer needs and customer value.

The program also fosters employee empowerment and delegation to facilitate rapid decision-making across all levels of Amadeus' organization.

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 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.

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.

³ 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.

⁴ As of 31 December, 2017.

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9.2 Research and development

Amadeus Research & Development is responsible for building innovative products and solutions for our customers worldwide. These solutions are based on a wide range of state-of-the-art technology integrated for the specific needs of customers. R&D is a strategic priority for Amadeus, and a key factor in maintaining market leadership and sustainable, profitable growth. This is a permanent objective, as R&D teams conceive, design, develop and maintain some of the world's most complex, widely available real-time information systems accessed daily by hundreds of thousands of travel professionals and end users in almost all areas of the travel industry.

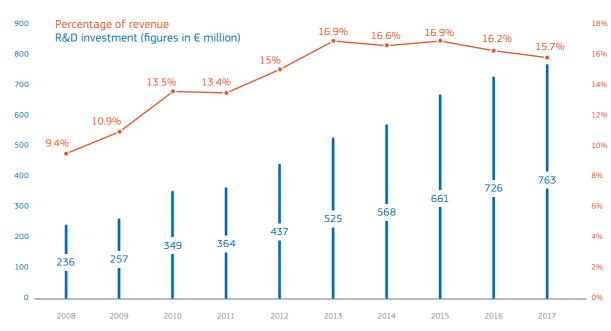
The Amadeus Technology and Platforms Engineering (TPE) unit is designed to deliver reliable platforms for an automation of the operational cycle, in the context of the ongoing transition to cloud-based architectures. In addition, the Core Shared Services R&D (CSS) unit regroups the transversal engineering activities and shared applications across all Amadeus' businesses and customer segments, such as the core reservation, pricing and shopping platforms. CSS is also responsible for the executive governance for quality management, development tools and project methodology across all components. Finally, application development pertaining to specific customer segments is embedded into dedicated R&D groups within the corresponding business unit.

This realigned organization of Amadeus Research & Development, now designated Engineering Community, will reinforce our constant efforts toward the highest

reliability and quality of our systems, products and services, following the new model of development based on continuous delivery and continuous deployment within cloud-based architectures.

Amadeus ranked as the second-largest R&D investor in the Software & Services sector in Europe.⁵

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.

⁵ 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://ir.igrc.ec.europa.eu/scoreboard16.html.

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A global approach

Amadeus' investment in R&D is supported by a network of development centers across the world. The Research & Development organization is 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. All sites work closely together, and our projects and product development are increasingly distributed over several sites. Nice (France) is the largest center for R&D activities, 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. In 2017 development sites have grown in all regions, showing that this distributed development approach can scale well.

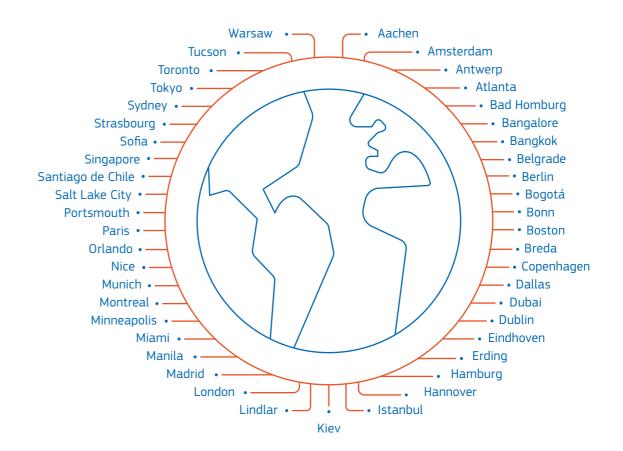
Amadeus Research & Development continued to expand its agile development methodology across all units. This agility program is now becoming mature in many areas and has promoted flexibility in the development and quality cycles, based on the dynamic assembly of teams focused around product and customer projects delivery. This approach is now extended to cover the operational readiness of the software for production deployment. 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. This methodology has been strengthened in 2017. It is instrumental to leveraging the high modularity of our systems, allowing applications delivered to our customers to share and reuse functionality and technical components.

Recruitment at Amadeus R&D is oriented toward incorporating a wide range of expertise and international cultures in order to develop global products. Staff mobility, short- or long-term,

is encouraged. Amadeus also offers numerous internships to top international schools, with formal recognition of their contribution in the form of an annual intern contest. Over 2015–2017, Amadeus has appointed close to 140 internal experts in all functional and technical domains relevant to our activities.

Amadeus pays particular attention to providing 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 the agile development methodology.

Technology sites



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Exiting the Transaction Processing Facility mainframes

Denis Lacroix

Senior Vice President, Core Shared Services R&D, Amadeus



The original Amadeus Global Distribution System (GDS) was largely based on mainframes, running the TPF system introduced in the 1970s by IBM, on which most airline passenger systems were also based. TPF mainframes are very powerful, but also bring a heavy set of constraints and high costs with their proprietary and monolithic architecture. At the end of the 1990s Amadeus designed a new architecture based on open systems and relational databases, and started migrating a number of applications while

modernizing the TPF platform to be perfectly integrated in this architecture. Open systems allow a more flexible and scalable deployment by distributing transactions on multiple servers. They are also vendor-independent and supported by the IT industry and the open source community, enabling for example development in modern programming languages.

During the 2000s Amadeus performed most new developments on open systems environments, in particular key components of the Amadeus Altéa suite such as Inventory Management, Departure Control Systems or Flight Management. In 2007 the decision was taken to engage in a full decommissioning of the TPF mainframes. This represented a huge engineering project of several thousands of effort-years, touching the core of our systems, while continuing the development of functional features to meet the growing customer demand and introducing new applications and capabilities. In June 2017 the TPF mainframes were officially unplugged. Amadeus is proud to be the first GDS and large-scale PSS supplier running fully on open systems.

There are major business benefits to removing the constraints of TPF mainframes:

- _Scalability, as we can distribute our applications over an almost infinite set of servers. If we had not decommissioned TPF, we would have reached the architectural limits of the IBM mainframe clusters.
- Resiliency, as it removes impediments to operating our applications in several data centers, enabling continuous system availability by relying on redundant platforms and faster response time by deploying our applications closer to our customers.
- _Flexibility, since we now have a unified technical environment and architecture.

 This makes complex developments easier and faster, including in the core
 systems and not just at the periphery.
- _ More predictable and linear cost, driven by commodity hardware and open source software, in full vendor independence. With TPF mainframes, these costs would have exploded. We can today leverage the latest evolutions in technology whether for computers, storage or networks at the best price/quality available on the market.
- _Talent attraction, as, being out of TPF mainframes, it is easier to attract and retain the best engineers

Overall, the exit from TPF mainframes has been a powerful functional enabler, opening a range of business opportunities to move faster toward a new range of technologies, such as cloud-based environments, big data analytics and artificial intelligence.

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Amadeus promotes a culture of innovation across all R&D teams and product management organizations, capturing and developing new ideas through a formal innovation process. This is complemented by our active participation in internal and external contests, hackathons and major tradeshows. This flow of innovation is exploited both within the Amadeus Innovation Labs and in the project teams, most often in collaboration with customers and partners.

In 2017 the strategic roadmap for innovation was built around six themes: messaging platforms, improved conversion, extended content, operations and performance, blockchain for travel and disruptive models.

Capitalizing on technology trends

Beyond cutting-edge functionality and features, our customers also expect robust, versatile and fast systems, as their businesses rely more and more 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.

With the predominance of multiple touchpoints, it is essential that information and transactions are processed in both a contextual and personalized way. This implies capturing and analyzing beforehand a lot of information about the traveler and the context in which they interact with the system – before, during and following a trip. This mass 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.

A number of technologies grouped under the concepts of "cloud" and "big data" are becoming mature. Most of them originated from mainstream IT companies and the open source community. They offer definite technical advantages, particularly in terms of infinite scalability and continuous availability. They also open avenues to new business opportunities with their application to data analytics and integration with other systems via a new application programming interface (API) framework.

While continuing the development of new functionality in existing and new businesses and serving an increasing customer base, Amadeus is now fully engaged in this major wave of technical evolutions around four pillars: cloud, data intelligence, security and open API.

2017 has seen new deliveries of applications based on this modern approach, in particular our next-generation hospitality reservation system – advanced optimization applications for airlines and airports based on machine learning and the generalization of Amadeus Airline Cloud Availability.

Cloud-based architecture

Cloud-based architectures promote an explicit separation and abstraction of the application, platform and infrastructure layers. Unlike mainframes, where these layers are completely interlaced and proprietary, this 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 capability to handle extremely large volumes of data and processing, with quasi-continuous system availability.

After the validation of technology choices, in particular the selection of IT partners for the Enterprise version of these open source frameworks, Amadeus has begun concrete implementation, with first deliveries to production in 2017 and a plan to expand progressively to the whole product portfolio over the coming years.

Data intelligence

Our customers are very demanding in the contextualization 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 Research & Development and Amadeus Global Operations have taken 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 capability drives both the evolution of our applications and the Travel Intelligence business line.

This means building and mastering data management frameworks on three levels:

- 1 Technically handling extremely large volumes
- 2 Performing predictive analytics on unstructured data
- **3**_ Exploiting the results in data-driven applications

⁶ These layers are often referred to as SaaS (Software-as-a-Service), PaaS (Platform-as-a-Service) and IaaS (Infrastructure-as-a-Service).

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In 2017, we were well engaged in the implementation of 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. 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 virtuous circle: the more data, the more relevant the pattern analysis, in turn feeding back enriched transactions and generating more data, and so on.

Security

Security is at the heart of Amadeus' systems in terms of application design and operations. We follow 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 2017 we continued our efforts toward compliance with advanced security standards, including the new evolutions of these standards. O Amadeus also reinforced its internal training programs on security. In addition, we are working actively toward the new General Data Protection Regulation enforcement introduced recently by the European Community around data privacy.

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 its customers from new types of vulnerabilities, cyberattacks and frauds. In 2017 we made substantial progress around a dynamic approach to contextual security. This approach will enhance our proactive detection of potential incidents and adapt to new fraud practices as they emerge. We are developing Threat intelligence methodology and are extending our external community by joining the Aviation ISAC consortium. User and entity behavior analytics is taking a major part in our detection techniques. We have introduced new technical frameworks, some based on artificial intelligence techniques, 7 to understand the dynamics of fraud and misuse, but also to optimize alert, response and recovery mechanisms in order to minimize the impact of potential situations where the operating businesses would be in a compromised state.

Open API

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"

Amadeus was the first Global Distribution System to introduce a structured API, 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.

The open API concept is primarily about being more systematic in the exposure of the Amadeus functionality and aligning with the best practices of the industry (i.e. being API-minded). Beyond the modernization of the technical frameworks underneath, the objective is

to promote our API in its business dimension. This will allow the creation of new generations of products and services, by associating Amadeus services 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.

One particular benefit we expect is to boost innovation, both internally and from new entrants, as well as develop a service ecosystem, making sure that Amadeus is a preferred back-end for any functionality dealing with travel. In the context of our Start-Up Innovation Program, which also includes hackathons, we have already published a set of APIs as a sandbox (i.e. on production-alike systems) for any third party to exercise Amadeus services.

In 2017 we have started the implementation of the generic framework for the open API, covering user management, security and monitoring, both for the distribution segment and airline IT customers. This is an essential step before the progressive publishing of functionality as of 2018.

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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 cloud capabilities to quickly build niche functionalities. Amadeus enjoys a privileged position, owning a large portfolio of travel-dedicated applications combined with the capability to quickly leverage all cloud techniques on a very large scale and on the widest customer base of the travel industry.

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. In 2017 we introduced applications deployed in production over to multiple data centers and clouds, with new database techniques.
- Rapid response time for all functions from any point of access in the world, serving hundreds of thousands of concurrent professional users, and a greater number of end consumers connecting to the websites of our customers (which collectively form one of the largest Web systems worldwide in terms of traffic).

_A true omni-channel approach, servicing all functionality 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 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 contributes to the development of open source communities, in particular in the context of its partnerships with major IT vendors.

External innovation programs

Amadeus ventures

As leaders in innovative programs, Amadeus continues to both invest in start-ups globally and partner to drive new strategic value for the travel industry. Amadeus has made 10 start-up investments across Europe, North America and the Middle East.

Innovation partnerships

Amadeus has developed an innovation partnership program aimed at engaging with more mature start-ups to explore relevant technology through testing and use case execution within strategic innovation areas, such as artificial intelligence, blockchain, messaging platform and predictive analytics.



Watch video on our approach to innovation

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Our two biggest airline programs were cut over in 2017

Christophe Bousquet

Senior Vice President, Airlines R&D, Amadeus



Over the past twelve years, Amadeus has built a proven track record of hundreds successful airlines migrations to our Amadeus Altéa solutions. However, 2017 has been a unique year as we have completed our two largest programs ever: Southwest Airlines Departure Control and Japan Airlines Passenger System program.

In May 2017 Amadeus completed the largest ever departure control system cutover, with the migration of Southwest Airlines. It was a tremendous challenge

for Southwest and Amadeus to perform such migration in Big Bang mode with more than 100 airports migrating at the same time all over the US. This cutover involved unprecedented support both on Amadeus' side (4,000 people worldwide) and on Soutwest Airlines' (13,000 employees newly trained). Amadeus demonstrated its capability to successfully address most critical technology challenges.

Southwest became the first major carrier in the US to join Altéa platform and the largest customer globally by passengers boarded with almost 4,000 daily flights and 500,000 passengers boarded every day.

In November 2017 Amadeus migrated Japan Airlines' international market to the Altéa platform, which was the biggest Reservation, Inventory, Ticketing and Departure Control cutover program in terms of duration (five years) and development (more than 450 man years of effort).

The challenge was a one-of-a-kind as this large customer's specific developments were done simultaneously to the migration of our applications to an opens systems environment and the decommissioning of our TPF mainframes. The unique situation involved stringent validation and transition phases, as well as, at times, new infrastructure internally.

Beyond the technical challenges, the trusted partnership and excellent collaboration with our airline customers at all levels of the organizations were key factors of success. These have been fantastic human experiences, all working together toward a common objective: a successful cutover on D-day, as committed together years ago.

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True partnership with the travel industry

When Amadeus was founded in 1987, the decision was made to base the architecture of our systems and our software development organization around a shared model to deliver applications. Airlines and travel agencies use the same core reservation functionality, relying on common processes, practices and data, avoiding complex synchronization of systems. This is extremely important for the convenience of travelers, who can benefit from a single view of their trip and manage it seamlessly through multiple channels and touchpoints.

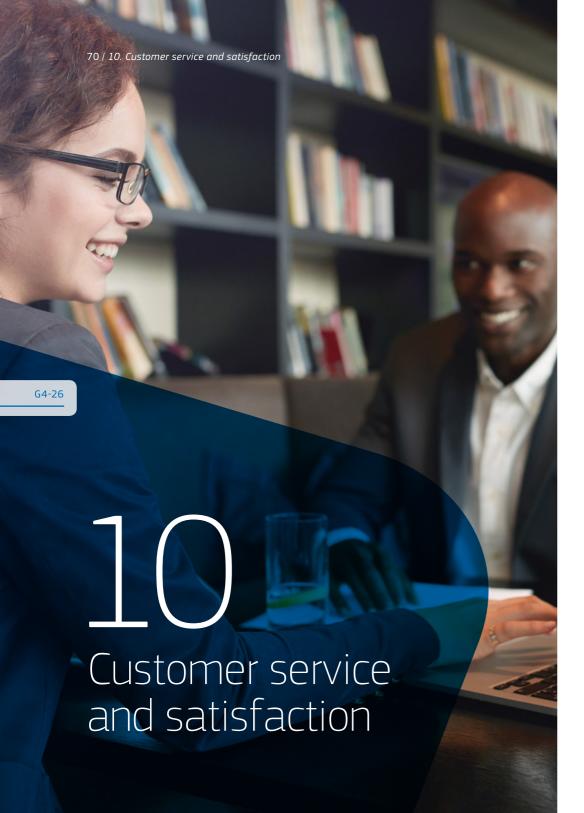
In addition, with the highly modular design of our system architecture, we can serve a wide range of travel-sector customers from a common set of source code, adapting and customizing to each customer as required. This approach is essential to evolving Amadeus' system to the global requirements of the industry. As a result, Amadeus is always in a strong position to anticipate the major trends in travel and introduce innovations for all travel players in the same wave of evolution. In other words, Amadeus shapes travel functionality for the whole travel industry at once, leveraging joint collaboration with its customers and partners.

These decisions were instrumental to giving us an advantage over our competitors in the past, and continue to do so today.

The "system user" and community concepts deliver substantial synergies and agility in the development of applications, since all technical investments are amortized for all Amadeus businesses. Our major shift toward cloud architecture, big data analytics and proactive security is shared between the Distribution and IT business lines. As of 2017 we expect major evolutions in the context of the progressive shift of our customers toward the IATA New Distribution Capability standard (IATA NDC), primarily around shopping, merchandising and personalization. Due to the shared nature of Amadeus systems, our NDC program will benefit both airlines and travel agencies from a common investment and organization.

Amadeus research and thought leadership papers



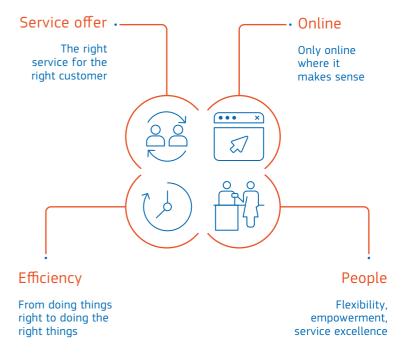


10.1 Customer service

Amadeus Customer Service develops and delivers a wide range of learning, support, automation, content and security management services to meet the needs of our customers. These professionals help our customers to succeed by:

- _Helping customers understand, train in and use Amadeus solutions
- Providing the highest level of functional and technical support
- _Securing and integrating travel industry content
- _Offering related consulting

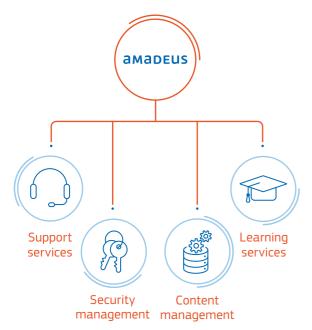
Our main focus areas



Amadeus Customer Service's vision 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, and developing and improving performance in areas such as:

- _Service excellence and service evolution: empowerment of customers via the enhanced offer of online self-service support and learning.
- Reduction of incident resolution time thanks to performance monitoring and proactive communication.
- _Amadeus Learning Center of Excellence: customized training adapted to customer needs and online training offers.
- Consulting: evolution of consulting services on content management and security, in addition to continuously improving our training offer.

Customer services scope



Support services: we are always there for our customers

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

- Level 1 customer support is provided to our distribution customers locally in each market by the Amadeus Commercial 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 Level 1 support to our Amadeus Customer Service experts.
- Level 2 support is provided by the Amadeus Service Management Centers, which build a virtual support network distributed across our centers in Sydney, San José, Nice, Erding, Bangalore, Bangkok, London, Miami and Dallas. We continue to develop our footprint by opening new Amadeus Management Service Centers close to our customers' locations.

For our local customers, we offer functional support outside of business hours through our Regional Service Centers in Buenos Aires, San José, Johannesburg, Manila and Kuala Lumpur. For global customers, Amadeus has a "follow-the sun" service that provides seamless 24/7 coverage from Amadeus Service Management Centers. Its structure aims to guarantee technical and functional support at any time for all our customers worldwide.

Level 3 support. Amadeus has a specialized technical support team bringing together R&D developers and quality assurance professionals. The synergies of their expertise allow for continual improvement of the investigation and recovery of non-code-related incidents in complex areas. The team contributes to customer satisfaction by minimizing resolution time, reducing R&D incident backlogs and improving the accuracy of responses. Our Customer Service engineers are on board with the goal to resolve up to 90% of incidents without further escalating to research and development teams for a solution. Today, Level 3 covers a wide range of functional areas for airline customers. We are constantly investigating how best to support our customers, by adopting new support models.

Amadeus support services



Customer service locations



We anticipate customers' needs

A team of technical analysts is dedicated to reducing the incident resolution time at Amadeus' global operations. O It monitors business performance to detect major issues before customers report them, correlates incidents to changes, drives recovery efforts, anticipates the impact of incidents and proactively communicates this to customers in order to ensure their business continuity. Since the creation of this team in 2015, the results on the mean time to recover for major business incidents has been significantly reduced. Additionally, the team has improved communication with customers, allowing them to make faster business decisions by reducing the time it takes for them to receive critical incident notifications from 20 minutes to 10 minutes. This is done via the Amadeus Critical Incidents Center online portal.

We contribute to continuous improvement

We use valuable information collected from our customers in order to better respond to their needs. Amadeus Customer Service helps to re-inject the voice of the customer back into the organization. Its objectives: to avoid where possible any recurring issues, to proactively propose consulting services and to work with the Amadeus Account Teams to help customers succeed.

One of our core guiding principles is to put our customers at the heart of everything we do. This is why at the end of 2017 Amadeus decided to bring the Customer Service units closer to the respective customer segments they serve across all our business units, and this will translate into a change of our current customer service organization.

Learning services

In order to ensure that our customers receive the training they need to make the best possible use of our technology, Amadeus Customer Service delivers training with a flexible and varied approach on the suite of Amadeus solutions.

We are fulfilling an increasing demand for customized training to meet customers' specific needs and specialist training situations. Equally, our comprehensive range of standard training courses (product functional training, sales training) are evolving to reflect the changes both of our training approach and Amadeus' products and solutions.

Learning is provided through e-learning videos and courses, and delivered by instructors through a virtual learning environment, in our training centers and on site at customer premises.

Our blended courses combine these formats for greater flexibility.

We ensure easy access to learning information that supports our customers and Amadeus employees at their moment of need. Our Online Help and User Guides explain how to use Amadeus solutions and are regularly updated with user feedback, including a "What's new" section for easy reference of recent updates to the information.

Thanks to our global, regional and local training presence, we adapt to customers' needs. Training experts are based in five locations: Nice, Antwerp, London, Bangkok and Dallas.

Our training services are delivered as standard in English. Whenever possible, we deliver training in local languages, including for example Spanish, Russian and Thai. Amadeus Commercial Organizations also provide a range of training to travel agencies in local languages.

Amadeus Learning Services is a recognized Center of Excellence that has adapted to deliver consultancy

on training needs, and provides forward-thinking learning solutions focused on customers' needs and special requirements.

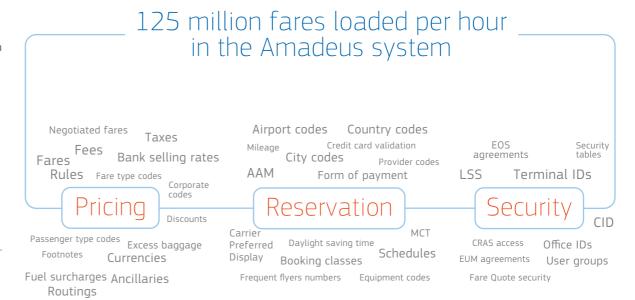
Content management and security

The Amadeus Content Management and Security teams ensure content quality and Level 3 customer support activities for reservations, inventory, ticketing and data load, as well as security and access management. The teams provide worldwide and centralized security administration for Amadeus employees and customers. The 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.

These data management experts ensure that appropriate, reliable and accurate content is available for our customers 24/7. Their core business knowledge allows them to provide expertise on a wide range of products and domains, and they are the dedicated entry point for external data providers.

These experts analyze customer issues and provide recommendations through tailored services such as on-site customer training, data reports or fare filing on behalf of customers. One of the key services in this scope is consulting on how to make the best of Amadeus solutions. In 2017 we expanded our services by setting up a center of excellence dedicated to specific pricing incidents. This newly created team enabled us to improve our resolution rate and turnaround time significantly. During the year, we also delivered several consulting services to airlines, including a large program to help a South American airline streamline its office identification numbers, users and access rights set-up.

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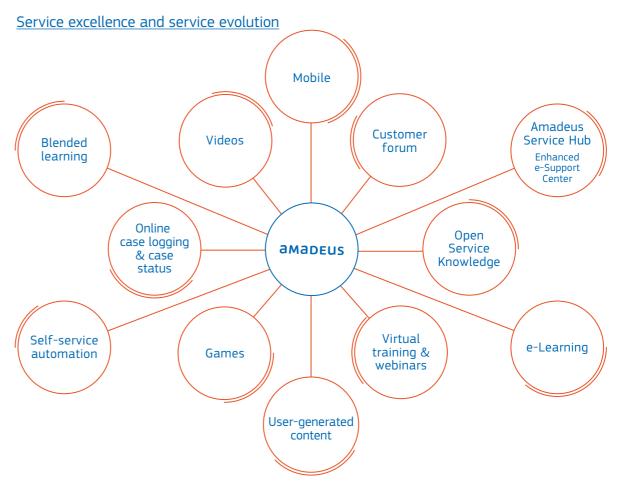


Digital first

Our online presence is key to supporting our strategy. We develop innovative self-service solutions to empower our customers and grant them the independence they need with our online support and learning tools. Amadeus Service Hub, an online learning and support portal introduced in 2016, was made available to the vast majority of our customers in 2017. This knowledge base provides a powerful search function, case and claim logging capabilities, real-time news and other features. Today, more than 210,000 users - including retail and online travel agencies, airlines, ground handlers, airports and hotels - are serviced online via Amadeus Service Hub. Customers can also access product user guides online, short "howto" videos, e-learning courses and training catalogs, and can self-enroll on training programs.

Amadeus is working on the development of new engaging online services¹ that, among other things, are designed to automate specific notifications to customers, make the learning experience more enjoyable and share knowledge among customers:

- _ Amadeus Critical Incident Center: automating the notifications to airline customers and updating them with valid information on the resolution of their critical incidents. The solution will soon be extended to the rest of our customer groups.
- _ Amanda: in 2017 we launched as a pilot in Latin America, a chatbot solution called "Amanda." Integrated into Amadeus Selling Platform Connect, it provides a seamless and innovative online experience for our customers, answering easy how-to guestions.
- Open Service Knowledge: 5,500+ knowledge solutions are easily accessible to anyone via internet search engines.



- _ Amadeus Customers Community: customer forum to leverage peer-to-peer knowledge sharing and simplify interactions among customers and with Amadeus.
- _User-generated content: Amadeus Service Hub is a customizable platform where customers can upload their own content.
- _ Amadeus Critical Incident Center: customer notification on critical incidents and resolution progress. This tool, introduced for airlines in 2016, has been deployed to more customer segments in 2017.

The initiatives to improve the distribution customer service experience are managed by the implementation project SENSE – Service Excellence and Service Evolution. The project aims to empower customers to find the right service at the right time in order to enhance their operational efficiency.

¹ Services depending on market availability: customer forums, games and user-generated content.

10.2 Customer satisfaction and loyalty

Listening to our customers and understanding the different needs of travel providers and sellers is critical to our company. We know that customers' business needs and challenges are constantly evolving. We have therefore built a Voice of the Customer program that monitors customer satisfaction and then evolves in order to open new feedback channels between customers and Amadeus.

The mechanisms to gather customer feedback and measure customer satisfaction vary slightly across business lines in order to adapt to the characteristics of each segment and market. Nevertheless, there is a consistent process structured around the Net Promoter Score methodology. Targets are set in order to reflect Amadeus' customer loyalty strategy. Once customer satisfaction has been measured, results are communicated both internally and externally to customers. Finally, action plans are defined and implemented.

The main purpose of Amadeus' Voice of the Customer program is to transform customer feedback into insights that the business units and functions across Amadeus can use to improve our performance. Then, we can measure the impact of these actions in the following round of customer satisfaction surveys.

Customer satisfaction in 2017

In 2017 Amadeus executed satisfaction surveys for four customer segments. This year we have implemented a Voice of the Customer tool with the aim of collecting in a more systematic way the customer feedback from different types of surveys, with the final aim of having a 360-degree customer view.

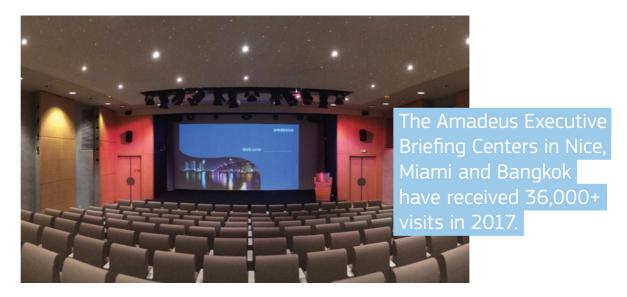
There are certain key customer satisfaction drivers across all customer segments:

- _Perception of Amadeus as a solid, leading and innovative brand.
- _Quality and reliability of Amadeus solutions, which is a reflection of Amadeus' focus on research and development.
- _ Relationship with account management teams, which highlights Amadeus' staff engagement.

For areas with potential for improvement, action plans are defined with the goal of establishing specific measures that will improve customer satisfaction.

Based on customer feedback, Amadeus has put in place several initiatives with the aim of improving tools and processes. For example, the Airlines team has arranged several engagement sessions to share insights and discuss implications and next steps, and has developed a community with over 30 people who are accountable for driving action based on customer feedback. In other areas, efforts have been made in increasing the level of participation of customers, and improvement programs have been put in place with tailored action plans related to different customer touchpoints. All activities are focused on putting the customer at the center of what we do.

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Auditorium in the Amadeus Executive Briefing Center in Nice, France.

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Creating success through people and culture

Sabine Hansen Peck

Senior Vice President, People, Culture, Communications & Brand, Amadeus



Our competitiveness depends on our ability to continue attracting and retaining the best talent at Amadeus. This is at the core of what my team and I do. We work to make Amadeus a place where each and every one of our people wants to do their best for our customers, every single day. In short, it is about making Amadeus a great place to work. This means having the right culture - one where our employees can flourish and one which makes us the kind of partner our customers love to work with.

The employee experience starts from the very first contact candidates have with Amadeus, to their everyday work with us throughout their tenure.

The first thing they notice is the Amadeus culture, which is what sets us apart from others. It is founded on a strong purpose as well as values which underline what we stand for and guide our decisions, behaviors and

every aspect of our day-to-day work. We nurture this by refining and reinforcing these values in line with changing dynamics in technology, travel and the world around us.

We have a diverse, global workforce which spans five generations in every corner of the world. They are vital to our success, so our goal is to offer them a combination of responsibility, recognition and benefits that is meaningful to them at whatever stage they may be in their career or in life.

To do this we constantly benchmark ourselves against other companies with equivalent profiles to ensure our rewards packages are competitive. We also encourage our people to participate actively in the company's success. They do this via our company performance bonus scheme and our Share Match Plan, which is available to 12,000 employees in 28 countries. This plan has long been recognized as a leading program by the equity compensation sector on both sides of the Atlantic.

Other increasingly important aspects of our employee experience include the opportunity to continue learning in existing or new roles, the possibility of pursuing a career in expert or people-leadership fields, geographical mobility, work-life balance and opportunities to give back to the community and society.

Our leadership team is hugely important in all of this. Apart from significant accountabilities to our customers, they also need to coach and mentor their own teams on how to adapt to a changing future. We continue to expand the reach and scope of our development programs for leaders in which we combine the latest thinking in technology, business and leadership so they can learn and grow for tomorrow.

How well are we doing? We regularly monitor how empowered and engaged our people feel via our "Engage" feedback program. We strive to be ever more open and transparent in our communications and actively encourage clear and constructive feedback on all aspects of people's working lives.

The focus of all these initiatives is to deliver a great employee experience and to be more effective as a single global team in serving our customers. This has been recognized externally with 25 significant awards in 2017. I am especially pleased that we received the Top Employer award in six countries last year and are now ranked as the seventh best employer overall in Spain.

Our people and our culture are at the heart of Amadeus and our future success, and we are proud of what we have achieved so far. However, to acquire and retain the best talent in the technology and travel industries, we know we cannot be complacent. The competition for talent is fierce and we need to stay ahead of the game.

Our people are our lifeblood. And our culture is what allows our people to be the best version of themselves at work. I am proud to lead Amadeus' efforts in this area, and together with my team we will continue to give our very best every day and enable success for our customers and for Amadeus in the coming years.

Our people are the cornerstone of Amadeus' success. Their energy, passion and expertise have delivered best-in-class products and services to the travel industry and driven our growth over our 30-year history. Each employee is part of these achievements, and we strive to ensure that we continue to deliver the best possible environment for our people to thrive in.

This chapter highlights Amadeus' significant investment and enhancements in the fields of people, diversity and inclusion.

In 2017 the number of employees at Amadeus continued to increase across all markets, with more than 2,000 employees hired globally.

Workforce by type of contract (FTEs)*

	2015	2016	2017**
Permanent staff	12,584	13,623	14,543
External manpower	1,567	1,590	1,752
Temporary staff	100	167	490
Total	14,251	15,380	16,785

Workforce by region (FTEs)*

	2015	2016	2017**
Europe	9,113	9,356	10,053
Asia-Pacific	2,607	3,167	3,688
North America	1,652	1,980	2,188
South America	524	555	548
Middle East and Africa	355	322	308
Total	14,251	15,380	16,785

^{*}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.

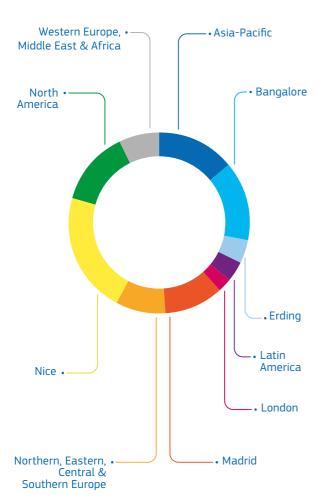
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^{** 2017} scope follows a more accurate calculation, which includes additional categories like "inactive" employees, who would be those on a long-term leave. The 2017 figure calculated with the methodology followed in previous years would be 16,262 FTEs.

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11.1 Talent

Hires per geography in 2017



Talent attraction

Amadeus' talent acquisition unit is one of our strategic pillars to enable future business sustainability and growth. One mission-critical objective for us is to attract and engage a diverse talent pool, which will help shape the future of travel. To do so, we have transformed our recruitment model to enable a better and more digital end-to-end candidate experience. We have upskilled our recruiters to master new digital techniques to source, find and engage a talent. We have modernized our techniques to streamline the application process by offering video interviews and remote real-time assessments. We have also strengthened our employer brand on social media through targeted campaigns to show what it is like to work at Amadeus

Talent and learning

We firmly believe that our people are our best competitive advantage, hence our focus on providing learning and development opportunities to encourage their growth and engagement.

Developing our future leaders

In Summer 2017, we run the 7th edition of our corporate Leadership Development Program in collaboration with the IESE Business School in Madrid. This event brings together members of our senior management team from all over the world and from all business areas for two weeks. Sessions are delivered by IESE professors and members of the Amadeus Executive Committee, ensuring a balance between the latest academic thinking and business knowledge.

In total, 180 Associate Directors and Directors have attended the program since its inception in 2013.

Amadeus also offers initiatives for specific groups, such as junior professionals to help ensure readiness for the next step in their careers.

Our North American colleagues offer a highly selective two-year rotational Leadership Development Program aimed at developing high potential, technology-savvy MBA graduates into future leaders.

In March 2017 Amadeus concluded its Leadership Development Program – accredited by the Institute of Leadership and Management in the United Kingdom – for 15 employees from Amadeus' different commercial organizations in the Middle East and North Africa.

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I believe my generation of young, international graduates is becoming ever more demanding of what companies can offer them. Amadeus is in a fortunate position to be able to inspire talented students and graduates to join a unique company, which is full of exciting opportunities across many different functions spanning the globe. And that's something I have a first-hand experience of!"

Recently joined millennial

Amadeus Revenue Management & Collection



Our Recruitment 'Ninjas' attending the Data Science
Bootcamp at Instituto de Empresa, Spain.



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Internal development opportunities

Functional mentoring

Amadeus is constantly looking for ways to encourage employee development. With this in mind, we started a functional mentoring program in 2016/2017 and have now expanded this program globally across all functions

In this program, senior professionals were paired up with junior employees within the same function but across different geographies. The main objectives of this program were to foster networking and a closer cross-geography collaboration. It provided junior professionals an opportunity to gain exposure, while also gaining insights from senior professionals and it encouraged the development of junior professionals with potential within the function.

Global mentoring

Our global mentoring program has a similar philosophy but mixes mentors and mentees from different businesses and functions as well as markets and regions. Since its launch in 2010, Amadeus has developed 78 senior leaders by using the in-house expertise, knowledge and skills of our seasoned Vice Presidents and Directors.

Developmental feedback

A new 360-degree feedback tool based on the Amadeus Competency Model was launched in January 2017.

This new tool allows employees to gather accurate and helpful feedback in a constructive and confidential manner, helping them gain insight on how others perceive them at work, while the resulting report is used to build an individualized development plan.

360-degree feedback tool



Digital talent profiles

As part of Amadeus' commitment to providing development opportunities, mobility options and organizational visibility, Amadeus launched My Talent Profile globally in 2017, an online talent site where employees can include their knowledge, expertise and career preferences in order to be considered for a wider range of mobility and career opportunities.

This new tool also enables employees to seamlessly apply to internal opportunities, have organizational

visibility and recognize colleagues publicly for work done well, among other features.

Internal mobility and progression are also part of our talent strategy, and the transfer of Amadeus' knowledge, skills, processes and culture is a key factor in our success. One of the ways in which we enable this is through internal mobility of talent, giving us the opportunity to fill roles while actively providing employees with opportunities to progress, develop and expand their roles.

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"WHO if not YOU" campaign

Amadeus is determined to create a strong learning organization where our employees are accountable for sharing and acquiring knowledge critical to their development. With this in mind, we launched the internal campaign "WHO if not YOU" in order to empower each of our employees and maximize their potential by putting them in the driving seat for their own careers.

Throughout the campaign, we systematically revealed the various talent tools available and described, with examples and toolkits, how employees could proactively use these for their development.



11.2 Diversity and inclusion

Amadeus was born as a multi-cultural and diverse company and we continue to pursue diversity and inclusion across the entire spectrum of our business.

A global workforce from 146 nationalities

Promoting respect, fairness, equal opportunity and dignity for everybody is the foundation of our diversity and inclusion strategy, and represents a business imperative to our company's future success.

Our leadership, environment, corporate culture, recruitment communication and values all have diversity and inclusion embedded in them to ensure no one is left behind and that everybody fits in. At the same time, we accept and respect differences between and within cultures. We acknowledge and endorse differences based on gender, age, race, ethnicity, beliefs, sexual orientation and disabilities, as well as diversity of thought and experiences.

Our main offices in France, Germany and Spain employ people from 102 nationalities.

Gender diversity

Skills and professional expertise are the backbone of Amadeus' recruitment policies, and our job offers are gender-neutral, ensuring a bias-free selection.

Equal pay is an area which we monitor closely and our salary systems, regular reviews and processes are designed to avoid any gender-based discrimination.

Encouraging girls to opt for STEM¹ studies and being mindful of the challenges of recruiting and retaining women for STEM roles, we are working on programs to raise awareness and encourage school girls and female university students to pursue Computer Science or any IT studies. We have celebrated the international Girls in ICT Day and invited female IT leaders to provide a testimonial of their roles and male IT leaders to share their views on women. We also invited female representatives from our main R&D centers to provide insights on women and IT.

Furthermore, we have signed an agreement with Inspiring Girls International, an organization dedicated to raising the aspirations of girls around the world by connecting them with female role models. The initial agreement is for Spain, but we aim to pursue agreements in several other areas where the foundation operates.

Our Amadeus Women's Networks continue to thrive, with 19 women's networks globally. The networks provide a platform for women to get together, with the goal of enhancing the professional development and career evolution of women at Amadeus, as well as improve work-life balance.

Our R&D center in Nice, France, has renewed its company agreement on gender diversity in the workplace to cover the 2018–2021 period and continues to focus on diversity in recruitment, career evolution, skills development and compensation. This site partners with the Professional Women Network and engages with Pluri'elles d'Azur, the Côte D'Azur women's network.

¹ STEM: Science, Technology, Engineering and Mathematics.

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- Amadeus participated in the Mujeres Tech & Allies summit in roundtables and workshops on robotics, Scratch programing, 3D printing, Internet of Things and entrepreneurship.
- Amadeus participated in a major research project led by the Spanish chapter of the Professional Women Network and the Women General Directorate of the Madrid Community, aiming at improving employability of women over 50.
- Amadeus headquarters in Madrid, considered as one of top 30 in gender and diversity best practices in Spain according to research conducted by Intrama.
- Amadeus participating in Intermon Oxfam Trailwalker 2017.

LGBT+ community

Amadeus' commitment to equality in sexual orientation and gender identity is equally strong. Amadeus has consistently supported activities to promote LGBT+ equality and to support it publicly through awareness, communication, sponsorship and storytelling.

We have been included as a best practice company on LGBT+ in the Aequalis report sponsored by the official Madrid Community LGBTI Commission, launched during Pride Week in Madrid. Similarly, Amadeus was included in the LGBT+ best practices report published by the SERES Foundation, whose objective is to promote the commitment of companies in the improvement of society.

Amadeus is also working with LesWorking, the professional network of lesbian professionals spanning 20 countries, and has attended the Stonewall annual conference, the largest LGBT+ rights organization in the UK and in Europe, to continue to grow its network.

Following the launch of Amadeus Bangkok Proud in 2016, our first LGBT+ resource group, new networks were started at our Madrid headquarters and our R&D center in Nice in 2017. All chapters provide support and networking opportunities for members, encourage further LGBT-friendly changes in the work environment and promote activities within Amadeus, which raise awareness about our LGBT+ community.



Building on our strong partnership with leading Spanish business school IE (Instituto de Empresa), Amadeus has been the prime sponsor of IEOut LGBT@ Work's 10th anniversary event and also presented the prize to the best Spanish LGBT inclusion personality, which was granted to M. Alonso, founder of Driversity.

People with disabilities

Disability is one of the most complex areas of diversity and inclusion and one in which Amadeus is determined to significantly improve our performance.

Our intention is to make disability issues more visible among our employees, and in 2017 we commemorated the United Nations International Day of Persons with Disabilities and the European Day of Persons with Disabilities.

On the recruitment side, our corporate sites actively engage with schools, universities and job fairs for people with disabilities, as part of our activities as a disability-friendly employer.

Our Diversity & Inclusion team also participated in the initiative carried out by our Corporate Strategy and Industry Affairs teams, which published a research report – *Accessibility in Travel* – in partnership with Ilunion, a leading research firm specializing in disability issues.





This year, Amadeus has supported #valuable, a bold campaign initiative founded by visually impaired activist Caroline Casey, which calls on businesses across the world to recognize the value of the 1 billion people living with a disability and to position disability equality on the business boardroom agenda. The campaign saw Caroline and her accompanying team horse-ride for 1,000 km across South America to ianite a alobal conversation on this issue.

Amadeus Diversity Program A decade fostering recruitment of people with disabilities

In our largest site, located in Nice (France), we have implemented specific action plans focused on generation mix, gender mix, disability in the workplace and cultural mix.

Over the past decade, we have specifically taken action to challenge preconceived ideas and foster the employment of people with disabilities. Furthermore, our company agreement on disability in the workplace, signed in 2013 and renewed in 2016, has helped to accelerate inclusion through our dedicated Diversity Program.

In this site, we have raised our disability employment rate from below 1% up to 3% in 2017 and are targeting 4% by end of 2019. We do this through direct recruitment and partnerships with sheltered companies and adjustment of working conditions to the needs of our colleagues with disabilities. In addition, we are involved in various academia events and offer internship opportunities to support disabled students in building their professional development.

Regarding work environment, we constantly review accessibility of our premises and IT equipment. Raising diversity awareness through regular communication and as part of our standard training has been key to creating an increasingly inclusive workplace.

Finally, we purchase in a responsible manner, from companies and state organizations geared to the needs of people with disabilities.



The Beepcons app has been design to facilitate services around the buildings in our site in Nice using Bluetooth technology.

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11.3 Engaging our people – a great place to work

Amadeus' scores in Glassdoor (2016 vs. 2017)



Equity plans

As a result of the equity incentives offered and managed by Amadeus since its initial public offering in 2010, it is remarkable to see that today almost one out of every two employees is a shareholder of the company. We firmly believe that when employees have a stake in the business they work for, it contributes significantly to improving performance and motivation, creating a sense of belonging and ownership.

Many of our employee shareholders have become share owners through Amadeus' Share Match Plan, a global stock purchase plan. The concept of the plan is simple: employees invest in Amadeus shares through salary deductions and are rewarded with additional free shares in return after a holding period.

In 2017 our company offered the fifth consecutive edition of the Share Match Plan to more than 12,200 employees in 28 countries, promoted through a communication campaign aligned to the recently rolled out visual identity and employer branding. The campaign was supported by employee testimonial videos encouraging peers to participate. Some 5,200 employees enrolled, making the 2017 Share Match Plan edition the second most successful, with a participation rate of 41%.

Furthermore, Amadeus' long-term incentive plan offering in 2017 granted over 187,000 shares through the Performance Share Plan to senior leaders in almost 50 legal entities across the globe. The plan consists of a conditional award of shares that vest after three years if Amadeus achieves certain objectives linked to profitable growth and the delivery of sustainable shareholder value

Compensation: Simple Bucks

Amadeus was the Gold Winner of the SAP Quality Awards in the Iberian region. The prestigious SAP Quality Awards celebrate and recognize companies who have excelled in the implementation of their SAP software solutions. Amadeus won in the Business Transformation category for having implemented a global model for compensation in over 100 countries based on SAP SuccessFactors. "Simple Bucks," as it is known internally, helps Amadeus leaders manage the salary review and bonus process for their workforce much more efficiently and consistently.

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Staff bonus

At Amadeus, one of our principal considerations when determining remuneration policies is to ensure that these support our company strategy and business objectives. We believe that the company's results are the sum of all our efforts, and as such that all employees should be incentivized for Amadeus' performance.

With this in mind, in 2016 Amadeus redesigned the annual bonus scheme for staff by linking a significantly higher part of the payout not only to individual results but also to overall company performance. This enabled us to align the teams' focus and objectives with the same criteria against which management is measured.

In 2017 more than 10,200 Amadeus employees participated in the staff bonus scheme and the company's success.

Technology

In today's complex and hyper-connected world, technology plays a key role in ensuring that corporations have a leading edge and continue to outperform competition. 2017 has been a year of significant investment and resource allocation to guarantee that our People management unit is equipped with IT and tools to provide the utmost level of support to our people and to our business.

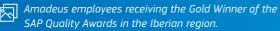
North America has made significant technology enhancements to its benefits enrollment, payroll management and time-tracking systems, bringing new mobile solutions to its employees. This empowers them to have the most up-to-date and easy-to-use solutions to manage their time-tracking, time off request/approval, payroll, bank, tax and benefits information from their computer or mobile device.

Collaboration platforms

Amadeus Groups is the internal collaboration platform where Amadeus colleagues can connect with each other, exchange information, share thoughts and coordinate projects and activities – anytime, anywhere, anyplace. Colleagues can access the platform from a laptop, tablet or phone to leave comments, have conversations, send recognition messages, ask and answer questions and run polls, among others.

Our Bangalore R&D center has been actively pursuing new ways to further raise employee engagement and collaboration. Our site has an Amadeus Labs anthem, a song sung by our employees, produced by a prominent Bollywood music director, and a video shot by a known director featuring our employees and office space, which is centered on our brand purpose of "Shape the Future of Trayel."







Senior leaders of our People & Culture team celebrate five years of success in Amadeus Bangalore.



The year 2017 has seen increased focus on community support initiatives, women's networks, LGBT groups and diversity and inclusion groups.

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Talent and digital platforms

Amadeus' long-term success is driven by our talent. It is therefore vital that we provide the right technology to support the development activities of our teams. In June 2017 Amadeus deployed SuccessFactors Learning, a new global training system, which has enabled us to provide a consistent training offer to all employees worldwide.

With this new learning system, activities for all training types (classroom, online, virtual and others) are now accessible to our employees on one single platform. Employees' full training history will be accessible to users in a single online location, which will support their progression as they move into roles in different locations. Moreover, virtual team members can now access the same content regardless of their physical location, helping to reduce geographical barriers.

Digitalizing recruitment

As every job opening is a unique opportunity to hire top talent, we evolved our employer brand in 2017. Our ambition was to become even more appealing and attractive to technology-minded candidates.

Amadeus is also embracing new technologies and emerging social media platforms to find the best talent for the company.

We expanded our presence on various networks such as top professional boards, social media channels and job platforms. We use social media channels to proactively share what it is like to work at Amadeus. Offices all over the world showcase their work environment, asking employees to share their Amadeus experiences and inviting prospective candidates to engage with us.

We continue to expand our strategic relationships with universities, participating in recruitment fairs around the world while also sponsoring and participating in hackathons. During 2017 our North American team participated in five student-run hackathons

(University of California, Berkeley; Brigham Young University; University of Arizona; University of Illinois; Massachusetts Institute of Technology), and hosted one, AngelHack, in our Boston offices. Similarly, our colleagues in India encourage employees to get involved in external hackathons – they have participated in more than 10 hackathons, winning 2 of them.

Mobility without limits

In 2017 over 200 employees took permanent new positions in a country different from their country of hire. Amadeus' global presence and continued growth enable our employees to pursue exciting career- and/or skill-enhancing opportunities. 2017 also saw Amadeus add 101 employees on temporary international assignments, mainly in the US and Asia, and we have also continued to see increased activities in the exchange of talent between the main European hubs (France, Spain and Germany).

One of the drivers of international mobility has been the implementation of a regional model in which our airline account teams are now aligned around clusters and key accounts, creating more agile and empowered teams that share objectives and focus their priorities as a group.

Work-life balance with a twist

In today's hyper-connected and fast-moving world, we offer a variety of flexible work arrangements across different locations to allow our employees to juggle their professional and personal demands.

Our Madrid headquarters is piloting "My Passport," a new policy where permanent employees have the opportunity to work from non-Spanish locations for a temporary period. These locations include France, Germany, the United Kingdom and Ireland. The duration will vary depending on the selected country. This is a

particularly interesting benefit for employees who want to increase their own or their families' cultural and linguistic understanding by living in a different country for a specific amount of time.

Work environment

At Amadeus we are especially careful to ensure that all our premises offer the highest standards of safety, comfort, technology and accessibility to host our most precious asset – our employees – and to accommodate the growth of the workforce.

Our Madrid headquarters inaugurated a new wellness hub area, and to improve the efficiency of the office space, we have installed self-regulating lighting that varies depending on exterior light conditions.

Health and safety

A safe and healthy working environment is one of the best recipes for employee wellbeing and engagement. Several Amadeus locations mark this with the celebration of health and safety weeks to raise awareness and remind our employees to take time to think about their body and their mind.

These initiatives are representative of similar activities across the world, including mindfulness, nutrition and health workshops in Latin America, and health and wellness education at our Bangalore and London R&D sites

Our R&D center in Nice also launched its special onsite wellbeing event to raise awareness of and ensure employees focus on the importance of nutrition, sleep and stress management, among others.



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Our Madrid headquarters linked its health and safety celebration to a donation program where one-third of the employees participated and raised funds to be donated to support sports activities for the people with intellectual disability challenges.



Watch a video of our Madrid Wellness Hub opening

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.

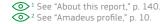
Amadeus adheres to national law and regulation in each market in which it operates. In situations where Amadeus faces conflicts between internationally recognized human rights and national regulations, the company will follow processes that seek ways to honor the principles of international human rights.

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Our Chief Financial Officer in the Madrid
Employee Forum.



The Amadeus brand

Amadeus has built an extremely powerful brand. Our company is recognized and respected by travel businesses worldwide. Our identity was built over decades, through disciplined and dynamic brand execution. This year marked a 30-year milestone for our brand, and we celebrated it worldwide with special messaging, marketing and communications, as well as a commemorative stamp. \odot ²

In 2014 we announced a new commitment to the world: the promise to shape the future of travel. In 2016 we evolved our brand's visual identity, adding dynamic new elements and a human touch to our design systems. In 2017 we turned to our brand's written communications and launched a program to evolve our verbal identity and help make all our communications clearer, more direct and more engaging.

We also celebrated 30 years of collaboration, innovation and better journeys, with a glimpse of the past but more importantly by creating excitement about our future.

Communications at Amadeus

The mission of Group Communications is to protect and enhance the reputation of the company with all stakeholders through all relevant channels.

Maintaining a strong and purposeful reputation in today's complex world requires Amadeus to be open, honest, authentic and fully engaged with the communities and markets in which we operate. We strive to achieve that by fostering open communication

and dialog between Amadeus and its employees; by building trusting and mutually beneficial relationships with the media; by showcasing the best of our company and engaging with the travel and technology industries at events; and by using the new channels open to us through social media and the internet to tell our stories.

Internal communication

At Amadeus we believe that employees are our most valuable asset, and our internal communications are designed to live up to that principle. Our role is to drive employee engagement and help our colleagues perform better by cascading our business strategy, sharing relevant stories and publishing timely updates on key external and internal events.

Social media activity

Social media at Amadeus complements the mission of Group Communications in the digital world and is often the first point of contact. Through the Amadeus corporate blog, a variety of stories from all areas of the business highlight our news, ideas, activities and culture, and give our communications a personal touch.

In 2017 the Amadeus blog attracted more than 1,000,000 visits, while our social media followers grew to nearly 240,000, primarily on LinkedIn, Twitter and Facebook. In 2017 we joined Instagram to give a behind-the-scenes look at our people and culture.

Amadeus' corporate blog can be viewed at www.amadeus.com/blog and Amadeus can be found on the main social networks as "Amadeus IT Group."

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Thought leadership

Amadeus has a strong heritage and track record of delivering thought-provoking and insightful research that aims at better understanding the future disruptive forces shaping the worlds of both technology and travel.

In 2017 Amadeus published a range of new research papers, including "What If? Imagining the Future of the Travel Industry" in partnership with A.T. Kearney. This was not an attempt to predict the future, but rather to evaluate, understand and ultimately prepare for possible new scenarios that are the result of a confluence of factors, including the most relevant global political and economic trends.

In 2017 we also commissioned the London School of Economics to help businesses understand how to realize a better return on investment in terms of corporate travel. Business leaders understand that, in many cases, travel is necessary to build key relationships or seal important deals, but that quantifying the value of business travel in and of itself continues to be a challenge.

Delivering world-class events

Events at Amadeus serve as an important communication, sales and marketing tool to achieve the organization's strategic objectives both externally and internally. During 2017 we gathered more than 4,500 attendees throughout the globe from all corners of the travel industry. These included flagship customer events such as the Amadeus Airline Executive Summit in Dublin and the Amadeus Leadership Conference in Lisbon. where 400 Amadeus leaders shared and discussed the challenges and opportunities to come.

Industry conferences and forums are one of the best platforms for Amadeus to share its 30-year experience and knowledge with all players in the travel industry. In 2017 Amadeus strengthened partnerships with the event and conference units in industry associations such as the International Air Transport Association and CAPA – Centre for Aviation, as well as in companies such as FlightGlobal and Terrapinn.

In addition, we have dedicated customer event centers in Nice (France). Miami (US) and Bangkok (Thailand). The three Amadeus Executive Briefing Centers together received more than 36,000 visitors in 2017. We obtain this figure from our event management system, which is the centralized platform that we use to manage and track the performance of all our Executive Briefing Centers.





the Asia-Pacific way!

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★#16 employer in France on Glassdoor

Glassdoor Site: Nice. France

★ Asian Leadership Awards -Winner of Promoting Health in the Workplace

World HRD Congress Site: Bangalore, India

★ Best Employer - Tech companies 5th rank

> Capital Site: Nice France

★ Great Place to Work -Amadeus Labs certified as a Great Place to Work

Great Place to Work Site: Bangalore, India

★ Most Attractive Employer - University students

Universum Site: Madrid, Spain

★ Times Ascent Dream Companies to Work For

World HRD Congress Site: Bangalore, India 2 consecutive years (2016-2017) People and Culture awards

→ ☆ 2017 ☆ ☆ →

Amadeus aims for excellence and to become the best in breed for the technology industry. This is a reflection of a team effort worldwide. In 2017 we received 25 external awards.



★ Best Use of Video Communication (Share Match Plan)

ESOP Centre Global award

Company

Humanos

★ Happy Candidates

Meilleures Enterprises Site: Nice. France

* Recognition as Healthy

Observatorio de Recursos

★ Happy Trainees

Meilleures Enterprises Site: Nice. France 4 consecutive years (2014-2017)

★ SAP: Gold Award "Quality Awards" for the Iberian Peninsula

Global award

★ Work-life balance 5th place

Site: Nice, France

Site: Madrid, Spain (headquarters)

★ Zinnov Awards Technical Role Model

Zinnov Site: Bangalore, India ★ Best Business Practices in Job Creation

KPMG Site: Madrid, Spain

★ Best Employer – Regional

Capital Site: Nice. France 2 consecutive years (2016-2017)

★ Employer of Choice ★ Finalist – HR Team of the Year 2017 Australian Business Awards

> Australian HR Awards Site: Sydney, Australia

★ India's Top 50 Best IT BPM ★ Innovative HR Team Companies to Work For

Great Place to Work Site: Bangalore, India

Site: Sydney, Australia

HRD Magazine Site: Sydney, Australia

★ Top Employer

Top Employer Institute

- ★Sydney, Australia 2 consecutive years (2016-2017)
- ★Thailand 3 consecutive years (2015-2017)
- ★ Madrid, Spain (headquarters) 6 consecutive years (2012-2017)
- ★Erding 4 consecutive years (2014-2017)
- **★**UK 2 consecutive years (2016-2017)
- **★**Singapore

2 consecutive years (2015-2016)

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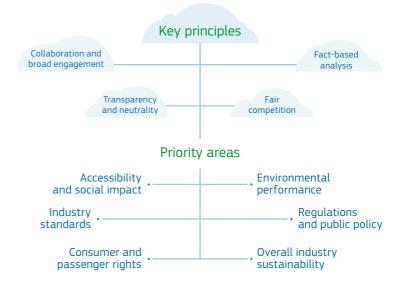


Amadeus' industry leadership comes with the responsibility to work with other stakeholders in the interest of the travel industry at large. Amadeus therefore engages regularly with governments, public entities, trade associations and other institutions globally.

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 has an important role to play as a facilitator also for the global teamwork that is needed to shape and safeguard a sustainable travel industry.

Our approach to industry engagement



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Amadeus Industry Affairs 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 and respect for society around us. 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.

12.1 Collaboration with public stakeholders

Amadeus is frequently asked to contribute to regulatory reviews or give inputs to policy initiatives, especially those that relate to or are enabled by technology. The travel and tourism industry is complex, and we are therefore proud to be asked to contribute. We share our experience, insights and balanced perspectives, always supported by evidence and fact-based analysis.

2017 saw many regulatory and policy initiatives for which Amadeus was asked to assist, provide information, knowledge and advice in order to establish new legislation or improve existing legislation. The most prominent of these were in the European Union.

- _Amadeus contributed to the European Aviation
 Strategy review, invited by the European Commission,
 and assisted the European Parliament on its own
 initiative report on the European Union (EU)'s Aviation
 Strategy. Amadeus was pleased to see that the
 importance of transparency and neutrality of air
 travel information and of the need to safeguard
 the key characteristics of the EU aviation markets
 are recognized by the Commission as well as the
 European Parliament.
- _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. We organized and participated in industry conferences that enabled public and private stakeholders to discuss key policy and industry initiatives relating to digital transport. These included the Digital Transport Days organized by the European Commission in Tallinn (Estonia) and the conference organized by Amadeus jointly with the European Parliament and the United Nations World Tourism Organization (UNWTO) in Madrid around the theme of Connecting Europe Through Innovation.

Together with other industry partners Amadeus is also engaged in technology research and development projects co-funded by the European Commission. These include Shift2Rail, which aims at building a more attractive, efficient and sustainable railway sector, and the IT2Rail project, which aims at providing a new seamless travel experience, giving consumers and travel companies access to a complete multimodal travel offer that connects the first and last mile of long-distance journeys.

- Passengers and consumers are important stakeholders in most of the policy and regulatory initiatives launched by the EU in the transport environment. At Amadeus, we endorse some of the issues and requirements that these stakeholders have when traveling and using technology to make their smart travel choices. In this respect:
 - We provided input for the rail passenger rights regulatory initiative launched by the European Commission's transport unit, as well as for its consultation study conducted on passenger rights across all transport modes.
 - We 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.

Amadeus strongly supports policy and initiatives by governments to support a robust and sustainable tourism sector. We engage with other travel industry and public stakeholders at national and regional market levels and conduct activities to promote innovation, entrepreneurship and collaboration in travel and tourism. During 2017 Amadeus was invited to speak in several events around the globe with special focus on digital-related issues and tourism. A good example is the invitation to Amadeus by the President of the European Parliament to participate in a roundtable on tourism innovation and digital economy as part of the High-Level Conference organized during the International Tourism Day.

Amadeus maintains a regular dialog with the European Commission on aviation, rail, digitalization of travel and transport and travel distribution matters. In 2017 Amadeus was especially active in responding to requests for information and support for policy initiatives relating to the aviation sector and on airline and digital distribution issues.

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

12.2 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 have strong relations and work closely with institutional stakeholders, consumer advocates and many other travel and tourism associations² across the globe on a regular basis.

Our memberships in travel technology associations

At industry level, Amadeus is represented indirectly through our memberships in the European Technology and Travel Services Association (ETTSA) and the US Travel Technology Association (TTA).

ETTSA and TTA represent the indirect distribution industry on regulatory and industry matters in the EU and the US, respectively. In 2017 ETTSA was particularly active, engaging on key issues related to aviation, such as the EU Aviation Strategy review, the importance of safeguarding the principles of transparency and neutrality in travel distribution,

In 2017 ETTSA commissioned two research projects on relevant market developments in the travel industry: the impact of airline consolidation on consumer choice, and an independent study on true airline distribution costs, the latter responding to factually incorrect claims of the cost of indirect distribution. These reports constitute valuable research that contributes to a more constructive and fact-based dialog with industry and regulatory stakeholders on key issues that affect EU consumers and aviation market.

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

Our relations with trade associations

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

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 (One Order, One ID and Simplify 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 and take into account the needs and requirements of all stakeholders in it. Moreover, Amadeus' concern is that industry standards are non-discriminatory in nature, are developed without favoring any one player in particular and are 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 2017 ADSF formalized and operationalized of the technical Distribution Industry Standards Working Group (DISWIG) to review and respond to IATA's proposed industry standards on payment, the so-called New Gen ISS program, and to improve communications with IATA on behalf of the indirect distribution industry. The work of the group on New Gen ISS has proven the effectiveness of industry collaboration on standardization processes by consolidating the views of the indirect distribution industry's technical experts on how technical standards should be developed for optimal impact and adoption.

the digitalization of the travel industry and consumer protection policy initiatives.

³ Infrata (2017). *Airline Distribution Costs*. A research report supported by ECTAA, ETTSA. Available at: www.ettsa.eu/policy-issues/publications.

⁴ GRA (2017). *Impact of Airline Consolidation on Consumer Choice.* A study supported by ECTAA, EPF and ETTSA. Available at: www.ettsa.eu/policy-issues/publications.

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

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Mapping of Amadeus stakeholders in the private sector and trade industry

ACI

Airports Council

International



Alliance

PATA

Pacific Asia Travel
Association

National
travel agency
associations

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G4-26

International Civil

Aviation

Organization

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 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.

Business travel buyer community

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

Consumer advocates

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 and thus benefit from a deregulated marketplace. During 2017 we engaged especially with the European Passengers' Federation (EPF), and the Bureau Européen des Unions de Consommateurs (BEUC), the voices of European consumers on issues related to the aviation sector. 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.

Travel and tourism associations

In the tourism sector, we work closely with UNWTO (United Nations World Tourism Organization), where Amadeus is an Affiliate Member, and with the World Travel and Tourism Council (WTTC), of which Amadeus is a full member.

During the 2017 International Year of Sustainable Tourism for Development, Amadeus and UNWTO promoted sustainable development in the sector through joint initiatives related to themes of the year: sustainable transport and tourism systems, poverty reduction and social inclusion through employment in travel and tourism, and climate-neutral tourism growth. Together, Amadeus, UNWTO and the European Parliament organized a conference about the role of innovation and connectivity for a sustainable transport and tourism system.

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 ETC's General Meeting 2017 in Porto (Portugal), with panel participation on EU competitiveness in the global marketplace.

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 in understanding the key business and regulatory issues in the local market. Amadeus is a current member of the US Chamber of Commerce, the Spain-Turkey 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.⁵

⁵ Amadeus' memberships in interest organizations or trade associations do not constitute support for policy positions or initiatives these may take.

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Participation in industry initiatives and events

As a trusted advisor 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 dialogue, 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 2017.

Contribution to the EU Strategy to enhance the competitiveness of the tourism industry

Hosted by the President of the European Parliament, Antonio Tajani, Amadeus was invited to participate in a panel debate in the Hemicycle of the European Parliament to share our views on how to improve the competitiveness and sustainability of the European tourism industry. Amadeus spoke on a panel that also included the EU Commissioner for the Digital Economy and Society, M. Gabriel, on the topic of innovation and the digital economy. The conference was well attended by members of the European Parliament, the European Commission, trade associations, the tourism business and consumer organizations.

Promoting innovation in travel and tourism jointly with the European Parliament and UNWTO

Amadeus organized jointly with UNWTO and members of the European Parliament a high-level conference around the theme Connecting Europe Through Innovation. The goal was to open a public–private dialog at industry level on how to best promote and stimulate the adoption of technological innovation in travel and tourism. The conference was attended by representatives of the European Parliament, the European Commission, tourism ministries, trade associations and travel companies. Roundtables were organized to discuss two important topics: (1) connecting Europe through smart mobility and how this could be transformed into opportunities to attract more tourism traffic, and (2) how best to assist European tourism's small and medium-sized enterprises (SMEs) in navigating the digital landscape.

Supporting the development of talent in the travel industry

Amadeus actively participates in several industry initiatives that support and foster the development of talent in the travel and tourism sector. This is becoming an ever more important pillar to securing the sustainability and inclusive growth of the tourism sector. Amadeus' efforts are channeled through selected programs that effectively deliver results in skill building and employability. Amadeus is a founding member of Global Travel and Tourism Partnership (GTTP), which delivers turnkey secondary school tourism courses to pupils in 13 countries. In 2017 Amadeus was again host to the annual GTTP conference in Sophia Antipolis, where students, teachers and GTTP staff and sponsors celebrated the achievements of the very best students from the different countries.

Amadeus also participated in the second UNWTO Global Conference on Talent Development and Education in Tourism. The conference brought together policy makers, experts from

public tourism administrations, private entities and world-renowned academics to debate the decisive role of tourism in talent development and education in defining the competiveness of tourism destinations in the roundtable discussion. Amadeus is also a supporting partner of the Fundación Junípero Serra, a non-profit organization that promotes education and talent development in travel.

Thought leadership in accessibility through global research

In October 2017 Amadeus launched *Voyage of Discovery*,⁶ a white paper on accessibility within the travel and tourism sector. Following an extensive research study to better understand the needs of travelers with disabilities, this report highlights the elements required to build an ideal, accessible trip and eliminate pain points, with a particular focus on technology. The research findings were opened dialog at international forums (for example the South Summit in Madrid and the European Day of Persons with Disabilities conference in Brussels organized by the European Commission).

Amadeus also has a long-standing partnership with the Pacific Asia Travel Association (PATA), promoting responsible development of travel and tourism to, from and within the Asia-Pacific region.

Sharing Amadeus' perspectives on how the travel and transport sectors could benefit from digital innovation

Amadeus was asked by the European Commission's Directorate-General for Mobility and Transport to participate in the Digital Transport Days that were held in Tallinn (Estonia) on November 2017, with the objective of exploring the potential and addressing the challenges of digitalization of transport and mobility for both passengers and freight.

The conference was a good opportunity to share Amadeus' views and discuss with other industry partners how new digital technologies could make transport safer, more efficient and more sustainable; the role of data as the new fuel for transport; and how to identify and tackle the obstacles that might hinder the full potential of what digitalization can offer.

Youth economic empowerment through travel and tourism

Amadeus, UNWTO, the Ministry of Tourism in Kenya, tourism training colleges, hotels and travel agencies in Kenya collaborated in a pilot project to increase access for women and youth from underserved communities to work in travel and tourism.

Driving environmental sustainability at the World Economic Forum

Amadeus participated in the World Economic Forum's Sustainable Development Impact Summit in New York. We also collaborated in workgroups that aim to promote cooperation among stakeholders in different industries toward environmental sustainability goals.

⁶ Amadeus (2017). *Voyage of Discovery. Working together towards inclusive and accessible travel.* Available at: www.amadeus.com/documents/reports/accessible-travel-report-voyage-of-discovery.pdf.



The travel and tourism industry is expected to grow at a rate of 3.9% annually over the next decade, outpacing global economy growth and contributing 23% of total global job creation during this period.¹ This positive outlook leads to concerns around environmental sustainability. Long-term industry sustainability requires determined and joint industry action on issues like climate change, use of natural resources or 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. Our environmental sustainability strategy relies 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 economic and environmental efficiency

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

3_ Participation 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 (WTTC) (2017) *Travel and Tourism. Global Economic Impact & Issues.* London, WTTC.

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13.1 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.

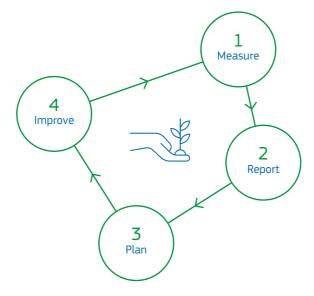
The use of office buildings across the world and electricity consumption at the Amadeus Data Center have been identified in our materiality analysis as the main contributors to the environmental impact of Amadeus' operations.

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.

On the other hand, 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 (EMS)

As a consequence of the results of the materiality analysis, the EMS was designed and created as the tool we use at Amadeus to measure, monitor, identify best practices, and to continuously improve the environmental performance of our operations at office buildings and at the Data Center.



EMS material 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 Protocol² standards:

- 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.

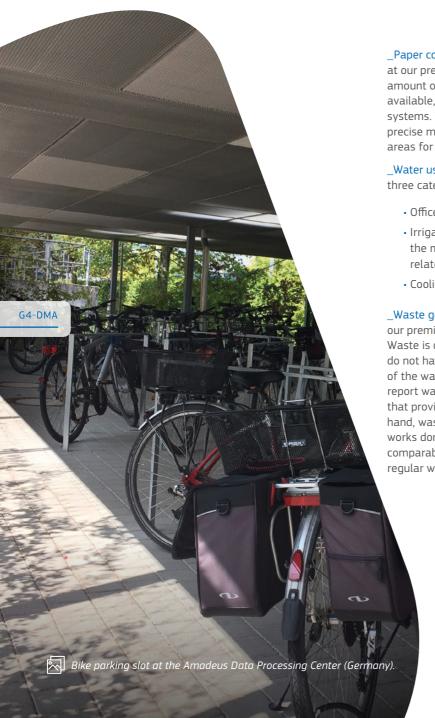
G4-DMA

² The Greenhouse Gas Protocol (GHGP) is 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.

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 2017. Paris, IEA Publications, pp. 118-120.

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_Paper consumption: We report paper consumption at our premises worldwide either by summing up the amount of paper bought during the year or, where available, through automated badge-based printing systems. 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 irrigationrelated consumption.
- Cooling of servers, principally at the Data Center.

_Waste generation: This concerns waste generated at our premises from kitchens and from general office use. Waste is difficult to measure, since in some cases we do not have the means or documentation to report part of the waste. The principal sources of information to report waste at Amadeus are the recycling companies that provide their services to Amadeus. On the other hand, waste generated by extraordinary activities, like works done in buildings, is generally measured, but for comparability reasons it is reported separately from regular waste.

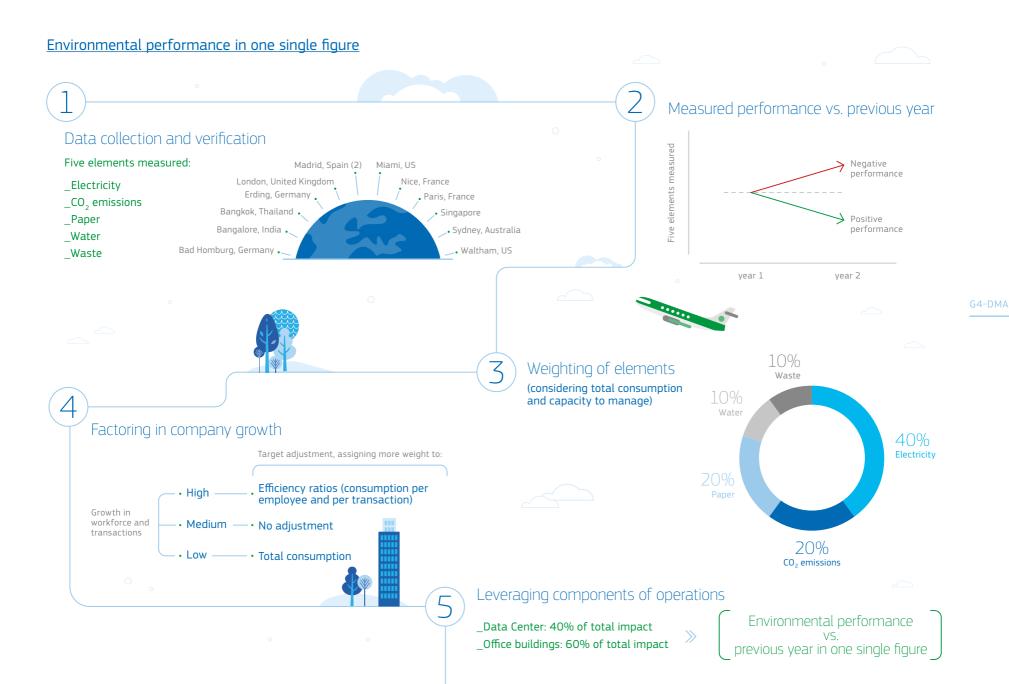
EMS geographical scope

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

- 1 Nice, France
- 2_ Bangalore, India
- 3_ Miami, US
- 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 Organization)
- 12_ Singapore
- 13_ Waltham, US

The sites of Singapore and Waltham have been included in the EMS for the first time in 2017. We aim to continuously increase the coverage of the EMS so it better reflects Amadeus' overall environmental impact. We also maintain continuity of the sites already included in the EMS to facilitate comparability over the years. The EMS includes an estimated 90% of the total Amadeus resource consumption worldwide. Additionally, best practices are shared among all sites, and all of them are encouraged to implement measures to reduce consumption.

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Environmental performance in one single figure

Amadeus has developed a specific methodology to summarize the environmental performance of our operations in 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 graphic on page 101 – is summarized below:

- 1_ Data collection of the five environmental elements identified in the materiality analysis, from the 13 sites included in the EMS. Data is gathered in a homogeneous way across all sites to facilitate comparison. For each data 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.
- 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 the previous page.
- 4_ Factoring in company growth. We assign more importance to efficiency ratios resource consumption per employee or per transaction processed when the company is growing rapidly. Consequently, in a context of recession or little growth, we assign more weight to total consumption of resources. The evaluation of performance is adapted to company growth, but trends in total consumption of resources are always considered, as the minimum weight allocated to the evolution of total consumption is 25%.
- 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 before 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.

Energy use increased at Amadeus Data Center in 2017 by 14.2%. This is due to the increased number of transactions processed (15.1% growth) and to the increasing complexity of each transaction.

Conversely, environmental performance at office buildings remained practically stable, despite a 5% growth in number of employees in the sites covered by the EMS. We have reported an increase in the waste generated at office buildings that is more related to a more accurate measurement than to a real increase.

Following Amadeus' carbon neutral growth policy, Amadeus compensated 8,267 t of CO₂ through the purchase of Certified Emissions Reductions from UNFCCC⁵ accredited projects in India.

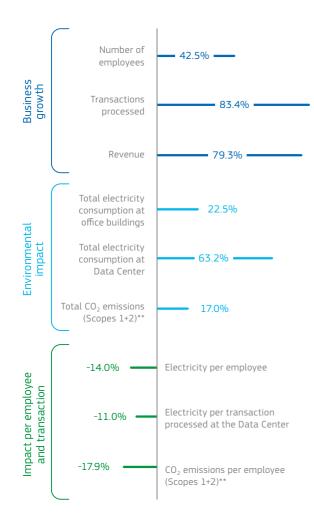
Calculated, as per the methodology explained in the graph of page 101, the overall Amadeus worldwide environmental performance in 2017 decreased by 1.43% compared to previous year.

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.

⁵ UNFCCC. United Nations Framework Convention on Climate Change.

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2017 vs. 2011 Business growth and environmental performance*



^{*} Scope: sites included in the Amadeus Environmental Management System, except transactions and revenue, which include data for the entire company.

Environmental performance at office buildings

The teams in charge of the Amadeus EMS are usually integrated in the Building and Facilities units, in most cases in the Human Resources department, so they must care not only about the environmental impact of our operations, but also about the comfort of all employees. Indeed, looking for measures that improve efficiencies while facilitating adequate workplace conditions for all sometimes becomes a real challenge. That is why a combination of implementing best practices at company level and developing pro-environmental behavioral change is critical to enhancing sustainability performance.

Examples of initiatives carried out at our offices worldwide to reduce our environmental footprint include:

- _LED technology is gradually replacing all incandescent bulbs with a significant positive impact in our electricity consumption. For example, in our premises in Nice, we have estimated a saving of 65,200 kWh implementing this measure in 2017.
- _The introduction of electromagnetic relay between regular and emergency lighting circuits in our site in Bangalore (India) has represented an estimated saving of 134,689 kWh in 2017. Regular equipment's maintenance and awareness campaigns targeting employees also contributed to a reduction of 50,000 and 44,000 kWh annual savings respectively.
- _Proper maintenance of the heating, ventilating and air conditioning equipment also resulted in an estimated saving of 117,000 kWh at our site in Bangalore.
- _ The badge-based printing system continues to contribute to the reduction of paper consumption and to increased environmental awareness among employees. In addition to the EMS sites, this system, together with a more efficient printing technology, will be implemented gradually in several Amadeus sites in the next two years.

- _Defaults set on printers to black-and-white and doublesided printing. This decision and the badge-printing system have represented up to a 20% reduction in paper use in the sites that have implemented these measures, such as Bangalore (India).
- _Motion sensor technology in lighting and water devices represent an important tool for optimizing consumption.
- _ Due to the full implementation of energy efficient fittings, including all lighting being fully integrated into the base building management computerized system, the building in which our Sydney site is located obtained a 5 Star NABERS energy rating.⁶
- _Some of our largest sites like Bangalore and Nice provide shuttle services and shared transport for employees to reduce environmental footprint and traffic congestion.

Continuous environmental performance improvement requires a combination of actions at management level, as well as individual employee's behavioral decisions. Therefore, communication and engagement are vital components of success.

These initiatives are implemented also in sites that are not formally included in the Amadeus EMS. For example, in 2017 Amadeus Greece promoted recycling not only internally but also with visitors to our premises. Visitors to our premises were invited to bring along their recyclable materials so they could conveniently dispose them in the recycling bins at Amadeus premises. The initiative turned out to be a success and very well received by employees and partners.

G4-DMA G4-EN6 G4-EN19

^{**} Includes carbon offsetting.

⁶ NABERS is a national rating system that measures the environmental performance of Australian buildings, tenancies and homes. Star rating ranges from zero to six star scale, where six is best performance.

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Amadeus Singapore and Waltham

Our sites in Singapore and Waltham (US) are the new additions incorporated in Amadeus EMS in 2017. Both sites have an advanced environmental performance. Our premises in Waltham already include some of the best practices recommended G4-DMA for Amadeus sites in general, like the broad use of LED lighting, motion detection sensors for water faucets and lighting or badge based printing system.

> The Guoco Tower, home of Amadeus Singapore, is a benchmark for environmental sustainability. This green building is one of the newest constructions in Singapore and it has already garnered several awards for its eco-friendly features. Energy-efficient lighting and water systems, a performance glass façade to minimize solar heat gain, and solar photovoltaic cells to generate renewable energy are among the innovative green features built into this LEED and Green Mark Platinum certified building.

Examples of best practices at office buildings



Electricity consumption

- Replacing incandescent bulbs with LEDs
- Switches connected to movement-detection control systems
- Thorough planning of areas covered by specific liaht switches
- Automatically switching off lights at certain hours
- Switching off PCs after working hours
- _Maximizing the use of natural light
- Adapting room temperature to weather



CO, emissions reduction

- Adapting room temperature to weather
- Promoting the use of carpooling/public transportation
- Purchase of carbon-neutral paper



Paper consumption

- _Implementing badge-based printing systems
- _Use of carbon-neutral paper
- _Setting all printers by default to black-and-white double-sided printing
- Raising awareness among users of the environmental and economic cost of printing
- Use of recycled paper
- _Sending used paper for recycling



- Use of drip irrigation systems and plants with low water consumption
- Implementing motion sensor taps in washrooms
- Use of water-efficient household appliances in kitchens



Waste generation

- Implementing proper infrastructure to promote classification of waste
- Raising awareness among employees to minimize waste
- _Working with external providers to improve the measurement and management of waste

Thick Jumper Day

Increasing environmental awareness in the workforce has demonstrated its impact inside and outside our offices. Actions like the Thick Jumper Day in our site in Nice (France) have been a real success.

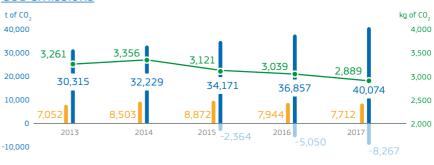
The International Thick Jumper Day initiative was created to encourage actions against climate change and ${\rm CO_2}$ emissions. Thousands of employees in our largest site were encouraged to wear their favorite sweater or hand-knitted wool jumper to remain comfortable at the work environment while contributing to energy savings. The impact of turning the heating down by 1 degree Celsius can add up to a 500 kg reduction in carbon emissions in one day.



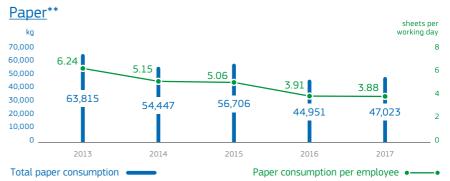


* Scope: top 13 Amadeus sites, excluding the Data Center. Waltham and Singapore included since 2017.

CO₂ emissions**







^{**} Scope: top 13 Amadeus sites, including the Data Center. Waltham and Singapore included since 2017.

G4-DMA G4-EN1 G4-EN3 G4-EN5 G4-EN15 G4-EN16 G4-EN17 G4-EN18 106 / 13. Environmental sustainability

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Environmental performance at the Amadeus Data Center

In 2017 the power and cooling capacity of the data center was significantly expanded. More than 5,000 new servers, and related peripherals were installed. Over the last few years our new servers have on average been 40% more energy-efficient than the servers they replaced. In addition, we are in the process of installing 42 sensible coolers that are significantly more efficient both from an economic and also environmental point of view.

With regards to water used for cooling purposes, continuous water quality tests are done to ensure high water quality standards. With these tests, we reduce the need of new/added water in the water circuits.

Despite the significant capacity growth of 2017, the data center PUE⁷ remained at 1.32, the same level as in 2016.

Amadeus carbon-neutral growth commitment

The number of transactions and queries processed at the Data Center has increased dramatically over recent years, due to the increasing number of online devices that can connect and trigger queries. More transactions require more energy consumption despite improvements in energy efficiency. At the same time, as a consequence of our growth, the number of employees and Amadeus offices around the world continues to grow. As a way to counteract this growing trend in energy consumption and greenhouse gas emissions, Amadeus maintains a carbon neutral growth policy, with 2015 as the baseline year. To this end, we have been working with the United Nations Framework Convention on Climate Change to invest in Clean Development Mechanism⁸ projects in India. The total carbon offset carried out for 2017 to keep our emissions at the level reached in 2015 was 8,267 t of CO₂.

Amadeus Data Center energy efficiency

	2013	2014	2015	2016	2017
Power Usage Effectiveness	1.38	1.36	1.35	1.32	1.32
kWh required per 1,000 transactions	33.6	34.8	34.9	35.5	35.2
Total GWh consumption Data Center	39.4	44.8	48.3	53.6	61.2



Amadeus signed the United Nations Climate Neutral Now pledge in 2017.



⁷ Power Usage Effectiveness (PUE) is 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.

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.

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13.2 Environmental benefits of Amadeus solutions

Amadeus invests more than €2 million daily in R&D projects.

We develop state-of-the-art 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. Interestingly, 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 ICAO⁹ 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 CO_2 emissions estimations for different itineraries. Travelers can then incorporate CO_2 emissions as an additional element into their booking decision-making process, together with traditional parameters like schedules, availability and fares.

See "Research and development," p. 62.

The International Civil Aviation Organization (ICAO) is 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.

Pre-trip

Amadeus Airport Sequence Manager permits planning 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 Union¹o estimates savings of over €120 million in fuel costs and a reduction of more than 250,000 tonnes of CO₂ emissions.

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

On-trip

Amadeus Altéa Departure Control-Flight Management helps airlines to estimate accurately 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 (Estimate Zero Fuel Weight) permits significant savings in fuel burn, emissions and economic costs.

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

G4-EN7

¹⁰ Eurocontrol (European Organization for the Safety of Air Navigation) (2008). *Airport CDM Cost Benefit Analysis*.

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

Post-trip

Through our presence around the world, we observe 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.

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



G4-EN7

13.3 Participation in industry environmental initiatives

Long-term industry sustainability can more easily be 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-related projects.

In order to raise awareness of aviation carbon emissions, 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 its distribution platforms, providing travelers with information about greenhouse gas emissions released during their trips. ICAO's carbon calculator brings the benefits of commercial neutrality, legitimacy to represent the aviation industry and 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 2017 we continued our cooperation with institutions like the World Travel and Tourism Council (WTTC) and academic institutions like Griffith University. In this respect, Amadeus contributed to the production of the Global Sustainable Tourism Dashboard, developed in cooperation with the University of Surrey (UK) and the Griffith Institute for Tourism, and 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 become carbonneutral and make our contribution toward reaching the 2 degrees target set by the Paris Agreement.

ICAO and Amadeus partnership



Carbon calculator

_Legitimacy _Neutrality _Global reach

amadeus

Travel industry reach

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

WTTC Global Summit.
Press Conference
announcing the launch
of the Global Sustainable
Tourism Dashboard.

Improved industry environmental awareness

G4-15 G4-26 110 / 13. Environmental sustainability

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13.4 Climate change-related risks and opportunities

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, or 3.6 degrees Fahrenheit. The actions required for the achievement of the climate change targets mean that fundamental structures of 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 in this case 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 and 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 identify 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 corporations to build and report carbon footprint inventories. In the specific sector of transport, 11 travel providers are requested 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. The presence of a regional emissions market in a global sector like aviation may create competitive and political disruptions, leading to increased uncertainty and costs in the travel industry, at least in the short term. For the aviation sector, the ETS may be replaced in the future by ICAO's CORSIA¹² initiative.

We do not expect these regulations to have a significant impact on Amadeus, given the relatively

G4-DMA G4-2 G4-EC2

¹¹ Decree No. 2011–1336 (France). October 24, 2011.

¹² The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is a market-based measure designed to assist the achievement of ICAO's goal of carbon-neutral growth from 2020 onward in international aviation.

low cost of compliance with the scheme – which is unlikely to reduce travel demand – as well as the geographical spread of Amadeus' operations.

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)¹³ and the CDP,¹⁴ which provide recognition of commitment to sustainability. The opportunities for Amadeus relating to climate change are divided into 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.
- Compare 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.

_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 sixth consecutive year, Amadeus has been included in the DJSI in the IT & Internet Software and Services sector. Moreover, in 2017 Amadeus has been recognized as leader of our sector, which includes 86 companies evaluated. Importantly, the DJSI evaluates sustainability performance very comprehensively, including economic, environmental and social dimensions.
- _CDP. In 2017, Amadeus was also recognized as a world leader for corporate action on climate change, receiving a score of A- in the Climate category.
- _FTSE4Good. Amadeus has also been included for the fourth consecutive year in the FTSE4Good sustainability index.
- _Global 100 Most Sustainable Corporations in the World. For the second time, in 2017 Amadeus has been included in the Corporate Knights Global 100 Most Sustainable companies in the world.



G4-DMA G4-2 G4-EC2

¹³ 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.

¹⁴ The CDP (formerly Carbon Disclosure Project) is 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.



14.1 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 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 64 countries.

In 2017, the International Year of Sustainable Tourism for Development (IY 2017), we took special pride in supporting and driving many initiatives to shape an inclusive and sustainable future. We demonstrated in practical ways that by combining our skills and technology with the reach of global travel, we can help bring about real, positive change.

In 2017 we made good progress in the three 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.

Knowledge and 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.

Community Support

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

Amadeus has 248 partnerships with intergovernmental and non-profit organizations, educational institutions and public and private sector leaders in the travel industry.

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Commitment to society

By connecting players, Amadeus occupies a unique position in the travel industry

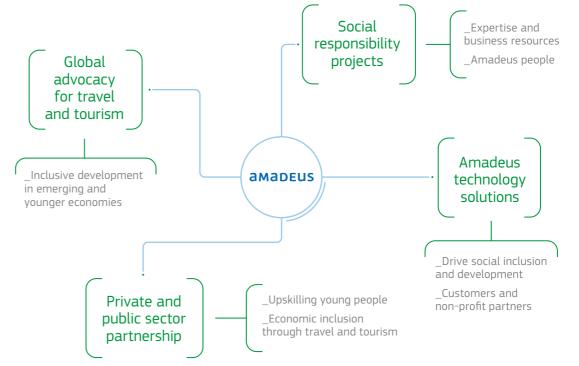


14.2 Our achievements in 2017

Our ambition for 2017 was to improve on our 2016 level of social responsibility engagement and the impact and reach of our strategic projects, while more systematically leveraging our core strengths.

During the year we also focused on aligning our programs and activities with the United Nations Sustainable Development Goals (SDGs) 💿 , and we achieved encouraging outcomes in all these cases. The number of Amadeus employees dedicating their time, talents and enthusiasm rose to 3,188.





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Some highlights

Issues addressed

Actions

Technology for Good	Improving understanding and implications of accessibility in travel.	Amadeus released key findings and recommendations from its global research on accessibility in travel.	The research findings are opening dialog at international forums, e.g. the South Summit in Madrid and the European Day of Persons with Disabilities conference in Brussels (European Commission).
	Solutions to delivering an inclusive experience in travel reservations.	Amadeus continued to deliver innovative technology solutions, on demand, for its customers to serve travelers and travel professionals with accessibility needs.	More travelers with accessibility needs are now able to self-book online, on the ca. 100 airlines whose websites are powered by Amadeus e-Retail, our online booking engine whose user interface has been made accessible.
	Innovative travel tech solutions to improve efficiency and impact of social development projects of our customers and non-profit partners.	Social innovation pilot with UNICEF using travel data analysis to help manage spread of epidemics.	Developed and successfully tested a prototype for real-time predictive analytics, to improve responses in humanitarian crises.
		Expanding the reach of Click for Change, an online donation solution and campaign to source reliable funding for multi-market social development projects.	Avianca Holdings, a leading Latin America airline group, committed to joining Click for Change to fund education projects in Latin America.
		Media solutions: extending the reach of UNICEF's global campaigns for children using global travel reservation communication channels.	3 pilot campaigns attracted significant attention from travelers.
	Digital literacy: extending the benefits of affordable computer technology.	Phase 2 of global partnership with Computer Aid International to tackle the digital divide in Sierra Leone.	Project lead, Njala University, became the first accredited International Computer Driving License center in Sierra Leone able to provide a legacy of internationally certified teacher training for years to come.
		New partnership with Close the Gap to enhance our existing PC donations program with reach and efficiency and, separately, build a pilot innovation challenge in Ghana to deliver digital solutions to social problems.	

Impact

G4-DMA



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Issues addressed	Actions	Impact
The skills gap in a fast-growing global travel and tourism industry.	3,245 young people trained in global reservations skills through our long-standing commitment to travel education.	
Unemployment among youth who, though educated, lack specific skills that businesses need.	A pilot program to train and give work experience to young people, to enable them to earn a living through travel and tourism in their countries: Amadeus, the United Nations World Tourism Organization (UNWTO), the Ministry of Tourism in Kenya, a tourism training college, hotels and travel agencies in the country collaborated in the pilot.	18 out of 20 beneficiaries completed the foundation training successfully. Learnings from this pilot will be applied to future training phases.
Economic inclusion of people living with disabilities.	A second pilot program, to train young people with disabilities to work in travel reservations. Amadeus, the Argentinian travel agency association FAEVYT and Incluyeme, a non-profit focusing on people with disabilities, collaborated in the pilot.	9 people with disabilities completed the training successfully, to ease their inclusion in the workforce.
Advocacy for travel and tourism's potential to contribute to inclusive and sustainable economic progress.	_Speaking at global forums, e.g.: _UNWTO-EU International Congress on Ethics & Tourism (Poland). _UNWTO-Africa International Conference on Promoting Sustainable Tourism, a Tool for Inclusive Growth & Community Engagement in Africa (Zambia). _Toward an inclusive and innovative economy, balancing economic progress with social needs (Spain). _Indaba Ministerial Discussion: The Role of Technology in the Changing Face of Travel in Africa (South Africa). _AmCham Shanghai CSR and Sustainability Forum, CSR in the Digital Age. _Sustainability and CSR Fair, partnerships for impact: the United Nations Children's Fund (UNICEF) – Amadeus case (Thailand). _Launch of pilot with UN Online Volunteering Service to bring pro bono skills from Amadeus professionals to development projects worldwide.	
Alleviating effects of poverty among people in vulnerable situations in our local communities.	_Amadeus offices participated in charitable projects in 42 countries, in partnership with 129 non-profit organizationsThe largest single initiative was the seventh edition of the Latin America Volunteer Day: over 300 staff members from 13 country offices and their customers went out to help people at risk of social exclusion in the local	Support for people in need in our local communities.

G4-DMA



Knowledge & Skills Transfer

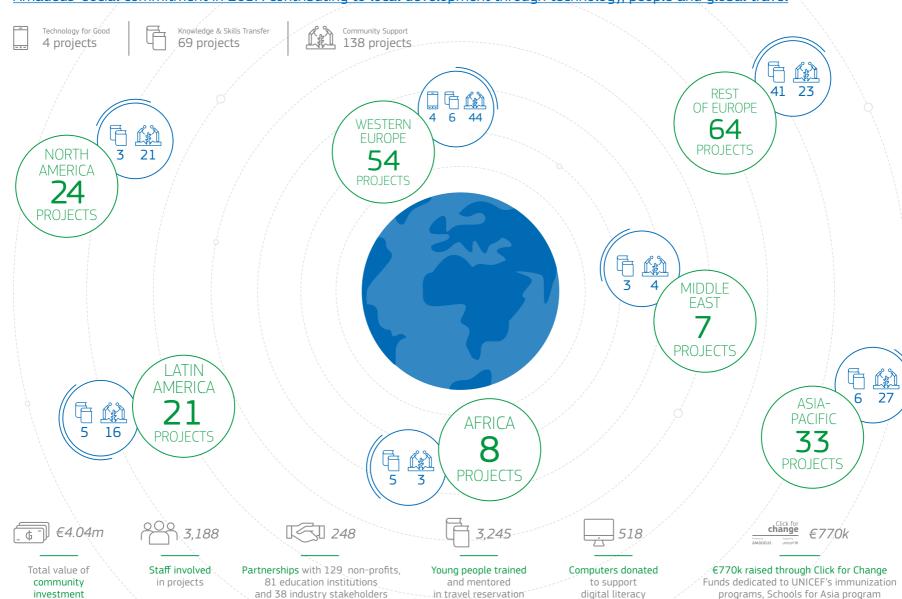
Community Support

communities.

Amadeus' social commitment in 2017: contributing to local development through technology, people and global travel

G4-DMA G4-EC8 G4-S01

investment



in travel reservation

skills and basic IT use

in 13 countries

and Regular Resources

in 64 countries

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14.3 Technology for Good

Sample of a risk map developed to predict spread of zika

Predictions

And six months earlier

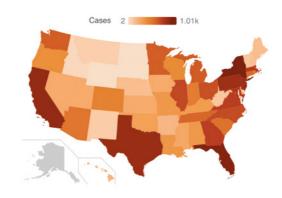


UNICEF Data Science Prediction. August, 2016

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 UNICEF

Actual cases



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

During 2018, we plan to validate these risk maps in a range of UNICEF country office applications, and to further develop the models with the help of academic and private sector partners."

Clara Palau UNICEF's Program Lead



See video: Amadeus' big data to support UNICEF's new platform

Real-time predictive analytics to improve response to global emergencies

In collaboration with Amadeus, UNICEF's innovation team 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.

The prototype was tested successfully and its value was proven in the Zika epidemic. By the end of 2018, UNICEF aims to have in place an automated platform for real-time risk-predictive analytics at a global level.

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

In 2017 Avianca Holdings, a leading group of nine airlines in Latin America, signed up to Click for Change, the global online donations campaign led by Amadeus and UNICEF. Starting in 2018, travelers making bookings on the group's website avianca.com will be able to donate to support quality education and universal learning spaces for underprivileged children and adolescents in the region. The UNICEF Regional Education program for Latin America will receive the funds and manage the programs reaching beneficiaries.

Click for Change is powered by the Amadeus Donation Engine, which gathers donations from people buying travel online. Since 2013 almost USD 3 million has been donated by travelers on the websites of Iberia, Finnair and Norwegian. 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. In 2017 Amadeus' contribution supported UNICEF's Schools for Asia and Africa programs and financed the vaccination of 70,000 children against measles, mumps and rubella. The Click for Change funding improves UNICEF's ability to deliver results for every child, especially those at greatest risk and in greatest need.

Click for Change Powered by Supporting amadeus unicef ®

Our promise goes beyond providing exceptional service to travelers.
Our corporate citizenship strategy, 'Avianca Citizen,' seeks to be an agent of transformation for the people and communities which we serve, with special focus on health and education programs for children and teenagers. Click for Change will help Avianca do this and so much more."

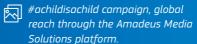
John Karakatsianis Corporate Citizenship Director, Avianca Holdings

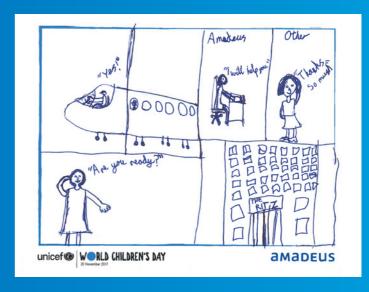
Increasing the reach of humanitarian campaigns through global travel communication channels

Using Amadeus' corporate and customer communication platforms we piloted three UNICEF global campaigns: #KIDSTAKEOVERBUSINESS, giving children a voice on World Children's Day; UNICEF humanitarian response in Mexico and the Caribbean, to help children and families affected by the earthquakes; and "A Child is a Child", a campaign aimed at protecting the rights of millions of refugee and migrant children uprooted from their homes by war, conflict and poverty.

In each case travelers responded, driving significant traffic to the UNICEF campaign pages.







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Accessible travel and inclusion of people with disabilities

According to the World Health Organization, 15% of the world's population lives with some form of disability. In some markets, as many as one in six airline passengers have some sort of accessibility need. This reality, together with increasing focus on the implementation of universal accessibility standards, led Amadeus to study in depth the issue of accessibility in travel.

During the year, Amadeus also delivered innovative solutions on request from our airline customers, both to ease work for their employees with disabilities and to better serve their customers with disabilities.



Voyage of Discovery Working towards inclusive and accessible travel for all



Building on our success in making the user interface of Amadeus e-Retail airline internet booking engine accessible to the standards of the Web Content Accessibility Guidelines, we commissioned research on accessible travel and the potential business opportunity that this represents for the global travel

industry. More than 800 travelers with accessibility needs were interviewed, along with industry experts from different transport modes and sectors.

In 2017 we published the findings of this global research to initiate an industry-wide dialog on the opportunities and implications of delivering an accessible experience in travel.

These were some of the key findings:

- _Travelers with accessibility needs rate their overall travel experience 6.2 out of 10.
- _86% of travelers with accessibility needs would travel more if barriers to travel were removed.
- _These travelers would increase their travel budget by 34% if the travel experience were more accessible.
- _Mobile technology identified as a key enabler or reducing barriers, especially to neutral and transparent travel information and on accessible travel options.
- Universal accessibility standards are not sufficiently developed or implemented.
- _More effective communications and personalized service will remove doubts and reduce uncertainty.



Download white paper Voyage of Discovery - Working towards inclusive and accessible travel for all 120 | 14. Social responsibility

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14.4 Knowledge & Skills Transfer

Shaping the future of talent to meet job market requirements

Amadeus' Knowledge & Skills Transfer program brings skills 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 skills and resource gaps, and to get their commitment to providing employment or onthe-job training opportunities to qualified candidates.

In 2017, 3,245 young people benefited from our long-standing education-related projects in 21 countries. They received training and mentoring in travel reservation, tourism and business skills. Overall, Amadeus offices have ongoing training partnerships with more than 80 education organizations – universities, vocational training centers, schools and educational non-profit organizations – in a total of 34 countries.

Travel and tourism could be facing a shortfall of up to 14 million jobs over the next 10 years."

Global Talent Trends & Issues research World Travel & Tourism Council, 2017

Public-private partnerships to ensure that training improves employability

In 2017 we completed two pilot projects with a new approach to public–private partnerships. The purpose of this new approach is to ensure that the training provided actually builds the skills that the travel industry needs, and improves the employability of the students and ultimately generates jobs for them.

In a pilot program in Kenya, Amadeus, UNWTO, the Ministry of Tourism in Kenya and a selection of stakeholders in the local tourism industry collaborated to train and give work experience to 20 young women and men. The goal was to qualify women and youth from underserved communities to work in travel and tourism or to continue with further education in the sector. With the commitment of local industry players, training can respond specifically to skill gaps and resource needs. This can dramatically increase the employability of candidates, and thus more of them are in a better position to achieve employment, contributing to economic empowerment and social inclusion.

Engaging with our partners and stakeholders in Latin America, we completed a training pilot in Argentina to equip people with disabilities with professional skills. We partnered with the Argentinian travel agency association FAEVYT and Incluyeme, a non-profit focusing on people with disabilities, and successfully trained nine people to professionally master a global reservations system.

We are convinced that the collaboration between FAEVYT and Amadeus will help disabled people to find more job opportunities as well as companies from our industry to better know the benefits of creating labor inclusion for them."

Gabriel Marcolongo CEO, Incluyeme.com

We believe that by training people with disabilities we are contributing with all the tourism industry. Through this program we are not only benefiting the companies involved but also their end users/customers, who receive the attention of a diverse and solidary community."

Fabrizio Di Giambattista FAEVYT Amadeus Global Report 2017 14. Social responsibility / 121

In partnership with the Spanish Foundation for the Blind (Fundacion ONCE), we also started discussions with the government of Morocco, the Union for the Mediterranean and Inserta, a disability specialist non-profit organization, to start a similar project in Morocco in 2018.

Amadeus believes that new and innovative models for public-private collaboration are needed to address the challenges of the future, and is engaging with governments and industry stakeholders in South Africa to build a new framework for collaboration that will accelerate the social and transformational benefits of travel and tourism.

Continuing growth in the Global Travel and Tourism Partnership (GTTP) education program

In 2017, 667,425 students from 13 countries¹ completed the GTTP online curriculum. This is a unique education program that introduces secondary school students to the travel and tourism industry and the career possibilities in it. Since its launch in 1996, 2.9 million students have completed the GTTP program.

The GTTP annual students and teachers conference was again held at Amadeus Executive Briefing Center in Sophia Antipolis in France. Amadeus has a long-standing partnership with GTTP and is a founding board member of the organization.

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. Working with partners like Spanish airline Iberia and Computer Aid International to refurbish and ship the equipment to its destination, hundreds of Amadeus PCs every year help improve digital inclusion.



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

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Bridging the digital divide in Sierra Leone with Computer Aid International: becoming self-sufficient

In 2016 Amadeus donated 100 PCs, which were installed in 10 primary schools. These have provided more than 4,000 students with hands-on training in ICT, and Amadeus therefore continued financial support for further stages of the project. With our contributions in 2017, stage 2 of the project was closed as the project lead, Njala University, became the first accredited International Computer Driving License center in Sierra Leone able to provide internationally certified teacher

training for years to come. With this new accreditation, in the project's next stage, Njala University, which manages the project locally, will be able to train 30 teachers across 10 schools and impact over 5,000 students in 1 year. The long-term impact of this project is significant, as it contributes to a skilled workforce, which will play a big part in enhancing Sierra Leone's ability to compete in the global economy.





An equipped computer classroom in the project managed by Njala University.

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14.5 Community Support

Partnering 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 2017 we collaborated on 138 projects with more than 120 non-profit organizations and local authorities in 42 countries.

Sports for charity, local fundraising and cash donations are some of the creative ways our people find to help in their local communities. Amadeus staff also dedicated over 11.213 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 rewarding competition winners with donations to one of the Amadeus Social Responsibility projects.



Amadeus employees' "Hour of code" at Waltham High School to help students develop coding skills and learn about career paths in Computer Science.

Examples of Amadeus' Community Support projects

_Amadeus Loyalty in Istanbul partnered with INARA, a non-profit that supports children in conflict zones to access hospitals. As the first step of this collaboration, Amadeus volunteers provided their expertise to strengthen INARA's online presence.

_In Dubai, Amadeus partnered with Dubai Cares, a local NGO that focuses on education projects. As a part of the local Amadeus 30th anniversary celebrations, staff and customers raised funds towards "Building a 30th Anniversary School" for a Dubai Cares school.

_Amadeus South Africa donated 100+ PCs to support a program by the National Applications Center and the Department of Correctional Services that helps young offenders in South Africa through education and skills development.

_Rural Literacy and Health Program for Children in India.

_Amadeus Bangkok CSR program supports educational inclusion among marginalized children and youth from early childhood education to university level. Four initiatives encase this: child care for underserved families with Baan Dek, getting street children back to school with Friends International, helping displaced youth re-enter education by obtaining high school equivalency certificate with Colabora Birmania, and, finally, university scholarships with International Support Group Foundation (ISGF).

_Navitaire, an Amadeus company, sponsored a high school robotics team from Washburn High School, Minneapolis, Minnesota. With the support the students were able to compete in the robotics competition and dive deeper into the world of tech. With this initiative, Amadeus fostered the skills and knowledge of technology and engineering among high school student in an Amadeus community.

_During the seventh edition of the LATAM volunteer day, over 400 employees from 14 Amadeus offices in the region and customers went out in the local communities. Handiwork, coaching and materials were provided to centers for young and elderly people, shelters and support organizations for the homeless, women inclusion groups, animal protection and orphanages. In Mexico, the efforts focused on rebuilding after the earthquakes.



Visit the Amadeus Social Responsibility Footprint Map online. 124 | 14. Social responsibility Amadeus Global Report 2017

14.6 Engaging with our external stakeholders to define the roadmap to 2020

2017 was an intense year of dialog with internal and external stakeholders of Amadeus Social Responsibility.

With 2017 being declared International Year of Sustainable Development for Tourism, Amadeus took a leading sponsorship role, supporting UNWTO in driving dialog at seven global forums in Europe, Africa, the Middle East and Latin America. The core theme was that travel and tourism – the world's third-largest economic sector – is uniquely able to contribute to inclusive and sustainable economic development, especially in less developed countries. We also engaged with our key partners like UNICEF and GTTP, where experts from all partners reviewed our strategy and jointly defined goals for 2020.

Through all of these engagements, Amadeus reinforced the message that technology will be instrumental in bringing about the necessary changes and improving the social and environmental impact of travel and tourism, and Amadeus will continue to engage with all travel and tourism industry stakeholders to build the public-private collaboration models required to solve our common challenges.









UNWTO campaign to raise awareness of the value of sustainable tourism and the contribution it can make toward development and engaging all stakeholders in making the sector a catalyst for positive change.



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14.7 Engaging with our colleagues

We completed important steps in the evolution of the Amadeus Social Responsibility program, and initiated a global conversation to enhance awareness of our initiatives and to involve and engage our colleagues. To date this conversation has provided valuable insights:

- _A global survey among Amadeus employees and selected external partners on their perceptions of social responsibility.
- _A first global conference summit for Amadeus' Global Coordinators of Social Responsibility.
- Regular internal communication activities to raise internal awareness of social responsibility initiatives and results, often authored by staff directly involved in these projects locally.

Conclusions from this global conversation have improved our understanding of the relevance and importance of the contribution Amadeus makes toward a global agenda for sustainable development, to all employees in Amadeus. We will continue this dialogue both internally and externally to gain more insight. This will continue to shape our commitment to social responsibility, by leveraging our people, our technology and our global position in the travel industry, in partnerships that make a real difference.

Amadeus Social Responsibility Survey results and participation by region*

91% of the staff says that social responsibility is important or very important.

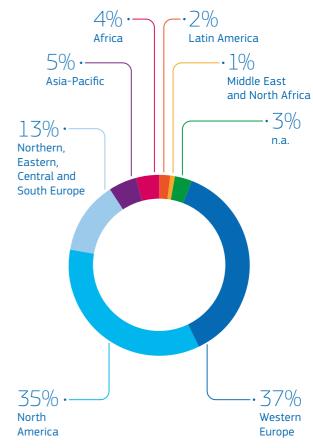


59% say that social responsibility can support their business objectives.

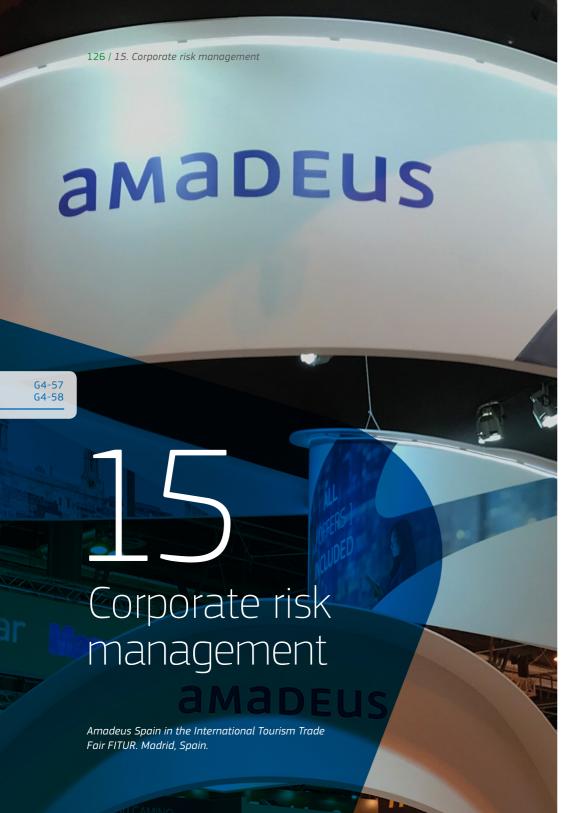


56% see an opportunity to integrate social responsibility into their work.





^{*} Amadeus Social Responsibility Survey, 2016–17. 691 respondents from 37 countries. Employees value a company-led program and want to see more investment, co-creation and awareness-building.



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.

Three Lines of Defense and Combined Assurance

— Governing body / Board / Audit Committee —

- Senior management ———i

1st Line of Defense

Line and support management

~

Has ownership, responsibility and accountability for assessing, controlling and mitigating risks

2nd Line of Defense

Human resources Financial control Legal Security Risk management Data privacy Compliance

Monitors and facilitates the implementation of effective risk management practices by the 1st line and assists risk owners in reporting risk-related information throughout the organization

3rd Line of Defense

Internal Audit



Provides assurance to the Group's governing body and senior management on the organization's effectiveness in assessing and managing risks and related internal control systems, including the manner in which the 1st and 2nd lines operate · External Alidit -

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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 & 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.

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 adequate health and safety 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.



Compliance policies ·

_Amadeus Code of Ethics and Business Conduct

- _Anti-Bribery Policy
- _Anti-Fraud Policy
- _Business Continuity Policy
- _Entertainment and Gifts Policies
- _Information Classification Policy
- _Speak Up Policy

Human resources policies

- _Amadeus Human Rights Policy
- _Health and Safety

Information security policies

_Acceptable Use Policies

Finance policies

_Corporate Purchasing Policy

Industry affairs policies

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

Legal policies

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

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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 2017 no significant breaches to the Code of Ethics and Business conduct were reported.

The Amadeus core policies listed on the previous 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.

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, Human Resources 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 financial internal controls unit (which oversees compliance with the Internal Control Over Financial Reporting standard).

Risk & Compliance develops the 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 analysis as well as monitoring measures are reported on a regular basis to the Risk Steering Committee and the Audit Committee, as well as to 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 the Amadeus Group, as well as Amadeus' own activities and objectives.

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

- _Achieving its long-term objectives as per 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
- _Contributing 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, such as economic, environmental, geopolitical, societal and technological risks.

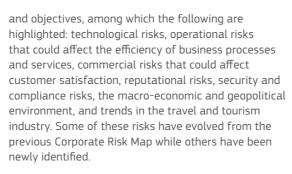
Amadeus is concerned about immediate risks – and emerging risks. Newly developing or changing risks that are difficult to quantify and could have a major impact on society and the industry are considered in the exercise. The effect of an increasing aging population over the years on the travel sector is an example of the type of risks we asses, as well as threats threats to our business model, especially at the increasingly and fast digital development. A new edition of the Corporate Risk Map will be issued in 2018.

The latest version of the Corporate Risk Map defines the most critical risks relating to Amadeus' operations

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





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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 as a result of changes in the environment, or as a consequence of 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 with 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 (CISO), which is 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 of the European Union as well as 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 a 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 the 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:

- 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 & 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.
- Risk Steering Committee. This committee 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 responses.

Both the Ethics Committee and the Risk Steering Committee meet several times a year.

Third Line of Defense: Group Internal Audit

The Group Internal Audit function provides independent and objective assurance and consulting services designed to add value and improve Amadeus' operations. It helps us accomplish our goals by using a systematic, disciplined approach to evaluate and improve the effectiveness of governance, risk management and control processes (including against fraud and corruption).

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, 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 2017 represented more than 50% of the total Amadeus workforce.

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) International Professional Practices Framework, including the Core Principles for the Professional Practice of Internal Auditing, Code of Ethics. International Standards for the Professional



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Amadeus Corporate Information Security Office Program

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:

- Corporate security objectives and controls set by a Corporate Information Security Office (CISO).
- 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 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.

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.

Regional security offices Extended security awareness and control to all Amadeus regions and subsidiaries Security Operations Centre Ensures that: All security policies and security architecture ISO 27001 certification Access control standards are properly monitored ISO 27001 level 3 and controlled. Ensure that only certification for Amadeus authorized persons have _Amadeus is protected against known threats Data Processing access to confidential and attacks. information on a _Security incidents are handled with need-to-know and proper communication. need-to-handle basis _Security incidents are investigated and contained. SSDLC* PCI-DSS** compliance Artificial intelligence is used to identify vulnerabilities. Ensure the Ensure that Amadeus _User behavior analytics are used to provide implementation of secure is PCI-DSS compliant software development us with actionable insights by identifying and that we are prepared patterns of traffic caused by user behaviors. methodologies according for changes in PCI-DSS to SSDLC standars both normal and malicious. compliance requirements Data leak prevention Security Security awareness Security by design nominative framework Ensure that critical Create and follow up Ensure that security is observed from the information in any on employee security Policies and framework are implemented and used to format does not leak out awareness beginning of every new to unauthorized product and new project assess security risks

Mitigation plan put in place

persons/destinations

^{*} SSDLC: Secure Software Development Life Cycle.

^{**} PCI-DSS: Payment Card Industry Data Security Standard.



16.1 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 Amadeus' performance.

Amadeus Investor Relations' mission is to maintain an open dialog and to 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, 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, during November 2017 Amadeus adapted its communication policy to Directive 2014/95/UE concerning the disclosure of non-financial information. The aim of this new measure is to contribute to a better understanding of corporate risks, therefore increasing sustainability and shareholder confidence. We will be disclosing information regarding: (i) the company's position on environmental and social questions: (ii) human rights policy and; (iii) fraud and bribery policies. This will provide 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, where applicable. These entities ensure the immediate dissemination of information through the 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 of channeling 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 the company 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 2017 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 Boston, Copenhagen, Edinburgh, Frankfurt, Geneva, London, Lyon, Madrid, Milan, Montreal, New York, Oslo, Paris, San Francisco, Stockholm, Toronto and Zurich.

- 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 35 at the end of the year.
- Website views: the Investor Relations website had over 179,000 page views by more than 65,000 unique visitors.

Amadeus also held a Technology Day on December 13, 2017 in London. The purpose of the day was two-fold. Firstly the Amadeus technology leadership team gave an overview of the technology story and strategy of the company and the way in which it can lever on modern technologies. Following this, the majority of the day was given over to seeing the company's technology in action, with tech demonstrations of products across the Amadeus portfolio.

Finally, for the sixth year in a row, Amadeus has earned the prestigious recognition of being included in the Dow Jones Sustainability Index (DJSI), in the IT & Internet Software and Services sector. In this edition, Amadeus has been recognized as the global leader of the 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 the company's commitment to developing a sustainable business, which brings long-term rewards to all our stakeholders and places emphasis on the careful management of resources. Amadeus' renewed inclusion in the FTSE4Good Sustainability Index Series in 2017 also recognized the company's ongoing efforts in implementing responsible, transparent and sustainable business practices.

MEMBER OF

Dow Jones Sustainability Indices

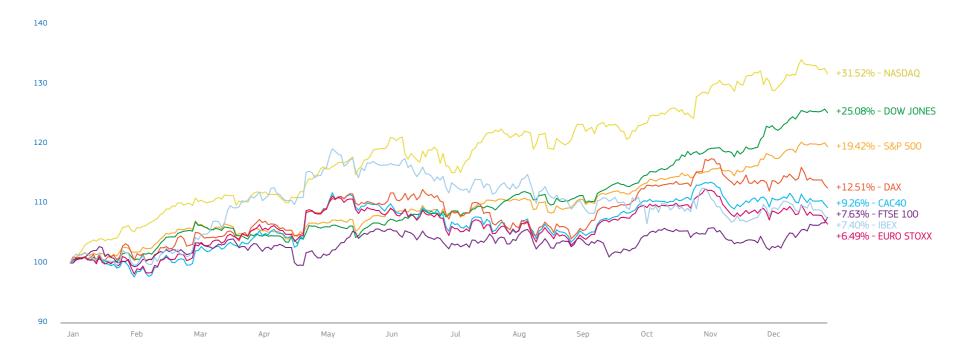
In Collaboration with RobecoSAM (

16.2 The stock market in 2017

2017 was a great year for the world economy, with robust global GDP performance leading to strong growth in all major capital markets. In fact, this is the first time in over a decade where we have seen true, synchronistic growth between all the major world economies.

In Europe, despite some uncertainty around key elections in France and Spain and the continuing Brexit negotiations, all financial markets performed well. For example, the EURO STOXX 50 (benchmark index for the European equity market) posted its highest annual growth since 2013 (6.5%) and was still outpaced by the IBEX, the FTSE 100, the CAC40 and the DAX, which grew 7.4%, 7.6%, 9.3% and 12.5% respectively. In the US, the markets performed even more positively, bolstered by the passing of a new tax plan and strong corporate profits. The Dow Jones, the S&P 500 or the NASDAQ all showed double-digit growth in 2017 (25.1%, 19.4% and 31.5% respectively).

Equity capital markets' performance in 2017



16.3 Amadeus' share performance

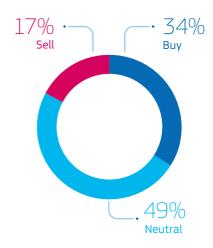
Amadeus' share price increased by 39.2% in 2017, outperforming underlying European markets. The share price reached its historical maximum of €61.95 on November 21, 2017 and closed the year at €60.11.

Our market capitalization at December 31, 2017 was €26,378 million. The average daily trading volume was 1.4 million shares, for a total traded volume of €17.8 billion for the year. The proportion of our stock in free float reached 99.65% at year-end.

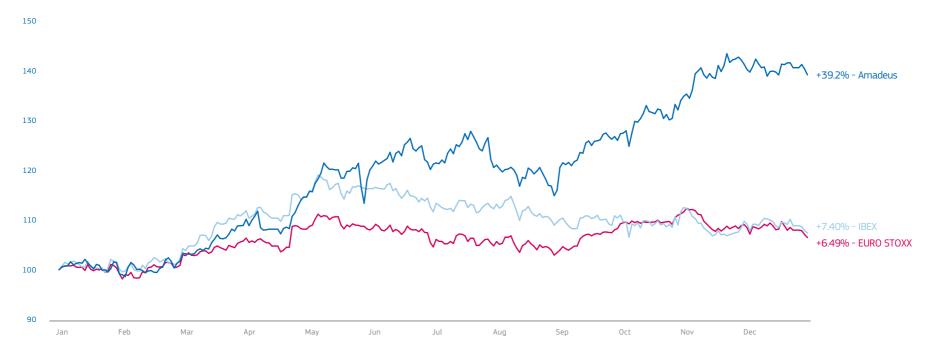
Amadeus has increased its weight within the IBEX 35 to 4.9% as of 31 December 2017, becoming the sixth largest company in the index.

In 2017 adjusted earnings per share stood at €2.55 and on December 31, 2017 the price to adjusted earnings ratio was 23.6x.

Analysts' recommendations at year-end 2017



Amadeus' share performance in 2017



Amadeus key trading for the year

	2016	2017
Change in share price (%)	6.1%	39.2%
Maximum share price (figures in €)	44.93	61.95
Minimum share price (figures in €)	32.96	42.58
Weighted average share price (figures in €)*	40.28	51.75
Average daily volume (number of shares)	1,537,881	1,369,088
Average daily volume (figures in € thousand)	60,493	68,391
Annual volume (figures in € thousand)	15,546,662	17,781,616

^{*} Excluding cross trades.

Amadeus key trading data at year-end

	2016	2017
Number of shares issued at Dec 31	438,822,506	438,822,506
Share price at Dec 31 (figures in €)	43.17	60.11
Market capitalization at Dec 31 (figures in € million)	18,944	26,378
Earnings per share (adjusted profit share), full year (figures in €)	2.08	2.55
Dividend per share, full year (figures in €)	0.94	1.14
Dividend yield, full year (%)*	2.2%	1.9%
Payout ratio, full year (%)	50%	50%
Price to earnings ratio at Dec 31 (x)	20.7x	23.6x

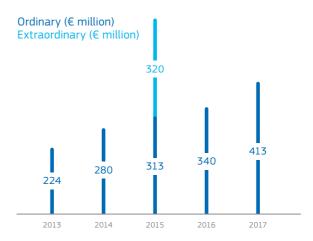
^{*} Based on year-end share price.

16.4 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%. The company complemented this with a share repurchase in 2015 and has announced a second share repurchase beginning in 2018. Amadeus aims to continue supporting this growth in the coming years based on its healthy cashgeneration profile and sound balance sheet.

Amadeus shareholder remuneration



Total €1.8 billion returned since IPO. 20% ordinary remuneration CAGR 2011–16.

Ordinary dividend payments

The annual gross dividend from the profit of the year 2016 was approved by our shareholders at the Shareholders' General Meeting held on June 15, 2017. The total value of the dividend was \leq 412.5 million, representing a pay-out of 50% of the 2016 reported profit, or \leq 0.94 per share (gross), growing 21.3% over prior year. Regarding the payment, an interim amount of \leq 0.40 per share (gross) was paid on February 1, 2017 and the complementary dividend of \leq 0.54 per share (gross) was paid on June 30, 2017.

On December 15, 2017 the Board of Directors proposed a 50% payout ratio for the 2017 profit dividend. In June 2018 the Board of Directors will submit a final gross dividend of \in 1.14 per share for approval to the General Shareholders' Meeting. An interim dividend of \in 0.48 per share (gross) was paid in full on 31 January 2018. Based on this, the proposed appropriation of the 2017 results included in the 2017 audited consolidated financial statements of Amadeus and subsidiaries included a total amount of \in 500.3 million, corresponding to dividends pertaining to the financial year 2017.

Extraordinary shareholder remuneration

Additionally, Amadeus has stated that in low leverage scenarios, it would complement ordinary shareholder remuneration with extraordinary remuneration.

Following this policy, Amadeus announced a share repurchase program on December 14, 2017, to be carried out in accordance with the provisions of the Commission Delegated Regulation (EU) 2016/1052 of of March 8. The purpose of the program is to reduce Amadeus' share capital through the redemption of shares, subject to prior agreement to be granted by the Ordinary General Shareholders' Meeting, to

take place after the closing of each of the respective tranches of the program.

The maximum investment of the share repurchase program will be €1,000 million and the number of shares to be acquired under the program will not exceed 25,000,000 shares, representing 5.69% of the share capital of the company.

The maximum execution period of the program is 27 months, from January 1, 2018 to March 31, 2020, excluding potential suspension periods. The program is split into two tranches: (i) Tranche 1: up to €500 million (non-cancelable), from January 1, 2018 to March 31, 2019, with a compulsory minimum purchase period of nine months and; (ii) Tranche 2: up to €500 million (cancelable at company's discretion), from April 1, 2019 to March 31, 2020, with a compulsory minimum purchase period of nine months.

Notwithstanding the above, Amadeus reserves the right to terminate the share repurchase program if, prior to its expiration date, Amadeus has acquired thereunder shares for a purchase price that reached the maximum investment price or has acquired the maximum number of shares under the program.

An irrevocable mandate to purchase shares has been granted to the financial entity that is acting as agent on Amadeus' behalf for the execution of the share repurchase program. It will make its purchasing decisions independently and without influence from Amadeus.

16.5 Financial institutions

Net financial debt as per our financial covenants' terms amounted to €2,083.3 million on December 31, 2017 (1.12 times last-12-month covenant 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 affecting our debt structure during the year were:

- _A €500 million Eurobond issue in May 2017 (under our Euro Medium Term Note Program), with a two-year maturity, an annual coupon of 0.0% and an issue price of 99.932% of nominal value.
- The full repayment of €400 million relating to a bond issued by Amadeus in December 2014.
- _A €185.1 million net repayment related to our Multi-Currency European Commercial Paper program, to reach a total nominal amount of €300.0 million at the end of December 2017
- The full repayment of €100 million related to our revolving credit facility.
- _The repayment of €50.0 million related to our European Investment Bank loan.
- _As explained in the shareholder remuneration section, Amadeus announced a share repurchase program on December 14, 2017. The future payments under the first, non-cancelable tranche of the share repurchase program, amounting to €500 million, have been included in the "Other current liabilities" in the statement of financial position, as well as in covenant net financial debt as of December 31, 2017.

In July 2017, Standard and Poor's confirmed its BBB/A-2 credit rating for Amadeus with positive outlook, and Moody's confirmed its Baa2 rating with stable outlook.



Closing remarks

Tomas López Fernebrand

Senior Vice President, General Counsel and Corporate Secretary, Amadeus

The Amadeus Global Report 2017 is the fifth edition of this document. It represents a fundamental tool to provide visibility about Amadeus' organization as well as transparent information to external and internal audiences. The report reflects Amadeus' commitment to embracing new and more comprehensive reporting standards, particularly in relation to Environmental, Social and Governance (ESG) practices.

The drive to improve the external reporting of corporations is a trend we also see at regulatory level. For example, the EU Directive 2014/95 mandates large corporations to disclose specific non-financial and diversity information relating to environmental, social, human resources and human rights issues, as well as measures to prevent corruption and bribery. At the time of closing this report, all EU Member States have transposed the directive into their relevant national legislation. Accordingly, Amadeus has already adopted these new requirements.

Amadeus Global Report 2017 Closing remarks | 139

The report reflects Amadeus' commitment to embracing new and more comprehensive reporting standards."

Given the fast growth and evolution of the travel industry, the 2017 edition of the Amadeus Global Report includes a more detailed analysis of trends in our sector than previous versions. In addition, in order to better describe our day-to-day activities, we have included a number of personal quotes from our top management as well as case studies from customers.

This more comprehensive reporting helps us as well to reflect on our responsibilities resulting from the growth of our company and of our industry. Indeed, the travel industry is consolidating its position as a fundamental engine for global job creation (18% of total new jobs worldwide in 2017 were related to travel and tourism) and economic progress. In 2017, with a growth of 4.6%, the travel industry outpaced for the seventh consecutive year the world's GDP growth.¹

At the same time, in 2017 Amadeus maintained strong overall results in economic performance, geographic operations expansion and increased number of customers and workforce. Every day, Amadeus' technology solutions help travelers make their trips efficient and pleasant. We see our position in the industry as a serious responsibility and are committed to delivering sustained profitable growth and increased added value for industry stakeholders.

This year our scores in sustainability indices have been remarkable. First,

These recognitions corroborate the merits of our strategic plan and encourage all of us to keep working in the same direction and to target higher ambitions.

In the year in which we celebrate our 30th anniversary, we trust in the enthusiasm and creativity of our people to continue to provide state-of-theart solutions to industry stakeholders and to contribute to a bright future for Amadeus and the travel industry as a whole.

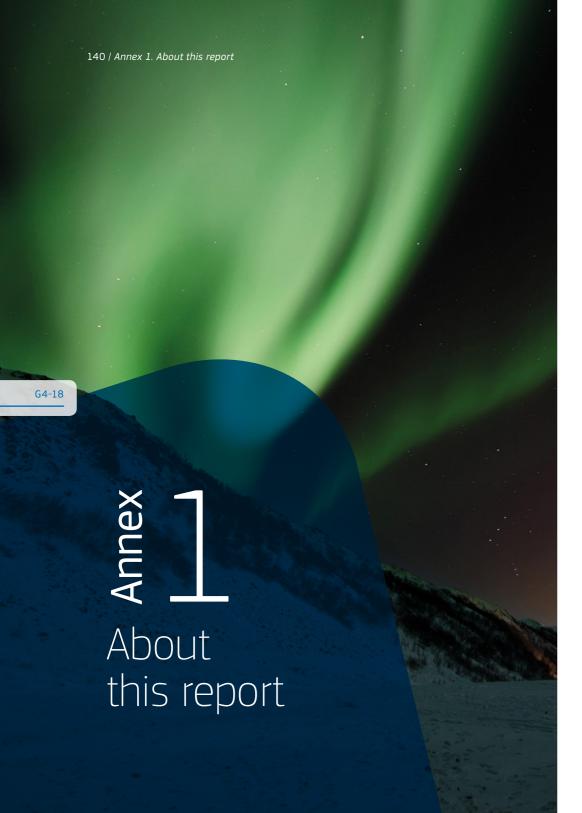
Tomas López Fernebrand

Senior Vice President, General Counsel and Corporate Secretary, Amadeus

Amadeus was recognized at the World Economic Forum in Davos as the 16th most sustainable company in the world by Corporate Knights. This acknowledgment follows our inclusion in the list of the top 100 most sustainable companies the previous year. In 2017 Amadeus was also the highest-scoring company in our sector of the Dow Jones Sustainability Index (composed of 86 companies). Moreover, Amadeus has remained a member of this prestigious sustainability ranking for the sixth consecutive year. Lastly, in 2017 we maintained our leadership status in CDP² ratings for the second year in a row.

¹ WTTC (2018). Travel & Tourism Global Economic Impact & Issues 2018. London, World Travel & Tourism Council.

² CDP, formerly Carbon Disclosure Project, runs the global disclosure system that enables CDP participants to measure and manage their environmental impacts. Participating companies are assessed across four consecutive levels which represent the steps towards environmental stewardship (Disclosure, Awareness, Management and Leadership).



The Amadeus Global Report 2017 presents a broad overview of Amadeus' operations, including financial and non-financial information. In addition, the report explains details of our business and its environment, including our approach to facing the challenge of new global trends and travel industry sustainability.

The Amadeus Global Report fulfills multiple purposes:

- _It serves as the main source of information for any internal or external stakeholder wanting to know more about Amadeus. For instance, it is used in induction programs for new employees and contractors, as well as to respond to customers' Requests For Proposals.
- _The comprehensiveness of the document and the fact that the information is verified by an external company significantly contributes to maximizing our scores in external sustainability indices such as the Dow Jones Sustainability Indices, CDP or FTSE4Good.
- _This publication reports in detail our approach and performance to labor, social, environmental and governance matters.

At Amadeus we are aware of the increasing expectations regarding non-financial information from our stakeholders, including regulators. That is why we have been issuing reports on sustainability and social activity since 2010, and why we have been publishing that information together with our business performance in our global reports since 2013.¹

The new European [Non-Financial Reporting] guidelines themselves reflect the principles of integrated reporting, recognizing our key concept of connectivity, the importance of linkages and inter-relations of information, whether it is between different aspects of non-financial information or between financial and non-financial information."

Richard Howitt
CEO, International Integrated Reporting Council

¹ All Amadeus Sustainability and Global Reports can be found at http://www.amadeus.com/msite/annual-reports/en/.

Amadeus Global Report 2017 Annex 1. About this report / 141

Scope and methodology

We determine our approach to and the content of the Amadeus Global Report on the basis of the above objectives. This task is carried out based on global and widely recognized reporting standards, as well as on our materiality assessment. In this section, we will present the roadmap to the Amadeus Global Report, with special focus on this first stage of the project.

Reporting principles

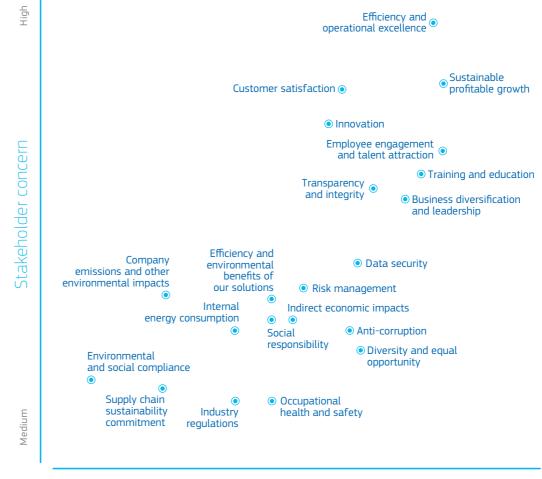
The guidelines issued by the Global Reporting Initiative (GRI) have been the main point of reference for the selection of the basic topics and metrics to be included in this report. The *Amadeus Global Report 2017* is prepared in accordance with the GRI G4 Guidelines – Core option. The GRI stamp in Annex 2 of this report means that GRI has confirmed that our GRI Content Index is accurate, and that all reporting indicators disclosed in this document have their corresponding location reference throughout the report.

This report brings together information about Amadeus' "capitals" into a single corporate document. To this end, the guiding principles of the International Integrated Reporting <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 activity 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 (PwC) ensures that the quantitative and qualitative information contained in the GRI indicators

of the Global Report is accurate and aligned with the requirements of the standard (see PwC's Independent Assurance Report in Annex 2).

Amadeus materiality matrix



G4-18

G4-20

G4-21

G4-32

G4-33

² As the International Integrated Reporting Council explains in its International <IR> Framework, all organizations depend on various forms of capital for their success: financial, manufactured, intellectual, human, social and relational, and natural. Capitals are stocks of value that increase, decrease or transform through the activities and outputs of the organization.

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Amadeus Global Report 2017

Materiality analysis

Together with external consultants, we have undertaken an assessment to determine which environmental, social and economic aspects are most critical to Amadeus and its stakeholders.

In order to carry out an initial selection of relevant subjects, all company units managing relationships with Amadeus' various stakeholders provided documentation, such as:

- _Overall news and social media evaluation report
- _ Work climate survey results at the Nice (France) and Madrid (Spain) sites
- _Global engagement survey results
- _Reputational risk map
- _Amadeus brand measurement study
- _Customer satisfaction surveys by customer segments at regional and global levels
- _ Dow Jones Sustainability Index and CDP questionnaires
- Previous materiality analyses

With the purpose of gaining a better understanding of the material aspects defined by this assessment, industry benchmarking and individual interviews were carried out by independent experts. The interviewees represented both internal and external stakeholders.

The graphic on the previous page represents the outcome of that assessment in two dimensions: relevance of sustainability matters for Amadeus, and influence of these on stakeholders' decisions. This materiality matrix shows the aspects with at least a medium or high degree of materiality in both dimensions. It is important to note that:

- _The materiality matrix depicts an evaluation for the short to medium term.
- _ All subjects included in the matrix form part of the regular running of the business and Amadeus'

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 the principal factors.

The materiality matrix is reviewed on a yearly basis in the planning phase of the production of the Global Report.

Scope and limitations of the Amadeus Global Report

The scope of the reporting 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 covered less than 100% of the business scope. In those cases where data is partial, this is indicated in the same section.

In addition to the most relevant aspects determined from the materiality analysis, we report on other matters to improve overall transparency. For example, we report on topics that have low sustainability risks or impact on our business such as water consumption or supplier assessment since these are relevant aspects for some stakeholders.

Below are other relevant remarks regarding some of the material aspects.

The environmental impact of Amadeus' operations

As a technology provider for the global travel industry, Amadeus has a relatively low direct environmental impact. We are not involved in physical manufacturing processes, and our main source of energy and natural resource consumption is our Data Center in Germany. Moreover, one principal objective of the solutions we provide to our customers is to improve 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' workforce

The vast majority of our people hold an advanced level of education. Consequently, the likelihood of our employees facing human rights risks is relatively low.

Amadeus' suppliers

Most of our external providers fall under the following categories:

- _Consulting and marketing services
- _Hardware providers
- Software providers
- _Data communication providers

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 that may not comply with minimal social or environmental requirements is low, and that is why our external reporting is limited.

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.

Our top 50 suppliers represent approximately 59% of our total spend with external providers. This facilitates our control and access to information in the supply chain.

Amadeus Global Report 2017 Annex 1. About this report / 143

In terms of purchasing volumes, our expenditure is concentrated at our three main sites in Spain, Germany and France.

An organization of local, regional and global Amadeus purchasing teams is in charge of managing the operations on the supply chain side and deals with both internal stakeholders and vendors.

Producing the Amadeus Global Report

Following the GRI G4 principles for defining report quality, we constantly review the production process to improve the report's balance, comparability, accuracy, timeliness, clarity and reliability.3

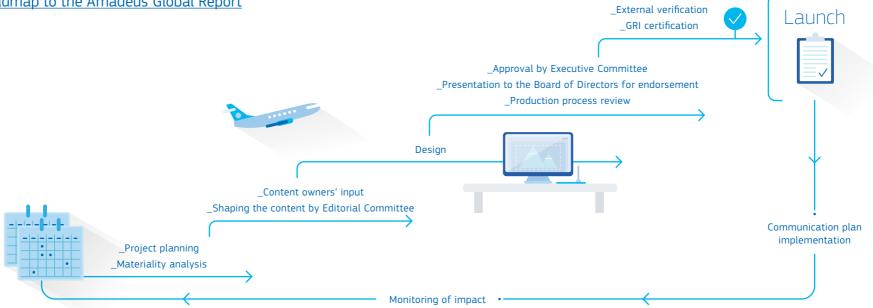
Once we define the material aspects to be included in the Amadeus Global Report, we gather the content from the owners of the information in the corresponding departments. Shaping the content is a complex process that requires a constant effort to enhance dialog within the company. That is why we have created the Amadeus Global Report Editorial Committee. The main mission of the committee is to agree on the objectives of the report, as well as the structure and the strategic overview of

the content. Led by the Sustainability, Global Reporting & Certifications unit, this transversal team is composed of heads of key units at global level: Communications, Brand, 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 report is presented to the Board of Directors for endorsement, it is released with customized internal and external communication campaigns at all geographical levels.

In this edition of the report, close to 100 people worldwide - representing more than 30 business areas and departments – have been directly involved in the preparation and production of the Amadeus Global Report 2017.

Roadmap to the Amadeus Global Report



³ The principles for defining report quality according to GRI are explained at https://g4.globalreporting.org/how-you-should-report/ reporting-principles/principles-for-defining-report-quality/.

G4-12

Amadeus' external reporting aims to ensure clear communication and transparency with regards to the company's performance. Together with the Global Report, other publications provide further insight into the details of Amadeus' activity:

- _Annual Corporate Governance Report
- _Consolidated Annual Accounts and Management Review
- Quarterly results announcements
- _Blog posts on global, regional and local Amadeus websites
- _Social media channels on LinkedIn, Facebook, Twitter, Google+, Instagram and YouTube

In addition to the above and the specific forms of communication described throughout this report, we use customized tools to facilitate dialog with our stakeholders. The table on the right summarizes all of these. The specific regularity of engagement depends on the need and the type of tool used. In any case, it takes place at least once a year.

Stakeholder	Communication channel
Employees and external candidates	_Direct engagement through local, regional and global Human Resources teams _Engagement surveys across all sites _Employee Box email _Intranet _http://www.amadeus.com/careers
Shareholders	_Direct engagement through Investor Relations team and regular reports _Roadshows and conferences _Investor Relations Inbox _ http://www.amadeus.com/investors/
Customers	_Direct engagement through local, regional and global sales, as well as customer management teams around the world _Customer Loyalty Program _Local customer support _Amadeus Customer Service 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 _Amadeus blog
Governments, authorities and regulatory bodies	_Direct contact through Industry Affairs team and local Amadeus general managers _Participation in related meetings and events _http://www.amadeus.com (specific pages for industry affairs)
Society and the environment	_Direct engagement through Industry Affairs team and various multi-stakeholder panels _Press releases _Social media _Industry Affairs Box email _Collaboration in joint social responsibility initiatives

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Amadeus' contribution to Sustainable Development Goals

The Sustainable Development Goals (SDGs), set out by the United Nations in 2015, are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. The 17 Goals are integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental.

The graph below represents Amadeus' contribution to the SDGs. Our action for each of them is described in the indicated section. We have summarized the description of these SDGs according to Amadeus' impact on their achievement. The analysis of our contribution to the SDGs has been based on the input by external

consultants' advice as well as by our social and environmental units; in addition, we have taken into account the study *Analysis of the Goals and Targets* by the Global Reporting Initiative and the conclusions in the report Sustainable Development in the European Union.

Sustainable Development Goal



In order to empower people to raise themselves out of poverty. SDG 1 seeks to ensure equal rights and access to economic and natural resources as well as technology, property and basic and financial services. It also calls for supporting communities affected by conflict and climate-related disasters.



SDG 4 seeks to ensure access to equitable and quality education through all stages of life. This goal calls for expanding the number of higher education scholarships or increasing the supply of qualified teachers.



SDG 5 aims at achieving gender equality by ending all forms of discrimination, violence, and any harmful practices against women and girls in the public and private spheres. It also calls for equal rights, recognition, their full and effective participation and equal opportunities for leadership at all levels of decision-making.



SDG 8 recognizes the importance of sustained economic growth and high levels of economic productivity for the creation of well-paid quality jobs. This Goal calls for providing opportunities for full and productive employment and decent work for all, promoting labor rights and safe and secure working environments.



SDG 9 recognizes the importance of technological progress and innovation for finding lasting solutions to social, economic and environmental challenges such as the promotion of resource and energy efficiency. SDG 9 seeks to bridge the digital divide by increasing access to information and communication technologies. It requires enhanced international cooperation and support for research, innovation and development of technology in developing countries.

Section in the Amadeus Global Report

- _Amadeus profile _Social responsibility _Amadeus people and culture
- _Amadeus people and culture
- _Annex 2 Tables related to human resources
- _Environmental sustainability Participation in industry environmental initiatives
- Social Responsibility Knowledge
- and Skills Transfer
- Corporate governance
- _Amadeus people and culture -Gender diversity
- Annex 2 Distributed economic value, Tables related to human resources
- _Corporate risk management -Amadeus policies
- Introduction to business lines
- _Amadeus people and culture
- _____Environmental sustainability Environmental
- efficiency of Amadeus operations
- Social Responsibility
- Annex 2 Distributed economic value, Tables related to human resources
- Introduction to business lines
- Airline IT
- _Diversification into new areas
- _Technology and innovation
- _Environmental sustainability Environmental benefits of Amadeus solutions
- Social Responsibility

Sustainable Development Goal



SDG 10 highlights the importance of combating social, economic and political disparities and calls for reducing inequalities based on income, sex, age, disability, race, class, ethnicity, religion and opportunity by adopting relevant policies and legislation.

SDG 12 calls for action on adoption of

to move to sustainable patterns of

impacts for sustainable tourism.

sustainable practices and sustainability

reporting by businesses. It highlights the

importance of strengthening scientific and

technological capacity in developing countries

consumption and production and developing

tools to monitor sustainable development

Section in the Amadeus Global Report

- _Amadeus people and culture _Environmental sustainability -Climate-change related risks and opportunities
- Environmental sustainability -Environmental impact of Amadeus operations. Environmental benefits of Amadeus solutions
- _Annex 1 About this report
- Annex 2 Tables related to environment



SDG 13 seeks to implement the commitment to the UNFCCC and further operationalizing the Green Climate Fund. This requires improved education, awareness-raising and capacity on climate change mitigation and





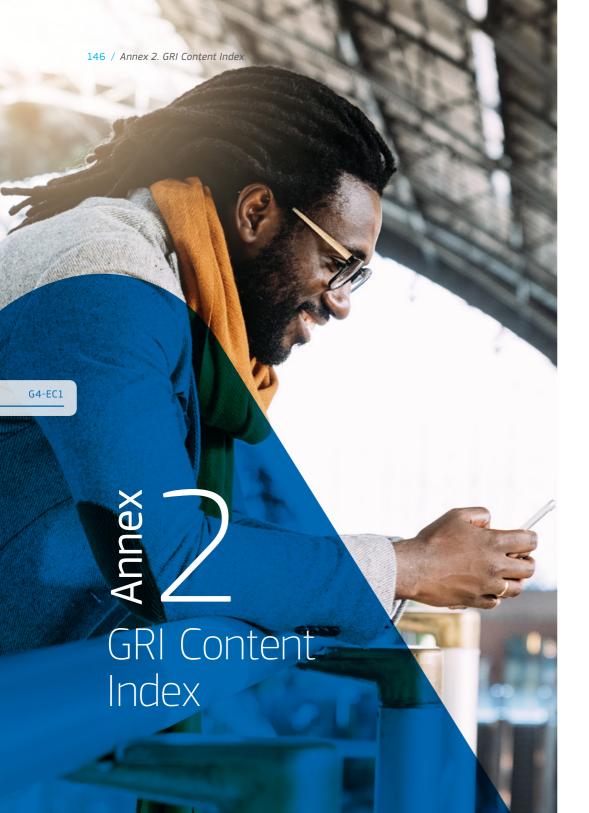
SDG 16 intends peaceful and inclusive societies based on respect for human rights, protection of the most vulnerable, the rule of law and good governance at all levels. It also envisions transparent and effective and accountable institutions, which promote non-discriminatory laws and policies, combat corruption, bribery and prevent crime.

- _Corporate governance
- Amadeus people and culture
- Amadeus industry affairs
- Corporate risk management



SDG 17 aims to strengthen the means of implementation and revitalize global partnerships between governments, the private sector and civil society for sustainable development.

- _Technology and innovation Amadeus industry affairs
- Environmental sustainability



<u>Distributed and generated economic value</u>* (figures in € million)

	2017
Operating costs	1,635
Employee wages and benefits	1,338
Payments to providers of capital**	434
Payments to governments	363
Distributed economic value	3,770

^{*} As defined by the Global Reporting Initiative (G4-EC1 indicator).

Net sales	4,853
Financial income	1
Sales of assets	0
Generated economic value	4,854

 $^{^{**}}$ All financial payments made to providers of the organisation's capital (interests and dividends paid).

Tables related to environmental sustainability

Energy consumption

	2014	2015	2016	2017	20171
Electricity consumption top Amadeus sites* (GJ)	116,033	134,594	129,596	131,181	135,107
Number of employees	9,604	10,192	10,465	10,461**	11,009**
Electricity consumption per employee (GJ)	12.1	13.2	12.4	12.5	12.3
Electricity consumption Amadeus data center (GJ)***	161,351	173,899	193,041	220,452	220,452
Number of transactions processed at the data center (millions)	1,288	1,386	1,510	1,738	1,738
Electricity required per one million transactions (GJ)***	125.3	125.5	127.8	126.8	126.8
Total electricity consumption top Amadeus sites and data center (GJ)	277,384	308,493	322,637	351,633	355,559
Natural gas (GJ)	22,513	15,166	22,106	20,327	20,327
Diesel oil (GJ)	2,578	2,704	4,438	2,834	2,834
Total energy consumption top Amadeus sites and data center (GJ)	302,475	326,363	349,181	374,794	378,720

^{*} Does not include Amadeus Data Center.

Type of fuel used for electricity generation (GJ)

	Coal	Fuel Oil	Natural Gas	Biofuel	Waste	Other*	Total
Top 13 Amadeus sites	84,779	3,714	36,953	7,216	2,915	87,156	222,734
Data Center	292,986	5,643	53,689	40,490	11,654	80,622	485,083

^{*} Other: Nuclear, hydropower, geothermal, photovoltaic, solar thermal, wind power and tidal power.

^{**}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.

^{***} Data for 2014 was updated as compared to the 2015 report due to a more accurate figure obtained from electricity provider.

¹ Scope: Top 13 Amadeus sites worldwide by number of employees. Waltham and Singapore included since 2017 as the 12th and 13th site. For comparability purposes we have included two sets of data for 2017: one without the new sites incorporated during the year (Waltham and Singapore) and the other including the new sites.

CO₂ emissions*

	2014	2015	2016	2017	20171
Scope 1. Direct emissions (fossil fuels)**	1,408	983	1,467	1,263	1,263
Scope 2. Indirect emissions from purchased electricity**	30,821	33,188	35,389	38,297	38,810
Scope 3. Indirect emissions from other sources***	8,503	8,872	7,944	7,708	7,712
Carbon offset		2,364	5,050	n/a	8,267
Natural gas (m³)	586,083	394,822	575,488	529,186	529,186
Diesel oil (L)	66,771	70,043	114,949	73,404	73,404

^{*} All figures in t of CO₂ unless otherwise indicated.

Paper consumption

	2014	2015	2016	2017	20171
Paper consumption (kg)	54,447	56,704	44,951	45,180	47,023
Number of employees	9,604	10,192	10,465	10,461	11,009
Paper consumption per employee (A4 sheets per working day)	5.15	5.06	3.90	3.93	3.88

Water consumption and waste generation

	2014	2015	2016	2017	20171
Water consumption (m³)	205,506	272,288	250,233	250,240	253,179
Total estimated waste (kg)*	306,369	320,476	235,970	313,716**	315,241**

^{*} For comparability purposes, the figures for waste in 2017 do not include obsolete equipment or hazardous waste, since this information is only available in some of our sites. The total obsolete equipment in 2017 was 25 tonnes and the total hazardous waste was 10 tonnes.

G4-EN1 G4-EN8 G4-EN15 G4-EN16 G4-EN17

^{**} Carbon offset not discounted.

^{***} Includes emissions from air travel (top 7 sites until 2016 and top 9 in 2017) and paper use (top 11 sites until 2016 and top 13 in 2017).

^{**} The percentage of obsolete equipment and hazardous waste that was sent for recycling in 2017 was 100%. For non-hazardous waste was 84%.

¹ Scope: top 13 Amadeus sites worldwide by number of employees. Waltham and Singapore included since 2017 as the 12th and 13th site. For comparability purposes we have included two sets of data for 2017: one without the new sites incorporated during the year (Waltham and Singapore) and the other including the new sites.

Tables related to human resources information¹

Diversity in the workforce

	VPs a	and directors		Senior managers and managers			Staff		
	2015*	2016	2017	2015*	2016	2017	2015*	2016	2017
By age range									
<30	n/a	n/a	0	n/a	n/a	15	n/a	n/a	2,787
30-50	n/a	n/a	79	n/a	n/a	2598	n/a	n/a	7,015
>50	n/a	n/a	113	n/a	n/a	870	n/a	n/a	1,532
By gender									
Male	148	164	159	1,620	2,336	2,350	5,267	6,216	6,754
Female	29	29	33	678	1,085	1,133	3,384	4,230	4,580
Total workforce	177	193	192	2,298	3,421	3,483	8,651	8,651	11,334

^{*} Scope: Excluding Central Eastern and Southern Europe and Subsaharian African and 61 employees with no gender declared.

Employees with disabilities

	2015	2016	2017
Total	129	147	178

Anti-fraud policy training

	2017*
Top management trained	24
Total number of top management	426
% of top management trained	6%

^{*} Breakdown by region is as follows: 8 employees in Asia-Pacific, 15 employees in Europe, Middle East and Africa and 1 employee 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.

G4-LA12 G4-S04

¹ Figures in headcounts unless otherwise indicated. Headcounts include permanent staff and temporary staff. Scope: Only fully owned Amadeus companies. 2015 figures do not include acquisitions.

Governance bodies (ratio)

2015* 2016 2017 By age range <30 0% 0% 0% 30-50 30% 20% 0% >50 70% 80% 100% By gender Male 90% 90% 82% Female 10% 10% 18% By nationality Other than Spanish 70% 70% 64%

Average hours of training by employee category

	Male	Female	Total
SVPs, EVPs and VPs	4.56	0.63	4.03
Directors	10.48	13.50	11.02
Associate directors	11.55	8.25	10.83
Senior managers	19.92	17.02	19.11
Managers	22.86	24.75	23.53
Staff	33.10	25.92	30.20

Employees covered by collective agreements

	2015*	2016	2017
Percentage of employees covered by collective agreements	53%	52%	51%

^{*} Scope: Excluding Central, Eastern and Southern Europe and Subsaharian Africa.

Training on Code of Ethics and Business Conduct 2017

	Online	Face to face	Total
Number of employees trained	1,240	1,467	2,707
Percentage of employees trained	7%	9%	16%
Number of training hours	1,905	38	1,943

^{*} Scope: Excluding Central, Eastern and Southern Europe and Subsaharian Africa.

G4-11 G4-LA9 G4-LA12 G4-HR2

Employees hires and turnover

		Employee	e hires		Employee	turnover		
	2015 2016 2017			2015	2016	2017		
	Headcounts	Headcounts	Headcounts	Rate	Headcounts	Headcounts	Headcounts	Rate
By region								
Europe*	865	764	1,132	13%	504	569	714	8%
Asia	578	681	604	17%	307	410	337	9%
North America	155	288	304	15%	132	227	190	10%
South America	63	72	79	15%	83	70	58	11%
Middle East and Africa	38	49	29	10%	17	39	46	17%
Total	1,699	1,854	2,148	14%	1,043	1,315	1,345	9%
By gender								
Male	n/a	1,148	1,274	14%	665	792	820	9%
Female	n/a	706	874	15%	378	523	525	9%
Total	1,699	1,854	2,148	14%	1,043	1,315	1,345	9%
By age range								
<30	n/a	871	1,139	41%	n/a	421	469	17%
30-50	n/a	892	926	10%	n/a	723	675	7%
>50	n/a	91	83	3%	n/a	171	201	8%
Total	1,699	1,854	2,148	14%	1,043	1,315	1,345	9%

^{*} Europe 2015 does not include Central & Southern Europe region because of lack of comparable data with the rest of the countries included.

G4-LA1

Health and safety 2017

	Euro	pe	Asia-Pa	acific	North A	merica	South A	merica	Middle East	and Africa	Total
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Injuries per type											
Neck or back	6	3	0	0	1	1	1	0	0	0	12
Bone	3	1	0	0	0	3	0	0	0	0	7
Soft Tissue	5	5	0	0	2	1	0	0	0	0	13
Burns	0	1	0	0	0	0	0	0	0	0	1
RMI	0	0	0	0	0	0	0	0	0	0	0
Other	24	27	1	0	0	0	43	32	0	0	127
Total injuries	38	37	1	0	3	5	44	32	0	0	160
Injury rate	3.95	6.38	0.15	0.00	1.17	3.17	86.23	73.09	0.00	0.00	5.39
Occupational diseases rate	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
Lost day rate	0.11	0.45	0.00	0.00	0.01	0.00	1.47	0.64	0.00	0.09	0.16
Absentee rate	1.98	3.21	6.49	12.77	0.22	1.10	1.27	0.71	0.21	0.37	3.60
Work-related fatalities	0	0	0	0	0	0	0	0	0	0	0

G4-LA6

GRI Content Index



General standard disclosures				
General standard disclosures	Page number or direct answer	Omission(s)		
Strategy and ana				
G4-1	4-5			
G4-2	35, 43, 51, 110-111, 127-130			
Organizational pr	ofile			
G4-3	Cover			
G4-4	32-33, 44			
G4-5	11			
G4-6	10-11, 63, 72			
G4-7	9			
G4-8	32-33, 36-40, 48, 51-54			
G4-9	8-9			
G4-10	8,77			
G4-11	150			
G4-12	142-143			
G4-13	22, 24			
G4-14	104, 128-129			
G4-15	93, 109, 124			
G4-16	81, 92-96, 124			

General standard disclosures	Page number or direct answer	Omission(s)
Identified materia	al aspects and boundaries	
G4-17	Amadeus Consolidated Annual Accounts 2017 - pages 89-97	
G4-18	140-141	
G4-19	141	
G4-20	141-142	
G4-21	141-142	
G4-22	There have not been any re-statements of information provided in earlier reports.	
G4-23	There have not been any significant changes from previous reporting periods in the Scope and Aspect Boundaries.	
Stakeholder engagen		
G4-24	144	
G4-25	141-142, 144	
G4-26	Amadeus works with key stakeholders regularly (P. 144). The frequency of engagement varies, but for all cases it happens at least once a year, and the specific frequency depends on the nature and need of engagement in each instance. We include below a list of principal stakeholders and the way in which we normally engage with them: - Employees: P. 88. - Shareholders: P. 132-133. - Customers: P. 70-75. - Suppliers: P. 142-143. - Industry partners: P. 92-96. - Governments, authorities and regulatory bodies: P. 93 - Society: P. 124 - Environment: P. 109.	
G4-27	141-142, 144	
Report profile		
G4-28	Cover	
G4-29	Amadeus previous report was published in 2017.	
G4-30	Annual	
G4-31	Back cover	

General standard disclosures	Page number or direct answer	Omission(s)
G4-32	141, 161	
G4-33	141, 161	
Governance		
G4-34	P. 16-17, 24-25 / The person with the highest level of responsibility over environmental and social impacts within American, SVP Corporate Secretary and General Counsel and member of the Amadeus Executive Committee.	adeus is Mr Tomas López
G4-38	P. 17-25 / 2017 Corporate Governance Annual Report - C.1.12, page 20.	
G4-39	The Chair of the Board of Directors is not an executive director.	
G4-40	24	
G4-42	16-17, 24-25	
G4-46	17, 127-130	
G4-47	Amadeus reviews its sustainability performance once a year.	
G4-48	143	
G4-51	23	
Ethics and integrity		
G4-56	87, 127	
G4-57	126-130	
G4-58	126-130	
Disclosures on	Management Approach (DMAs) and indicators - Specific standard disclosures tabl	<u>e</u>
DMA and indicators	Page number or direct answer	Omission(s)
Category: economic		
- Material aspect: eco	onomic performance -	
G4-DMA	9, 110-11	

DMA and indicators	Page number or direct answer	Omission(s)
G4-EC1	146	
G4-EC2	P. 110-111 / Amadeus estimates that the effort required to adapt and comply with current and future environmental legislation related particularly to emissions reporting globally and energy audits in the European Union will be in the range of 100,000 to 200,000 EUR within the next three years.	
- Material aspect: i	ndirect economic impacts -	
G4-DMA	113-116	
G4-EC8	116	
Category: environn		
- Material aspect: r	naterials -	
G4-DMA	100-102, 104-105	
G4-EN1	105, 148	
- Material aspect: 6	nergy -	
G4-DMA	99-105	
G4-EN3	105, 147	
G4-EN4	Energy consumption outside of the organization is 103,863 GJ.	
G4-EN5	105, 147	
G4-EN6	103	
G4-EN7	107-108	
- Material aspect: \	vater -	
G4-DMA	100-102, 104	
G4-EN8	148	
- Material aspect: 6	emissions -	
G4-DMA	99-105	
G4-EN15	105, 148	

DMA and indicators	Page number or direct answer		Omission(s)
G4-EN16	105, 148		
G4-EN17	105, 148		
G4-EN18	105		
G4-EN19	103		
- Material aspect:	effluent and waste -		
G4-DMA	100-102, 104		
G4-EN23	148		
- Material aspect:	compliance -		
G4-DMA	110-11		
G4-EN29*	Amadeus has not received any significant fines or sanctions	for non-compliance with environmental laws and regulations.	
Category: social			
Sub-category: lab	our practices and decent work		
- Material aspect:	employment -		
G4-DMA	78		
G4-LA1	151		
- Material aspect:	occupational health and safety -		
G4-DMA	86		
G4-LA6	152 avi	nission: Information regarding independent contractors. Explan ailable at the date of preparing this report due to the absence ormation. Amadeus is analysing the availability of related data tions for reporting this data in a homogeneous manner. Amade	of a formal procedure for reporting the required a in the relevant locations and exploring different
- Material aspect:	training and education -		
G4-DMA	78, 86		

For clarification purposes, we are referring to incidents, breaches or a significant fine which have an impact higher than 50,000 euros, with a firm basis on which there is no possibility of appeal, and which was imposed directly due to behavior or acts of a significant nature performed by companies or employees of the Amadeus Group.

DMA and indicators	Page number or direct answer	Omission(s)
G4-LA9	150	
G4-LA10	78, 86	
- Material aspect	: diversity and equal opportunity -	
G4-DMA	81, 83	
G4-LA12	149-150	Omission: In relation to minority groups, also breakdown by gender and percentage of minority group membership of the governance bodies. Explanation: Currently unavailable. This data is not available at the date of preparing this report due to the absence of a formal procedure for reporting the required information. Amadeus is analysing the availability of related data in the relevant locations and exploring different options for reporting this data in a homogeneous manner. Amadeus aims to report this data in 2019.
Sub-category: hu	ıman rights	
- Material aspect	: investment -	
G4-DMA	127-130	
G4-HR2	150	
- Material aspect	: child labour -	
G4-DMA	87	
G4-HR5	Amadeus is a leading provider of advanced to not identified any operations as having signif	echnology solutions for the global travel industry, and thus has īcant risk for incidents of child labor.
- Material aspect	: forced or compulsory labour -	
G4-DMA	87	
G4-HR6		echnology solutions for the global travel industry, and thus has īcant risk for incidents of forced or compulsory labor.
- Material aspect	: supplier human rights assesment -	
G4-DMA	87	

DMA and indicators	Page number or direct answer	Omission(s)
G4-HR10		Omission: Percentage of significant suppliers, contractors and other business partners that have undergone human rights screening, and actions taken. Explanation: Currently unavailable. During 2012 and 2013 Corporate Purchasing carried out a Social Responsibility and Environmental Questionnaire to its key providers. No major risks when it comes to human rights were identified at that time and, as no key providers have been changed since then, no additional questionnaires have been submitted. Just the regular communication has been taking place with them in order to ensure they keep Amadeus standards in all social and environmental matters. Additional questionnaires will be submitted, and information will therefore be available in future, when significant changes take place in our supply chain.
Sub-category: so	ciety	
- Material aspect	:: local communities -	
G4-DMA	113-116	
G4-S01	116	
- Material aspect	:: anti-corruption -	
G4-DMA	127-130	
G4-S03	of the Internal Controls over Financial Reporting in scope of these activities represent about 80° (pre-consolidated view). No significant risks of control (Amadeus Group Company Questionnaire) worldwide to assist in assessing compliance of Manager signs this form that to the best of his the Amadeus' core group policies. Once Legal h	pleted 10 Internal Audits, 1 Advisory, and also tested the effectiveness g at 9 legal entities (completed in February 2018). The entities % of Amadeus' revenues, 76% of assets and 82% of total profit corruption were identified. In 2017, Legal sent a self-assessment to all Amadeus Commercial Organisations and group companies each company with core group policies and procedures. Each General or her knowledge, the ACO/company's business is in compliance with as compiled all the answers from the Amadeus Group Company hare the results, and send a report to the regional VPs of and the
G4-S04	149	Omission: Business partners and governance body members that the organization's anti-corruption policies and procedures have been communicated to. Explanation: Currently unavailable. Amadeus is in the process of defining a communication and awareness campaign on anti-corruption policies and procedures to governance body members and another communication and awareness campaign for business partners. Amadeus aims to report this information in 2019.
G4-S05	In 2017 Amadeus did not identify any incidents	of corruption.
- Material aspect	:: anti-competitive behaviour -	
G4-DMA	87	
G4-S07	In 2017, there were no legal actions for anticom	npetitive behavior, anti-trust and monopoly practices.

DMA and indicators	Page number or direct answer	Omission(s)
- Material aspect:	compliance -	
G4-DMA	127-130	
G4-S08*	In 2017 there was not imposed on the Group either a penalty for incidents or breaches or a significant fine, which have a material impact in the financial statements or company reputation, with a firm basis on which there is no possibility of appeal, and which was imposed directly due to behavior or acts of a significant nature performed by companies or employees of the Group.	
Sub-category: pro	duct responsibility	
- Material aspect:	customer health and safety -	
G4-DMA	127-130	
G4-PR2	We are not aware of any incident of non-compliance with regulations and voluntary codes concerning the health and safety impacts of our services.	
- Material aspect:	product and service labelling -	
G4-DMA	75	
G4-PR5	P. 75. Customer satisfaction survey results are not published since they are considered confidential information.	
- Material aspect:	customer privacy -	
G4-DMA	27-28	
G4-PR8	In 2017 there were no complaints regarding breaches of customer privacy and losses of customer data.	
- Material aspect:	compliance -	
G4-DMA	127-130	
G4-PR9**	Amadeus did not receive any fines related to non compliance with laws and regulations concerning the provision and use of products and services.	

^{*} For clarification purposes, a material impact in the case of workplace discrimination or corruption (part of SO8 indicator) are those above 50.000 euros. In the case of the rest of SO8 indicator material impact means any event, monetary or non-monetary that may have an adverse effect on the business, assets, reputation or financial condition of the Company that makes it difficult to meet its payments obligations, financial or commercial commitments.

^{**} For clarification purposes, we are referring to incidents, breaches or a significant fine which have an impact higher than 50,000 euros, with a firm basis on which there is no possibility of appeal, and which was imposed directly due to behavior or acts of a significant nature performed by companies or employees of the Amadeus Group.



INDEPENDENT LIMITED ASSURANCE REPORT ON THE CORPORATE SOCIAL RESPONSIBILITY INDICATORS

To the Management of Amadeus IT Group, S.A.

We have carried out our work to provide limited assurance on the Corporate Social Responsibility indicators contained in "Annex II" of the Global Report 2017 (hereinafter "CSR Indicators") of Amadeus IT foroup, S.A. and its subsidiaries (hereinafter "Amadeus") for the year ended 31st December 2017, prepared in accordance with the content proposed in the Guidelines for the Preparation of the Sustainability Report of the Global Reporting Initiative (GRI) version G4 (hereinafter GRI G4 Guidelines).

Responsibility of the Management

The Management of Amadeus is responsible for the preparation, content and presentation of the Global Report in accordance with the Core option of the GRI G4 Guidelines. Management's responsibility includes establishing, implementing and maintaining the internal control required to ensure that the CSR indicators are free from any material misstatement due to fraud or error.

The Management of Amadeus is also responsible for defining, implementing, adapting and maintaining the management systems from which the information required to prepare the CSR indicators is obtained.

Our responsibility

Our responsibility is to issue a limited assurance report based on the procedures that we have carried out and the evidence obtained. Our limited assurance engagement was done in accordance with the International Standard on Assurance Engagements 3000 (Reviewed) "Assurance Engagements other than Audits or Reviews of Historical Financial Information", issued by the International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC).

The scope of a limited assurance engagement is substantially less extensive than the scope of a reasonable assurance engagement and thus, less security is provided.

The procedures that we have carried out are based on our professional judgment and have included consultations, observation of processes, document inspection, analytical procedures and random sampling tests. The general procedures employed are described below:

- Meetings with Amadeus's personnel from various departments who have been involved in the preparation of the Global Report 2017 of Amadeus.
- Analysis of the procedures used for obtaining and validating the data presented in the CSR indicators.

pwc

- Analysis of the Amadeus's CSR indicators adaptation to the requirements established by the GRI G4 Guidelines for the preparation of reports.
- Verification, through random sampling tests revisions, internal control test and substantive
 tests on the information used to determine Amadeus's CSR indicators. We have also verified whether
 they have been appropriately compiled from the data provided by Amadeus's sources of formation.

Our Independence and Quality Control

We have fulfilled our work in accordance with the independence requirements and other ethical requirements of the Code of Ethics for Professional Accountants of the International Ethics Standards Board for Accountants (IESBA), which are based on basic principles of integrity, objectivity, professional competence and diligence, confidentiality and professional conduct.

Our firm applies the International Standard on Quality Control 1 (ISQC 1) and thus employs an exhaustive quality control system which includes documented policies and procedures on the compliance of ethical requirements, professional standards, statutory laws and applicable regulations.

Limited assurance conclusion

As a result of the procedures carried out and the evidence obtained, no matters have come to our attention which may lead us to believe that Amadeus's CSR indicators, for the financial year ending 31st December 2017, contain significant errors or have not been prepared, in all of their significant matters, in accordance with the GRI G4 Guidelines.

Use and Distribution

Our report is only issued to the Management of Amadeus, in accordance with the terms and conditions of our engagement letter. We do not assume any liability to third parties other than Amadeus's Management.

PricewaterhouseCoopers Auditores, S.L.

Ma Luz Castilla

19th April 2018

 $Price waterhouse Coopers\ Auditores, S.L., Torre\ PwC,\ P^o\ de\ la\ Castellana\ 259\ B, 28046\ Madrid,\ España\ Tel.: +34\ 915\ 684\ 400\ / +34\ 902\ 021\ 111,\ Fax: +34\ 915\ 685\ 400,\ www.pwc.es$

G4-33



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.

Codesharing:

an aviation business arrangement where two or more airlines cooperate by sharing the same flight, splitting marketing and operating carrier, improving airlines' network capacity and efficiency.

CRS:

Computer Reservation System is a computer network containing travelrelated information such as schedules, availability, fares and other services, which enables automated travel-related transac-tions between travel providers and travel agents.

Competitive position:

in Distribution, it is measured as our travel agency air bookings in relation to the travel agency air booking industry, defined as the total volume of travel agency air bookings processed by the global or regional Central Reservation Systems. It excludes air bookings made di-rectly through in-house airline systems or single country operators, the latter primarily in China, Japan and Russia. In Airline IT, competitive position of PSSs is calculated over total passengers ex-cluding China.

Distribution industry:

includes the total volume of air bookings processed by GDSs, excluding:

- Air bookings processed by single-country operators (primarily in China, Japan and Russia)
- 2_ Bookings of other types of travel products, such as hotel rooms, car rentals and train tickets

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European Civil Aviation Conference:

ECAC, an intergovernmental organisation which was established by the International Civil Aviation Organization (ICAO) and the Council of Europe. Today, ECAC has 44 member countries.

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.

ICT:

Information and Communication Technology.

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.

n/a:

not applicable.

n.a.:

not available.

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 three levels of NDC certification, depending on the NDC capabilities the technology enables:

- _Level 1: NDC-enabled basic shopping (ancillaries post booking)
- Level 2: NDC-enabled Offer Management (extensive use of Offer Management API and Air Shopping)
- Level 3: NDC-enabled Offer and Order Management (extensive use of Offer and Order Management API

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.

Property Management System:

PMS. 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).

p.p.:

percentage point.

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).

PUF:

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.





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