

The cover features a large blue circle on the left containing the title. To its right are two overlapping semi-circles. The front semi-circle is a dark blue gradient, while the back semi-circle is a lighter blue gradient and contains a photograph of a city skyline at night with a bridge and lights.

# Amadeus Global Report 2022

**amadeus**

# Amadeus Global Report 2022

## A business, financial and sustainability overview

The objective of this Global Report is to provide a comprehensive and transparent view of Amadeus' activities, operations and performance during 2022. We've taken into consideration a broad perspective, including economic, social and environmental matters.



The PDF version of this report is designed to be accessible to all users.

It's compliant with Level AA of the current European standard EN 301 549, the Web Content Accessibility Guidelines (WCAG 2.1) and the PDF/UA standard.



For a more interactive reading of this report, visit the online version at [amadeus.com/global-report-2022](https://amadeus.com/global-report-2022)

GRI 2-22



April 2023

## Message from the Chairman of the board

The travel industry continues to prove its resilience, providing opportunities for adventure, exploration and growth, and continuing on its journey to recovery. Restrictions were eased in 2022 and, in some cases, lifted. Volumes picked up as, increasingly, people once again began to plan family holidays and work trips. Packing a suitcase and embarking on a journey speaks to our human desire to expand our horizons.

But at the same time, new challenges impacted both the travel industry and the global economy.

There was of course first the threat then the terrible reality of war in Europe for the first time in decades. Amadeus reacted swiftly to guarantee the safety of all our people in Ukraine. Tireless efforts were made to ensure business continuity and, most importantly, the support of our teams at both the personal and professional level.

And partially as a consequence of war, the global economy faced a new risk, unknown for more than a decade: high inflation. And with it, sharp hikes in interest rates from central banks, followed by the renewed risk of decreased consumer spending and, in turn, of a global recession.

But even under these conditions, our financial strength and the measures we took during the pandemic meant that we were in a strong position to retain and attract top talent and support our customers, while continuing to invest in the future.

GRI 2-22



Packing a suitcase and embarking on a journey speaks to our human desire to expand our horizons.

Late in 2022 we launched our new People & Culture strategy to ensure that Amadeus continues to be a top employer and great partner. It's thanks to the talent of our people that we continued to build trust with our customers and partners, working together to solve travel's biggest challenges and scale ideas quickly.

Today, as we look ahead, our sector has the ambitious goal of delivering on net-zero emissions by 2050; of thriving in a changing economic and geopolitical landscape; and above all, of restoring the joy of travel globally. These are big challenges. Ones that need to be addressed together, as part of a more connected world. By bringing our deep expertise to our customers and partners worldwide, we can make the experience of travel better—for everyone, everywhere.

In this report, you'll find detailed information about the journey we've been on and our path ahead. I hope you find it of interest.

A handwritten signature in blue ink, appearing to read 'William Connelly'.

William Connelly,  
Chairman of the Board  
Amadeus

GRI 2-22



April 2023

## Message from the President & CEO

The travel industry is proving that it's as resilient as ever. Demand for travel has remained strong, and over the past year we've seen travel volumes improve across all our segments quarter-on-quarter. Looking ahead, our optimism about the future is shared by international bodies, customers and travelers alike, and is fueled by our purpose: to make the experience of travel better for everyone, everywhere.

During 2022, in partnership with our customers, we worked hard to deliver on our commitments, and we reinforced our position with important customer wins across all our businesses. We continued expanding the content available for travel agencies via the Amadeus Travel Platform, and among the customers who signed up or renewed their distribution agreements with us were Lufthansa Group, Ryanair and Hopper. In Airline IT, we welcomed new airlines to Altéa and New Skies, including Air India, ITA Airways, Iraqi Airways and Allegiant Air. We also unveiled our new airline retail offering with Finnair. In Hospitality & Other Solutions, we saw continued interest in our reservation, business intelligence and media solutions from hotels and destination management organizations (DMOs) around the globe.

The trust placed in us by all these customers is testament to the great work and commitment of our commercial teams and the unrivaled quality of our engineers. Our talented teams are what truly sets us apart. Their drive and their commitment to improving the travel experience and our industry overall is inspiring and is a continuous source of pride for me and my colleagues on the Executive Committee. Ensuring we provide them with the resources necessary to continue to innovate and develop new solutions is crucial to us. In 2022 we increased our R&D investment by almost 30% so we can continue to implement new customers; progress in strides toward the cloud and develop new solutions with Microsoft; and explore the benefits that artificial intelligence, the metaverse and many other new technologies can bring to the travel industry and the traveler experience.

GRI 2-22



Our talented teams are what truly sets us apart.

This has been possible thanks to the recovery of travel volumes and their positive impact on our financials, but also thanks to the efficiency measures we took in previous years. Our focus on strengthening our financial situation remained constant throughout 2022. Our free cash flow generation was strong, and we also executed several bond redemptions to lower our debt. We're now close to our target debt/EBITDA ratio, and pending the approval of our Annual General Meeting we expect to resume shareholder remuneration this year. This is an important milestone for us. Our investors have supported us in these three years of the pandemic, and being able to give back to them again is important to us.

I would also like to thank our customers for their trust, our partners for their support and our employees for their dedication. By creating a connected, sustainable and traveler-centric ecosystem and by inspiring innovation at scale, we can power progress across the entire travel industry and continue to make the experience of travel better.

We have great plans for the future and we can't wait to see what 2023 and the years ahead bring next!

A handwritten signature in blue ink, appearing to read 'Luis Maroto'.

Luis Maroto,  
President & CEO  
Amadeus

## Captions

Following global reporting trends and best practices, we've included the following marks throughout this Global Report.

GRI 000

### GRI disclosure label.

Indicates that a GRI Sustainability Reporting Standards disclosure is reported on the page where the label has been placed.



### Cross-references.

Further information provided in another section.

## Sustainable Development Goals

These icons highlight Amadeus' specific actions contributing to key United Nations Sustainable Development Goals.



1 No poverty



2 Zero hunger



3 Good health and well-being



4 Quality education



5 Gender equality



6 Clean water and sanitation



7 Affordable and clean energy



8 Decent work and economic growth



9 Industry, innovation and infrastructure



10 Reduced inequalities



11 Sustainable cities and communities



12 Responsible consumption and production



13 Climate action



14 Life below water



15 Life on land



16 Peace, justice and strong institutions



17 Partnerships for the goals



# Table of contents



## Introduction

Chapter 1	Amadeus profile and corporate performance	9
	→ Corporate performance	
	→ Travel industry outlook	
	→ Amadeus profile	

## Business

Chapter 2	Business areas	28
	→ Air Distribution	
	→ Air IT solutions	
	→ Hospitality and transversal solutions	
Chapter 3	Technology	60
Chapter 4	Innovation	70

## ESG

Chapter 5	Amadeus people and culture	77
Chapter 6	Social responsibility	87
Chapter 7	Environmental sustainability	95
Chapter 8	Corporate governance	110

## Stakeholders

Chapter 9	Shareholders and financial institutions	131
Chapter 10	Amadeus industry affairs	137
Chapter 11	Materiality and stakeholder engagement	144

## Annexes

Annex 1	About this report	153
Annex 2	Quantitative information and GRI Content Index	157
Annex 3	Task Force on Climate-related Financial Disclosures Index	172
Annex 4	Glossary	177



Chapter 1

# Amadeus profile and corporate performance

**In this chapter**

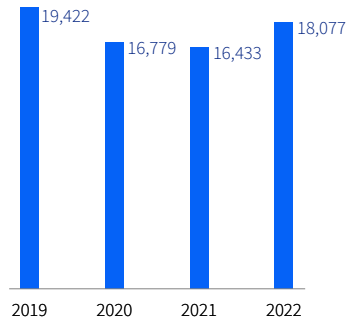
Corporate performance

Travel industry outlook

Amadeus profile

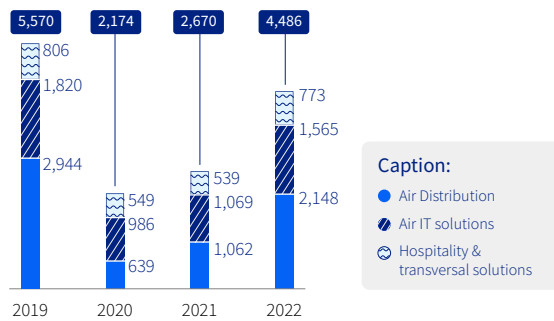


Total workforce (figures in FTEs)\*



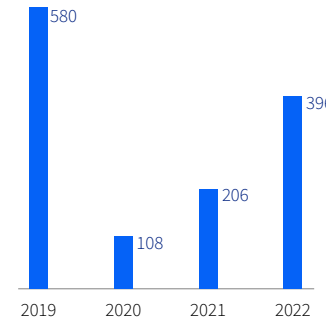
\* Scope: all fully owned Amadeus companies. Figures in full-time equivalents (FTEs) as of December 31. FTE is the headcount converted to a full-time basis, e.g. an employee working part-time covering 80% of a full-time schedule is considered 0.8 FTE.

Revenue breakdown (figures in € million)



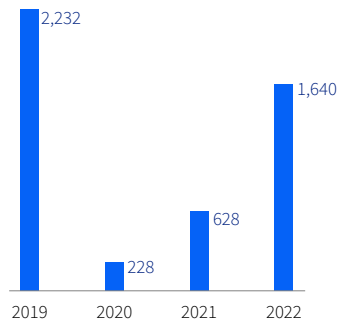
**Caption:**  
 ● Air Distribution  
 ● Air IT solutions  
 ● Hospitality & transversal solutions

Travel agency air bookings\* (figures in millions)

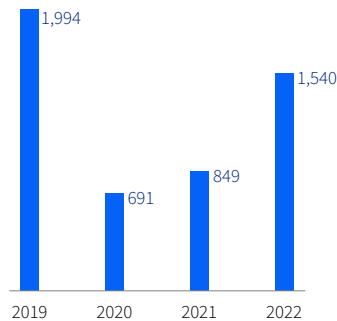


\* Bookings processed by travel agencies using Amadeus distribution platforms.

EBITDA<sup>1</sup> (figures in € million)

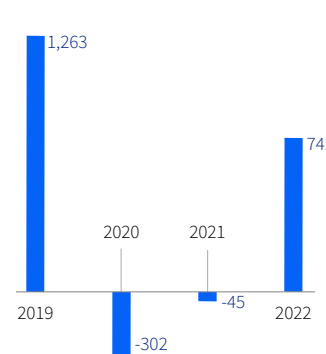


Passengers boarded\* (figures in millions)

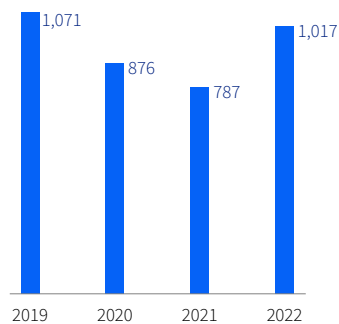


\* Actual passengers boarded onto flights operated by airlines using at least the Amadeus Altéa® Reservation and Inventory modules or Navitaire New Skies®.

Adjusted profit<sup>1,2</sup> (figures in € million)

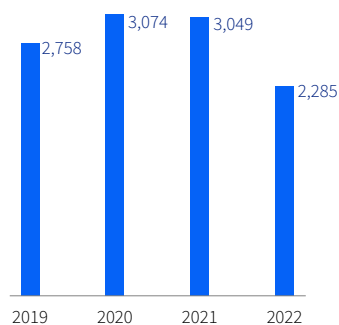


R&D investment\* (figures in € million)



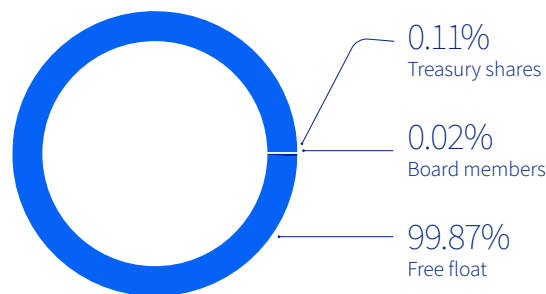
\* Gross R&D investment.

Net debt evolution\* (figures in € million)



\* Net financial debt as defined by our credit facility agreements.

Amadeus share structure



2022 was a strong year for Amadeus. Global air traffic continued to recover, and we had important customer wins and market share gains during the year. We remained highly focused on our investment plans, particularly to support customer implementations and advance in key strategic areas. Our financial performance strengthened considerably.

Travel agency air bookings

Amadeus' total travel agency air bookings were 31.7% below 2019 (and up 92.0% compared to 2021). Our best-performing region in 2022 was North America, which grew by 2.9% compared to 2019, and it's now our largest region by bookings, representing 30.8% of Amadeus' total bookings.

Passengers boarded

Passengers boarded (PBs) in 2022 were 22.8% below 2019. Our best-performing region in the year was North America, which reported 11.1% PB volume growth compared to 2019.

Revenue

Revenue grew by 68.0% compared to 2021, driven by growth rate enhancements across our businesses, and was 19.5% below 2019. Air Distribution revenue improved by 102.3% versus 2021 revenue, and was 27.0% below 2019, driven by the lower booking volumes. Air IT Solutions revenue increased by 46.4% from 2021, representing 86.0% of 2019 revenue. Revenue per passenger boarded grew in 2022 by 11.4% versus 2019, mainly due to revenue lines not linked to the PB evolution reporting healthier growth rates than airline PBs, and positive pricing partially offset by mix impacts. The revenue per PB was also impacted by positive foreign exchange effects. Hospitality & Other Solutions revenue (comprising Hospitality and Payments) decreased by 4.2% compared to 2019, impacted by the effects of the COVID-19 pandemic.

R&D investment

Gross R&D investment increased by 29% compared to 2021. Some of our most relevant projects include customer implementations, the evolution of our hospitality platform, Airline IT digitalization and enhanced shopping, retailing and merchandizing tools, and our

partnership with Microsoft, including our shift to cloud services and the application of artificial intelligence and machine learning to our product portfolio co-innovation program.

EBITDA<sup>1</sup> and adjusted profit<sup>1,2</sup>

EBITDA amounted to €1,640.3 million, an improvement of 161.4% versus 2021, or 73.5% of 2019 levels. EBITDA evolution, relative to 2019, was driven by a 26.7% decrease in Air Distribution contribution, a 17.3% contraction in Air IT Solutions contribution, a 16.9% reduction in Hospitality & Other Solutions contribution and a 6.2% decline in net indirect costs, impacted by the €51.2 million government grant received in the second quarter of 2022.

Net debt

The main changes to our debt in 2022 included the redemption of outstanding notes issued in February 2021 for an amount of €500 million the issuance of a €500 million floating-rate note in February, increased by €250 million in April, the early redemption in February 2023 of these €750 million outstanding notes, and the amortization of €500 million bonds that reached maturity in March 2022.

1 2021 and 2020 figures adjusted to exclude costs, amounting to €28.6 million (€19.8 million post tax) in 2021, and €169.1 million (€120.9 million post tax) in 2020, related to the implementation of the cost saving program announced in 2020. Figures for 2019 include TravelClick's related acquisition costs.

2 Excluding the after-tax impact of the following items: (1) accounting effects derived from purchase price allocation (PPA) exercises and impairment losses, (2) non-operating exchange gains (losses) and (3) other non-operating, non-recurring effects.

## Travel industry outlook



### Overall travel volumes

Before the COVID-19 crisis, the contribution of travel and tourism to the world economy was estimated at USD 9.6 trillion, or more than 10% of the global GDP, supporting 333 million jobs (1 in 10 globally),<sup>1</sup> and air traffic<sup>2</sup> was expected to grow at an average of 4.6% per annum over the following 20 years.<sup>3</sup>

While the airline industry in the past has fully recovered from demand-side shocks (SARS, global economic recessions, terrorist attacks) in 6 to 18 months, the impact of the COVID-19 crisis on travel and tourism has been unprecedented in depth and duration.<sup>4</sup> As such, the estimated contribution from travel and tourism to the world economy compared to 2019 declined by 50% in 2020 and 40% in 2021.<sup>5</sup>

Aviation has been even more affected, and the industry has been facing the worst crisis since the beginning of commercial aviation after World War II. Several airlines have gone out of business, while others have survived only due to government bailouts. Air travel declined by 66% in 2020 and by 58% in 2021 compared to 2019.<sup>6</sup>

However, our industry has consistently overcome downturns throughout its history. In 2022 the industry recovered strongly, with the gap in air traffic versus 2019 narrowing

1 World Travel & Tourism Council (WTTC) (August 2022). *Global Economic Impact & Trends 2022*.

2 Air traffic measured in Revenue Passenger Kilometers (RPKs). RPKs indicate the aggregated number of kilometers flown by passengers who purchase air tickets.

3 Boeing (2019). *Commercial Market Outlook 2019–2038*.

4 International Air Transport Association (IATA) (October 4, 2021). “COVID-19: airline industry outlook.”

5 World Travel & Tourism Council (WTTC) (August 2022). *Global Economic Impact & Trends 2022*.

6 International Air Transport Association (IATA) (June 2022). “Global outlook for air transport: times of turbulence.”

to 31.5%,<sup>7</sup> and in the long term, air traffic is expected to recover annual growth rates of 3.8%.<sup>8</sup> However, this level of growth can be significantly impacted by trends and events affecting the global travel industry (see below).

### Regional development

Developments in the travel sector are expected to be very uneven across different regions of the world. Growth in the travel industry is particularly strong in Asia-Pacific, the Middle East and Africa, with direct travel and tourism GDP projected to grow at compound annual rates of 8.5%, 7.7% and 6.8% respectively over the next 10 years, compared to total world annual growth rates of 5.8%.<sup>9</sup>

Looking specifically at air traffic, over the long term, Asia-Pacific, Latin America and Africa are expected to grow faster than other regions. The Middle East is expected to grow in line with the overall growth of ca. 4% per annum, and Europe and North America will grow at a slower pace.<sup>10</sup>

As a consequence of these regional growth differentials, the center of gravity in the travel world will continue to shift from west to east, with Asia-Pacific being the major growth catalyst.

Amadeus is well positioned to capitalize on this Asia-Pacific growth. We have a wide local presence and a workforce of more than 4,900 people in the region, representing 27% of our total workforce. We also have a strong market position in our Air Distribution business and many important airline customers in our Airline IT business.

 See p. 78, “Workforce by region.”

7 International Air Transport Association (IATA) (February 2023). “Passenger Demand Recovery Continued in December 2022 & for the Full Year.”

8 Boeing (2022). *Commercial Market Outlook 2022–2041* (3.8% growth rate compared to 2019 traffic).

9 World Travel & Tourism Council (WTTC) (August 2022). *Global Economic Impact & Trends 2022*.

10 Boeing (2022). *Commercial Market Outlook 2022–2042*.

## Trends and events affecting the global travel industry

Several interrelated events and trends are affecting the global travel industry. While the COVID-19 health crisis and the war in Ukraine both had a strong direct impact on the travel industry, they've also driven new trends and accelerated existing ones.

The COVID-19 health crisis and related lockdowns have led to new ways of working, creating new drivers of travel for business, for example people working from home now traveling to their company offices to connect with their teams. The war in Ukraine has also affected the geopolitical scene and globalization trends, increasing the risk of the global economy fragmenting into distinct economic blocs. The combined impact of these two events, together with inflationary pressures and a slowdown in China, have impacted the general economic environment. Lastly, over recent years general concern over sustainability has risen to an extraordinary level, with climate-related issues having an impact on the travel industry in areas such as aviation. These trends and events are discussed below.

### Health crises

Over the previous years, as COVID-19 held the world in its grip, the travel industry was challenged to think creatively about how to secure the return of global travel. In 2022 prospects for the industry continued to be tied to government policies on vaccinations and travel restrictions, which played a major role in the pace and nature of travel recovery. Now that confidence has returned, the industry needs to be proactive in stimulating growth and enabling resilience.

Amadeus has contributed to travel recovery since the start of the pandemic by working hand-in-hand with our customers to equip them with the tools needed to adapt to the evolving needs of travelers.

For example, the speed at which biometrics has been rolled out at airports has been greatly accelerated, resulting in smoother journeys as physical touchpoints decrease. Digitalization also enables us to integrate new health accreditation requirements easily.

Also, as a consequence of the pandemic, digital payments are seeing a massive increase in adoption. This will provide travel management companies greater visibility

of travel and expense, creating a rich source of data to be harnessed in new ways. Hoteliers have invested in digital keys, allowing guests to access rooms with just an app, while smart hotel rooms will provide a better, more comfortable and more personalized guest experience.

These are all examples of changes and evolutions accelerated by COVID-19 but which have now in many cases become permanent: travelers now expect such new tools that became more present during the pandemic to be readily available, meaning travel won't only be safer but speedier, more resilient and more efficient.

The common thread with all of these trends is that technology is powering the renewal of travel—although we need to keep working on improving confidence to ensure the gains we've made aren't lost. We must become smarter as an industry to anticipate the ever-changing needs of the traveler.

### Geopolitics

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

Amadeus is deeply concerned about the war and humanitarian crisis unfolded in Ukraine. Our first priority is the safety of our people and their families and our teams across the business are working to manage the situation as best as we can.

Although the war has had a limited direct impact on the industry,<sup>11</sup> it might also have an indirect impact on global air travel. The travel industry has rapidly overcome previous geopolitical crises (e.g. the 1990–1991 Gulf War, the 1979 oil crisis, etc.).<sup>12</sup> Oh the other hand, experts believe that the global economy might be at risk of fragmentation into distinct economic blocs with different ideologies, political systems, standards, etc.<sup>13</sup> In 2018 the International Air Transport Association (IATA) projected

<sup>11</sup> International Air Transport Association (IATA) (March 25, 2022). [“The impact of the war in Ukraine on the aviation industry.”](#)

<sup>12</sup> The World Bank, data. [“Air transport, passengers carried.”](#) *International Civil Aviation Organization, Civil Aviation Statistics of the World and ICAO Staff Estimates.*

<sup>13</sup> International Monetary Fund (IMF) blog (June 2, 2022). [“A deeper look at forces fragmenting our world—and how to respond.”](#)

significant differences in the growth of air travel over the next 20 years under a base case scenario (“Constant Policy”: 3.5% growth p.a.) and two extreme scenarios (“Reverse Globalization”: 2.4% p.a.; “Maximum Liberalization”: 5.5% p.a.).<sup>14</sup> In terms of number of passengers in 2037, this shows a difference of a factor of almost two between the best- and worst-case scenarios. In the “Reverse Globalization” scenario, we see the reduction in air travel between the economic blocs as an important driver of lower overall growth.

Amadeus invests significant effort in understanding the major drivers of change that are likely to shape the future. We regularly engage in scenario-planning exercises that help us understand the evolution of travel and devise a strategy to sustain our leadership position.<sup>15,16,17</sup>

## Economic growth

Economic growth levels correlate closely with travel industry growth over the long term, although this general relationship varies substantially over time and geographical region. Over the last 20 years, Revenue Passenger Kilometers (RPKs) have grown at a rate roughly double that of GDP.<sup>18</sup>

Before full recovery from the COVID-19 pandemic, the world has encountered a new set of complex macroeconomic challenges, including persisting and broadening inflationary pressures, the Russian invasion of Ukraine and a slowdown in China. In this context, the International Monetary Fund (IMF) expects global growth of 2.9% in 2023 and 3.1% in 2024.<sup>19</sup> In the short/midterm, macroeconomic volatility is likely to have an unbalanced economic impact on countries and citizens, and as the evolution of the

14 International Civil Aviation Organization (ICAO) (August 19, 2019). “[Enhancing fair competition and safeguards for the sustainable growth of international air transport.](#)”

15 Amadeus Insights (June 28, 2022). “[Preparing for the future, today.](#)”

16 Amadeus Insights (October 4, 2022). “[Preparing for the future: traveling in the world of tomorrow.](#)”

17 Amadeus Insights (October 10, 2022). “[Future proofing for a renewed world of travel.](#)”

18 International Air Transport Association (IATA) (February 8, 2019). “[Air travel GDP multiplier falls sharply back to its 20-year median.](#)”

19 International Monetary Fund (IMF) (January 2023). “[World economic outlook update.](#)”

crisis is likely to be uneven,<sup>20,21</sup> the relationship between GDP and travel industry growth may be different from what has been observed historically. At the same time, leisure and domestic travel have recovered earlier than business and international travel.

However, demand for travel is resilient, and people across the world still need to travel to see friends and family, carry out business in person and enjoy new destinations. In the midterm, the IMF expects global economic growth to remain at around 3.3%.<sup>22</sup>

Technological solutions can help to achieve a frictionless travel experience, contributing to a faster recovery of travel demand. Consequently, we firmly believe that Amadeus has a relevant role to play to facilitate travel recovery and resilience.

## Flexible working

The COVID-19 pandemic and related lockdowns have led to new ways of working. Flexible working models combining working from the office and remotely, be it from home or another location, have become the new norm, and options to work from anywhere are becoming more and more common for many businesses. These flexible work dynamics have unleashed new trends and practices, such as the “workcation” (the combination of periods of work immediately preceded or followed by vacations) or “digital nomads” (the option of spending longer periods working from another country). Many countries, such as Germany, Greece and Norway, are adapting their visa and incentive schemes as well as their infrastructures to attract nomads.

In parallel with these individual practices, distributed working has also changed team dynamics, increasing the need for regular quality and focused face-to-face time. More and more companies are implementing quarterly team camps to strengthen the bonds between people. More and more managers are taking advantage of those moments where teams are physically together to foster creativity and recover the missed human touch while working remotely and distributed. With “employee experience” being more important than ever to attract and retain talent, we expect that internal team travel programs will increase as they’re a key item to motivate teams and strengthen the sense of belonging to the company.

20 World Bank Group (June 2022). *Global Economics Prospects.*


21 International Air Transport Association (IATA) (June 2022). “[Global outlook for air transport: times of turbulence.](#)”

22 International Monetary Fund (IMF) (October 2022). “[World economic outlook.](#)”

With the recovery from the pandemic, businesses have seen an increase in time spent at the office. However, we don't expect pre-pandemic working models to come back. The purpose of the office has changed—it's now a place to come together, collaborate and socialize. Spaces are prioritized for the face-to-face interactions missed when working from home or asynchronously.

Off the back of these behaviors, we're witnessing new drivers of travel for business. Those who work from home, sometimes in remote locations, will now see their business trips focused on coming into the office or another central location to foster in-person connections with their teams.

For travel technology companies like Amadeus, the challenge is to provide efficient tools for this new world of flexible working with which business travel can be planned and booked in a seamless, collaborative and forward-looking way. Our partnership with Microsoft enables Amadeus to create such applications.

 See p. 34, "Cytric Easy."

## Sustainability

Concerns over sustainability in travel have risen to unprecedented levels in the last two years and it's unlikely they'll wane in the foreseeable future. As opposed to what happened with the financial crisis of 2008, which overshadowed any attention on sustainability, the COVID-19 pandemic and subsequent economic environment have exposed how vulnerable the travel industry was, and that we need to rebuild it in a way that is stronger, safer and more resilient. Importantly, we've also realized that all of this can't be done without bringing sustainability to the top of the agenda.

The travel and tourism sector faces sustainability challenges such as climate change, overcrowded destinations and income inequalities. The climate issue in particular has received much more attention over recent years. In 2019 air traffic accounted for 2% of all human-induced carbon dioxide emissions,<sup>23</sup> and social movements like "flight-shaming" attracted attention at unprecedented speed and intensity. We expect a more specific and stricter legal framework to emerge on these and other issues, which could impact on travel volumes in the short term. The industry needs to respond with fact-based information and action.

In regard to aviation, however, the industry is determined to grow sustainably, committing to achieving net-zero carbon emissions by 2050<sup>24,25,26,27,28</sup> and to working together to achieve the commitments reached at the 26th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP26).<sup>29</sup> As such, many airlines have taken an active role in addressing this issue, via different initiatives. For example, IAG and Air France–KLM are purchasing sustainable aviation fuels

23 Air Transport Action Group (ATAG) (September 2020). "[Facts & figures.](#)"

24 International Air Transport Association (IATA) (October 4, 2021). "[Net-zero carbon emissions by 2050.](#)"

25 International Civil Aviation Organization (ICAO) (October 7, 2022). "[States adopt net-zero 2050 global aspirational goal for international flight operations.](#)"

26 Qantas Group (March 2022). *Qantas Group Climate Action Plan.*

27 EasyJet (September 26, 2022). "[EasyJet reveals roadmap to achieve net-zero by 2050.](#)"

28 Ryanair (March 21, 2022). "[Ryanair aims to become carbon neutral by 2050.](#)"

29 International Air Transport Association (IATA) (November 12, 2021). "[International aviation climate ambition reflects airlines' net-zero goal.](#)"

(SAFs) to reduce flight carbon emissions<sup>30,31</sup> and EasyJet, American Airlines, Delta and British Airways are planning to be flying on zero carbon emission hydrogen-powered aircraft.<sup>32,33,34,35</sup> Beyond airlines, Booking.com has launched a platform to help travelers choose more environmentally sustainable travel options and SAP Concur has launched an app that automates measurement and reporting of carbon emissions.<sup>36,37</sup> Also, corporations like Microsoft and Ernst & Young are integrating sustainability rules and penalties into their travel policies.<sup>38,39</sup>

In the journey toward the industry becoming more sustainable, technology from IT companies can contribute to the more efficient use of infrastructure and energy and the reduction of carbon emissions. For Amadeus, our contribution can be made principally in two ways. First, by raising awareness among the millions of travelers processed through our platforms about the emissions released as a consequence of their trips. This helps them make informed travel purchasing decisions, factoring in the sustainability component and facilitating further mitigation measures like carbon offsetting. At the moment, we have an agreement in place with the United Nations' International Civil Aviation Organization (ICAO) to use their carbon calculator in our distribution platforms. In addition, in 2022 Amadeus joined the Travalyst coalition,

30 InceptiveMind (August 24, 2022). [“IAG signs agreement with Aemetis for sustainable aviation fuel supply.”](#)

31 Neste (October 25, 2022). [“Neste to supply the Air France-KLM Group with more than 1 million tons of Sustainable Aviation Fuel.”](#)

32 The Guardian (September 26, 2022). [“EasyJet to stop offsetting CO<sub>2</sub> emissions from December—airline unveils ‘roadmap to net zero’ strategy focusing on sustainable fuel and more efficient planes.”](#)

33 Simple Flying (October 10, 2022). [“American Airlines eyes net-zero fuels with Universal Hydrogen investment.”](#)

34 Simple Flying (March 18, 2022). [“Delta Air Lines partners with Airbus seeking hydrogen flight.”](#)

35 Hospitality ON (March 17, 2022). [“British Airways partners ZeroAvia on hydrogen-powered aircraft project.”](#)

36 Skift (October 24, 2022). [“Booking.com to add emissions info to bookings through new partnership.”](#)

37 Business Travel News (BNT) Europe (June 17, 2022). [“SAP Concur launches climate app.”](#)

38 Skift (March 14, 2022). [“Microsoft discourages corporate travel by raising own carbon fee 600 percent.”](#)

39 WiT (April 13, 2022). [“No shorthaul if there is rail, no day trips and limits on number of staff in one event.”](#)

with the purpose of joining forces with other industry players so we can all provide consistent sustainability information to passengers.

➤ See p. 108, “Collaboration in industry environmental initiatives.”

Second, by developing IT solutions that improve the operational and environmental efficiency of our customers. For example, using large volumes of data and sophisticated algorithms, our Departure Control – Flight Management module helps airlines optimize aircraft trim<sup>40</sup> (among other things), reducing fuel used and emissions released.

➤ See p. 106, “Environmental sustainability value proposition.”

Taking sustainability seriously means that all travel industry stakeholders need to work collaboratively in new ways, including travel providers, travel sellers, technology companies, industry associations, regulatory bodies and travelers.

In addition to this necessary collaborative approach, we believe technology is going to be a key facilitator for a more sustainable travel industry.

40 Aircraft trim holds control surfaces in a specific position, requiring less manual input from the pilot to maintain a desired flight attitude. Aircraft trim is useful to reduce the effort required to keep a movable control surface in any given position at a certain airspeed by deflecting the air moving around it.

## The need for technology to support the evolution of the travel industry

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

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

➤ See p. 38, "Air IT solutions;" p. 72, "Nexwave."

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

➤ See p. 28, "Air Distribution."

We invested €1,017 million (gross) in R&D in 2022 to develop IT solutions that improve the operational efficiency of our customers, facilitating the sustainable growth of the travel industry. We remain leaders in R&D investment in the travel industry and rank fifth-largest R&D investor in the software industry in Europe.<sup>41</sup>

A number of technology trends have implications for the evolution of the industry and for Amadeus. In this context, cloud is a disruptive technology change, as it comes with significant benefits for both Amadeus and our customers. Other important recent and emerging technologies are artificial intelligence, digital identity and biometrics, the metaverse, and open environment/platform ecosystems.

<sup>41</sup> Joint Research Centre (European Commission) (December 13, 2022). "[The 2022 EU Industrial R&D Investment Scoreboard.](#)"

## Cloud

Cloud technology has matured significantly, for example within security and automation, and it's therefore now relevant even for mission-critical systems like the ones operated by Amadeus. Because of this, we're accelerating the move of our systems and services to the public cloud.

In this respect, in early 2021 we entered into a strategic partnership with Microsoft to move all our systems and solutions to the public cloud.

Moving to the cloud comes with several benefits for Amadeus. From a technology point of view, we will:

- Further improve our resiliency
- Enable new innovations and create new business opportunities
- Deliver global support with local proximity to our customers
- Speed up the delivery of our services and technology

It'll also bring benefits from a business point of view:

- By partnering with a third-party public cloud provider, we'll unlock new business opportunities, contributing to a new phase of growth for Amadeus.
- We'll be able to increase flexibility and scale our operational capacity up or down and adjust it as needed given market demand and conditions.
- We'll be able to leverage the innovation and economies of scale of the public cloud providers and establish more flexible and competitive cost structures, while increasing our capabilities to address changing customer requirements.


Our customers will also enjoy different benefits, such as:

- Better performance and lower latency when we can process their data closer to their location
- Flexibility to better handle unplanned traffic peaks



- Better resiliency thanks to our improved business continuity and higher availability. We'll also be able to offer improved disaster-recovery capabilities
- Higher security standards thanks to the enhanced security controls and functionality available in the cloud

Since the start of our Cloud Transformation Program in 2021, we've moved petabytes of data to Microsoft's public cloud computing platform Azure, we've had critical Amadeus application back-ends running in test mode and we've tested some of our main solutions live on Azure with customers. We've already successfully migrated some of our solutions and applications to the public cloud.

 See p. 60, "Technology."

## Recent and emerging technologies

The inconveniences and friction sometimes linked to travel can be a significant impediment in the evolution of the travel industry. However, recent and emerging technologies can help all actors deliver a frictionless experience, by reducing hassle for the traveler either directly (e.g. by allowing check-in for a flight at the hotel, or removing the need to present physical IDs) or indirectly (e.g. by reducing the impact from disruptions). With the friction exacerbated by the COVID-19 crisis, the pandemic has accelerated the use of these technologies. Key technologies in this arena include artificial intelligence and digital identity and biometrics.

### Artificial intelligence

The potential for the use of artificial intelligence (AI) in travel is immense, across all steps of the journey. When considering future travel, AI can be used to enhance recommendations based on a detailed understanding of travelers' needs and requirements. When searching for specific travel, AI can help increase the chance that the cheapest option is found. When selling tickets, to maximize total revenues, airlines can rely on AI-assisted revenue management systems (RMSs). To optimize fuel use and reduce greenhouse gas emissions, airlines and ground handlers can use AI to forecast the total weight of the aircraft based on a prediction of the amount and weight of passenger luggage. When traveling, AI can also be applied to reduce the impact of disruption, by providing fast and high-quality decision support for reallocation of flights and passengers.

For the hospitality sector, AI can be used to improve occupancy forecasting, predict cancellations, translate hotel descriptions, personalize guest experiences and increase marketing effectiveness.

At Amadeus we have research teams of AI specialists and data scientists implementing these various use cases. We continue to invest in research and innovation in this area, and we now have a good balance between exploration and systems already launched in the market.

 See p. 70, "Innovation;" p. 69, "Advanced data analytics and business intelligence."

### Digital identity and biometrics

A digital traveler identity is a highly contextual, variable set of personal data or attributes. It may comprise our basic passport number and data but also medical or biometric data and is uniquely tied to a specific journey or booking number. The most crucial concept that digital traveler identity enables is perhaps contactless travel, which, fueled by the pandemic, has the potential to dramatically transform the way we travel and help deliver a greatly improved travel experience.

At Amadeus we provide contactless solutions for all touchpoints in the airport, from check-in to baggage drop, passenger verification and boarding.

 See p. 47, "Airport IT;" p. 72 "Nexwave."

Two other recent and emerging technologies have the potential to significantly impact the travel industry: the metaverse, and open environment/platform ecosystems.

### The metaverse

The metaverse is a shared virtual world that, theoretically, can be explored as easily as the real world. The metaverse is starting to be recognized as the next iteration of the internet, and we'll see a progressive transition from the current internet experiences in 2D to an immersive and interactive 3D experience in the metaverse. Today, the metaverse is in its emerging phase, and adoption is mainly driven by the gaming industry, with platforms like Roblox, Fortnite, etc., but it has the potential to disrupt all sectors, including travel.

As the industry progresses along this line, we'll start to see more realistic immersive and interactive experiences, and we can expect an explosion of virtual activities (business

conferences, concerts, etc.) and travel experiences (trips to the past, to Mars, to dangerous destinations, etc.). As adoption increases, the metaverse could have the potential to become a new distribution channel (offering mixed metaverse/physical trips), facilitate airport transit through augmented reality (AR) glasses, attribute-based selling (e.g. “trying” the hotel room before booking), etc.

Amadeus is building internal capabilities in a test-and-learn approach to better support our customers and partners in this new environment. For instance, we’re building experiments around a “try before you buy” use case for airlines, where travelers could visit aircraft cabins in 3D, and benefit from high-level immersion and interaction with their 3D virtual environment. We’re also working with Microsoft, using their AltspaceVR solutions, to visually demonstrate what the vision for the “inspiration and search” phase of the journey could look like in the future.

In this context, Amadeus has participated in international forums showing our thought leadership in the travel industry. We’ve significantly contributed to the IATA white paper on the metaverse,<sup>42</sup> and Amadeus is among one of the few travel companies that have joined the Metaverse Standards Forum, which aims at facilitating discussions between key players of the metaverse and leading IT companies.

We don’t yet know how far and how deep the impact of the metaverse will be, but given its high disruption potential, our approach is to explore use cases and opportunities but without yet engaging in significant investments.

### Open environment/platform ecosystems

Platform businesses generate value by facilitating exchanges and interactions, creating opportunities for an ecosystem of stakeholders to collaborate, innovate and transact on a global scale.

There are two main types of platforms. Matching platforms focus on facilitating the match between users/ buyers and producers who would otherwise have difficulty finding each other. Typical functions include searching, match making, communicating, carrying out transactions and making payments. Amadeus’ Air Distribution business is an example of a matching platform. Creation platforms focus on building on top of, customizing and integrating applications. These platforms come up with tools and components that are used by third parties as a foundation for developing

value-added services or products. Successful creation platforms bring many benefits to stakeholders, such as the ability to innovate, grow faster, save costs and reinforce their market position. We see interest for creation platforms from customers and partners, for example large airlines.

➤ See p. 60, “Technology.”



42 International Air Transport Association (IATA) (November 2022). *Digital Think Tank White Paper*.

# Amadeus profile



## At the heart of the travel experience

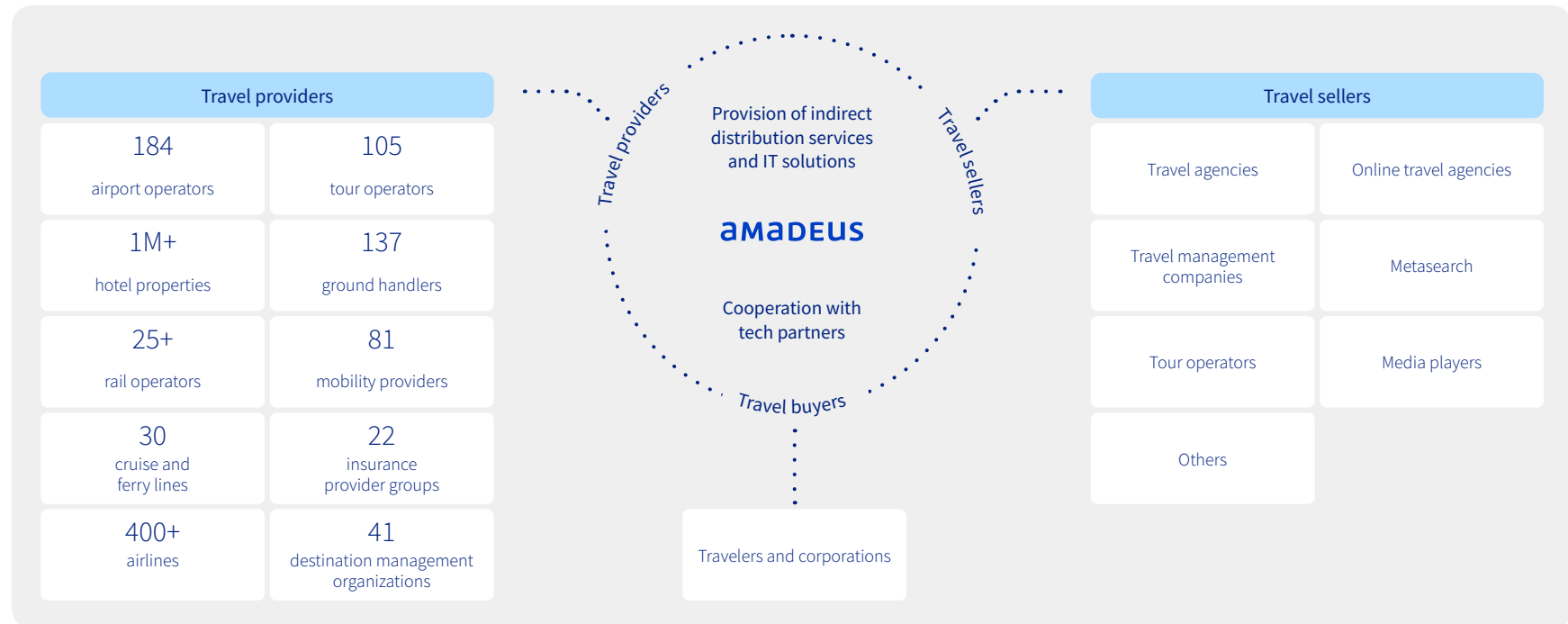
Travel fulfills our need to explore the world—to see new places, meet new people and be near to what’s important to us. It also powers progress: travel builds economies, broadens cultures and creates connections between societies. The travel and tourism industry is dynamic, powerful and fast-moving, and one of the world’s largest business sectors.

Amadeus’ purpose is to make the travel experience better for everyone. Our technology powers the global travel and tourism industry, inspiring more open ways of working and more connected ways of thinking, always with an eye on how the industry can evolve and how our customers can better serve travelers.

Our technology unlocks the freedom to realize new ideas. It connects our industry and inspires new opportunities for growth while reducing friction and getting us all where we need to go more easily. Our aim is to help deliver great traveler experiences with more information, more choice and more autonomy.

We power progress by connecting ideas, organizations and technology. We have a unique perspective on travel, being at the heart of our industry. By bringing our deep expertise to our customers and partners worldwide, we can solve travel’s biggest challenges and scale ideas quickly.

### Amadeus at the heart of travel



GRI 2-6

## Who we are

Amadeus is a technology company dedicated to the travel industry. Amadeus' corporate headquarters are in Madrid. We have a truly global team of more than 18,000 professionals serving customers in more than 190 countries. We've built a commercial and operational network all over the globe, which is key for our value proposition, and we're committed to helping global travel make a positive impact on communities around the world.

We operate under a transaction-based business model linked to global travel volumes. We're a publicly listed company and part of the Spanish IBEX 35 Index, which includes the biggest, most liquid companies in the Spanish stock market.

## What we do

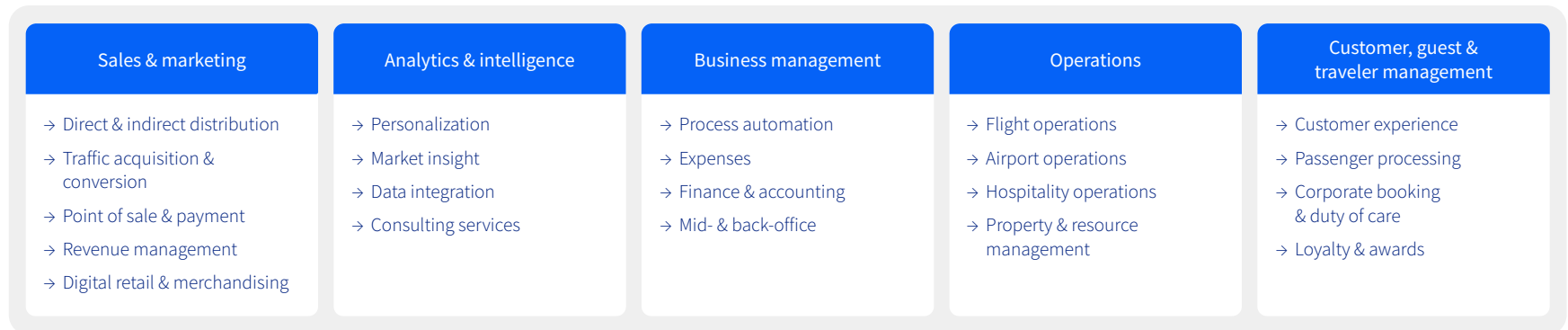
Amadeus offers cutting-edge technology solutions that help travel industry stakeholders succeed. We connect travel players and make personalized journeys happen.

We invest hundreds of millions of euros each year in R&D. We design our solutions around our customers' needs as well as the needs of their customers, the travelers. At all stages of the travel experience—from inspiration to shopping, booking, on-trip and post-trip—our solutions help deliver better service to travelers.

➤ See p. 9, "Corporate performance."

We help travel providers package and deliver their content across both direct and indirect (travel agency) channels and we provide travel sellers access to a comprehensive range of global travel content. Our customer management solutions help them enhance the customer experience, from first contact to check-out and beyond.

For example, for airlines this means improving passenger processing capabilities. We've developed solutions to make sure that flights take off on time, every bag is tracked and every disruption is dealt with as efficiently as possible.



## GRI 2-6

For corporations, this means providing staff with improved self-booking and duty of care solutions. We offer solutions built to automate processes and handle all essential mid- and back-office tasks, hassle-free. These give corporate travel and finance managers greater control across all travel programs. Our dedicated finance and accounting tools can also help our corporate customers manage travel information and make strategic travel decisions.

➤ See p. 21, “Corporations.”

We also provide solutions to help the hospitality sector manage properties and resources more efficiently. Our technology and insight help our customers develop tailored content and promotions that enhance the guest experience. We also help optimize the delivery of that experience to increase guest loyalty. We offer analytics and intelligence solutions built to help anticipate trends, adapt to market shifts and monitor performance. This means travelers get more than just a great travel experience—they get one designed to meet their individual preferences, needs and expectations.

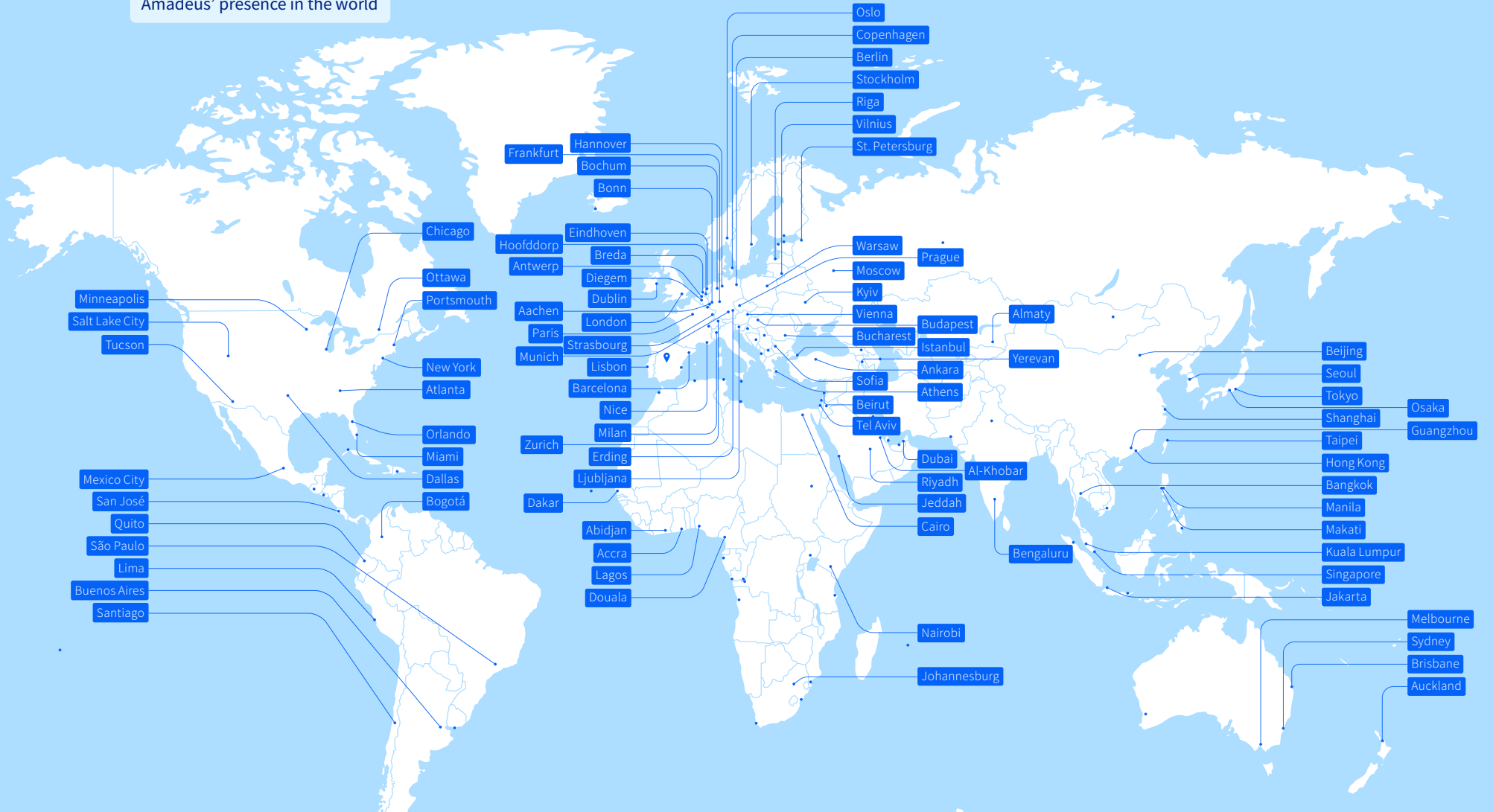
➤ See p. 53, “Hospitality.”

We also offer industry-leading consultancy services to help transform travel businesses for the better.



GRI 2-1

Amadeus' presence in the world



 <p>Headquarters Madrid</p>	<p>100+ offices around the world</p>	<p>190+ markets</p>	<p>Sites marked only with a dot on the map represent smaller Amadeus sites, branches, companies non-wholly owned by Amadeus and distributors.</p>
--	--	-------------------------	---

## GRI 2-6

## The customers we serve

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

Amadeus sits at the heart of every journey, connecting travel providers, buyers and sellers.



## Where we've come from—our history and key milestones

Amadeus was founded in 1987 by four airlines: Air France, Iberia, Lufthansa and SAS. From our origins supporting airline distribution and then IT, we gradually expanded our capabilities to serve customers across the entire travel industry. Three decades later, Amadeus is one of the world's largest technology providers for travel and tourism.

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

We accelerated our move into the hotel IT sector with the acquisition of Newmarket in 2014 and TravelClick in 2018, confirming our strong commitment to the hospitality industry and broadening our product portfolio, know-how and global presence. In a highly fragmented market, Amadeus now has the people and the technology to help all hoteliers deliver a great experience for their guests.

We've also expanded our portfolio to include merchandising, revenue management, travel intelligence and travel and expense management, harnessing the potential of cloud computing, mobile applications and big data for our customers.

We continue to diversify our operations into other businesses linked to the travel industry, such as airport IT and payments, and we're exploring new opportunities through our innovation teams. Throughout our history, investment in R&D has been integral to our company culture.





Our history and key milestones

Business operations

2021  
Partnership agreement with Microsoft

2019  
ICM Airport Technics acquisition

2018  
TravelClick acquisition

2017  
TPF decommissioning

2016  
Navitaire acquisition

2014  
Newmarket acquisition

2012  
➤ Diversification into new IT solutions  
➤ Inclusion in Dow Jones Sustainability Indices

2010  
1 million passengers boarded per day

2010  
Second IPO

2006  
EU R&D leadership

2002  
1 million bookings per day

2005  
Amadeus goes private

2000  
Airline IT launch

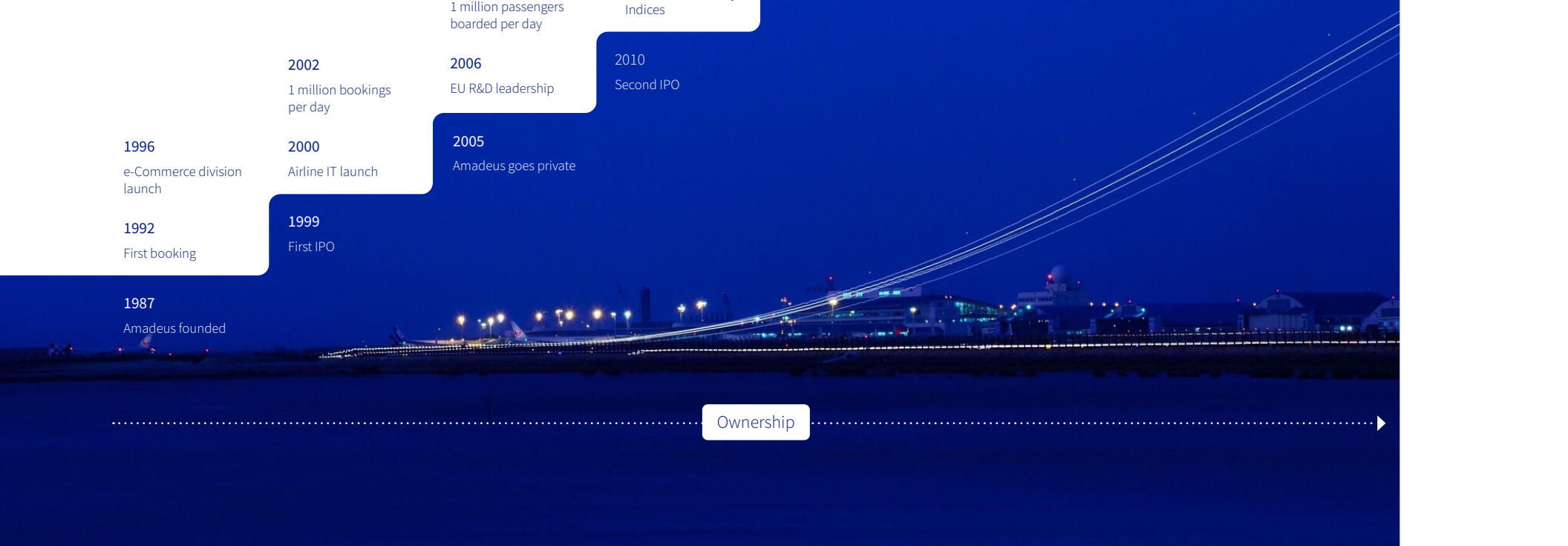
1996  
e-Commerce division launch

1999  
First IPO

1992  
First booking

1987  
Amadeus founded

Ownership



## Where we're going

Today's travelers want a more personalized way to travel. They want to search for experiences that are unique to them. They also expect their journeys to be one single, smooth experience—from thinking of where to go, to getting to their destination, to making the most of their stay, to arriving back home. At Amadeus, we believe that this desire for connectivity will continue to grow across all modes of transport, experiences and devices. And travelers will also want their travel providers to make a positive impact on society and the environment, both locally and globally.

We're investing in these opportunities and exploring new models that will drive our own and our customers' growth, experimenting with technologies that'll make travel more rewarding for all of us. We're working in a more agile way, we're making processes leaner, we're building new and better ways to collaborate. And we're using new structures and systems to catalyze cooperation across teams, functions and geographies, within Amadeus and with our customers.

### Recognition and awards



We're committed to investing in innovation and collaboration, promoting sustainable business practices, advancing the travel industry and giving back to society. In 2022 respected organizations all over the globe recognized our efforts and achievements in these areas.



**DJSI**  
Europe and World indices



**Top Employer Europe**  
Top Employer Institute



**Most Admired Travel Technology Company**  
The Beat Readers' Choice Awards



**CDP**  
CDP measures the comprehensiveness of environmental practices. Amadeus received a score of B in CDP Climate Change 2022 (scores range from A to D-).



**FTSE4Good**  
FTSE4Good Index measures companies' ESG performance. Amadeus is a constituent in FTSE4Good with a score of 3.7 (max. 5) and a percentile rank of 69.



**Award for Technology innovation**  
Business Travel Awards Europe



**Best provider of technology to the UK travel trade**  
Travel Trade Gazette (TTG)

## Amadeus' Executive Committee



**Till Streichert**  
Chief Financial Officer

**Wolfgang Krips**  
Senior Vice President, Corporate Strategy

**Francisco Pérez-Lozao**  
Senior Vice President, Hospitality

**Sylvain Roy**  
Chief Technology Officer, Senior Vice President,  
Global Technology and Cloud Platform

**Decius Valmorbida**  
Senior Vice President, Travel Unit

**Jackson Pek**  
Senior Vice President, General Counsel

**Ana Doval de la Heras**  
Senior Vice President, People & Culture

**Luis Maroto**  
President & CEO

Mr. Christophe Bousquet, Chief Technology Officer, Senior Vice President Airlines R&D, left Amadeus on December 31, 2022, and Sylvain Roy, new Chief Technology Officer, joined the Executive Committee effective January 1, 2023.  
Ms. Sabine Hansen Pek, Senior Vice President, People, Culture, Communications & Brand, left Amadeus on October 1, 2022, and Ana Doval de las Heras, new Senior Vice President, People & Culture, joined the Executive Committee effective October 1, 2022.

GRI 2-6 GRI 3-3 (Travel and tourism development through Amadeus' IT solutions)

Chapter 2

# Business areas

● In this chapter

Air Distribution

---

Air IT solutions

---

Hospitality and transversal solutions

---



## Air Distribution



Amadeus' Air Distribution business is two-sided. On one side we have travel providers: airlines, hotels, car rental operators, railways, cruise lines, etc. And on the other side we have travel sellers (both retail and business), online travel companies and buyers like corporations.

Through Amadeus, travel providers get cost-efficient global market reach and can sell their offer more effectively. Our travel seller customers access the content of connected travel providers through the same platform. That way they can search, plan, book and service complete travel experiences for travelers.

Travel has always been fast-moving and never more so than in 2022. As travel volumes continue to return to 2019 levels, industry trends and behaviors that were already in evidence pre-pandemic are now accelerating at an even higher velocity.

The move toward digitalization and online shopping is breaking down barriers for new digital entrants in travel, which in turn is increasing competition for existing players. Retailing flexibility to capture opportunity wherever it's available and at any traveler touchpoint is now paramount.

Changing corporate and consumer values, especially in relation to sustainability, are highlighting the growing importance of being able to connect to new travel partners to meet the increasing need for intermodal, climate-friendly travel options.

And while certain pandemic travel restrictions still exist, people do need to be able to travel seamlessly and safely.

We know one size doesn't fit all, and we recognize that the value of travel distribution comes with the flexibility to serve our customers and their travelers in the way that best addresses their needs. Our goal is to help our customers grow with solutions that are tailored to how they want to do business and serve travelers.

## GRI 2-6

## Air content

Throughout 2022 we've renewed our commitment to leading the transformation of air distribution. Now more than ever, airlines and travel sellers need to be ready to deliver optimal experiences no matter where the purchase has been made or with which distribution channel or technology. Amadeus takes care of this increasing complexity.

Over the past few years, we've been re-engineering the Amadeus Travel Platform to offer airlines more flexibility and choice to support their evolving distribution strategies and differentiate their brands more effectively. We want to offer our travel sellers a single point of access to the broadest and richest range of global air content, fully integrated, as part of our core offer.

2022 has seen an increasing consolidation of travel agency businesses. We're continuing to support our business, leisure and hybrid travel sellers to power up their businesses. We're helping them rethink how they deliver value to their travelers through content innovation, new technology and new business models, and giving them the solutions to help increase traveler confidence, reshape their offering and rebuild their profitability.

By equipping them with more digital and retailing tools, we can help our travel seller customers deliver a fully personalized experience across the traveler's entire journey, as well as enable those players who rely on the human touch to have their agents focus more of their time on servicing and upselling.

Our front-office application Amadeus Selling Platform Connect is an essential, web-based air distribution gateway for travel sellers, enabling them to access their point of sales and handle daily tasks from home or remote locations, giving increased agility to respond to disruption.

We support online travel agencies with the capability, content and choice that enable them to offer the digital trading model of their choice—increasing customer acquisition and conversion.

As new ways of business emerge and changes in the workplace accelerate, we continue to support our corporate customers with intuitive corporate booking solutions and duty of care solutions, providing their employees with a more personalized travel experience as well as automating inefficient manual processes.

## Focusing on resolving content fragmentation

Our goal is to eliminate the impact of content fragmentation across the industry so that travel sellers can continue to access the widest range of travel offers on one platform, without the need for more expensive and less scalable alternatives.

We're continuously building and evolving our extensive air offer to provide our travel sellers with more choice and options to suit their business needs—all provided seamlessly no matter how the booking is made: through a self-booking tool, our professional desktop solution, a smartphone or tablet, a website, an office location or a chatbot.

Whatever the channel, our customers are all accessing common data records and processing them from a single set of community applications, allowing them to deliver a seamless traveler experience.

And through our platform, travel providers can distribute their content in the largest global travel agency network to sell their offer more effectively.

Distributing content to travel agencies, travel management companies, tour operators, online travel agencies, metasearch providers, media players and others, Amadeus serves tens of thousands of travel organizations in every corner of the world.

GRI 2-6



## Next level of digital air retailing with New Distribution Capability (NDC) as the key enabler

As travelers become more demanding, personalization is taking center stage. Today’s consumers expect brands to demonstrate that they know them on a personal level. McKinsey’s *Next in Personalization 2021 Report* reveals that 76% of consumers are more likely to consider purchasing from brands that personalize. The International Air Transport Association (IATA)’s New Distribution Capability (NDC) technical standard is enabling a digital retailing transformation in travel selling similar to what we’ve seen with companies like Netflix or IKEA.

Differentiated content exclusively sourced via the NDC standard from 19 airlines<sup>1</sup> (Air France, American Airlines, Avianca,<sup>2</sup> Finnair, Iberia, KLM, Lufthansa Group, Qantas, Qatar Airways, Singapore Airlines and United Airlines) is already available on the Amadeus Travel Platform for travel sellers to shop, book, pay and service—with many more carriers set to be implemented in the coming months.

And there are over 24,000 Amadeus travel agencies in 127 markets that have already activated NDC-sourced content on the Amadeus Travel Platform. 2022 has been key to scaling up NDC. At Amadeus, we’ve been making airline content via NDC available around the globe, now reaching 96% of the global market coverage. We’re working closely with all our partners to support our travel seller customers in the transition and to foster NDC adoption worldwide. As of today, NDC bookings still represent a small part of our bookings in the indirect channel.

At Amadeus, we continue to invest into opening a whole new world of sophisticated retailing techniques for our customers to explore and innovate with.

Certified by IATA’s Airlines Retailing Maturity (ARM) index as an IT and distribution system provider, Amadeus has reached maturity with version 21.3 of the IATA standard. We’re convinced that this new version of the NDC standard is an acceleration enabler for new airlines and for advanced travel retailing at scale.

1 Availability may vary per market.

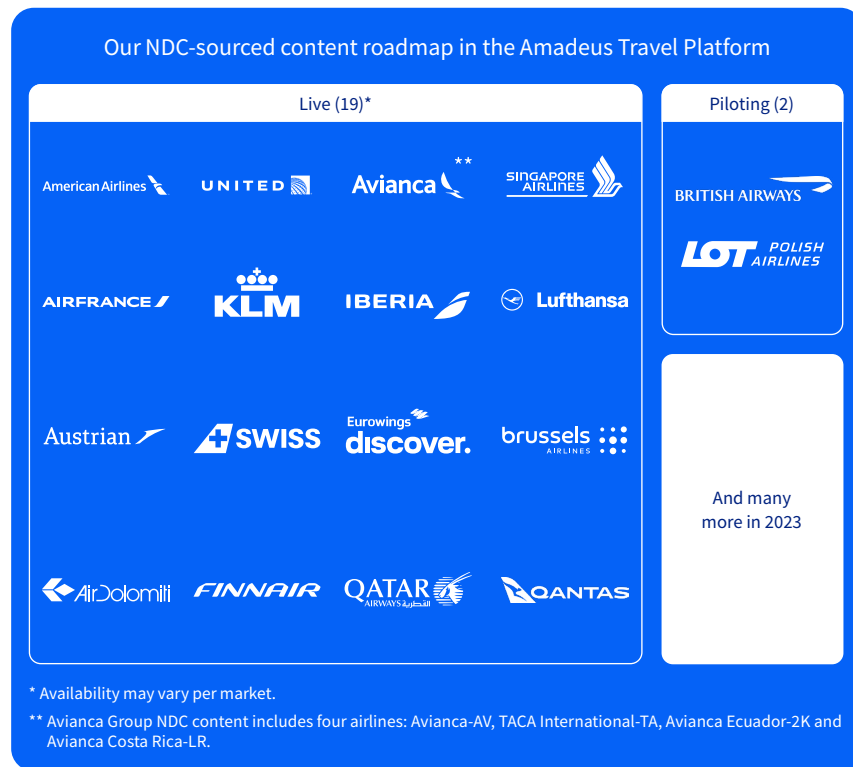
2 Avianca Group NDC content includes four airlines: Avianca, TACA International, Avianca Ecuador and Avianca Costa Rica.

GRI 2-6

This is just the start of a journey that will lead us to a major transformation of our industry based on IATA's ONE Order<sup>3</sup> and new NDC offer and order<sup>4</sup> processes.

Opportunities ahead of us are significant. Our close collaboration with our airline and travel seller partners is helping us pave a smooth transition for the industry into modern retailing to unlock benefits for all players in the value chain.

Scaling up our NDC-sourced content coverage



3 A standard that creates a single integrated customer record to streamline fulfillment, delivery and accounting processes across the life cycle of an order.

4 A data exchange format based on Offer and Order Management processes for airlines to create and distribute relevant offers to the customer regardless of the distribution channel.

## Travel sellers

Travel sellers continue to innovate to deliver traveler-centric experiences and offer a better service to travelers. Likewise, this year we continued to deliver highly relevant technology innovation, air and beyond-air content, and value-added industry partnerships—all geared toward enabling leisure and business travel sellers to reshape their business.

Traveler confidence has become the new currency, and therefore we're focusing on developing and deploying solutions that remove friction in the travel journey. The Amadeus Safe Travel Ecosystem product suite has evolved to include information on travel restrictions and safety measures for all relevant Amadeus products.

Due to the impact of the pandemic, in 2022 travel sellers continued to find their operational performance and sales productivity challenged in the short term and beyond. High turnover has left many industry players in the process of rebuilding with less staff. Thanks to a robust collection of automation tools from Amadeus in areas such as ticket reissuance/refund, fare optimization and queue management, travel sellers of all sizes were able to reduce time spent on administrative work and instead focus on identifying every opportunity to generate incremental revenues.

Beyond-air content and multimodality are strategic choices for travel sellers to differentiate their offer for travelers. To this effect, we added six new car rental providers to our platform and increased our offering of pre-booked transfers. We cover close to 37,114 car rental locations across the globe and now have a total of 80+ mobility providers. From a travel protection perspective, 6 new airlines were implemented in 2022, bringing the total to nearly 50 airlines using our travel protection insurance solution covering 80 markets. On the hotel distribution side, in 2022 we signed important new agreements with Lufthansa City Center International, Selectour, TrustedStays in the UK, Hilton and Booking.com. We also brought our accommodation options to 8+ million properties.

➤ See p. 53, "Hospitality."

And with the scalable technology and breadth of beyond-air content available for travel sellers on our platform, key global players continued providing the choice and transparency required to deliver a personalized and seamless booking experience for each and every traveler.

This year we also partnered with Rappi Travel, the most popular super-app in Latin America. Founded only in 2015, behind the app is a young and growing team of

## GRI 2-6

technology entrepreneurs. The app has an already impressive reach of over 30 million users spanning across more than 350 cities and 9 countries. In Asia, we announced that Thai super-app Robinhood's online travel agent, Robinhood Travel, is using Amadeus Web Services to access Amadeus content.

We're continuing to make strategic investments in R&D, and we're listening carefully to what our travel seller partners tell us about the tech tools that'll further fuel their success. We were therefore honored to be selected as Most Admired Technology Company by *The Beat's* readers for the fourth consecutive year, as well as crowned Technology Supplier of the Year at the Travel Industry Awards 2022, hosted by the *Travel Trade Gazette (TTG)*.

By applying technology and innovation, developed with the traveler at the heart, we can accelerate this industry's evolution and empower the travel ecosystem to identify and deliver value that supports both industry renewal and the traveler experience.

## Online travel companies

The online travel industry has shown great resilience as travel came roaring back in 2022, with some markets reaching or surpassing 2019 pre-pandemic levels.

Throughout these challenging times, online travel agencies understood the need to adapt quickly, especially around digitalization and automation (whether robotics or machine learning). In 2022, 68% of worldwide sales in tourism and travel were made online, while only 32% were offline sales. The Statista Online Travel Market outlook estimates that this trend will continue increasing the share of online sales to 74% by 2027.

In 2022 online travel agencies expanded their focus on personalization, automation, inspiration and retention to provide their customers with wide access to content with fast, easily comparable results for a more personalized and interactive experience. These will continue to be key drivers heading into 2023.

Our focus has been on innovating and working closely with our online travel customers, product and innovation teams, and our partners to leverage these opportunities and support growth and profitability. Hence, our portfolio for online players is centered on the following six pillars: Search, NDC, Automation & Digitalization, Payments, Data & Analytics, and Innovation. In particular we aim at:

- Delivering relevant search results at the inspiration stage of travel shopping to help increase conversion and drive growth.
- Accelerating NDC to answer the specific needs of our online travel customers, enhance their air retailing and support their long-term success, while also growing our global content offer.
- Enhancing our automation and digitalization services portfolio, with new technologies like machine learning and consultancy supported by our data and analytics offer to help optimize our customers' efficiency and performance.
- Continuing to provide solutions to improve fraud prevention and cybersecurity, and offering new payment methods while reducing costs.
- Innovating and expanding the potential of online travel by working with new digital players who want to monetize their consumer base by bringing them new services.

The relationships we've made around the world range from global online travel agencies like Expedia Group, Trip.com and Booking Holdings, to multinational companies like Fareportal, eDreams ODIGEO, Etraveli, Despegar and MakeMyTrip, to fast-moving players like Hopper and Kiwi.com, including local start-ups. We also partner with metasearch providers such as KAYAK, Skyscanner and Wego, digital players like Google and Fliggy, and super-app entrants like Rappi and Robinhood Travel.

Amadeus will continue to adapt to this fast-paced environment and remain the technology leader that online travel companies trust as their strategic partner now and for the future.



We're very excited about the innovation that Amadeus is bringing to the table because this partnership will allow us to transform people's travel experience.

**Guido Becher, Global Head of Rappi Travel**  
Rappi



## GRI 2-6



Amadeus has come across as a very strong innovator thinking ahead of what is needed in 5, 10 years from now, and what we need to do now to achieve that goal—so that innovation spirit is very helpful for us, and we've been collaborating very closely in innovation where we jointly work on products and new features to present to our customers.

**Werner G. Kunz-Cho, Chief Executive Officer**  
Fareportal



Amadeus and its portfolio of products is a key partner for us and not just as a GDS but also NDC-X, we're really happy to work with them to provide that convenience to our customers.

**Guk Kim, Chief Operating Officer**  
Lastminute.com

## Corporations

The appetite for customer-facing meetings and in-person industry events is back after the forced standstill the pandemic brought. Despite the best video conferencing technology, face-to-face meetings are indeed an inherent part of business, necessary for building trust and relationships with customers. In May, a [tClara study](#) revealed that 8 out of 10 US business leaders agreed that meeting in person with staff, managers and peers is important, making it easier to build trust, strengthen company culture and overall increase engagement.

Additionally, according to a [September 2022 Microsoft Trend Index Special Report](#), although most employees (about 70%) would like to keep the benefits of remote working, about the same proportion would like more in-person time with their colleagues.

With business travel resuming, corporations have to manage and control these travel costs while responding to new needs generated by changes in the workplace (hybrid working, increased number of digital nomads and remote workers, etc.), as well as live up to their sustainability commitment.

Amadeus Cytric Solutions are geared to the needs of this new business travel reality and offer travel and expense (T&E) solutions that generate value for the employee and for their corporations thanks to digitalization. We're designing our solutions with the employee experience at the center while optimizing corporations' processes by removing the manual burden thanks to automation and integrated solutions.

In that context, to complement our portfolio, in 2022 Cytric Solutions launched [Cytric Easy](#), a unique innovation developed in partnership with Microsoft that enables employees to manage their T&E directly in Microsoft Teams, without toggling between applications, providing advanced collaboration features and a transformed employee experience.



We want to simplify every aspect of business travel for our employees. Cytric does this with its intuitive user experience. We have an ongoing partnership with Amadeus and a joint vision, as part of a wider collaboration, to redefine corporate travel. We're pleased our employees will also benefit from vision and experience.

**Eric Bailey, Global Travel Director**  
Microsoft

GRI 2-6

## Cytric Easy

Beyond being a partner, Microsoft has also chosen Cytric to transform business travel for its own employees. It joins a long list of new customers who trusted Cytric in 2022, like Meliá Hotels International, Egis, EnBW and TomTom.

In 2022 Cytric Solutions continued to develop commercially thanks to new resellers (like Focus Travel Group or Munckhof), and to implement our solutions we relied on a solid network of service partners (like the consulting companies Numiga, Arago, Conovum, Opteva, TMCON and Cyclad). Cytric Solutions also contracted new partners to complement and enrich its solutions, like AppZen to automatize expense auditing processes with artificial intelligence, and Karhoo to offer Cytric Mobile customers the option of booking on-demand rides from hundreds of fleets of taxis and private transfer companies.

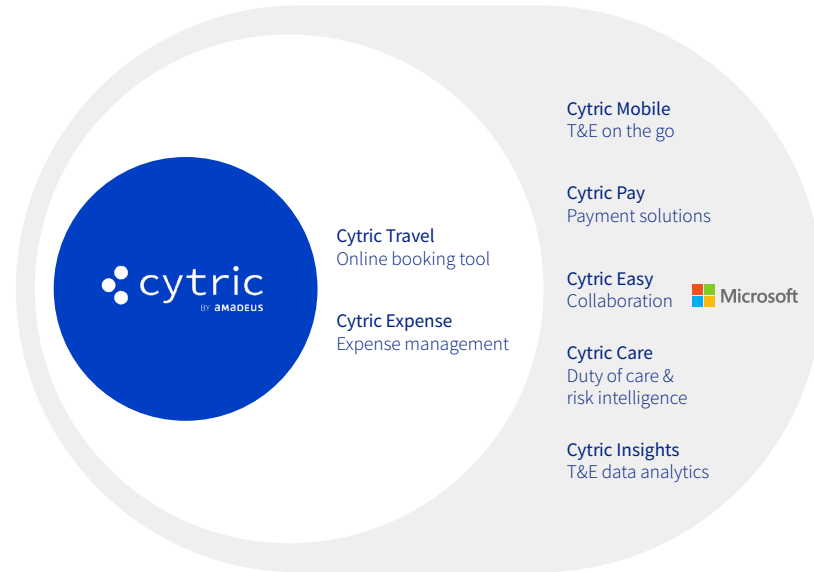
Amadeus Cytric Solutions is harnessing the power of digitalization. In addition to the Cytric online booking tool, it delivers technology solutions that enable a digital end-to-end corporate travel experience, from planning to spend management.



As a global company, many of our employees travel across the world, so organizing travel is a key consideration for us. Being able to find and book a flight, hotel or car without leaving Microsoft applications is a game-changer.

**José María Dalmau, Vice President Business Development  
Meliá Hotels International**

## Cytric Solutions portfolio, the smart connection



Cytric wants to respond to employees’ new digital expectations by providing a smooth and frictionless user experience. This is especially true with spend management. Technology can drastically change the employee experience and remove the burden from travel and finance departments while better managing and controlling travel costs. Today, it offers multiple payment options, seamlessly integrated with Cytric Travel & Expense. This includes virtual payment solutions that, coupled with invoice collection and enrichment services, streamline the accounting, auditing and VAT reclaim processes. According to Amadeus’ latest study with the Centre for Economics and Business Research (CEBR), 8% of travel costs could be saved thanks to enhanced control on all travel spend, not only pre-trip but also on-trip, and thanks to virtual payments.

Another important topic where technology can play a key role is sustainability. In a WBR study commissioned in 2022, almost 80% of respondents admitted that technology could be key in helping them meet their sustainability objectives. With Cytric, Amadeus customers can benefit from different features to help them make informed decisions, thanks to greener content options and the display of the CO<sub>2</sub> per trip options. They can measure their carbon footprint and track it versus their carbon

GRI 2-6

budget and be kinder on the environment by going paperless. And with Cytric Easy, they can even share a ride with close collaborators.

Cytric’s global value proposition has been recognized by several awards in 2022 like the [Business Travel Awards Europe](#), the [European Mission Awards](#) and [IBTA](#).

And because the importance of security can’t be underestimated, for the 10th year in a row Cytric achieved PCI DSS (Payment Card Industry Data Security Standard) certification.

You can learn more about Amadeus Cytric Solutions at [Cytric.com](https://www.cytric.com).

## Customer experience

### Customer service

Amadeus Customer Services provides vital expert knowledge, skills and support to travel sellers, shaping our customer services around them to deliver the personalized, high-quality experience that travelers are demanding.

We accompany our customers along every step of the journey, delivering peace of mind in their service experience and enabling them to maximize the benefits of Amadeus solutions. Our customers need swift incident resolution, the right learning at the right time and instant access to how-to information, expertise and technical support—all with zero disruption and delivered through their preferred channel.

In 2022 Customer Services remained fully engaged in this mission, deploying a new enhanced contact center solution and continuing to evolve the digital solutions channels that are currently available to customers, offering a more seamless experience. This year the Customer Services team also started the journey toward introducing service differentiation, laying the foundations for enabling Amadeus to offer different service models, focused on delivering the appropriate level of service required for each type of customer.

In parallel Amadeus has continued to invest in a comprehensive blended learning experience, so that our customers can enjoy our instructor-led trainings but can also benefit freely from a vast array of leading-edge digital learning materials, in their own language, and wherever they’re located in the world.

We also reduced the overall turnaround time for pricing claims to seven days. This was possible thanks to our Airline Tariff Publishing Company (ATPCO) rules and pricing consulting services for airlines and travel agencies, our dispute service on behalf of travel agencies, our follow-the-sun footprint and key automation initiatives that allowed us to manage 10% of claims automatically in 2022.

### Customer service | Shaped around our customers



\* Net Promoter Score (NPS) is a widely used measure of customer loyalty. It’s the percentage of customers rating their likelihood to recommend a company, a product or a service to a friend or colleague. NPS ranges between -100 (all respondents are “detractors”) and +100 (all respondents are “promoters”). A positive score is desirable, and for a B2B company a score above +25 is a frequent target.

GRI 2-6

## Voice of the Customer

We continue to enrich our Voice of the Customer practices to proactively capture, process and react to customer feedback.

In 2022 we continued our focus on analyzing data, qualitative feedback and trends to understand changing customer behavior and expectations, especially post pandemic. These insights were bolstered by leveraging data analytics tools to understand the sentiments and feelings behind the responses. The findings and pain points were fed back to Amadeus top management and to the customer-facing teams so they could plan appropriate next steps.

During 2022 we sent out our yearly relationship survey to all our customers and organized in-depth interviews with our key customers. These activities helped us stay connected with the day-to-day challenges of our industry.

We received a total of 17,336 responses (versus 11,584 the previous year) to our relationship survey and we recorded an NPS of +54.6. This score is a steady increase from the last recorded NPS of +49.4. Also, 84% of these customers confirmed they were satisfied with their relationship with Amadeus.

This is proof of the hard work put in by all our customer-facing teams to ensure that customers are at the center of what we do.

Customers have acknowledged and appreciated the way we've supported them during and after the crisis, which is reflected in the high NPS.

We've also incorporated more transactional-based surveys to capture instant feedback for our services and customer support. We've measured and analyzed more than 40,000 survey responses after solution delivery, customer support and training delivery.

In 2023 we will continue to focus on improving the customer experience and making the customer journeys more memorable. We'll also try to add new ways of collecting feedback to make our insights more meaningful and actionable.

	2021	2022
Relational NPS	49.4	54.6
Customer service NPS	76.7	74.3

## Amadeus travel agency air bookings

In 2022 Amadeus' travel agency air bookings were 396.3 million, 92.0% over the bookings of 2021 or 31.7% below 2019.

In the fourth quarter of 2022, Amadeus' bookings were 28.3% less than in the fourth quarter of 2019. For the whole year, Amadeus' bookings were 31.7% below 2019 (and up 92.0% compared to 2021). In the year, revenue in this segment was 27.0% below 2019, due to lower booking volumes. Despite the negative effect from a higher weight of local bookings compared to 2019, in 2022 the revenue per booking increased, supported by various positive pricing effects and a positive foreign exchange impact.

The best-performing region in 2022 was North America, which grew by 2.9% compared to 2019, and it's now our largest region by bookings, representing 30.8% of Amadeus' total bookings. In the fourth quarter, Asia-Pacific was the region reporting the highest booking performance improvement (vs. 2019), compared to the prior quarter.

### Amadeus travel agency air bookings by region | Change vs. 2019

	Full-year 2022	% of total 2022	% of total 2019
North America	2.9%	30.8%	20.4%
Western Europe	(42.1%)	28.3%	33.3%
Middle East & Africa	(24.4%)	13.3%	12.0%
Asia-Pacific	(51.2%)	12.8%	17.9%
Latin America	(27.0%)	7.6%	7.1%
Central, Eastern & Southern Europe	(46.2%)	7.2%	9.2%
<b>Total</b>	<b>(31.7%)</b>	<b>100.0%</b>	<b>100.0%</b>

## Key Air Distribution highlights in 2022

During 2022 we signed 65 new contracts or renewals of distribution agreements, including with Ryanair, with whom we announced a new distribution partnership that'll further expand access to Ryanair's offering for Amadeus' industry-leading customer base.



We renewed and expanded our distribution partnership with Lufthansa Group. Lufthansa Group airlines' NDC-sourced content is available via the Amadeus NDC-enabled interfaces.

Finnair strengthened its partnership with Amadeus to bring NDC-enabled offers to travel sellers worldwide.

We renewed and expanded our multiyear partnership with American Express Global Business Travel (GBT), including NDC.

We renewed and expanded our distribution partnership with Hopper, a high-growth online travel agency. Our expanded agreement will allow Hopper to access NDC-enabled content via the Amadeus Travel Platform.



Cytric Travel & Expense has been embedded in Microsoft 365—introducing Cytric Easy. From now on, users can plan trips and share travel details with colleagues without leaving their day-to-day applications such as Microsoft Outlook, Calendar or Teams. Meliá Hotels International and mapmaker TomTom were among the customers that signed up for this new solution.

Microsoft chose Cytric Travel to transform business travel for its employees. In the first stage, Microsoft will deploy Cytric and Cytric Easy to a selected group of its employees.

We entered into the super-app sphere with agreements with Thai super-app Robinhood's online travel agent, and Rappi, the most popular super-app in Latin America. Both have signed for Amadeus Web Services to further support their growth in travel.

We partnered with Karhoo to integrate taxi-booking capabilities into Cytric, so that our users can take pre-booked or on-demand rides in more than 1,000 cities.



GRI 2-6 GRI 3-3 (Travel and tourism development through Amadeus' IT solutions)

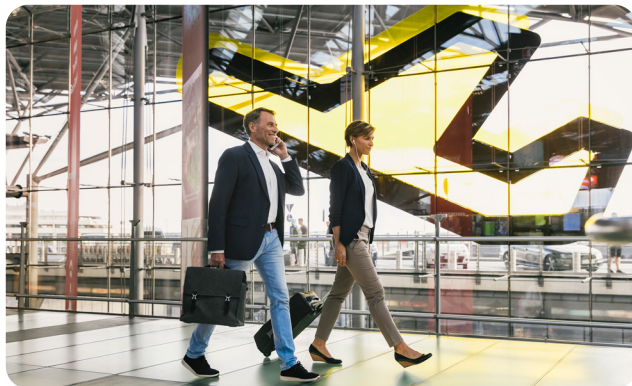
## Air IT solutions

As markets throughout the world advance toward travel recovery and reach pre-pandemic levels of airline reservations, our airline and airport customers are looking to trigger as much growth as possible and transform their businesses from processes and systems that were built decades ago.

And our technology serves as a major enabler that:

- Improves customer understanding and lifetime value using comprehensive data and insights
- Creates new retailing opportunities and revenue streams
- Ensures business continuity for successful transformation at scale
- Supports sustainable operations as well as environmental, social and corporate governance (ESG) initiatives
- Harnesses innovation and exploration of new technology to position our customers for the future

We're working with our airline, airport, business and technology partners, creating a unique ecosystem of players to identify and capture new opportunities and enable exceptional travel experiences across the full travel journey.



## Amadeus Airline IT offer

Demand for air travel continues to strengthen, and airlines are focused on scaling up their operations while keeping costs down and compensating for the impact of loss of staff and expertise during the pandemic. As we enter this new era, airlines are at a pivotal moment to take action and open up opportunities in a fast-paced, highly competitive market.

Our Airline IT offer allows airlines to tap into these opportunities by:

- Enabling tomorrow's travel experiences today
- Helping them set their business apart
- Supporting them to make their next move with confidence

We provide airlines with solutions, services, new partnership models and innovation using state-of-the-art technology that's in line with the latest industry standards and gives flexibility, freedom and efficiency to bring the most value possible to their business.

### Enabling tomorrow's travel experiences today

With today's digital consumers, technology plays a huge role in creating the smooth, enjoyable and personalized journeys that travelers expect.

We're working with our airline, business and technology partners to identify and help airlines provide remarkable travel experiences across the full end-to-end journey—from inspiration to post-trip engagement and beyond.

Through improved customer understanding driven by comprehensive data and insights, our customers are creating new opportunities to orchestrate content in a meaningful way and engage with travelers at any touchpoint, for example by:

- Creating unique experiences across all traveler touchpoints, both digital and offline
- Increasing customer conversion with targeted retailing and hyper-personalized search, including social media channels

GRI 2-6

- Better anticipating and managing disruption in real time with automation, self-service and smart service centers
- Growing customer lifetime value with enhanced reward and loyalty programs
- Improving collaboration across airlines and airports

These opportunities enable airlines to turn experiences into relationships through exceptional moments during the traveler’s journey, bringing tomorrow’s travel experiences to life today. Check out [Olivia’s journey](#) with smoother, more enjoyable and personalized experiences.



With Amadeus as a partner, Etihad's guests will be able to enjoy the best user experience possible as they book and manage their flights, with the ability to customize their travel to an unprecedented level.

**Mohammed Al Bulooki, Chief Operating Officer  
Etihad**

**Know customers**

Orchestrate content

Engage on any touchpoint

Personal information		Identities		Relations		Personal information		Metrics		Segmentation	
<b>Name</b>	Olivia Lee	<b>CRM ID</b>	rgjergoijsivje	<b>Sister</b>	Kelly Lee	<b>Meal</b>	Vegetarian	<b>CLV 1Year</b>	2500AUD	→ Women	
<b>Email</b>	olivia.lee@gmail.com	<b>Adobe ID</b>	woierg5wef48	<b>Friend</b>	Liam Ferguson	<b>Seat</b>	Window	<b>Churn risk</b>	Low	→ Gold membership prospect	
<b>Nationality</b>	Australian	<b>Amadeus ID</b>	pwgjj9656w	<b>Friend</b>	Janice Doe	<b>Origin airport</b>	SYD	<b>Total revenue</b>	4863AUD	→ Sports lover	
<b>Gender</b>	Female	<b>Facebook</b>	w89w4gw98d			<b>Service</b>	Sports equipment			→ Direct channel customer	
<b>DOB</b>	28-FEB-1993					<b>Destination</b>	OOL			→ Instagram influencer	
<b>Address</b>	92 Curlewis Street					<b>Contact</b>	Email				
						<b>FOP</b>	PayPal				
Loyalty information		Social media		Consent		Claims		Assets wallet			
<b>Tier</b>	Frequent Traveler	<b>Network</b>	Instagram	<b>Marketing</b>	✓	<b>Claim</b>	8496184 lost luggage	<b>Promo code</b>	6X68487984		
<b>Alliance tier</b>	Silver	<b>Followers</b>	126374	<b>Profiling</b>	✓	<b>Claim</b>	4789435-disruption	<b>Voucher</b>	6XUPG7848		
<b>FF</b>	4889848153	<b>Media count</b>	1230	<b>Sharing</b>	✓			<b>CC</b>	TOKENwef88w6		
		<b>Airline tag count</b>	2					<b>PayPal</b>	848ewgf31w8e		
								<b>Mileage</b>	65482		

## GRI 2-6

## Luxair

### Enabling tomorrow's travel experiences today with Luxair's online shopping experience for customers

Our partnership with Luxair began in 2013 with the airline's migration to Amadeus Altéa solutions and later expanding to streamlining its revenue management processes.

When it came to its online shopping experience, Luxair wanted a solution that provided offer consistency to its customers, from inspiration to shopping time.

The seamless integration of Amadeus Instant Search was the perfect solution to enable this offer consistency and simplify the search experience.

Luxair was able to confirm over 90% fare accuracy, an 18% conversion rate increase and better engagement with shoppers.



Amadeus Instant Search is a solution focusing on the traveler's inspiration that enables Luxair to stand out from the crowd and transform lookers into bookers.

**Alberto Bortott, Program Management Officer**  
Luxair



## Helping airlines set their business apart

The airline industry's retailing infrastructure remains complex, and there are many different business and technology considerations involved for transformation to take place. At Amadeus, airline retailing transformation is becoming a reality.

We've embarked on the journey to Offer and Order Management<sup>5</sup> to enable airlines to address the USD 40 billion in retailing revenue projected by McKinsey & Company.<sup>6</sup> This move is a significant undertaking, involving joint initiatives with airline and industry partners and the build of new systems in line with scaled agile framework (SAFe)<sup>7</sup> practices for efficient, timely and profitable deliveries.

Amadeus' airline retailing offering provides airlines with modern, digital retailing capabilities to help set their business apart by differentiating their brands and travel offers in a rapidly changing and competitive market.

Our technology enables airlines to create Offers—airline products and bundles—dynamically and personalize them for the individual traveler using the latest industry standards as well as an advanced revenue optimization algorithm. This fully leverages the use of an industry standard defined by the International Air Transport Association (IATA) called an Order,<sup>8</sup> so that airlines can benefit from a full, integrated view of the passenger in one place.

Our comprehensive airline retailing offering includes payment, delivery and loyalty

5 Offer and Order Management is an airline industry initiative led by the International Air Transport Association (IATA) to modernize airline retailing to support omnichannel and customer-centric processes using centralized capabilities and data. International Air Transport Association (IATA) (October 2021). *Airline Retailing: An industry vision for Offers and Orders*.

6 McKinsey & Company (September 9, 2022). ["Airline retailing: how payment innovation can improve the bottom line."](#)

7 A set of organizational and workflow patterns that help enterprises in scaling lean and agile practices.

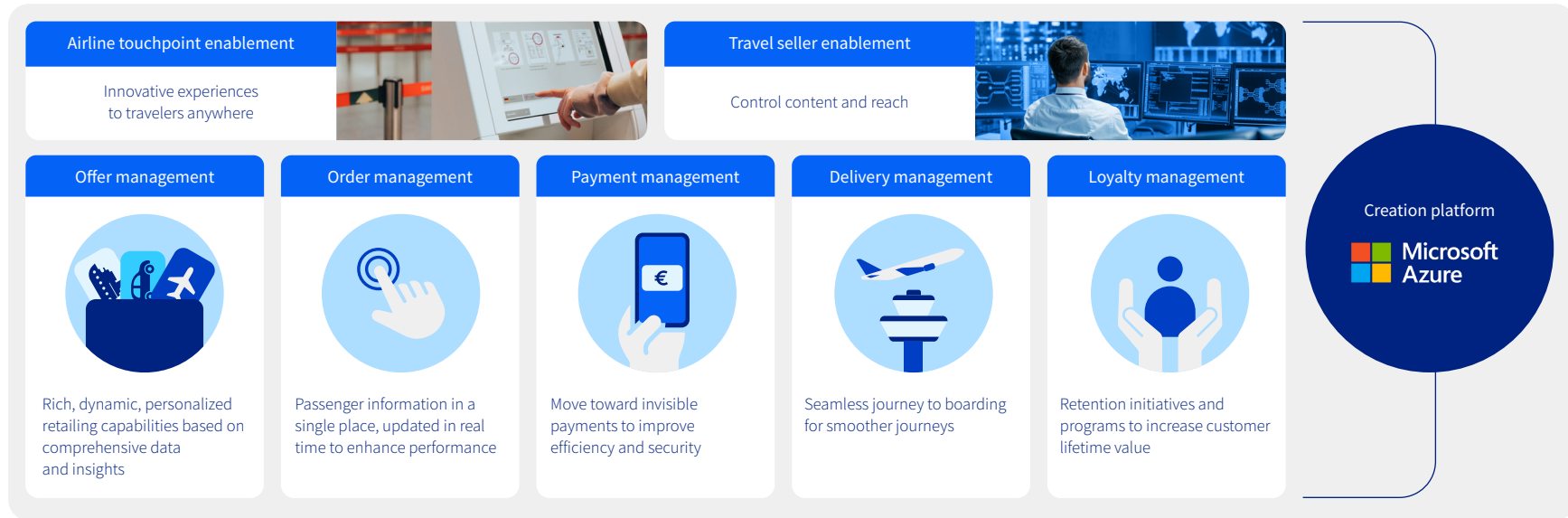
8 IATA's [ONE Order standard](#) creates a single, integrated customer record to streamline fulfillment, delivery and accounting processes across the life cycle of the Order.



GRI 2-6

management, allowing airlines to benefit from opportunities to improve efficiency and performance in all areas of their business when combined with our touchpoint capabilities (Digital and using the New Distribution Capability (NDC)<sup>9</sup>).

Amadeus airline retailing offering



<sup>9</sup> New Distribution Capability (NDC) is a data exchange format based on Offer and Order Management processes for airlines to create and distribute relevant offers to the customer regardless of the distribution channel.

“  
Enhanced digital capabilities are at the very core of offering customers the possibility to tailor their travel experience, and to offer a stellar customer experience. Better retailing capabilities including dynamic pricing, upselling, cross-selling, bundling and unbundling also support our target of boosting revenues and improving profitability. We are excited to continue this journey together with our longstanding partner Amadeus.  
Antti Kleemola, Chief Information Officer  
Finnair

GRI 2-6

Through the Amadeus Airline Business Cockpit interface, airlines will be able to grow their business and open new opportunities through the power of real-time data and predictive analytics across their full retailing business.

We continue to enhance the premium offer of our Amadeus Altéa Passenger Service System (PSS) for full-service airlines and Navitaire New Skies® for low-cost and hybrid carriers to enable their retailing capabilities and support their core operations. This includes our acquisition of Kambr, expanding our revenue management offer for airlines to optimize operational efficiency with increased ease of use, time to market and simplicity.



The Amadeus revenue management solution and its new forecast model have enabled us to be more flexible and agile in monitoring changing market developments and the variance between planned scenarios versus real passenger behavior. This is critical for us to quickly adapt and evolve our commercial strategies in such volatile times.

**Kirsten Amrine, Managing Director Revenue Management**  
[Alaska Airlines](#)

Amadeus Airline Business Cockpit



## GRI 2-6

## Southwest Airlines

**Setting Southwest Airlines' business apart with network optimization**

Schedules sit at the heart of every airline, and as a growth carrier, Southwest Airlines has optimized its approach to network planning with Amadeus SkyMAX, part of the Amadeus Sky Suite.

Southwest can generate its schedules from scratch—free from historical bias—to create seasonal schedules, test the feasibility of new routes and additions to the schedules, and adapt its network in times of disruption.

This has enabled the airline to add destinations to its network (20 new airports in 2020/2021) with improved results, reduce the effects of disruptions, improve processes and ensure less manual editing when managing nearly 4,000 flights per day.



As we emerge from the pandemic, Sky Suite tools are designed to provide Southwest with a greater ability to swiftly deploy schedules adapted to the changing industry landscape.

**Matt Muehleisen, Senior Director Network Planning  
Southwest Airlines**

**Helping airlines make their next move with confidence**

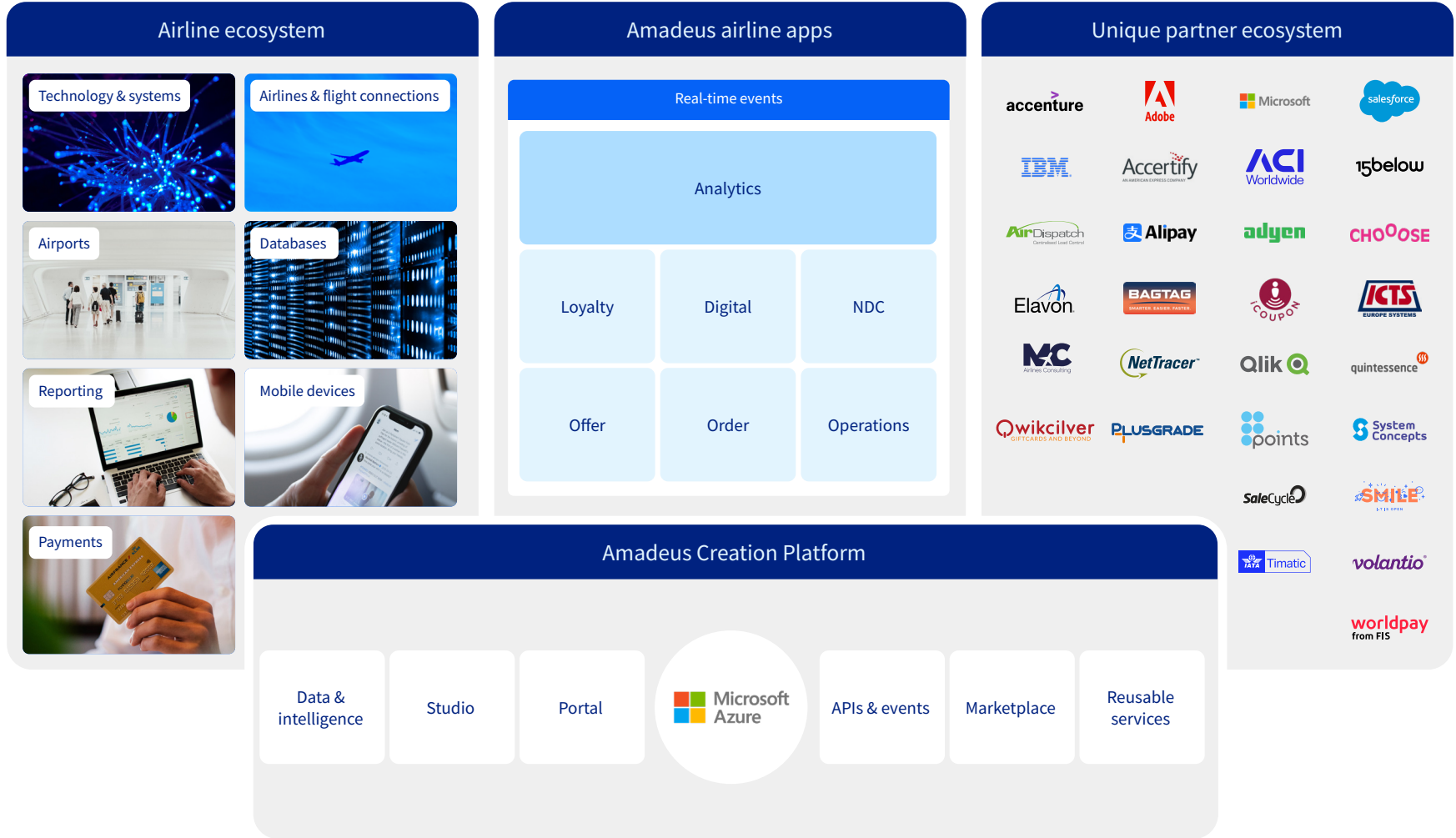
Our open Amadeus Creation Platform is the foundation of our airline technology, based on a modular and flexible approach to solutions and services, and combining ready-to-use components with capabilities that can be customized based on the individual needs of an airline.

This means airlines can use our systems in the way they need with more choice, freedom, flexibility and return on investment, in line with their business and growth strategy.

An airline's systems, infrastructure and partners connect with our unique ecosystem of business and technology partners to open up more opportunities with improved customer conversion, new revenue streams and more efficiency.

GRI 2-6

Amadeus Creation Platform



## GRI 2-6

Our move to the cloud in partnership with Microsoft means that all new solutions are cloud-native, positioning our customers for the future. New retailing capabilities and improved customer understanding are becoming a reality with our integrated, 360-degree approach to data, our use of machine learning and artificial intelligence and our continued investment in innovation and the exploration of new and emerging technology. Some areas of exploration include the metaverse, low-code/no-code, quantum computing, assisted programming, edge computing, hardware acceleration using field-programmable gate arrays (FPGAs) (to boost the speed and performance at which data is processed), and more.

[Check out](#) what our Microsoft partnership means for airlines.

With our technology and expertise, we're in a unique position to ensure business continuity across multiple, complex systems and transformation at scale, so our airline customers can make their next move with confidence.

## Adobe

### Helping airlines automate unique customer experiences across all digital touchpoints

As part of the journey to modern retailing for airlines, we've partnered with Adobe to help airlines create rich traveler profiles, activate personalized journeys in real time and deliver traveler experience management at scale by integrating our technology platforms.

Integrating the Adobe Experience Platform with the Amadeus Creation Platform means that airlines will be able to automate and personalize customer experiences across all their digital touchpoints faster than ever before.

We engaged a pilot airline to compare business results between its existing platform and the new one powered by Amadeus and Adobe, and the business impact has proven impressive: better customer conversion, higher revenues, faster time to market and lower IT costs.



The Adobe–Amadeus partnership enables air travel to shop like they shop for anything online: easily, from anywhere, receiving tailored and optimized offers for their needs.

**Nik Shroff, Senior Director of Global Technology Partners**  
Adobe

## GRI 2-6

## Navitaire Airline Platform

Navitaire, an Amadeus company, provides digital-first technology that enables over 70 low-cost, ultra-low-cost and hybrid airline customers to innovate and grow. The Navitaire Airline Platform has a long tradition of ancillary<sup>10</sup> sales leadership, powering the digital retailing and e-commerce success of many of the world's low-cost carriers and digital pioneers.

### Navitaire Airline Platform: open, digital, connected, data-driven

The Navitaire Airline Platform is digital-first and retail-first by design. It gives airlines proven retailing and digital capabilities, leveraging advanced analytics-driven optimization to create personalized customer offers. It enables seamless digital experiences underpinned by a single record efficiently managing the Offer and Order. Navitaire's open architecture lets airlines create their travel retailing ecosystem to do business on their terms—selling what they want, when they want and where they want, based on real-time data to drive decisions and better serve customers.

### Adapt and accelerate digital channels

From inspiration to the day of travel, travelers expect a high level of self-service coupled with tailored experiences. Airlines can get started quickly and with confidence using Navitaire's integrated digital platform, including over 1,000 digital APIs<sup>11</sup> and the Navitaire Digital Experience Suite's web and mobile software development kits and sample apps. This rich suite of tools lets airlines reach their customers with the right information, at the right time, wherever they are and on any device.

10 Ancillary sales can include airline offers such as seats, baggage, Wi-Fi, flight-change flexibility, on-board meals and merchandise, as well as third-party products or services such as travel insurance, car hire, hotel stays, destination activities and ground transportation.

11 Application programming interface—a way for two or more computer programs to communicate with each other.

## Cloud-enabled today

In addition to being digital-native and retail-first, the Navitaire Airline Platform is also now fully cloud-enabled. Navitaire became one of the first technology providers to operate its entire airline solution platform in the cloud in January 2022, offering its carriers dynamic scalability to keep pace with growth, and access to leading technology that supports modern Offer and Order retailing concepts. Navitaire is continuing its investment by delivering new cloud-native services.

Today's hybrid, low-cost and ultra-low-cost airlines are focused on scalability, flexibility and creating more value for their customers to keep them coming back for more. The Navitaire Airline Platform provides a powerful package that delivers leading retailing, digital and cloud-enabled capabilities that are ideally suited to these dynamic, fast-growing airlines.



Our goal is to enable passengers with a seamless end-to-end experience. For us, migrating New Skies to Microsoft Azure will allow Volotea to stay ahead in innovation, to improve our data-driven strategy and ultimately to achieve best-in-class personalized digital experience to our customers. Our digital evolution roadmap aims to be more agile and improve the efficiency of our operations. By building on Navitaire's cloud services, we are becoming more competitive in providing the best response to travelers' demands.

**Alex de Jesús, Chief Experience Officer**  
Volotea

Our goal is to leverage best-in-class technology and build a data-driven organization, and our partnership with a technology leader like Navitaire is a testament to the same.

**Anand Srinivasan, Co-Founder and Chief Information Officer**  
Akasa Air

## GRI 2-6

## Evolution of passengers boarded

Amadeus' full-year 2022 passengers boarded (PBs) were 22.8% below 2019. In the fourth quarter of 2022, Amadeus PBs were 15.6% lower than in the fourth quarter of 2019. In the fourth quarter, Asia-Pacific and Middle East & Africa were the regions reporting the strongest performance advances compared to the prior quarter's performances.

Our best-performing region in the year was North America, which reported 11.1% PBs volume growth versus 2019. Western Europe had the highest weight over our total PBs, representing 34.8% of Amadeus' PBs.

### Passengers boarded by region | Change vs. 2019

	Full-year 2022	% of total 2022	% of total 2019
Western Europe	(18.9%)	34.8%	33.1%
Asia-Pacific	(42.7%)	24.0%	32.4%
North America	11.1%	19.5%	13.5%
Middle East & Africa	(14.1%)	8.3%	7.5%
Central, Eastern & Southern Europe	(19.0%)	7.2%	6.9%
Latin America	(27.4%)	6.2%	6.6%
<b>Total</b>	<b>(22.8%)</b>	<b>100.0%</b>	<b>100.0%</b>

## Airport IT

The aviation industry continues to experience operational challenges associated with the rebound in demand for air travel. These challenges are often felt and most visible at the airport, where airports, airlines and ground handlers must work together to deliver high levels of service and efficient operations. During 2022 we merged our Airport IT business with our airline operations portfolio in recognition that transformation of the airport passenger experience and operational performance require closer collaboration between these partners. We believe there's a significant opportunity to provide common, platform-based technology to airlines, airports and ground handlers that reinvents industry processes while making it easier for our customers to benefit from an ecosystem of third-party solutions providers.

Our Airline and Airport Operations business removes the constraints of legacy solutions and provides the flexibility of modern cloud technology. We work on solutions for passenger services and core airport operations, both made stronger with seamless data exchange. Amadeus is partnering with airlines and airports to help them rapidly scale handling capacity up or down, serve passengers at the airport or off-airport and deliver innovative solutions like biometrics.

We're focusing on developing and deploying solutions that remove friction in the travel journey. Already, 23 airlines trust our self-service health document validation. Our self-service bag drop, kiosk and biometric boarding solutions help reduce queues and are equipped with touchless proximity sensors and remote-control options to enhance the overall travel experience. Recently, we've introduced self-service passport validation and will continue with visas and other required travel documents.

GRI 2-6

### Transforming the end-to-end airport passenger experience

Amadeus provides airports with a wide range of technology capabilities, including Amadeus Flow, a single cloud solution to service passengers. The solution helps airports and airlines deliver a more agile and better-connected experience for passengers inside and outside terminals, from check-in to boarding.

We continued to see strong demand for Amadeus Flow during 2022 from airport customers focused on transforming the end-to-end airport passenger experience.

#### Isavia

Isavia, the operator of Iceland’s airports, committed to a major transformation at Keflavik Airport, where Amadeus Flow is being deployed to improve collaboration with airline partners. All passenger service points at Keflavik Airport will transition to Amadeus’ cloud solutions, including more than 130 check-in and boarding desks, as well as 50 new self-service check-in kiosks and 25 new auto bag drop units.



This major project is all about having the flexibility to collaborate more closely with our airline partners to deliver a better experience for passengers. Payments is a great example. We’ve wanted to meet traveler demand by rolling out payment acceptance at check-in for some time. Now Keflavik runs on the same cloud as the majority of our airline partners, which means we can help them handle payments, share data more effectively and enable them to innovate by providing services off-airport too.

**Bjarni Sigurðsson, Director of IT**  
Isavia

#### Vancouver International Airport

Vancouver International Airport transitioned to Amadeus Flow to power more than 650 check-in desks and provide the foundation for flexible off-airport passenger services and advanced biometric self-service.



The COVID-19 pandemic and subsequent hit to the aviation industry accelerated our desire for digital transformation. Amadeus is helping us make that transition by connecting us with airlines more effectively, so we’re ready to harness new innovations for the benefit of passengers. The flexibility of airport solutions in the cloud allows for a phased approach where airlines and check-in desks can migrate to Amadeus in a gradual and low-risk manner, ensuring we’re ready to welcome increasing numbers of passengers.

**Lynette DuJohn, Vice President Innovation and Chief Information Officer**  
Vancouver Airport Authority





## GRI 2-6

## British Airways

### Partnering with British Airways for biometric innovation at Heathrow Terminal 5

#### Challenge

British Airways is committed to delivering an outstanding passenger experience, particularly at its flagship Heathrow Terminal 5. The airline wanted to experiment with biometrics on specific flights to understand passenger perceptions and learn how the technology can deliver an improved experience.

#### How did Amadeus support the airline?

Amadeus worked closely with British Airways to trial Amadeus Biometric Solutions for a six-month period for a number of London flights to Malaga and other international destinations. The technology was made available at check-in, bag drop, the BA lounge and boarding, for an end-to-end airline passenger experience:

- Delivered an innovative trial of end-to-end biometrics at Heathrow Terminal 5
- New approach means enrolled BA passengers no longer need to present passports or boarding passes
- Experimentation across a number of BA international routes



Not only is this the first time that our customers have been able to register their biometric information at home, but it's the first time they can use it for British Airways' international flights. This is a secure and efficient tool that makes for a smarter and smoother airport experience, which will reduce the time it takes us to board aircraft. The beauty of this technology is that it also frees our people up to look after more complex customer enquiries and deliver the best possible customer service.

**David Breeze, Operations Transformation Manager**  
British Airways

## Innovating to deliver more efficient airline and airport operations

Our airport and airline operations business also provides the Amadeus Airport Management Suite (AMS), a comprehensive range of integrated solutions that handle every aspect of an airport's operations. Again, as a major provider of cloud solutions to both customer groups, Amadeus is in a strong position to support airports and airlines to collaborate more effectively when it comes to operational processes and decision making. That means better utilization of assets like stands and gates, improved optimization of take-off and landing slots, and more joined-up data flows that support better on-time performance.

## Finavia

### Transforming operations at 20 Finavia airport

Building on last year's major transformation of the passenger experience across Finavia's airports, Amadeus agreed a new deal to transform how 20 Finavia airports manage their operations. Helsinki and 19 other Finavia airports are transitioning to Amadeus Airport Operational Database, a single cloud-based solution that's tightly integrated with airline systems to gain optimized airport operations.

Finavia benefits from automated real-time updates to flight information as soon as airlines initiate changes, meaning high accuracy levels. This helps airport stakeholders to better allocate resources and respond to the needs of airlines and passengers. With a detailed understanding and visibility of passengers' onward connections, the Airport Operational Database also supports Finavia to better allocate arriving aircraft to the right gate.



Rolling out this new capability across Finavia's airports will significantly improve our operational efficiency, helping us to better collaborate with our airline partners to improve on-time performance for passengers.

**Leyla Akgez-Laakso, Chief Information Officer**  
Finavia

GRI 2-6

## Customer experience

### Committed to excellence in customer service and support

We provide a full range of dedicated services to our airline customers to ensure they get the most business value from our technology.

Services include onboarding and learning and support services that come with implementing our solutions; 24/7 support from digital self-service to proactive monitoring by our team of 200 industry experts located around the globe; and the handling of incidents and issues.

In line with our integrated approach to data, our content management and security services ensure the quality and 24/7 availability of data fed into the Amadeus system from external data providers, such as IATA or the Airline Tariff Publishing Company (ATPCO).

### Enhancing airlines' business value with travel and technology expertise

Amadeus offers professional services—from consulting and advisory to outsourcing services. We mobilize travel technology experts worldwide to help airlines maximize their return on investment, simplify their day-to-day and address any of their challenges across the entire business value chain.

### Amadeus Airline Professional Services portfolio

#### Your IT partner beyond product

A full range of services to help you maximize your return on investment, simplify your day-to-day and address any of your challenges across your entire business value chain.



## Transforming customer feedback into actionable insights: Voice of the Customer program

Our Voice of the Customer program monitors customer loyalty and satisfaction across all stages of our airline and airport customers' relationship with Amadeus. The program's main purpose is to transform customer feedback into actionable insights that teams across Amadeus will use to improve our performance. This helps us continually revisit our way of doing things and focus on our customers' priorities.

Our approach to gathering feedback includes a range of interviews and surveys focusing on our customers' overall experience of working with Amadeus, their specific interactions along the customer journey and their experience using our products.

Our main measure of customer loyalty is the Net Promoter Score (NPS), for which we set targets at the beginning of the year.

In 2022, 1,150 contacts from airlines and 160 contacts from airports and ground handlers participated in our annual Relationship Survey.

For airlines, we achieved an NPS of +28, a 1-point increase on our score from 2021 (+27). Respondents highlighted the strength of the relationships with Amadeus teams, in particular the professionalism, commitment and expertise of the people they interact with. In addition, respondents noted improvements in stability and software quality and are excited about Amadeus' innovative solutions for NDC<sup>12</sup> and airline retailing transformation. The reported figures for the percentage of satisfied customers were very encouraging, with airlines reporting 89% and airports with 93% satisfied customers.

In the area of airports and ground handlers, our NPS increased by 16 points to +51. Respondents emphasized the deep customer understanding of the account teams and the broad product portfolio. They see Amadeus as a true partner, rather than a supplier.

For both airlines and airports, Amadeus' unique industry expertise is perceived as a major differentiator and value driver.

We ensure that customer feedback is actioned, and a community of Voice of the Customer champions spread globally across our locations is accountable for sharing results and driving action in each team and region. We encourage customers to actively participate in the design of our action plans, keeping them informed regularly of the progress made.

<sup>12</sup> New Distribution Capability (NDC) is a data exchange format based on Offer and Order Management processes for airlines to create and distribute relevant offers to the customer regardless of the distribution channel.

## Key Air IT solutions highlights in 2022

At the close of December, 211 customers had contracted one of the Amadeus passenger service systems (Altéa or New Skies) and 200 customers had implemented one of them.

ITA Airways signed for the full Amadeus Altéa PSS suite, and will adopt dynamic pricing, merchandizing, data management and passenger servicing solutions, and implement Amadeus Altéa NDC.



Iraqi Airways and Bamboo Airways contracted for the full Amadeus Altéa PSS suite and some additional solutions.

Allegiant Air signed for Amadeus New Skies PSS. Also the new Indian low-cost airline Akasa Air contracted for our Amadeus New Skies PSS.

We announced a new partnership with Finnair. We'll collaborate to build the next-generation airline retail offering, bringing personalization and real-time insights through the adoption of Offers and Orders.

Air India, recently acquired by Tata Group, implemented the Amadeus Altéa PSS and a host of technology solutions to transform its customer experience.

All Nippon Airways (ANA) domestic flights will be migrating to Altéa. Amadeus Altéa PSS will support both ANA's domestic and international flights across reservation, inventory, ticketing and departure control.

Korean Air selected Amadeus Customer Loyalty Suite to manage its loyalty program, Skypass.

MIAT Mongolian Airlines contracted for Amadeus Altéa NDC, which allows airlines to distribute advanced merchandising offers.

We strengthened our partnership with Fiji Airways with the implementation of Amadeus Digital Commerce and Amadeus Reference Experience. In March, Philippine Airlines signed for Revenue Accounting.

We announced the acquisition of Kambr, a start-up based in Minnesota (US) specialized in revenue management solutions for airlines. In April Kambr announced that Viva Aerobus had selected Kambr's platform. New Dominican low-cost carrier Arájet also selected Kambr Revenue Management System.

British Airways and Qatar Airways contracted Amadeus ACUS Mobile. Isavia, Iceland's airports' operator, will move Keflavik Airport to Amadeus Flow and will adopt Amadeus' Baggage Reconciliation System (BRS).



In North America, Fort Wayne International Airport will move from our Amadeus Extended Airline System Environment to our cloud-based ACUS passenger processing system. We had upselling with Long Beach Airport and Salt Lake City International Airport. Palm Springs International Airport signed for ACUS. Wilmington International Airport contracted ACUS and Amadeus Flight Information Display System. Vancouver International Airport will move to Amadeus Flow.

Port Hedland International Airport contracted ACUS and Wellington International Airport contracted and implemented ACUS. Taiwan Taoyuan International Airport contracted 30 auto bag drop units.

GRI 2-6 GRI 3-3 (Travel and tourism development through Amadeus' IT solutions)

## Hospitality and transversal solutions

### Hospitality

Increased traveler confidence ushered in a year of renewal in the hospitality industry, as people eagerly left home to go on long-awaited trips after two years of pandemic uncertainty. Global hotel occupancy exceeded 2019 (pre-pandemic) levels beginning in April 2022, driven largely by leisure travelers. Worldwide, hotel occupancy reached a high of 69% in June and July, an increase of 5 and 3 percentage points over the same months in 2019, according to Amadeus' Demand360® business intelligence data. Group travel also made significant gains, finishing the year within 1–2% of pre-pandemic levels as the events and conference sector rebounded. Although these figures differ by market and region, the widespread availability of vaccines and reduced travel restrictions contributed positively to industry recovery.

As travel returns and new trends emerge, hospitality professionals are re-examining their businesses with technology at the forefront. Modern, innovative solutions are critical to addressing pandemic-era shifts in traveler behaviors, labor shortages, increased costs and the need for deeper market insights.

Amadeus' dedicated Hospitality business of 3,500+ professionals serves 50,000+ unique properties worldwide. We stand out from the competition by delivering the industry's most comprehensive hospitality solutions portfolio and data sets, supported by our growing technology ecosystem of 1,200+ partnerships to meet the needs of properties of all sizes.

Our longstanding customer relationships and knowledge of the industry power our purpose to drive profitable demand, increase operational efficiency and improve the guest experience.



[Shaping the future of Hospitality](#)

### Supporting industry growth with innovative technology

As the hospitality industry evolves, we're evolving with it. Amadeus' portfolio of hospitality solutions extends beyond the needs of hotels to serve destination marketing organizations (DMOs), travel agencies, and mobility and insurance providers. By using our extensive distribution network to connect the full travel ecosystem, we offer our customers and their clients more choice and flexibility to build seamless journeys.

At the core of our technology vision lies the Amadeus Hospitality Platform—the industry's only true single image of hospitality data (rates, inventory, availability and profiles)—enabling hoteliers connect supply and demand to benefit travelers and accommodation sellers alike. It provides open, scalable architecture that eliminates data silos in a historically fragmented industry full of stand-alone solutions.

With the Amadeus Central Reservation System anchoring the platform, enterprise customers can optimize operations and increase opportunities for personalized guest experiences through attribute-based selling. By offering different guest room and non-guest room products specific to a hotel property, hoteliers unlock the opportunity to increase revenue and deliver a memorable, personalized stay.

Built and launched in collaboration with InterContinental Hotels Group, and selected by Marriott International in November 2021, this transformative technology will set a new standard to deliver bespoke hotel experiences and maximized revenues.

To serve the broader market, including independents and small to mid-tier hotel chains, we're continuing to build on the strength and connectivity of Amadeus' iHotelier® Central Reservation System to drive demand and value for this customer segment. In 2022 we launched the new Amadeus iHotelier Booking Engine—an advanced integration of website plus booking engine—to create a singular shopping experience. The booking flow remains consistent for shoppers to decrease abandonment, while adding personalization features to increase hotelier revenue opportunities. Hay Creek Hotels, based in New Hampshire in the US, participated in beta testing for the new booking engine and reported a 25% increase in booking conversion rates versus previous solutions.

iHotelier also serves as the foundation of the Amadeus Integrated Booking Suite, a unique bundled offering including guest management and web capabilities for a truly unparalleled hotel e-commerce platform.

## GRI 2-6



The new iHotelier Booking Engine has helped enhance the value of our website and make it easier than ever for guests to select and book add-ons. The use of one platform for website and booking engine will also make it more efficient to train our people as our organization continues to expand.

**Heather Cox, Corporate Director of Rooms & Revenue Management**  
Hay Creek Hotels

To enhance our industry-leading business intelligence suite, we introduced Amadeus Air Traffic Forecast to provide tourism and hospitality businesses with a holistic view of global travel movement worldwide. Viewing insights around air search, capacity, number of flights, bookings and arrivals allows users like DMOs or convention bureaus to identify travel demand, forecast market changes and adapt business strategies.

To RevenueStrategy360™ we've added a first-of-its-kind market forecasting model. The algorithm calculates historical actuals, pacing and forward-looking booking data from over 35,000 Demand360 data providers to produce a highly accurate look at short-term hotel demand at the market level.

The world's largest hotel brands and management companies are increasingly recognizing the value of these solutions, with major names like IHG, Wyndham, Aimbridge Hospitality, Flemings Hotels, Event Hospitality & Entertainment Limited and Preferred Hotels & Resorts all signing on for various Amadeus business intelligence solutions in 2022.



Having access to our portfolio performance enables us to make more effective revenue decisions down to the individual property level and aid in strategic decision making.

**Andrew Rubinacci, EVP Commercial & Revenue Strategy**  
Aimbridge Hospitality

Another area of the business highly dependent on quality data is marketing. In 2022 we worked with thousands of hotels and DMOs all over the world to deliver omnichannel media campaigns with great success. Whether it's through metasearch, display ads, Global Distribution System (GDS) advertising, search keywords or retargeting, we've helped names such as Dubai's Department of Economy and Tourism, Turismo de Tenerife and Louvre Hotels Group reach new audiences and achieve more bookings with a clear return on investment.



Although Tenerife has long been on the map, the team at Amadeus understood immediately what we required to reposition our offering and put together a comprehensive solution that helped us reach new year-round, high-quality travelers from around the world.

**Laura Castro, Director of Tourism**  
Tenerife Island Government

A strong channel mix is also critical to maximizing bookings, which is why distribution remained a significant growth area for us in 2022, with hotel distribution ending at 98% of 2019 performance and mobility growing to 111% of 2019 performance. Driven by market recovery and new partnerships with businesses such as TrustedStays in the UK, our network grew to a record 8.8 million shopping options and 1.6 million unique properties. Our reach also expanded through travel agency agreements with Lufthansa City Center International in Germany, Selectour in France, and Hotel Planner and Simplenight in the US.

## GRI 2-6

In addition, Hilton signed a partnership with Amadeus to implement their API within the Amadeus GDS. This will allow the hotel chain to distribute content faster and scale up more effectively, while improving the overall customer experience and booking process for guests.



By partnering with Amadeus, we're bringing a first-of-its kind technology solution to the hospitality industry and making important strides in our effort to employ the latest, award-winning innovations and standards to improve the performance of our hotels and elevate our service to our customers.

**Oral Muir, Vice President, Partnership Development & Global Distribution  
Hilton**

We continue to diversify our distribution model, moving beyond hotel rooms to mobility providers to further support leisure travel. An investment in Spanish start-up Eccocar brings fresh content to the Amadeus network in the form of on-demand car rentals and urban rideshares bookable by travelers themselves.

Seamless payments and insurance options are also high on the priority list for pandemic-era travelers, which is why Amadeus partnered with Booking.com to streamline the payment process between travel agencies and accommodation providers. The Amadeus B2B Wallet solution integrated with Booking.com reduces the demand for travelers to make payments during check-in/out, instead allowing travel agencies to process payments using a wide range of virtual cards.

[↗](#) See p. 57, "Other key developments during 2022."

Our growing partnership with the insurance provider Pattern expands our insurance portfolio, allowing UK travel agents using the Amadeus Selling Platform to automate the insurance proposal process. Agents can trigger notifications for relevant opt-in coverage directly to the traveler so they're empowered to decide what they wish to purchase for their trip using their preferred device.

Turning to the on-property experience, managing hotel operations, labor shortages and traveler cleanliness expectations remained top concerns. In 2022 we unveiled a new user

experience for our leading service optimization solution, Amadeus HotSOS. Redesigned with dynamic operational dashboards and in-line help, the solution makes it easier for teams to analyze key reporting and data points, labor output metrics and guest amenity requests. Its intuitive look and feel also enables faster employee onboarding and contains training materials for improved staff retention and engagement.

Group business is returning on a global scale, bringing a renewed desire for operational efficiency from both hoteliers and meeting and event planners. To speed up the booking process for small events that don't require a request for proposal, we've expanded our MeetingBroker capabilities to offer connectivity for instant group bookings. This allows venues to list their availability directly through our partner channels to make booking space for small meetings or events as easy as booking a flight or hotel online.

For hospitality teams hosting larger events, our Amadeus Delphi sales and catering solution helps full-service venues streamline the process from lead to execution using a single, cloud-native platform. New reporting enhancements in 2022 further elevate these processes, displaying status changes, room block updates, revenue impact and more.



Moving to Delphi allowed us to launch an enterprise sales organization, which was critical to our success during the pandemic. Our sales force works remotely selling for a portfolio of hotels, and they have everything they need in one centralized system. It helped save our company, ultimately.

**Kimberly Furlong, Chief Commercial Officer  
Atrium Hospitality**

To support select service properties with less meeting space, Delphi Select introduces enhanced capabilities and rapid onboarding with training and help, translated to French, German and Spanish to support European adoption.

## GRI 2-6

## Becoming one to deliver on our vision

To honor our commitments to our customers and better serve the industry, we've made significant progress in unifying our internal processes. Our training, finance and customer support teams have rolled out new operating models to handle requests faster and with greater accuracy. We've standardized our surveying capabilities to allow for clarity across our Hospitality business and we've expanded access to feedback and reporting. This is reflected in our latest Customer & Technical Support NPS of +54, and our Customer Delivery NPS of +62.

Additionally, our internal refinements are much appreciated by customers, reflecting a score of 21 in our 2022 Voice of the Customer survey, up from the pre-pandemic score of 23 in 2019. Additionally, 80% of the customers who responded to our annual survey were satisfied with their relationship with Amadeus.

At Amadeus, we believe our business will grow exponentially as we continue delivering value to the industry with ongoing investments in our solutions to bring our vision of an integrated hospitality platform to life. This is the key to long-term success for an industry weighed down by outdated, fragmented systems that prevent hoteliers from gaining a holistic view of their business. Our mission is to empower the wider hospitality industry with the tools necessary to drive profitable demand, increase operational efficiency and improve the guest experience.





GRI 2-6 GRI 3-3 (Travel and tourism development through Amadeus' IT solutions)

## Payments

Amadeus has been investing in travel payments for over 10 years to improve the end-to-end traveler experience.

Payments are an integral part of travel, but today, payment problems can undermine the travel experience. There are now many ways to pay, ranging from cards to digital wallets and specific local payment methods. Yet travelers often can't pay with their preferred method at the booking stage, at the airport or at the hotel, whether for leisure or business travel.

In B2B payments between travel sellers and travel providers, integration in the travel ecosystem is a key differentiator. When supporting providers to deliver services to travelers, Amadeus connects every stage of the trip to create smooth payment experiences so travelers can pay quickly, easily and in the way they choose. By doing so, we help airlines, hotels, travel sellers and corporations deliver a better, smoother and more connected payment experience across the entire trip, supporting broader industry objectives like merchandising and digital transformation.

Innovation and technology are part of Amadeus' DNA. As we evolve our proposition for the payments business to better serve our customers, we're making investments in three key areas:

1. Technology investment in open development environments will help fintechs and banks connect to our platform using APIs, dramatically accelerating the pace at which customers can roll out the new innovations that travelers demand, such as buy now, pay later (BNPL) and multi-currency pricing (MCP).
2. We've applied to the Bank of Spain for an e-money license to provide regulated services in Spain and, subsequently, the wider European Economic Area. This means that, subject to being granted the license, we could offer regulated services such as accepting customer funds or issuing pre-paid debit cards—improving choice, service and innovation for our customers.
3. We plan to keep investing in our growth by hiring additional payments and fintech experts across our key sites to deliver a widened product and service portfolio and by pursuing a range of new partnerships with leading fintechs and banks focused on removing payment friction in travel.

Thanks to these investments to evolve our payments business, our customers will

benefit from faster innovation, greater choice and an improved experience.

In order to achieve these objectives and scale up the business while delivering more value to customers, Amadeus has consolidated its travel payments business under a new wholly owned Amadeus company as of January 2023: [Outpayce](#).



[Learn more](#) about our journey into Outpayce from Amadeus.

## Other key developments during 2022

In line with our mission to make it easier for our customers to connect to the latest fintech innovations, important partnerships were agreed with two specialist BNPL providers: Uplift and Fly Now Pay Later. Outpayce's travel merchant customers will be able to easily access BNPL, making this new payment method available to travelers through their digital channels. We also continued to see significant demand for our Amadeus FX Box solution for MCP, with the innovative product shortlisted for several payments industry awards during 2022.

According to Amadeus' own research, travel is expected to be consumers' highest discretionary spend area during 2023. In fact, 75% of travelers who participated in our global study [Consumer Travel Spend Priorities 2022](#) confirmed that they wanted the flexibility offered by BNPL and foreign exchange services to fund travel purchases during this period of economic uncertainty.

Another major partnership, with Chargebacks911, resulted in the launch of Outpayce Chargeback Management (rebranded from Amadeus Chargeback Management), a fully outsourced service that helps travel merchants like airlines automate the payment dispute process. [Our own research](#) with travel companies confirms that, during the pandemic, the industry has seen a 50% increase in chargebacks compared to 2019. Efficiently managing chargebacks has become a key area to address for many of our customers. Outpayce Chargeback Management solves the chargeback challenge through greater automation. Rather than deploying internal teams to manage chargebacks, travel companies can now log in to the Outpayce Xchange Payment Platform (rebranded from Amadeus Xchange Payment Platform) to see a detailed overview of chargebacks handled as part of the new service.

## GRI 2-6

Our payout solutions help travel companies make B2B payments a strategic priority. We've been working with our travel seller customers to transform how they pay out to suppliers.

Our flagship Outpayce B2B Wallet solution (rebranded from Amadeus B2B Wallet) provides travel sellers access to a wide selection of different payment methods including debit, pre-paid and credit options from leading financial services partners so the best payment method can be selected for each booking. In addition to leveraging virtual card technology within our B2B Wallet solution, we're also busy making it available within a greater range of Amadeus solutions.

As an example, in November 2022 we announced that travel agencies reserving Booking.com accommodations through the Amadeus Travel Platform can now choose to process payments using a wider range of virtual cards from our digital wallet, across more than 1.3 million accommodation options.

In addition, in 2022 we published the report *Opening the Door to Guest-Centric Payments: The opportunity for hospitality*. The report draws on psychological insights from respondents who had recently traveled to international hotels in other countries, providing the industry with a view into hotel guests' conscious and unconscious perceptions when making payments at the hotel and how this experience impacts their opinion of the hotel brand. This insight was combined with Amadeus' vision for how hospitality chains can transform their approach to payments by centralizing and digitalizing the entire experience to become more guest-centric.

And on the corporate side, the opportunity presented by digitalizing corporate travel payments was outlined in a major economic study conducted by Amadeus during 2022, *It's Time to Transform: The economic case for end-to-end digital spend management in business travel*. According to an analysis carried out by the Centre for Economics and Business Research (CEBR) for the study, by practicing end-to-end spend management, corporations in France, Germany, the UK and the US stand to reduce direct business travel spend by 8.2% on average, while freeing up 188,000 full-time equivalent (FTE) employees involved in administration for more meaningful tasks. This research supports Amadeus' strategy to embed virtual card payments within Amadeus Cytric, our T&E tool.

Our payments experts look forward to solving an even broader range of challenges in partnership with our customers during 2023 and beyond, as part of our strategic investment in Outpayce.



Our primary aim is to make every aspect of the travel experience easier and more streamlined for travelers and travel providers alike, including when it comes to payment options. Virtual cards offer significant benefits and are gradually replacing legacy settlement schemes and manual plastic card payments across travel. The Amadeus Travel Platform is an important distribution channel for our accommodation partners, and making virtual payments part of the reservation process is a big step forward for everyone involved.

**Jeremy Cornuau, Global Director for Partnerships**  
Booking.com

## Key Hospitality and transversal solutions highlights in 2022

We expanded our existing hotel distribution agreement with Van der Valk Hotels & Restaurants, adding our iHotelier Central Reservation System and RevenueStrategy360.

We partnered with Hilton to implement their API within the Amadeus distribution system. Both Hilton and Amadeus will benefit from a faster, more advanced connection to the GDS channel.

Grupo Posadas partnered with Amadeus to create new custom websites across its 185 hotels and 9 brands. The new web experience, backed by Amadeus' iHotelier Booking Engine and Digital Media Campaigns, allows Posadas brands to drive significant results through their website's direct booking channels thanks to tailored service promotions and upsell opportunities.

Casa Andina, with 34 properties in 23 different destinations throughout Peru, signed up for our iHotelier Central Reservation System and Guest Management Solutions.



We announced that travel agencies reserving Booking.com accommodations through the Amadeus Travel Platform can now choose to process payment using a wider range of virtual cards from Amadeus B2B Wallet.

HotelPlanner signed a new long-term agreement to deploy Amadeus Web Services, gaining access to the breadth and depth of hotel content available via the Amadeus Travel Platform.

Preferred Hotels & Resorts issued exclusive endorsements for Amadeus' Demand360, Agency360+ and Sales & Catering solutions, with additional recommendations for Amadeus' GDS, guest management, and service optimization solutions.

Aimbridge Hospitality, a leading multinational hotel management company, has exclusively endorsed Amadeus' full business intelligence suite.

We renewed our long-standing partnership with IHG Hotels & Resorts, meaning that the company will continue to exclusively recommend its properties the use of Demand360, Agency360 and RevenueStrategy360.

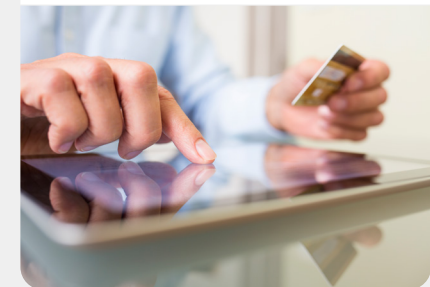
French hotel booking engine CDS Groupe contracted Amadeus Value Hotels. Also, as part of the extended partnership we signed with Travel Advisors Guild, its travel agencies gained access to Amadeus Value Hotels.

Dubai's Department of Economy and Tourism renewed its digital media partnership with Amadeus to continue to leverage the power of Amadeus' business intelligence solutions and media services on its travel advertising platform.

In November we announced that we applied to the Bank of Spain for an e-money license to provide regulated services in Spain and, subsequently, the wider European Economic Area. Amadeus' existing payments business became Outpayce, a wholly owned Amadeus company, with the transfer of assets and employees to the new entity taking effect on January 1, 2023.

We launched Amadeus Chargeback Management, powered by Chargebacks 911, which provides airlines with an automated and fully outsourced service to better manage chargebacks at scale.

We announced a new partnership with Uplift and Fly Now Pay Later, to bring BNPL capabilities to our payment services offering.



GRI 3-3 (R&D management)

Chapter 3

# Technology

● In this chapter

Leadership in travel technology	Distributed operations and data centers
A business-oriented organization	Green IT and energy efficiency
Technology centers worldwide	Security
State-of-the-art development	From open API to a platform-enabled strategy
An effective cloud-based architecture	Data analytics and business intelligence



## Leadership in travel technology



The travel industry’s reliance on technology continues to accelerate, with multiple channels and methods to interact with travelers and manage services. The challenges in 2022 of supporting the gradual return to pre-pandemic travel volumes have continued to drive technology advances with a major impact on travelers such as touchless passenger handling. For example, most travel providers use sophisticated methods for merchandising their products, evolving toward fully personalized offers covering all parts of a trip. This customization requires an understanding of traveler behavior that’s achieved through the analysis of large amounts of data. Artificial intelligence (AI) and advanced cloud-based data analytics are starting to play a critical role for providers and distributors to stay ahead in this very competitive industry.

➤ See p. 38, “Air IT solutions.”

As the wave of technology innovation continues to rise, we’re observing a trend of consolidation together with a strong flow of new entrants. This includes both start-up companies that can quickly build niche functionalities, and major technology companies expanding their existing portfolio of solutions into travel.

In this dynamic context, Amadeus enjoys a privileged position. We offer a large portfolio of travel-dedicated applications to the travel industry actors globally. This means that our platforms handle a rich set of functionalities, huge amounts of information, and historical data reflecting all kinds of travel situations, with an up-to-date view on industry trends.

We maintain and develop our technical leadership through a unique combination of capabilities:

- ➔ An engineering organization with deep knowledge and field expertise in all aspects of travel. This knowledge is the basis for our solutions and services.
- ➔ Extremely high-performance transaction processing under stringent system availability, security and performance requirements. All our applications evolve

**GRI 3-3 (R&D management)**

while ensuring a continuous service to our customers. In 2022 we processed over 100,000 user transactions per second at peak time in our main data center.

- Rapid response time for all functionalities from any point of access in the world, serving hundreds of thousands of simultaneous users, and a greater number of travelers connecting to the websites of our customers. This network of travel professionals and consumers forms one of the largest web ecosystems worldwide in terms of traffic.
- The management of very large databases with full transactional integrity, an essential factor in travel reservations.
- A true omnichannel approach, servicing all functionalities from a wide range of devices and interaction methods, such as agent desktops, websites, kiosks, cell phones, tablets and chatbots, as well as system-to-system integration via various application programming interfaces (APIs). Whatever the channel, our customers are all accessing common data records and processing them from a single set of community applications. Business rules enable our customers to carefully customize their services to meet traveler expectations.
- A combination of intellectual property rights (notably copyright, know-how, patents, trademarks and domain names) and appropriate intellectual property provisions in transactional agreements to protect our innovations.

[↗](#) See p. 75, “Diversifying innovation sources.”

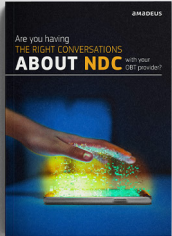
The ongoing move to a public cloud infrastructure will reinforce some of these capabilities, such as flexibility, scalability and performance.

These capabilities and assets combined with very close collaboration between our engineering and commercial organizations are critical to maintaining Amadeus’ position at the forefront of the travel technology industry.



GRI 3-3 (R&D management)

Amadeus research and thought leadership papers



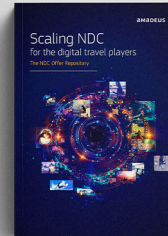
Are You Having the Right Conversations about NDC with Your OB T Provider?



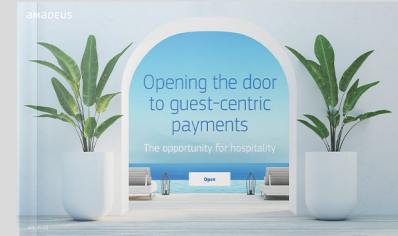
Rethink, Rebuild, Renew: Travel fintech investment trends 2022



Sustainable Business Travel in 2022 & Beyond



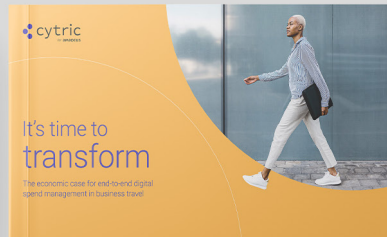
Scaling NDC for the Digital Travel Players: The NDC offer repository



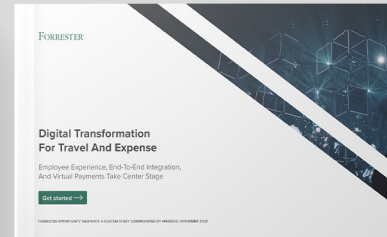
Opening the Door to Guest-Centric Payments: The opportunity for hospitality



Consumer Travel Spend Priorities 2022: How fintech is supporting industry renewal



It's Time to Transform: The economic case for end-to-end digital spend management in business travel



Digital Transformation for Travel and Expense



Digitally Driven Multimodality Can Supercharge Sustainable Growth of European Passenger Mobility



Air Transport Competitiveness Index in Latin America and the Caribbean

## GRI 3-3 (R&amp;D management)

## A business-oriented technology organization



In 2022 we followed the strategy defined with our Chief Technology Officer for delivering new capabilities. The Amadeus Technology Platforms & Shared Capabilities (TEC) entity provides the Platform-as-a-Service (PaaS) capabilities to the business domains so they can develop and eventually operate their applications.

The Amadeus engineering community is responsible for the development cycle, from design to delivery, as well as the operational coverage of our applications in production. Engineers' roles encompass product specification, software development, quality assurance, operational deployment/management and project management. During 2022 we continued to strengthen the engineering community embedded within the business units through the formal community structure. This enables engineers to continuously share best practices and knowledge across the whole of Amadeus while being focused on bringing value to our customers.

The TEC organization combines core technology capabilities and provides secure and stable platforms upon which customer solutions are built. These platforms include the core airline reservation, pricing and shopping applications that are common across Amadeus' main business solutions (our Global Distribution System (GDS) and our airline IT products). TEC also provides executive governance, quality management, development tools and Agile or traditional project methodologies across all businesses and customer segments.

These shared capabilities have the objective of enabling the engineering units to adapt to new realities, foster excellence and stay ahead of competition. They also help promote alignment, sharing and fast decision making and execution, based on pragmatic technology choices. To reach these goals, we're implementing an open platform model, accelerating our move to the cloud and actively developing an effective engineering unit with strong technical leadership.

The TEC organization leads Amadeus' technical research, whose goal is to understand traveler behavior and create a smarter, seamless and more sustainable travel

experience, leveraging digital data, computation power and AI. To that aim, we have an active academic collaboration program with several PhDs (e.g. on topics like price prediction or understanding customers' online behavior for searching and booking), as well as internal exploration (e.g. hardware acceleration, or APIs embedding AI in flight delay and travel recommendation processes). In 2022 we implemented a technology monitoring framework for the systematic identification, exploration and deployment of new technologies in our products.

➤ See p. 75, "Identifying and adopting new technology with our Tech Watch and expert services."

Recruitment for Amadeus' engineering teams is oriented toward incorporating a wide range of expertise and international cultures. Staff mobility, short- or long-term, is encouraged between both business expertise domains and geographical locations. Since 2015, Amadeus has promoted the expert career path to recognize the value of deep business or technical knowledge. So far, more than 180 people have been appointed as experts and specialists in all our critical functional and technical domains. Amadeus also offers numerous internships to top international schools, with formal recognition of their contribution in the form of an annual intern contest.

Investing in our people leadership remains a strong focus, and at the same time we're developing our individual contributors' career paths. Whether individual contributor or people manager, we've created bridges between the different jobs taking into consideration the roles within the Agile/SAFe<sup>01</sup> context. To adapt to IT market practices and to value IT skills that are a must for our engineering community, we've extended our Principal Engineer Ladder up to director level, and we continually review and revise role descriptions especially in highly dynamic areas such as security and data management.

1 Scaled Agile Framework: a set of organizational and workflow patterns that help enterprises in scaling Lean and Agile practices.

## GRI 3-3 (R&amp;D management)

## Technology centers worldwide

The Amadeus engineering community is organized as a network of technology centers across the world. These are composed of groups of engineers able to autonomously develop and maintain our solutions across the globe. The engineers based in these centers are either part of cross-site teams working on globally used products or provide local specialization. The localization is based on either technical expertise or deep local market knowledge relevant to our customers. In 2022 we've focused our teams on our customer's needs for the return of business.

All technology sites work closely together, and our projects and product development processes are increasingly distributed over several regions. Bengaluru (India) and Nice (France) are the largest technology centers, with single-site and global teams developing solutions for all our business units, as well as the TEC organization developing the core platforms and technology. We're operating dedicated technology teams in the same locations for key customers, for example at our Dallas, Dubai, Montreal, Tokyo, Seoul and Sydney sites. In 2022 we recruited new technology talents in locations such as Bogotá (Colombia), Istanbul (Turkey) and Sofia (Bulgaria).

Our platform engineering and operations group based in Erding (Germany) develops the operational tools and deploys the infrastructure in our data centers. It also governs Amadeus' growing public cloud deployments. In addition, it has full responsibility for operational support based on a follow-the-sun model, with dedicated specialist support groups in Australia, Germany, India, the United Kingdom and the United States. This distribution over strategic locations in different time zones ensures that round-the-clock service is guaranteed with the fastest response to any customer incident. As part of our technology transformation, we're progressively moving the applications from our proprietary data centers to the public cloud. This technical transformation is accompanied by an organizational transformation that's redefining our way of working as we move to the cloud. The organizational transformation encompasses people, tools and processes that cover the full management of systems, expanding the traditional development and operational activities to include security and financial aspects.

## State-of-the-art development methodology

Early in 2014 we started introducing Agile methodology into our software development activities.

Agile is a set of practices and collaboration tools mapping all phases of software development in frequent iterations (sprints) managed by small teams, instead of sequencing the specifications, coding, testing and delivery with a large organization. This methodology is now widely used in modern IT companies.

Cutting product development into smaller chunks gives better control over the progress of a project and, very importantly, ensures the convergence between functional specifications and customer requirements. It's also instrumental in leveraging the high modularity of our systems, allowing the applications delivered to our customers to share and reuse functionalities and technical components.

Since 2018, we've been embracing the industry-standard SAFe methodology. SAFe promotes collaboration and alignment for a very large number of Agile teams along the whole production cycle, from the product requirements stage to delivery. As it's a standard, it makes it easier to collaborate with customers and technology partners, and we even include customers directly in our Agile cycle. SAFe has been adopted as the global methodology for the whole Amadeus organization, including our commercial activities.

There's a clear focus on the value development cycle, connecting commercial functions more efficiently to the whole software development cycle, aligning strategy to execution and maintaining extremely high levels of quality. For Amadeus, this is a very beneficial investment, as we manage a large volume of features and functional evolutions for a wide range of customers. This year we continued to evolve our Continuous Integration/Continuous Delivery (CI/CD) systems, extending the automation and monitoring of the software production cycle, from programming to delivery. In parallel we use Lean Portfolio Management methods for product management. These practices align strategy and execution by applying Lean and systems thinking approaches, improving arbitration of priorities and budget allocation. A large proportion of our applications are now covered by CI/CD, leading to noticeable improvements in the overall delivery time of projects.

The last element of the software development cycle, which is actual deployment to production and operational management, has been addressed since 2018 by



## GRI 3-3 (R&amp;D management)

promoting and maturing a DevOps approach. DevOps is both a type of organization mixing development and operational skills, and a set of practices, procedures and tools covering application management in a production environment.

## An effective cloud-based architecture

Cloud-based architectures encompass a set of design practices and concrete technical implementations all aiming to provide the highest levels of flexibility, reliability, resilience, scalability and performance for very large systems. They promote an explicit separation and abstraction of the application, platform and infrastructure layers.<sup>2</sup>

The cloud capabilities provide a powerful solution to resilience and capacity management. Applications need only be up and running in one physical location to be available, and distribution across multiple locations can be managed easily. There are few limitations to adding (or reducing) the number of machines in each location where applications are executed. For business applications, this translates into the ability to handle extremely large volumes of data and processing with almost continuous system availability.

Amadeus' cloud model is flexible enough to support different types of applications. Applications that weren't initially designed for cloud deployment can be migrated with some adaptations but may only benefit from a subset of the advantages in this set-up. Designing applications specifically for the cloud allows us to maximize their value, whether it's the optimization of infrastructure costs, scalability, agility to deploy evolutions quickly or the optimization of operational costs through powerful automation. The cloud-native world, which is fostering small computing units called microservices, is also maximizing the reuse of components across applications.

As part of creating Amadeus' cloud-native application design, we've made considerable progress in the use of an event-based communication model between application components called Realtime Stream Processing. This means that as well as an application component being able to explicitly call another to execute a use case, the application is equipped with a nervous system of events, and any application component can react to any event in the whole platform. This enables powerful plug-and-play capabilities and offers great flexibility to implement service evolutions.

<sup>2</sup> These layers are often referred to as SaaS (Software-as-a-Service), PaaS (Platform-as-a-Service) and IaaS (Infrastructure-as-a-Service).

We've continued to increase the capability of our internal cloud platform and to deploy applications on it. This enables seamless integration of new cloud-native applications with applications hosted on our traditional platform. The cloud-native platform also simplifies the evolution of our traditional applications into a hybrid model to allow them to migrate smoothly to modern designs. The cloud-native design also enables us to integrate new managed services available directly in the public cloud from the cloud providers and other third parties.

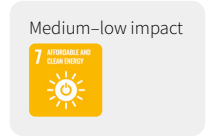
This year we incorporated the latest standards, technology and recommendations into our public cloud security design. We've also further automated our systems based on infrastructure as code and application blueprints. These improvements have established the foundation for large-scale migration to the public cloud, applying different models that ensure that critical services are highly resilient.

We may not re-engineer all our applications to be cloud-native as we relocate them to the public cloud over the next few years. However, our technical strategy is to ensure that any new project—or any new feature developed for an existing application—can be done in a cloud-native way.

With our investment in cloud-based architectures, Amadeus will be in the best position to propose advanced solutions to the entire travel industry and even beyond from a common core of services and data platforms.

GRI 302-5 GRI 3-3 (R&D management)

## Distributed operations and data centers



As Amadeus accelerates its cloud migration journey, data center operations continue to be a critical element of our strategy. Beyond cutting-edge functionality and features, capabilities such as continuous availability, sub-second response times and flexibility of deployment are becoming mission-critical business features for our customers. Response time is seen as a critical factor for adoption and conversion. Our customers need advanced security for safeguarding travelers’ personal and financial data, to build trust with their users and partners.

We deliver our services to customers from many locations—a combination of our private Amadeus Data Center, private clouds in remote locations, and public clouds such as Amazon Web Services, Google Compute Engine, Microsoft Azure and Salesforce.

This distributed operations approach delivers native redundancy of systems and dynamic capacity with on-demand models, supporting our commitment to high performance and, when applicable, regulatory constraints by moving our systems close to the customer location or in a designated country. As a key element of Amadeus’ strategy, we always maintain full oversight of all operations, irrespective of the nature and location of the physical server infrastructure. This is crucial for Amadeus due to our end-to-end responsibility vis-à-vis our customers. It also ensures we can execute required changes to our technical or operational frameworks without external dependencies or constraints.

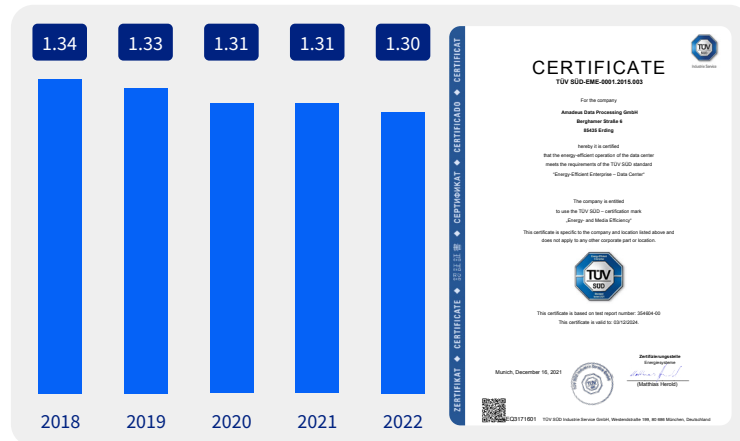
## Green IT and energy efficiency



Amadeus has always been focused on the energy efficiency of all its operations. In 2022 Amadeus continued to look into operational efficiencies and innovative approaches to further reduce power consumed delivering our services. Our global Green IT program not only focuses on the continued monitoring and energy efficiency improvements of the Amadeus Data Center but also on initiatives toward more sustainable software engineering. For the Data Center, we received Energy-Efficient Enterprise certification from TÜV SÜD for the first time in 2010 (the certification was renewed in 2012, 2015, 2018 and 2021 and is valid until December 2024) for its power supply, IT equipment and cooling and climate control processes, as well as its procurement, installation and de-installation procedures.

➤ See p. 96, “Environmental efficiency of Amadeus operations.”

### Data Center Power Usage Effectiveness and energy efficiency certification



GRI 302-5 GRI 3-3 (Cybersecurity and data privacy)

We also extended our Amadeus Data Center certification to EN 50600, the EU standard for data centers that's even broader in scope and more difficult to achieve.

In 2019 we achieved carbon neutrality at the Data Center thanks to the use of Guarantees of Origin of renewable energy, which we continued in 2022. This initiative has had a large positive impact on overall company emissions.

↗ See p. 97, "Data processing and software development."

Our ongoing investments in the Data Center have also resulted in the continued reduction of the annual Power Usage Effectiveness (PUE)<sup>3</sup> ratio from 1.49 in 2009 (when this value first began to be closely monitored) to 1.30 in 2022. According to the latest annual Uptime Institute<sup>4</sup> survey, the average PUE ratio for a data center in 2022 was 1.55.

## Security



Security is at the heart of Amadeus' systems in terms of application design and operations. Under the supervision of our Chief Information Security Officer organization, we continuously keep up to date with advanced security standards and IT industry best practices, securing our data, our products and our people, responding to incidents and achieving security compliance (e.g. ISO 27001 certification or SSAE 18 compliance).

We've been a member of the Aviation Information Sharing and Analysis Center (A-ISAC) since 2017, testament to our continued efforts to increase our customers' trust and to implement best practices.

<sup>3</sup> 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.

<sup>4</sup> *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.

Amadeus has taken the necessary steps to comply with the General Data Protection Regulation (GDPR) introduced in May 2018 by the European Union regarding data privacy. We continually assess the compliance of all our systems and processes pertaining to personal private information with the support of specialized consulting firms. Any areas of improvement that are identified are actively addressed.

↗ See p. 128, "Amadeus Group Privacy Office."

In December 2022 Amadeus renewed its certification for the Payment Card Industry Data Security Standard (PCI DSS) Level 1, the highest level for card processors. This standard pertains to the management of credit card payments with the highest measures of data protection.

Our ISO 27001 certification, the most internationally recognized security certification related to the management of information security, was renewed in March 2021, with a three-year validity.

↗ See p. 128, "Amadeus Corporate Information Security Office."

From a global operations and technology perspective, Amadeus relies on an independent security operations center (SOC) to monitor the security status of the services we provide to customers 24/7. This service also helps us understand emerging technical threats and invest in the most appropriate technology to mitigate new risks. The SOC covers the application development process, the Data Center infrastructure, employees' office activities and cloud services.

All Amadeus staff, regardless of function and location, receive continuous training on security and data confidentiality best practices. For technology divisions, this is complemented by dedicated sessions on application security, based on state-of-the-art practices known as Security Development Lifecycle (SDL) and on Defense in Depth (DiD)<sup>5</sup> for the protection of IT infrastructure.

With the adoption of new and disruptive technologies such as social networks, mobile, big data, cloud deployment and connected objects, Amadeus must protect its systems and customers from new types of vulnerabilities, cyberattacks and fraud. In 2022 we continued to deploy new tools and services to enhance our proactive capabilities for

<sup>5</sup> An information assurance approach that provides multiple layers of security.

## GRI 3-3 (Cybersecurity and data privacy)

the detection of potential incidents and our ability to respond to new fraud practices as they emerge.

## From open API to a platform-enabled strategy

Amadeus was the first GDS to introduce a structured API back in 2000 that later evolved to XML and web services. Today we expose more than 1,000 services out of our central applications, not counting the APIs exposed for the web front-ends and mobile applications. Our APIs power a large ecosystem of travel actors and are becoming a value-adding business in themselves, enhancing Amadeus' position as the reference source for travel services.

The objective of Amadeus' open API concept is to promote the business dimension of our APIs. Opening Amadeus functionality for collaboration with third-party services facilitates the creation of new generations of solutions. We can enhance our own services, leveraging our past investments, and customers can complement our services with their own custom development.

Amadeus for Developers is an open API program for start-ups, developers and non-travel businesses that enables users to directly access essential functionalities via simple online sign-up and freemium pricing.

Amadeus goes beyond the open API model with our platform strategy, for example the Amadeus Airline Platform. The concept of platforms is general to the industry and practiced by major players such as Adobe and Salesforce.

 See p. 38, "Amadeus Airline IT offer."

In 2020 we set out our vision and plan to extend this platform to a Platform-as-a-Service (PaaS), which we started to build in 2021 leveraging the characteristics of cloud environments (see previous section "An effective cloud-based architecture"). Our Technology Hub is the portal to this platform, giving access to a catalog of data, machine learning capabilities, microservices and more. Here all travel players (travel providers and travel sellers), as well as third-party partners, can autonomously access Amadeus' functionality to build their own, independent new services or complement Amadeus services. This is possible due to the characteristics of our open platform:

- Open development, enabling internal and external developers to create extensions and plugins for existing applications and to create new applications for integration with existing ones. This applies to both front-end (user interface) and back-end (microservice) developments using either traditional programming languages or advanced no/low-code logic.<sup>6</sup>
- Open data, enabling data sharing between Amadeus applications and external applications speaking the same "language" and allowing Amadeus data to be complemented with customer or partner data.
- Open integration, providing native integration with external platforms (Adobe, Salesforce, etc.), pooling Amadeus and partner functionalities for a seamless experience. The personalized retargeting solution that we created with Adobe in 2021 (allowing for the display of ads tailored to the user's needs based on their online behavior and purchase intentions) was built leveraging these capabilities. The solution provides platform-to-platform connectors to exchange data between airline systems and the Adobe Experience Platform so the airline can send the right message at the right time to the end consumer.

<sup>6</sup> A low-code development platform (LCDP) uses a graphical user interface instead of traditional hand-coded computer programming. This means faster delivery of apps as well as a wider range of contributors, not just skilled coders.

## Advanced data analytics and business intelligence



Our customers' expectations regarding offers and sales systems are very high. They don't want raw data, but insightful information on behaviors and patterns that can help them create the right offer to the right customers and boost sales conversion. They want to turn data into knowledge, and then use it to trigger actions in real time. This is what we call data-enriched transactions.

Amadeus has long been building data management applications offering our customers a comprehensive view of their travelers and the travel business environment. This entails capturing and analyzing a large amount of information about the traveler and the context in which they interact with the system—before, during and after a trip. Such massive amounts 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.

To support this growing need for data-driven applications, we're moving to a cloud-based big data platform. We're taking this opportunity to embrace a new paradigm called “data mesh,” based on the following principles: domain-driven ownership of data, data as a product and self-service data platforms.

These principles create a trusted data exchange network. Combining this with the data processing and AI capabilities available today will create plenty of opportunities for innovation and AI democratization, improving the range of our product offering. Our data mesh will form the foundation for many new data initiatives for Amadeus, our partners and customers, and will maximize the value of our data.

We apply these capabilities across all functional domains and customer types, and internally we use the data framework to capture and monitor the large volumes of technical data coming from the operation of our systems.

Our global data platform is capable of handling exceptionally large volumes of data, enabling predictive analytics, even on unstructured data. The results of these analyses are fed into our transactional applications to create data-driven services.

Our framework includes powerful data analytics techniques, some operating in real time, that are based on supervised and unsupervised machine learning, including deep learning algorithms coming from the AI domain. Current examples of the direct application of AI techniques include:

- Flight management to improve fuel load and optimize cargo
- Schedule recovery to rebook passengers affected by delayed or canceled flights
- Shopping and low-fare search products to minimize central processing unit (CPU) utilization
- Ancillaries dynamic pricing to maximize the revenue generated from ancillary services sales

Beyond the improvement of operational efficiency or improved revenue generation, these applications of machine learning help Amadeus and our customers become more energy-efficient and environmentally friendly.

[↗](#) See p. 106, “Environmental sustainability value proposition.”

We believe that our global approach to data and analytics is the basis for a positive feedback loop: the more data, the more relevant the pattern analysis, in turn feeding back transactions with contextual information and generating more data.

Chapter 4

# Innovation

● In this chapter

Nexwave

---

Strategic alliances

---

Fostering collaboration

---

Diversifying innovation sources

---

Technology to power innovation

---

Innovation to improve our processes

---

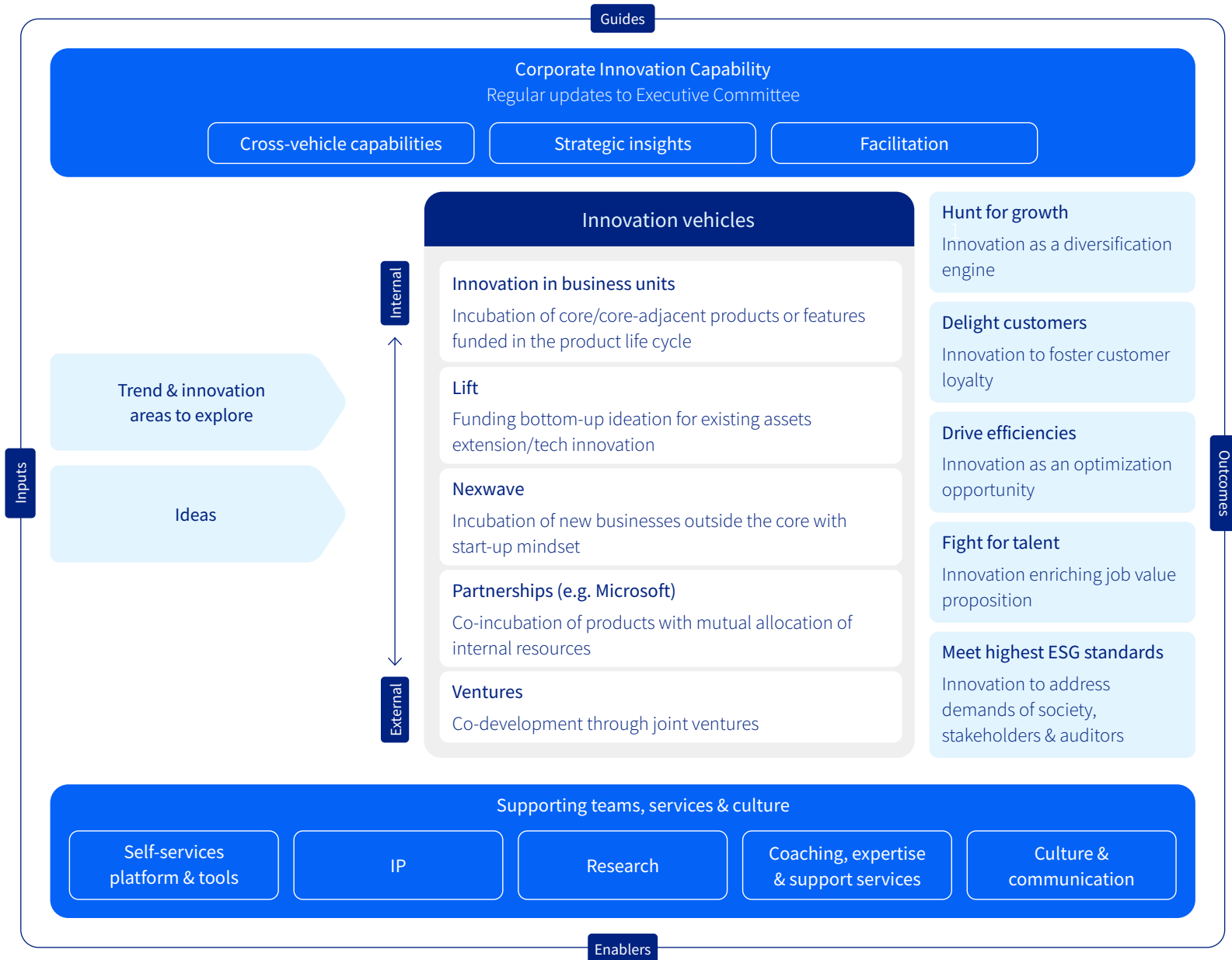


In 2022, as the industry recovered from the pandemic, Amadeus increased its focus on innovation to provide our customers with the best solutions, offer travelers the best experience and identify new areas of growth. We also use innovation internally to drive efficiencies, attract and retain talent and improve our impact on the environment and society. To achieve these ambitious goals, we've adapted our operating model, built stronger partnerships and maximized our technological capabilities.

Our revamped operating model allows us to share best practices across the company and capitalize on our successes and failures, and in turn reduce uncertainty, improve our competitiveness and effectiveness, and drive value for the industry in the shortest possible time.

These changes have materialized in an improved innovation portfolio, increasing the value of existing projects and creating new ones.





# Nexwave, the Amadeus business incubator focusing on traveler experience

As global travel resumes, we must begin to think about our sector anew, strengthening resilience by focusing on traveler needs and building a more collaborative industry. The mission of Nexwave is to identify, incubate and manage the next generation of Amadeus businesses that we believe have the potential to transform the traveler experience for today and tomorrow.

In 2022 we revised our incubation methodology, aligning it with the Lean Scaleup framework, better suited for business building in a corporate context. It comes with a supporting toolbox for incubation teams and an assessment scorecard for operational and executive governance.

In parallel, we accelerated the delivery of our innovation projects:

## 1. Amadeus Hey!

A digital travel assistant available via an API to accompany travelers at every stage of their trip with personalized and contextualized trip information and services. By automating traveler servicing, Amadeus Hey! helps travel companies increase customer satisfaction and reduce operational costs. During 2022 we launched a white-label digital travel assistant app, enabling travel companies to easily offer mobile conversational assistance to their customers. Also, we increased our customer portfolio onboarding to new customers—an online travel agency and a business travel agency.

Amadeus Hey! is also powering our B2C flagship product, CheckMyTrip, already used by millions of travelers. In December 2022 we launched a brand-new app experience for CheckMyTrip, with an embedded conversational assistant so travelers can not only quickly access all the trip notifications but also ask for assistance all along their journey.

## 2. Amadeus Traveler ID

A solution enabling travel companies to digitalize and automate the verification of traveler identity and documentation across the journey. Due to airlines' urgent need to streamline passenger processing and restore self-service check-in,

we proposed a solution to digitalize the verification of COVID-19 documentation. Amadeus Traveler ID is fully integrated into airlines' own channels and with the departure control system (DCS) that enables the automation. With 19 airlines in production, we managed to verify about 20 million documents in 2022! We also launched a new feature to verify passports automatically.

## 3. Amadeus Discover

A B2B platform to aggregate and distribute destination experience providers through new distribution channels. Since 2021, we've joined forces with the major French public investment bank Banque des Territoires and the data exchange platform Dawex to create Alentour, which distributes Amadeus Discover in France. In 2022 Amadeus Discover was used by major hotel brands, and has been made available to all developers around the world through our "Amadeus for Developers" API platform.

## 4. Amadeus Traveler Centric Platform

Initiated in 2021, an industry collaboration platform geared toward travel providers who want to share and access relevant traveler insights across verticals. In 2022 we worked with Microsoft to develop this cloud-based platform that enables travel providers to have a more comprehensive view of the different facets of a traveler's journey and offer more personalized products and services.

And we also started the incubation of two new businesses, in partnership with corporate venture builders:

1. **Loyalty for the Planet**, which motivates and rewards employees when making sustainable business travel choices
2. **Wander**, a middleware for car rental companies to offer a digital, seamless and convenient customer experience

Finally, when it comes to breaking the silos, Nexwave created the Travel Innovation Club in 2021 with other industry players and partners. It's a unique industry forum gathering leaders from all verticals of the ecosystem (airlines, airports, travel agencies, hotels, start-ups, tech players, etc.). In 2022 the club has welcomed new members and now includes more than 30 companies.



## Strategic alliances: co-innovating with our partners

Work with our partners on joint innovation has accelerated in 2022 and is resulting in tangible improvements for our customers, new business opportunities opening up and internal efficiencies. Among several partnerships supporting innovation, we continue to put a strong focus on our strategic alliances with the following three key players.

### Microsoft

Our partnership with Microsoft continues to support our journey to the cloud and is accelerating our joint innovation initiatives, which have almost doubled in the last year. Together we're working on empowering our joint travel industry customers' digital transformation and enabling them to use our shared technology to deliver purposeful travel to their customers.

Innovation areas that Amadeus and Microsoft are currently exploring include:

- Helping customers to use their own and their partners' data to deliver personalized experiences and more efficient business processes. A key product in this area, announced to the markets in October 2022, is the Airline Creation Platform.

[↗](#) See p. 43, "Helping airlines make their next move with confidence."

- Making search an inspirational, personal and immersive experience. Using Microsoft assets such as Azure Cognitive Services, we're enhancing our search capabilities to deliver more efficient multichannel customer acquisition and conversion for our customers.

- Expanding business travel into the day-to-day workflow of a corporation's employees. The headline initiative in 2022, now used by several customers, is Cytric Easy, the integration of Amadeus' Cytric solution into Microsoft Teams. Cytric Easy enables a new level of collaboration and is our first step toward adapting corporate travel to the post-pandemic world.

[↗](#) See p. 34, "Cytric Easy."

### IBM

Building on a long-standing business relationship, IBM and Amadeus signed a strategic partnership agreement in 2021 with the objective of connecting and better serving the travel and transportation ecosystem, by combining our deep travel industry expertise with the technical competencies and vertical industry experience of IBM.

After the initial project that integrated the IBM Digital Health Pass into our Amadeus Traveler ID health credentials verification solution, in 2022 both companies have continued to explore additional co-innovation in areas such as digital transformation, sustainability, natural language processing, machine learning and artificial intelligence (AI), and quantum computing.

### Accenture

Having worked with Accenture for many years, we've expanded our collaboration with our new strategic alliance. In 2022 Accenture helped us move Navitaire New Skies to the cloud, benefiting our customers with faster response time and increased system stability. Beyond airlines, we're now exploring opportunities in other areas such as hospitality, airports and corporate IT. With our renewed alliance we're improving the service to our customers, reaching new customers and offering more comprehensive end-to-end solutions for the travel sector.

## Fostering collaboration with the entrepreneurial ecosystem

### Amadeus Ventures

Amadeus Ventures is our corporate investment program established in 2014 to identify start-ups standing at the intersection of travel and technology. It has two main objectives: to establish a pipeline of business opportunities that can contribute to the future growth of Amadeus, and to support the development ecosystem of Amadeus' business units.

Investment criteria for the program include both financial considerations and the possibility of strategic collaboration where Amadeus, as a market-leading global technology company, can add value as a minority shareholder. The program not only tracks venture capital financial performance, but also actively facilitates commercial collaborations and co-marketing among our customers, Amadeus' business units and the active Amadeus Ventures portfolio companies.

Our Ventures team regularly talks to more than 300 start-ups per year, and 19 investments have been made under the program in the United States, Israel and Europe, in areas such as sustainability, travel data exchanges, VAT refund and identity management. Currently the program has 11 active portfolio companies and has exited 8 investments.

### Amadeus Startup Universe

To further foster visibility and interaction between established players and start-ups, Amadeus Startup Universe was established in 2018 as a catalog featuring start-ups and scale-ups worth promoting in our industry. Through increased exposure to new ideas from start-ups, we seek to contribute to the innovation efforts of our industry by exploring emerging technologies through field testing in real situations together with our customers in all travel verticals.



## Diversifying innovation sources

We believe that innovation is a great vector for staff engagement and talent attraction, and that great ideas can come from anywhere, including from outside the travel business and our traditional partners. We have several key initiatives in that spirit.

### The Lift program

The ambition of this program is to uncover growth opportunities by leveraging existing company assets or exploring the use of new technologies. The program improves employees' engagement, as it promotes their most promising ideas collected through a yearly campaign. The teams having submitted the most promising projects receive funding and support from innovation, business and technical experts to incubate their idea. In 2022 the selected ideas addressed domains as diverse as reducing airlines' digital resources consumption, exploring distribution via social media, and improving both search performance and personalization with edge computing.

### Hackathons

Hackathons are a great way to tap into the creativity of students and combine it with the expertise of our partners and customers and our own technology and solutions. At Amadeus we run such events regularly. Among those organized in 2022, we're particularly proud of the Sustainability Hackathon for Students, which saw some 700 students from around the world coming together to innovate and develop applications to contribute to a more sustainable travel ecosystem.

### Academia

Amadeus maintains close relationships with the academic world through formal partnerships with universities and research institutes (e.g. Inria, EURECOM, Université Côte d'Azur and MIT). This cooperation is leveraged for research projects including doctorates and research internships. In 2019 our main site in Nice became a founding partner of 3IA Côte d'Azur, one of the four Interdisciplinary Institutes of Artificial Intelligence that were created in France in 2019. Amadeus is also a founding member of the Industrial Council of Artificial Intelligence Research (ICAIR), where various companies and AI research labs exchange views on common issues related to the use of AI in their respective industries.

## Intellectual property

Intellectual property is a fantastic tool to protect our assets, retain talent and strengthen our leadership. At Amadeus we maintain a portfolio of intellectual property provisions in transactional agreements to protect our innovations as well as intellectual property rights, such as trade secrets, copyrights, open source and patents. A selection of our patents showing the inventors' names and an abstract of the innovation protected by the patent is displayed in prominent positions at multiple Amadeus sites to valorize this tangible contribution to Amadeus innovation. We also contribute to the development of open-source communities in the context of our partnerships with major IT vendors.

## Technology to power innovation

### Leveraging our open platform

Innovation requires a proper platform and development environment to access data for fueling new use cases and to combine functionalities for fast prototyping internally and with our partners. Our technology strategy and the characteristics of our open platform accessible through our Technology Hub answer this need, making it possible to share a catalog of open data and microservices across internal applications and with third parties, exposed via our open API and enriched with machine learning capabilities. This open development environment allows internal or external developers to easily develop extensions or plugins for existing applications.

[↗](#) See p. 68, "From open API to a platform-enabled strategy."

### Identifying and adopting new technology with our Tech Watch and expert services

Amadeus Tech Watch is a framework created to support strategic decisions, knowledge sharing, expertise recognition and innovation. With this framework, we define a strategic positioning for each analyzed technology, determine how critical it is for our business, support investment decisions and ultimately differentiate ourselves. It also improves knowledge sharing across the engineering community (and beyond) and fosters expertise recognition among employees who can influence Amadeus' strategy.

In addition, it's a source of inspiration and a way to identify opportunities to innovate, by addressing existing use cases with new technologies or building new forward-looking solutions.

We have specific expert services to support innovators:

→ **Data Science Shared Services**

A group of experts in the data science field, leveraging AI and machine learning techniques to support incubation projects, from hypothesis validation to prototyping and minimal viable products (MVPs).

→ **Foster AI**

A program that helps accelerate the adoption of AI across the company by leading various initiatives including training and improving processes and tools. In 2022 we also defined our internal AI ethics policies to address the emerging challenges and ethical dilemmas that AI raises, in particular in areas such as privacy, fairness, accountability and sustainability.

→ **Hands-on exploration of new technologies**

Including federated learning, natural language processing, AI-assisted coding, quantum computing and hardware acceleration.

## Innovation to improve our processes

An innovation approach and mindset serves our internal processes as well: whether looking at our ways of working in the product life cycle, or automating low-added-value tasks in support functions, our people always look to test new approaches to achieve their objectives. In 2022:

→ We strengthened our implementation of Continuous Integration/Continuous Delivery (CI/CD), a set of best practices and tools to automate and monitor the end-to-end software production cycle. A large proportion of our applications are now covered by CI/CD, leading to noticeable improvements in the overall delivery time of projects.

→ We launched a Robotic Process Automation practice. This program enabled the Hospitality business unit's operations to refocus their resources on high-added-value activities. It also helped absorb the increase of activities following

the recovery from the pandemic. From mid-2021 to mid-2022, it released 17,253 hours of repetitive tasks from the traditional workforce and promoted an innovative hybrid digital workforce. A robust value realization dashboard and solid return on investment allowed us to further pilot and deploy the capability to more corporate processes, such as purchase or finance, and additional business units.



Chapter 5

# Amadeus people and culture

● In this chapter

A caring company

Talent

Diversity and inclusion

2022 highlights

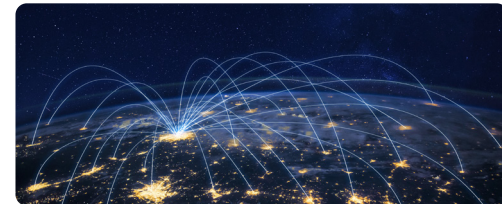
Amadeus' people are our greatest competitive advantage, and they're critical to the success of our strategy. The role of our People & Culture team is to make sure that we recruit and retain the best talent so we can deliver the best to our customers.

Our goal is to build a caring and inclusive culture in which diversity of perspective and background is valued. We provide an environment that appreciates each individual and gives them the best possible opportunity to have a productive, stimulating and enjoyable career, on equal terms.

We aim to embrace and celebrate difference, ensuring all our employees feel valued for who they are and the contribution they make. Our workforce is spread across 100+ offices around the globe, and 45% of our teams have members in more than one country. We encourage and support international mobility: more than 1,100 employees have moved countries to assume new roles and responsibilities through international assignments.



60+  
languages spoken



150+  
nationalities



GRI 2-8 GRI 3-3 (Talent attraction and retention)

Workforce by type of contract (FTEs)\*

	2020	2021	2022
Permanent staff	16,135	15,621	16,816
External manpower	527	678	1,003
Temporary staff	117	134	259
<b>Total</b>	<b>16,779</b>	<b>16,433</b>	<b>18,077</b>

Workforce by region (FTEs)\*

	2020	2021	2022
Europe	9,490	8,854	9,670
Asia-Pacific	4,021	4,344	4,927
North America	2,473	2,266	2,344
South America	497	621	752
Middle East & Africa	298	348	384
<b>Total</b>	<b>16,779</b>	<b>16,433</b>	<b>18,077</b>

\* 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.

## A caring company

Amadeus fosters a caring environment, seeking balance between a fulfilling career for our people and their personal and family life. We see ourselves as a community with inherent values of respect and sharing, and a significant focus on people. We have a culture of open, transparent and inclusive employee communications. Our goal is to help our people connect what they do individually with the company vision and strategy, to be more engaged in their day-to-day work and to build a sense of belonging to one global team.

Good communications drive performance: we inform our employees about our business strategy, our customers, the market and technology landscape and key events both external and internal. We work to make relevant resources and information accessible through a variety of channels: a weekly internal newsletter; an internal social network; regular town halls and staff briefings with our leaders; and two annual global editions of *Amadeus Live*, which nearly 7,000 of our employees watched in 2022. We build a sense of belonging by sharing stories that unite us as a global workforce with common values. And we work to empower our employees at all times by encouraging greater exchange, input and dialogue.

Thanks to this, 70% of our employees plan to continue working for Amadeus in three years' time.



85% of employees agree there is a **caring environment** in their teams according to our Engagement Survey



glasdoor



GRI 3-3 (Talent attraction and retention) GRI 3-3 (Health, safety and well-being)

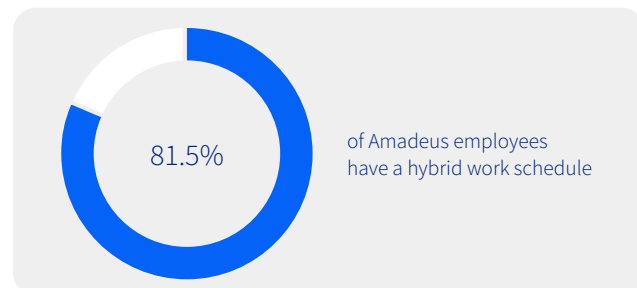
## Hybrid working model

We started reviewing our workplace guidelines in 2019 to address talent retention and attraction, employee performance, and cost and space optimization. The pandemic accelerated our plans of moving to a permanent hybrid working model, and in 2021 we started to gradually implement it site by site via local policies and guidelines adapted to local legislation, business practices, infrastructure and other existing policies.

Our goal is to balance business needs with flexibility so each employee can work at their best—giving them more options to combine working from home (WFH) with working from the office (WFO). Flexibility is a must both for employees and for the company. In 2022 we launched a Global Workation policy, allowing our employees to work from anywhere for up to four weeks per year—for example working from their hometown/country and closer to their families.

Technology plays a key role as the enabler of a hybrid set-up and for employees to stay connected. This means new sets of equipment; guidelines and support based on concepts of flexibility; collaboration; unassigned desks; diverse space types; and multiple ways of working. We're permanently assessing and testing new tools optimizing the way we work individually and collectively, both at home and in the office—from desk booking to socialization apps.

In this new model, the office becomes the place for socialization and collaboration, including a wider variety of settings as the proportion of space allocated to individual work is reduced. Space allocated to other settings varies according to the needs of the different communities. During 2022 the office guidelines adapted to hybrid working have been used in the design of many premises around the world (Singapore, Paris, Dallas, Miami, etc.).



Our annual workplace survey gathers WFH employee intentions and tool and office space preferences, taking this feedback into account as we refined local policies and guidelines. The benefits of this new global hybrid model are a new global employee experience, a more flexible hybrid set-up and a stronger focus on collaboration and innovation.

## Mental health first-aiders

Amadeus is firmly committed to a work environment where all activities are carried out safely, aiming to remove any identified risks to the health, safety and welfare of employees. This includes mental health. In 2020 Amadeus launched its first Amadeus Mental Health First-Aiders program in the United Kingdom, extended to Madrid in 2022. Through this program, Amadeus volunteers are trained in mental health first aid. This training allows the volunteer to recognize a range of mental health conditions and, when needed, guide a person to seek appropriate professional help.



GRI 3-3 (Talent attraction and retention) GRI 404-2

# Talent



Talent attraction and retention is crucial to the success of Amadeus. We continuously evolve some of our key people processes, including assessing and managing employee performance. We have processes in place that are simple, transparent and fully flexible, including constructive feedback, which is a powerful tool that we leverage through our IT systems. We also continue to strengthen our employer brand through corporate social media channels, and we use market-leading recruitment tools to broaden our reach and access to diverse talent pools. This means we're able to run campaigns targeted at key profiles required for business success, as well as provide a personalized experience for candidates.

We also continue to work on enhancing the candidate experience of our recruitment process. Virtual recruitment is here to stay, but we recognize that the human touch is still vital. We've adapted our competency-based interview training for virtual delivery, adapting to the new situations hiring managers, recruiters and candidates can expect.

## Learning and development

At Amadeus, we support the growth of our people with relevant and state-of-the-art learning and development opportunities. Learning at Amadeus happens all the time and in many ways: on the job, through formal learning activities and a variety of tools, and through day-to-day interaction with colleagues. Our people can also take advantage of several learning platforms such as LinkedIn Learning and Pluralsight. We also encourage mobility and exposure: we want our people to assume different roles, take on new challenges and seek greater depth within their expertise. Most of our people have worked in at least two departments or functions.



In 2022 we provided over 7,200 courses to 99% of our employees



In 2022 more than 2,800 employees completed over 5,800 courses from LinkedIn Learning and Pluralsight



In 2022 more than 550 employees moved internally from one department or team to another



GRI 3-3 (Talent attraction and retention) GRI 404-2

## Mentoring

Mentoring continues to be one of our most successful tools for developing employees. We delivered specific training sessions to upskill the participating mentors. We also continue to offer a variety of functional, local and regional mentoring programs across Amadeus covering different profiles and development needs—from technical to leadership roles, from junior to senior profiles. We also have specific mentoring programs for women.

## General learning and development opportunities

Amadeus employees benefit from over 2,500 blended learning opportunities, including face-to-face, virtual and online training sessions on soft and hard skills. Additionally, they have access to a large number of courses through external learning platforms, such as LinkedIn Learning, Pluralsight, Linux Academy and Microsoft's Enterprise Skills Initiative. Development programs for employees and managers at all levels are offered across the entire organization, spanning all businesses and geographical locations. Some highlights include:

- **An effortless learning experience.** Our aim is to provide an easy-to-access and always-on learning environment that offers a high variety of relevant learning opportunities. That's why we rolled out several online learning platforms such as LinkedIn Learning, Pluralsight and Linux Academy. All these user-friendly learning platforms offer state-of-the-art courses to enhance the development of specific skills. The Global Learning Hub on our intranet also provides access to learning offerings from all parts of the business.
- **Functional learning pages on our intranet.** Our SAFe Learning Hub and Cloud Learning Hub offer a wide variety of learning activities to further develop the skills and capabilities of our employees in alignment with Amadeus' strategic priorities.
- **Customized learning programs for business units.** Customized learning programs such as SAIL, targeted at commercial teams with the goal of upskilling them by improving their IT competencies, the CUS Academy and the CIT Campus, targeted at our people in Travel Channels and Corporate IT Customer Service, were created in alignment with Amadeus' business goals and organizational leadership and were integrated into the development planning and career development programs of the company's respective business units.

- **Leadership development programs and learning paths.** Our managers play a key role in enabling our teams to drive the future of travel. Our aim is to equip them with the skills and capabilities needed to be successful in the future workplace. We therefore developed six leadership and management learning paths in LinkedIn Learning for managers and senior managers, and we're currently in the process of reviewing and redesigning the leadership development programs for our assistant directors and directors.
- **Internal trainers community.** Our internal trainers play a key role in developing the knowledge and skills of our employees and in meeting Amadeus' current and future business objectives.

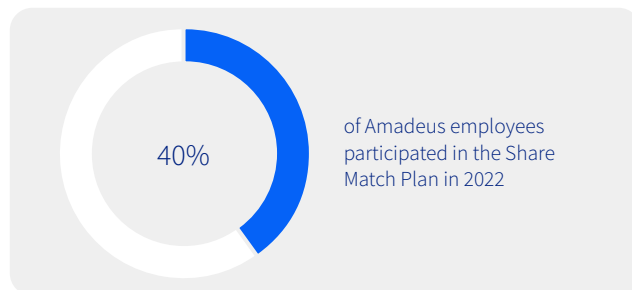


GRI 3-3 (Talent attraction and retention) GRI 3-3 (Diversity and inclusion) GRI 403-6

## A complete rewards offer

At Amadeus, we regularly benchmark our salaries against leading companies to make sure they remain competitive and equitable, and we make significant investments in fixed and variable compensation. Every Amadeus employee has the right to a fair compensation for their work. We're committed to remunerating employees in line with labor market best practice and local legislation. Our current compensation policies include global guidelines that are applied during our salary review process, ensuring fairness and equity across the different markets, and no discrimination based on gender and of minority groups. Our bonus scheme (Amadeus Performance Payment) is designed to both recognize individual performance and give all our employees a share in Amadeus' success. And 40% of our employees participated in the Amadeus Share Match Plan, a voluntary equity 'savings and match' plan that we offer to our employees, in 2022.

Amadeus is also committed to offering attractive local benefits packages, which typically include health and welfare insurance, retirement plans, life insurance and duty of care tools.



## Diversity and inclusion



Amadeus' culture promotes respect, fairness, equal opportunity and dignity for everybody, and allows our people to be the best version of themselves. We accept and respect differences and diversity of thought and experiences, and accept no discrimination based on age, gender identity/expression, race, ethnicity, beliefs, sexual orientation and disability. We continuously work to achieve an Amadeus where everybody can thrive, through constantly improving fair and transparent people processes and an inclusive culture.

In 2022 Amadeus appointed a new Head of Diversity and Inclusion, as part of the Global Employee Experience team in People and Culture. Work also started on including diversity and inclusion as part of the environmental, social and governance (ESG) framework of Amadeus. The strategies and goals for Diversity and Inclusion are governed by the ESG team and the People and Culture leadership team. The Head of Diversity and Inclusion coordinates a network of regional and country leads responsible for local implementation.

Some of our achievements in this area in 2022 include:

- Amadeus employee networks arranged more than 70 events around the world with approximately 7,200 participants on topics such as inclusivity in the workplace, gender equality, LGBTQIA+, multiculturalism, Indigenusness, women in tech, girls go tech, mental health, male allyship, disability and accessibility. Key People and Culture practices such as talent acquisition, rewards, growth, promotion and assessments were continuously reviewed during the year to ensure they provide equal opportunities for people of all backgrounds.
- Our globally accessible inclusion e-learning course continued its rollout, and on regional and local country level a multiple set of live and e-trainings on inclusivity have been used by managers and employees.
- We've continued to improve our communication to employees on diversity and inclusion topics via regular updating of local and regional pages on the company intranet, as well as bringing up the topics in town halls and employee information events.

**GRI 3-3 (Diversity and inclusion)**

- With the rollout of the HR system Workday, Amadeus became equipped with diversity data dashboards, allowing intersectional analysis and the opportunity to see trends and gaps for gender and age.

In 2022 Amadeus once again featured on the *Financial Times* Diversity Leaders list.

## Gender equality

Improving the ratio of female leaders has been on Amadeus' agenda for several years, with a continuous improvement of 3.2% per year. Nevertheless, efforts are ongoing, and the employee resource group Amadeus Women Network (AWN) keeps growing and providing important feedback to Amadeus' leadership and People and Culture team. The different AWN chapters around the world have also run mentoring programs and held networking activities with company leadership and with external leaders.

In 2022 the AWN also organized a global online event to acknowledge International Women's Day on March 8, discussing the United Nations' #BreakTheBias international theme to raise awareness on different types of bias, how they affect men and women in the workplace and what can be done to break them, and what everyone can do to create a more gender-equal and diverse society. More than 400 employees participated.

Amadeus strives to be a family-friendly employer, and in many cases we go beyond what local country social security schemes offer to parents—such as longer maternity, paternity and secondary caregiver leave or supplementary monetary compensation. For example, at our large sites in Spain, Nice, the United States and the United Kingdom, Amadeus ensures that our employees retain their full salary during their leave, going beyond the capped level of the stipulated government allowance. In Bengaluru, Amadeus offers all fathers 10 days of paid paternity leave, which is something the Indian government neither requires nor covers. In 2022 Amadeus UK added an extra four weeks of paternity leave with full pay, meaning fathers and/or secondary caregivers now benefit from six weeks in total, and Amadeus US and Canada enhanced their benefits to eight weeks of fully paid parental leave for new parents, including adoption, to all permanent employees at day one of hire.

In the effort to support women's health, the Amadeus UK office launched "Flourish," a reproductive health initiative for (peri)menopause, fertility and family planning benefits and policies for employees.

As part of our global collaboration with the United Nations World Tourism Organization (UNWTO), Amadeus was represented in the Women in Tourism Leadership for Africa Committee (WiTLAC). In 2022 the WiTLAC aimed to identify key priority areas to serve as a baseline for strategic activities and programs to reposition women at the core of tourism recovery in Africa. The objective of this working group is in line with the UNWTO Agenda for Africa: Tourism for Inclusive Growth, which identifies as one of its priority areas empowering youth and women through tourism.

In 2022 Amadeus initiated the process toward the 25by2025 commitment, a global initiative to change the gender balance within the aviation industry and raise awareness of the need to improve female representation, for and by International Air Transport Association (IATA) member airlines and strategic partners.

## LGBTQIA+ inclusion

A new chapter of Amadeus Proud was launched in North America, which means that the Amadeus LGBTQIA+ networks are present across the entire Amadeus footprint. This new chapter was welcomed to the community during the global online Pride event in June, which highlighted the importance of an LGBTQIA+ inclusive culture. Other activities throughout the year included a panel on microaggression, various networking opportunities and an awareness event on World AIDS Day. Further, the corporate travel tool Cytric by Amadeus was updated to support the use of "Gender X" for users who identify as other gender categories. In terms of contribution to society, Amadeus was again elected to the board of REDI (Red Empresarial por la Diversidad e Inclusión LGBTI), of which it is a founding member, which promotes best practice in the workplace for LGBTI diversity and inclusion in Spain.

In partnership with the Solidarity Foundation, our Bangalore office launched the Pride Café, a first-of-its-kind initiative in India, to empower the LGBTQIA+ community with livelihood opportunities and to build a more inclusive society. As part of this initiative, we sponsored 2 mobile food trucks that will employ 12 members each from the community.

The objectives of the Pride Café are:

1. To enable underprivileged members of the LGBTQIA+ community to build sustainable businesses that will increase their incomes and have a positive impact on their quality of life.

**GRI 3-3 (Diversity and inclusion)**

2. To showcase members of the community as contributors to the economy and thus change perceptions in society.
3. To create a robust model for future replicability in other locations.

The initial groundwork began in April 2022 when these objectives were identified and we began to work toward making this dream a reality. We also had the opportunity to have our CEO Luis Maroto and other senior leaders paint the mobile café during their India trip in June 2022.

Amadeus strongly believes in the potential of the Pride Café to become a successful commercial venture in the days to come, alleviating social exclusion and ensuring equality of access and employment conditions.

## Accessible travel, accessible workplace and disability inclusion

During the year, Amadeus France participated in several school outreach programs to mentor students with disabilities and promote employment. Amadeus accessibility teams also built internal awareness of the importance of inclusion through awareness sessions, coaching and the annual internal Digital Accessibility Forum to promote inclusive and accessible software development.

Amadeus France employees took part as ambassadors in the intercompany challenge Défi Sport Entreprises Handi-Valide, which brings support to people with mental or physical disabilities through adapted sports. Our team was composed of three Amadeus representatives and four external people with disabilities.

And eight employees and managers from our France office also participated in the Sport2Job event in Marseille, a sports initiative to support inclusion and employment for people with disabilities. Our employees teamed up with three disabled external candidates looking for a job or an internship, who were able to benefit from our people's guidance. The team made it to the podium!



During 2022 work continued on testing, developing and auditing the Amadeus Cytric Travel and Amadeus Cytric Expense modules to comply with Web Content Accessibility Guidelines (WCAG)\* 2.1 Level AA. Improvements were, among many, with colors, fonts, scalability, keyboard navigation, screen readers and feedback applications. The internal Amadeus testers with disabilities continuously validate designs and solutions.

\* Published by the World Wide Web Consortium (W3C) Web Accessibility Initiative, these guidelines provide recommendations for making web content more accessible to people with disabilities.

This is us!

Board of Directors

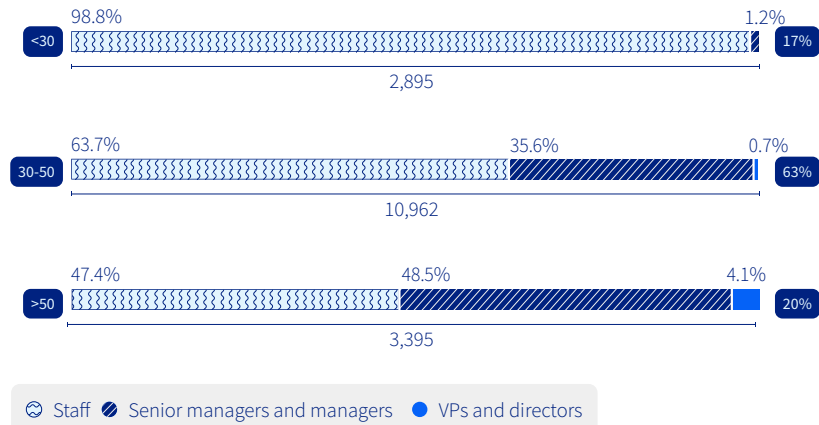
	2020	2021	2022
<b>Percentage by gender</b>			
Male	77%	58%	55%
Female	23%	42%	45%
<b>Percentage by nationality</b>			
Other than Spanish	69%	75%	73%

210

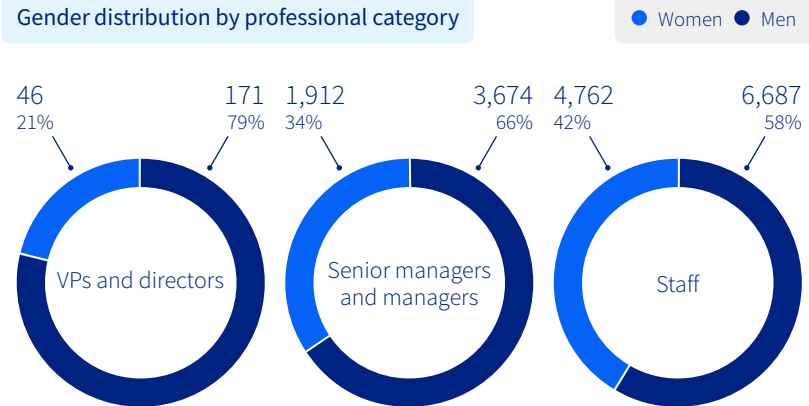
employees with disabilities in 2022



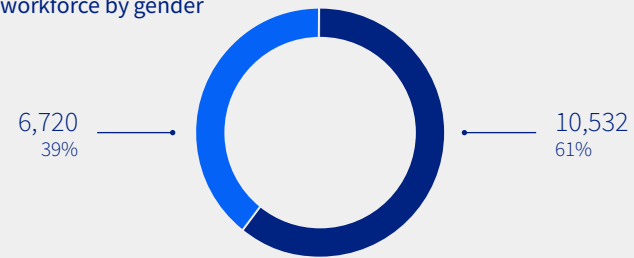
Age by management levels



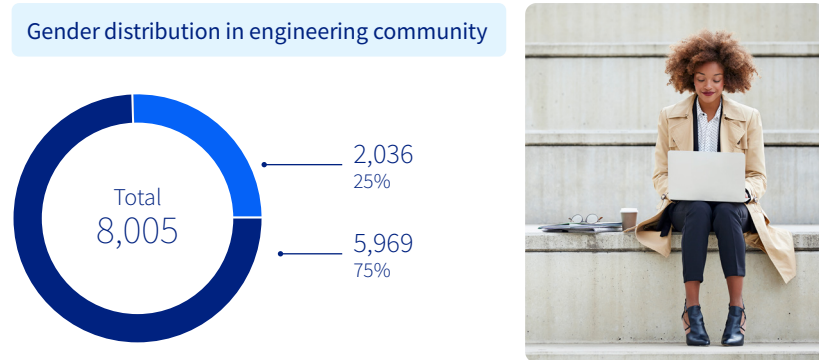
Gender distribution by professional category



Total workforce by gender



Gender distribution in engineering community



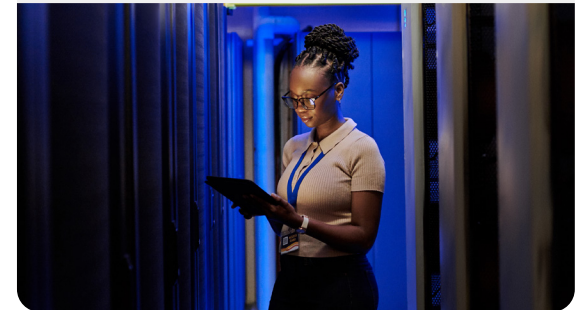
## 2022 highlights

Amadeus Bangalore initiated a “returnship” program to invite women back to the workforce post sabbatical (e.g. after a maternity leave), with the purpose of increasing women’s participation in tech and making sure that talent is returning to the tech market after longer leaves. This initiative gave the participants the opportunity to experience work life at Amadeus before deciding to join the organization. At the end of the six-month period, there was a skills assessment that resulted in the onboarding of 20 participants as Amadeus employees. The program, called “Udaan,” will continue in 2023.



The Amadeus office in Nice, one of Amadeus’ largest sites, launched the Diversity and Inclusion Ambassadors’ Network, with a focus on disability inclusion in the workplace. The network consists of 33 employees with the purpose of supporting their disabled colleagues, facilitating dialogue, promoting diversity and inclusion initiatives, sharing best practices, and participating in sport and recruitment events.

Amadeus’ Miami office launched a Women in Tech Co-Sponsorship program designed to close the gender gap for women in technology and to increase innovation through diversity of talent. Through this program, Amadeus sponsored two interns from underrepresented communities. Another highlight from North America is the adoption of several new holidays of diverse observances such as Martin Luther King Day, Juneteenth, Indigenous People’s Day, Veterans Day and the Canadian National Day for Truth and Reconciliation.



GRI 3-3 (Travel and tourism development through Amadeus' IT solutions) GRI 203-2

Chapter 6

# Social responsibility

**● In this chapter**

A responsible, inclusive and sustainable future

---

Our CSR achievements in 2022

---

Social Innovation Powers Good

---

Powering Good with Partners

---

Empowering Communities

---



## Building a responsible, inclusive and sustainable future for all



Our corporate social responsibility (CSR) purpose is to bring our people and technology together to help build a responsible, inclusive and sustainable travel and tourism industry. Travel can bring significant socioeconomic benefits for local communities. It has a direct impact on the long-term sustainability of destinations. This is why we focus on initiatives that contribute to the responsible development of travel and tourism through:

1. Maximizing the positive contribution that travel and tourism makes to society by engaging local stakeholders and creating opportunities for communities around the world through education and socioeconomic development initiatives.
2. Minimizing the potentially adverse impact of tourism on specific destinations by protecting biodiversity, cultural heritage and community spirit.

We continue to prioritize supporting our industry and our communities to enable the faster recovery of the global economy. We've consolidated three strategic global programs designed to meet our CSR purpose and social goals:

- **Social Innovation Powers Good**, delivering positive social impact through product and service innovation.
- **Powering Good with Partners**, joining forces with our stakeholders in collaborative initiatives to co-generate solutions with a positive social impact for our industry and our communities.
- **Empowering Communities**, fostering employee engagement to strengthen local communities and help them protect their natural and cultural heritage.

To increase our positive impact, we promote a collaborative approach to CSR. Amadeus occupies a unique position in the industry and partners with customers,

GRI 3-3 (Travel and tourism development through Amadeus' IT solutions) GRI 203-2

intergovernmental/nonprofit organizations, educational institutions, and public and private sector leaders to amplify the multiplier effect of our CSR projects.

We also play an active role in networks such as the United Nations Global Compact, Business for Societal Impact (B4SI), Fundación SERES and the Global Travel and Tourism Partnership (GTTP).



## Our CSR achievements in 2022

In 2022 we continued to consolidate our long-term CSR strategy to support the recovery of the travel and tourism industry. Our aim was to streamline our efforts toward strengthening our positive social impact worldwide. We focused on implementing our CSR vision through our three strategic programs, to support our communities and help the travel and tourism sector renew in a responsible, inclusive and sustainable way.

In 2022 CSR activities were rolled out in 71 sites (45 countries), where over 85% of staff are based. We worked with organizations to form long-term partnerships and collaborated on strategic projects that can have a greater impact on our beneficiaries.

Creating positive impact through social innovation is at the heart of what we do, and we worked with our partners throughout 2022 to leverage what makes us unique—our people and technology—to power good and to bring outcomes that make a difference. To name a few highlights:

- We ran the second edition of the Amadeus Scholarship Program, aimed at increasing the employability of students in the travel and tourism industry.
- We expanded the Travel4Impact network for European SMEs to increase their capabilities in sustainability and digitalization.

- We launched our annual Global Amadeus Volunteer Day, engaging over 2,800 employees in supporting their local communities and protecting their environments.
- We hosted the first online worldwide hackathon about sustainability in travel and invited around 600 university students to innovate and develop applications that contribute to a more sustainable travel experience.

### Examples of social KPIs achieved in 2022

	2020	2021	2022
Staff involved in projects	2,942	3,492	3,009
NGOs supported	74	87	161
Educational institutions supported	170	167	119



Amadeus' social commitment in 2022: contributing to local development through technology, people and global travel\*

What we've invested in the community

3.8M+

total value of community investment

35,829

hours dedicated by staff



What we've achieved as an outcome

3,009

staff took part in activities

220+

total number of projects

71

sites

300+

institutions empowered and supported

2M+

direct beneficiaries

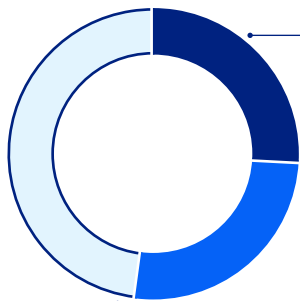
45

countries

Examples of how we've made a difference

Amadeus Scholarship Program

Of the surveyed students



26%

responded that the program helped them understand areas where they could improve their knowledge

26%

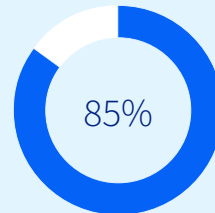
responded that they've improved their ability to use Amadeus technology and increased their employability

48%

responded that they've improved their ability to use Amadeus technology and feel prepared to apply this knowledge in future work opportunities

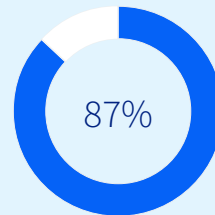
Amadeus Volunteer Day

Of the surveyed volunteers



85%

responded that they've improved their awareness of wider social and environmental issues



87%

reported an improved sense of well-being or happiness

\* Amadeus follows the B4SI (Business for Societal Impact) methodology for community investment calculation.

## Social Innovation Powers Good



This program promotes purpose- and impact-driven innovation. In 2022 we worked jointly with Amadeus stakeholders to support the ideation and development of new solutions addressing the social and environmental challenges of travel and tourism, and to meet the United Nations Sustainable Development Goals (SDGs).

### Engaging students and the innovation ecosystem in our social innovation efforts

Part of the social innovation process is the promotion of the right environment for new ideas to emerge. This year Amadeus worked to facilitate the participation of students and other players in the innovation ecosystem in the generation of innovative ideas to help solve the current social and environmental challenges of our industry.

#1AHACK4SUSTAINABILITY, the Sustainability Hackathon for Students, was the first online worldwide hackathon about sustainability in travel. We invited some 600 university students from around the world to innovate and develop applications that could contribute to a more sustainable travel experience. Students had the opportunity to brainstorm with leaders of some of the biggest players in the travel and tech industries and benefit from their insight and mentorship, including Microsoft, Air France–KLM, Etihad, Red Hat, MongoDB, the United Nations World Tourism Organization (UNWTO) and many more, as they coded on a cutting-edge, cloud-native platform to bring their ideas to life. More than 80 Amadeus employees participated in the hackathon as mentors, webinar speakers and jury members.

The Global Travel Hackathon Series promoted by Amadeus for Developers, in its fifth edition virtually in Brazil, also brought together more than 200 developers, entrepreneurs, designers and product professionals from the vibrant Brazilian innovation ecosystem in a competition to build innovative travel solutions with the potential to have a positive impact on the industry using Amadeus application programming interfaces (APIs).

## Promoting more responsible, inclusive and sustainable travel through our technology

Our social innovation efforts continued to focus on the protection of travelers' health, safety and well-being. We also helped the travel industry and our communities become more resilient by promoting the generation of ideas and the development of solutions for a more inclusive and sustainable travel ecosystem.

Digital travel assistants like CheckMyTrip have continued to send relevant and contextualized trip information and services for free to travelers all along their journey. In December 2022 we launched a brand-new app experience for CheckMyTrip, with an embedded conversational assistant so travelers can not only quickly access all the trip information but also ask for assistance all along their journey. In 2022 over 2.2 million users benefited from the CheckMyTrip digital travel assistance services. Moreover, the [Safe Place API](#) created in partnership with GeoSure provides safety and security ratings for over 65,000 cities and neighborhoods around the world. The API returns an overall safety score and scores for six categories: women's safety, health, physical threats, theft, political freedom and LGBTQIA+ safety.

Amadeus has also promoted inclusive and responsible travel through accelerating innovation projects or incubating new solutions. For example, Amadeus Discover enables tourism activity providers at destinations to gain more visibility with travelers and increase their bookings. Amadeus Discover facilitates access to a global distribution platform for SMEs and promotes local socioeconomic development. In 2022 Amadeus Discover was used by major hotel brands and was made available to all developers around the world through our Amadeus for Developers API platform. Additionally, we've started the incubation of new businesses such as Loyalty for the Planet, which motivates and rewards employees of companies when making sustainable business travel choices, thereby empowering them to become agents of change.

➤ See p. 72, "Nexwave, the Amadeus business incubator focusing on traveler experience."

## Powering Good with Partners



This program looks at joining forces with our stakeholders through collaborative initiatives to co-generate solutions that have a multiplier effect and increase our collective positive social impact. We continue to work together with our partners to further support our industry and communities.

### Partnering with our stakeholders to increase the positive impact of travel and tourism SMEs

To help our industry we also need to support our communities, enabling the people and organizations that rely on travel to survive and thrive. By engaging proactively with industry and community stakeholders, together we can build a travel ecosystem that's more responsible, inclusive and sustainable.

In partnership with IE University, an internationally recognized business university, and with the collaboration of UNWTO and other industry associations, in 2022 we launched the second edition of the Travel4Impact network for European SMEs to improve the competitiveness and positive social and environmental impact of small businesses within the travel and tourism ecosystem. This project aims to help rebuild our society and our industry through the creation and strengthening of a network of travel and tourism microbusinesses that see digitalization and sustainability as key elements of their value proposition.



The challenges we face require new ways of engaging with one another. Systemic change calls for collective action. Amadeus and IE University stand together to mobilize our many stakeholders to generate a sustainable future that doesn't leave anyone behind.

**Concepción Galdón, Director**  
IE Center for Social Innovation & Sustainability, IE University

### Working with customers and social partners to promote travel as a force for good

Amadeus recognizes that a sustainable recovery that safeguards our planet and our future prosperity needs to be central to the decisions we make. To continue with our commitment to the United Nations Decade on Ecosystem Restoration, Amadeus partnered with [Plastic Bank](#) in 2022 to fund the collection of over 100,000 kilograms of plastic from coastal areas to stop ocean plastic. By helping to offer safe, secure and traceable sources of income in exchange for plastic, we're also enabling collection community members to have an additional income and improve their quality of life.



We are proud to work with Amadeus to bring sustainability, circularity and regeneration into the travel industry. Travel is one of the world's most enriching experiences, giving access to new cultures, communities and ways of thought. By stopping ocean plastic and supporting collection communities in the world's most vulnerable coastal areas, Amadeus is part of the solution and not the pollution.

**David Katz, Founder**  
Plastic Bank

Our partnership with [Saving the Amazon](#) strengthened in 2022, working with customers to make our Amadeus forest bigger and stronger.

To support humanitarian aid relief efforts in Ukraine, we worked together with our global partners to amplify the positive impact of their programs to cover the basic needs of children, women and families in need.

## Partnering with customers and educational institutions to improve employability of travel and tourism students and professionals

In 2022 we offered some of our learning services for free to travel and tourism students and travel agency professionals, focusing on upskilling and increasing their job readiness.

To address the skills gap our industry is facing, we partnered with educational institutions and industry stakeholders to transfer our knowledge and expertise beyond Amadeus and promote inclusiveness in the local communities where we operate, through facilitating educational and employment opportunities in the travel and tourism industry.

Furthermore, in 2022 we ran the second edition of the Amadeus Scholarship Program. In partnership with 12 vocational training schools throughout Spain, students had the opportunity to access free training and obtain a certificate demonstrating they'd acquired the essential knowledge needed to work on Amadeus Selling Platform Connect within travel agencies. The program increased their employability and their preparedness for the job market.

In addition, Amadeus has been actively involved with the GTTP for over 20 years. This unique educational program introduces secondary school students to the travel and tourism industry and its career opportunities.

Amadeus' partnership with Plastic Bank commits to funding the collection and recycling of over **100,000 kg** of plastic



**1 Collect**  
Collection community members gather plastic within 50 km of coastal areas



**2 Reward & incentivize**  
Collectors receive a premium for the materials they collect, such as groceries, cooking fuel, school tuition and health insurance



**3 Empower**  
Plastic Bank provides classes to collectors on financial literacy and health education



**4 Renew & regenerate**  
Collected plastic is reborn as Social Plastic® and reintroduced into the supply chain

## Empowering Communities



This program focuses on engaging our employees in supporting social initiatives with a positive impact on the local communities where we operate. This year, our employees continued to support their local environments and communities through volunteering, fundraising and active citizenship initiatives.

### Meeting the needs of our communities and environments

Throughout the year, Amadeus helped local communities by identifying their needs under continued global challenges. Amadeus sites participated in a wide range of activities, such as collection drives to benefit the local community, and offered online basic technology training as well as career consultation. Our colleagues across the world also joined together to provide support to the people affected by the war in Ukraine. And in Australia, Amadeus raised funds for victims impacted by flooding, while our site in Bangkok continued to support its long-term partner Safe Haven Orphanage through multiple activities.

### Global Amadeus Volunteer Day

In this fourth edition of our Global Amadeus Volunteer Day, over 2,800 employees volunteered their time and talents to help their local communities through virtual, remote and face-to-face activities.

Leveraging our global partnership, Amadeus in Indonesia and Brazil volunteered with Plastic Bank, visiting their local sites and volunteering in waste collection activities. Our site in Colombia volunteered with another global partner, Saving the Amazon, planting trees to add to our thriving Amadeus forests. Our Bangalore site organized another successful Amadeus Volunteer Day where our people used their passion for doing good

in activities such as the Social Initiative Contest, where employees identified nonprofit organizations that would receive Amadeus support.

The volunteering week organized in our Madrid headquarters, championed by our senior leaders, contributed to various social goals such as supporting the unemployed, helping the underserved and protecting the environment. Employees in Nice also participated in several activities that contributed to social and environmental support. And our Erding site combined its love for sports and the environment to organize a cleanup, as well as a charitable run for the nonprofit organization Atmosfair, which offsets greenhouse gases.

Amadeus volunteers worldwide showed their commitment to helping their local communities with positive action.

### Green is the New Blue

Green is the New Blue was launched in 2019 as an internal engagement campaign to enable our people to share their ideas on how to promote a greener future. This year we invited our employees to share regarding their #GreenistheNewBlue transformational journey. Thousands of our people engaged in the campaign and shared updates regarding the changes they've made since the launch. The internal campaign was coupled with our global partnership with Plastic Bank that will collect over 100,000 kilograms of ocean-bound plastic on behalf of Amadeus.

Amadeus employees all over the world stepped up to do their part during our fourth annual Amadeus Volunteer Day, which ran throughout October and November.



In Spain, some employees volunteered with the Spanish Red Cross logistics center to sort items for humanitarian aid, while others took part in a job skills workshop helping young people improve their job searching skills.



Across the United States, our volunteers took part in various activities such as food drives to help their local communities.



Many Amadeus sites participated in green activities during Amadeus Volunteer Day such as planting trees and cleanups, extending the impact of Green is the New Blue.



Amadeus volunteers spent a day with Plastic Bank collection community members in Brazil and Indonesia, helping them collect plastic waste from the surrounding environment as well as learn about plastic management.



Chapter 7

# Environmental sustainability

● In this chapter

Environmental efficiency of Amadeus operations

---

Value proposition

---

Collaboration in industry environmental initiatives

---

Amadeus' sustainability credentials

---



Concerns over environmental sustainability—climate change in particular—have risen to unprecedented levels in the last two years, and are unlikely to wane in the foreseeable future. In contrast to previous health, financial or geopolitical crises that might have overshadowed the importance of sustainability, the COVID-19 pandemic has revealed the fragility of the travel industry ecosystem. Consequently, we need to rebuild it in a way that's stronger, safer and more resilient. There seems to be growing consensus that all of this can't be done without bringing sustainability to the top of the agenda. A collaborative approach is crucial to addressing the global sustainability challenge.

At Amadeus, we're involved in the travel experience of millions of passengers daily. We're an important player in the travel and tourism industry and we acknowledge our responsibility to contribute to the fight against climate change. Consequently, our environmental sustainability strategy is based on three pillars: (1) Responsibility: addressing the environmental efficiency of our operations; (2) Commitment: supporting our customers with our sustainability value proposition; and (3) Collaboration: with industry stakeholders in joint sustainability initiatives.

Amadeus has been a supporter of the Task Force on Climate-related Financial Disclosures (TCFD) since 2021 and follows its reporting recommendations. We've also been a participant to the United Nations Global Compact since 2018.

In 2022 we committed to developing science-based targets<sup>1</sup> to reduce greenhouse gas emissions in line with the objectives of the Paris Agreement. In addition, we anticipated the objective of reaching carbon neutrality<sup>2</sup> by 2025 instead of our original target of 2030.

1 The Science Based Targets initiative (SBTi) is a partnership between CDP (formerly Carbon Disclosure Project), the United Nations Global Compact, the World Resources Institute (WRI) and the World Wide Fund for Nature (WWF). Among other initiatives, the SBTi provides technical assistance and expert resources to companies who set science-based targets in line with the latest climate science.

2 For clarity purposes, the carbon neutrality objective refers to our Scope 1 and 2 emissions, it does not include Scope 3 emissions.

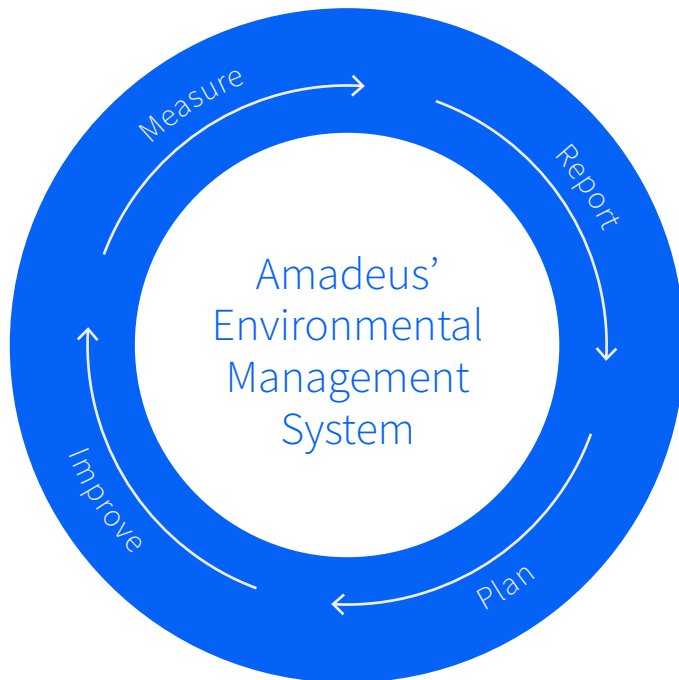
GRI 3-3 (Climate change) GRI 3-3 (Water) GRI 303-1, 303-2 GRI 3-3 (Use of IT equipment and other resources)

# 1. Environmental efficiency of Amadeus operations



The first step in addressing environmental sustainability is understanding the environmental impact of our operations and nurturing a company culture that prioritizes environmental impact.

We've been monitoring the environmental impact of Amadeus' operations since 2009 through our Environmental Management System (EMS). The main sources of impact from our operations are our data processing activity and the use of our office buildings across the world.



## Amadeus' Environmental Management System (EMS)

Amadeus' Environmental Management System (EMS) is the tool we use to measure, report and continuously improve the environmental performance of our operations, as well as identify best practices. Its scope and accuracy have been regularly enhanced to be in line with the evolution of the company and with external reporting guidelines.

### Material aspects of the EMS

Amadeus' EMS has identified five material aspects based on the relevance of each item, our capacity to influence performance and the expectations from stakeholders regarding reporting transparency and involvement:

1. **Energy use:** The most important component of our energy use is electricity. We measure electricity consumption at our Data Center and at our office buildings separately.
2. **CO<sub>2</sub> emissions:** We follow the Greenhouse Gas Protocol (GHGP)<sup>3</sup> standards to report CO<sub>2</sub> emissions. In 2022 we committed to setting near- and long-term science-based targets to reduce greenhouse gas emissions. As part of that exercise, we're expanding the reporting of our Scope 3 emissions to fully cover all relevant categories listed in the GHGP. We expect to finalize this exercise during 2023.
3. **Paper consumption:** We use badge-based printing devices to calculate the amount of paper we use. These automated systems permit precise monitoring and facilitate the identification of areas for improvement.
4. **Water use:** The use of water at Amadeus is divided into three categories: general use at office buildings, irrigation of green spaces and cooling of IT equipment.

3 The Greenhouse Gas Protocol (GHGP) is the most widely used international accounting tool for governments and businesses 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 from electricity use; and Scope 3: emissions released by third parties as a consequence of the use of their services, such as emissions from travel providers for business travel.



GRI 3-3 (Climate change) GRI 3-3 (Water) GRI 303-1, 303-2 GRI 3-3 (Use of IT equipment and other resources)

5. **Waste generation:** We generate waste at our premises from kitchens and general office use. The recycling and waste management companies providing services to Amadeus are the main sources of information for reporting this element. Waste generated by extraordinary activities, like works done in buildings, is generally measured, but reported separately from regular waste for comparability reasons.

## Geographical scope of the EMS

Amadeus has more than 100 offices across the world. Some of these workplaces are small, and it becomes inefficient to measure and report the impact of all of them in a direct manner. We've thus adopted a pragmatic approach whereby we report direct measurements in 14 of our largest sites (which represent more than 68% of the total Amadeus workforce worldwide) and then make an estimation of the impact of the remaining sites, based on the average consumption factors of the 14 sites. This methodology was implemented in 2018, broadening the scope of our reporting to 100% of our impact, and has been externally validated.

The 14 sites included in the direct reporting of the EMS are:

1. Nice, France
2. Bengaluru, India
3. Miami, FL, United States
4. Erding, Germany
5. Madrid, Spain
6. London, United Kingdom
7. Bad Homburg, Germany
8. Bangkok, Thailand
9. Sydney, Australia
10. Paris, France

11. Singapore
12. Manila, Philippines
13. Portsmouth, NH, United States
14. San José, Costa Rica

## Data processing and software development

The energy use at our Data Center is the single most important element of Amadeus' environmental impact, representing more than half of Amadeus' total energy use worldwide. Our strategy to minimize the environmental impact of our data processing and software development includes the following principal elements:

→ **Energy efficiency**, which involves monitoring and continuously improving the energy efficiency of our Data Center. We use industry-specific certifications like EN 50600 and metrics like the Power Usage Effectiveness (PUE)<sup>4</sup>. Over the last five years the PUE of our Data Center has declined slightly from 1.34 in 2018 to 1.30 in 2022. This is remarkably better than the 1.55 average PUE of the global data centers as per the latest annual Uptime Institute survey.<sup>5</sup> Since 2010, the Amadeus Data Center has maintained its Energy-Efficient certification from TÜV SÜD for its power supply, cooling and climate control processes, and IT equipment, as well as its procurement, installation and de-installation procedures, following a thorough analysis of our infrastructure. The certification has been subsequently renewed every three years and the current one is valid until the end of 2024. Further significant increases in the energy efficiency of our Data Center would require important infrastructure investments, which we'll achieve instead with our progressive migration to the cloud.

 See p. 66, "Green IT and energy efficiency."

<sup>4</sup> Power Usage Effectiveness (PUE) is a common metric used to measure the energy efficiency of data centers. PUE is determined by dividing the total amount of power entering a data center by the power used by the computing equipment within it. The closer to 1 the PUE, the more efficient the data center is.

<sup>5</sup> Uptime Institute (September 2021). *Uptime Institute Global Data Center Survey 2022*.

**GRI 3-3 (Climate change)**

- **Progressive migration to the cloud**, which is expected to improve the environmental performance of Amadeus' operations in various ways, including improved efficiency using advanced data center infrastructure designs, the more efficient management of peak loads with the flexibility obtained from the large-scale IT infrastructure provided by the cloud, and the reduction of wasted computing resources through an improved alignment of demand and server capacity. This allows more flexibility and scalability, reducing overall environmental impact per transaction processed.
- **Sustainable software engineering initiatives**, which includes continuous improvement in the use of energy and hardware through a systematic process of engaging with our developers, measuring performance, identifying areas for improvement and driving change.
- **Use of market-based mechanisms** to reduce greenhouse gas emissions that we couldn't eliminate with the initiatives above. This includes the use of carbon offsetting and Guarantees of Origin<sup>6</sup> of renewable energy. These mechanisms have helped us comply with our company-wide carbon-neutral growth policy set in 2016. Moreover, thanks to the use of Guarantees of Origin, the Amadeus Data Center has been a carbon-neutral facility since 2019.

<sup>6</sup> A Guarantee of Origin is an EU green label that guarantees that electricity has been produced from renewable sources. Guarantees of Origin are traded as a commodity.



GRI 303-1, 305-5 GRI 3-3 (Circular economy) GRI 3-3 (Water) GRI 3-3 (Use of IT equipment and other resources)

## Environmental targets and performance

The five material aspects of the EMS (energy, CO<sub>2</sub> emissions, paper, water and waste) are evaluated in absolute and relative terms, taking into account (1) number of employees, (2) number of travel transactions processed (to measure Data Center energy efficiency) and (3) revenue generated. These indicators have been monitored since 2009, allowing us to use historical data records to analyze trends and define targets.

### Short-term targets

Amadeus has developed a tailored methodology to condense into a single figure our environmental performance compared with the previous year. The methodology, summarized in the graph on the right, consists of:

1. The collection of more than 300 single data elements
2. The evaluation of performance versus the previous year
3. The weighting of the five elements included in the EMS
4. Factoring in company growth to balance the relevance of efficiency versus absolute targets
5. Leveraging the components of our operations, namely Data Center operations versus office buildings

Based on this methodology, in 2022 Amadeus improved its overall operational environmental performance by 11.93%. However, 2022 was an exceptional year in terms of growth, so comparison with 2021 isn't straightforward.

### Environmental targets and performance in 2022



GRI 3-3 (Climate change) GRI 303-1, 305-5 GRI 3-3 (Circular economy) GRI 3-3 (Water) GRI 3-3 (Use of IT equipment and other resources)

As explained in the publicly available document Amadeus Environmental Objectives and Performance 2022, the methodology above is designed for annual growth (or decline) scenarios of approximately 1–25%, in terms of number of employees, number of travel transactions processed and revenue. While Amadeus’ workforce grew by 6% in 2022, revenue and transactions processed grew by 68% and 82% respectively. Accordingly, the results achieved shouldn’t be used as the only performance indicator. For this reason, we’ve focused instead on some of the principal elements of our overall impact to better reflect our performance in 2022, namely energy use and greenhouse gas emissions.

The only greenhouse gas releases identified as material in Amadeus’ operations are CO<sub>2</sub> emissions. The table below shows yearly targets and achievement.

In Scope 1 we include emissions from natural gas, used mainly for heating purposes, and diesel used by a large generator to guarantee uninterrupted power supply at the Data Center.

In Scope 2 we include emissions linked to the use of electricity at our office buildings worldwide and at the Data Center.

The coverage of our Scope 3 reporting is currently expanding, and we expect to develop a full inventory before the end of 2023. Our Scope 3 emissions in 2022 expanded to cover more than 90% of our estimated business travel emissions. In 2021 we included business travel emissions from 13 of our main sites—in 2021 there was very limited business travel due to the COVID-19 pandemic. In 2022 we also included emissions from purchased paper and, importantly, we’re including emissions from purchased services of public cloud. These emissions have been estimated based on the reporting from our provider.

	2021		2022		Targets and results 2022	
	Gross	Offset	Gross	Offset	Gross	Net of offset
CO <sub>2</sub> emissions (t)						
Scope 1						
Direct emissions from fossil fuels	1,961	581	1,600	374	< 1,961	< 1,253
Scope 2						
Indirect emissions from purchased electricity*	11,767	-	11,552	2,697	< 11,767	< 9,043
Scope 1&2						
per employee (kg)	856	181	776	36	< 856	
Scope 3						
Indirect emissions from other sources	366	-	9,240	8,389		

\* The conversion factors applied, i.e. the amount of CO<sub>2</sub> emitted per kWh used, are obtained from the latest updated averages per country published by the International Energy Agency (IEA) in its data set IEA Emissions Factors 2022.

GRI 3-3 (Climate change) GRI 303-1, 302-4, 305-5 GRI 3-3 (Circular economy) GRI 3-3 (Water) GRI 3-3 (Use of IT equipment and other resources)

Overall, in 2022 the coverage of our Scope 3 emissions can be divided as follows:

- Scope 3 category 6 GHGP. Business travel: 8,389 tons of CO<sub>2</sub>
- Scope 3 category 1 GHGP. Purchased goods and services. Use of public cloud: 808 tons
- Scope 3 category 1 GHGP. Purchased goods and services. Paper purchased: 43 tons

As depicted in the table on the previous page, in 2022, despite the significant growth of our revenue and our workforce, we managed to reduce the total Scope 1 and 2 emissions. This was due to a number of energy efficiency measures and the general improvement in the efficiency use of our office buildings. In addition, we used market-based mechanisms to mitigate the emissions we could not avoid, as follows:

- We purchased Guarantees of Origin of renewable energy to avoid the release of 20,413 tons of CO<sub>2</sub> emissions at our Data Center
- We purchased 8,389 Certified Emission Reductions (CERs) from United Nations Clean Development Mechanism<sup>7</sup> (CDM) projects to offset 100% of emissions from business flights
- We purchased 3,071 CERs to partially offset our Scope 1 and 2 emissions to align our net of offset emissions to our 2025 target of reaching carbon neutrality

The table on the right shows our electricity use, our related short-term targets and our performance.

Amadeus' environmental performance in 2022 was marked by three principal elements. First, the progressive migration to the cloud. Even if the effects on the energy use have

<sup>7</sup> The United Nations' Clean Development Mechanism (CDM) is one of the market-based mechanisms defined in the Kyoto Protocol. The CDM facilitates investment in emission reduction projects in exchange for Certified Emission Reductions (CERs). One CER unit is equivalent to the reduction of 1 ton of CO<sub>2</sub>. The United Nations market-based mechanisms defined in the Kyoto Protocol stimulate sustainable development, address emissions in a cost-effective way and facilitate contribution by the private sector to emission reduction efforts.

been limited in 2022, the move to the cloud will be a fundamental component to making our operations more energy-efficient in the coming years.

Second, we've gone through an exceptional growth in revenue and in key billed transactions processed. Despite this significant growth, we've been able to keep our total energy use stable at 105 GWh. This was due to the efficiency of our data processing activities and the continuous and intensified implementation of efficiency measures in the use of energy and resources. Some of these initiatives are depicted in the infographic on the following page.

Third, we're scaling up our overall environmental, social and governance (ESG) ambitions, and many of our premises are intensifying eco-efficiency measures related to a variety of subjects, including commuting, teleworking, waste management and water use. Importantly, our Green IT initiative was launched (see the case study below) and the response from our community of engineers has been very encouraging.

	2021	2022	Targets and results 2022	
Energy use office buildings	43,994	41,623	< 43,994	-5.4% <span style="color: green;">✔</span>
Energy use Data Center	61,513	63,977	< 61,513	4.0% <span style="color: red;">✘</span>
Total energy use per revenue (MWh/€ million revenue)	39.5	23.5	-	-40.4%

All figures in MWh unless otherwise indicated.

GRI 3-3 (Climate change)

GRI 302-4, 305-5, 306-2, 303-1, 303-2

GRI 3-3 (Circular economy)

GRI 3-3 (Water)

GRI 3-3 (Use of IT equipment and other resources)

### Energy efficiency and CO<sub>2</sub> emissions

- Using switches connected to movement detection control systems.
- Reducing the time lights remain on after movement detection. Replacing incandescent bulbs with LEDs.
- Including energy performance clauses in our contracts with vendors, like at our Nice offices.
- Automatically switching off lights at certain hours.
- Using renewable energy in sites like our Data Center in Germany (through the use of Guarantees of Origin) and our offices in Manila.
- Thorough planning of areas covered by specific light switches.
- Renovating our office buildings to make them more energy-efficient.
- Implementing photovoltaic cells on roofs.
- At our London site, the LED lighting system regulates the intensity of artificial light according to the natural light available, and the photovoltaic panels on the roof have produced close to 82,000 kWh in 2022.
- Measures implemented at our Erding site to reduce gas consumption include the upgrade of the solar system for water heating, and the renewal of the gas burners and control system for heating, resulting in savings of 20% in gas use compared to 2021.
- Using Guarantees of Origin of renewable energy for the Data Center, saving 20,413 tons of CO<sub>2</sub> in 2022.
- Using shared transport facilities at our largest sites like Bengaluru, with an estimated reduction of 600+ tons of CO<sub>2</sub> annually. Our offices in Nice provide a shuttle service between the main sites to reduce our CO<sub>2</sub> footprint and traffic congestion.
- Purchasing carbon-neutral products and services from vendors.
- Launching of awareness campaigns to promote frugal consumption of energy.
- Installing a new Digital Addressable Lighting Interface (DALI) system to optimize lighting control at our premises in Nice.
- Improving thermal insulation, renovating energy recovery air handling units, and installing heat pumps on the roof in Nice. Estimated reduction of 530+ MWh per year.
- Facilitating commuting in non-fossil fuel transport modes in London, implementing bike storage for staff, and installing electric bike charging points.
- Launching initiatives to reduce the impact of business travel, including offsetting 100% of emissions from flights using Certified Emission Reductions (CERs) from the Clean Development Mechanism (CDM); purchasing of limited amounts of sustainable aviation fuel (SAF) in partnership with airline programs and encouraging frugality in travel, e.g. by sharing transfers among employees.

### Waste generation and circular economy

- Globally implementing badge-based printing systems that reduce paper used, in addition to other benefits like improved confidentiality. This is the most successful initiative to reduce paper overall.
- Setting all printer defaults to black-and-white, double-sided printing.
- Using recycled paper when possible.
- Sending used paper for recycling.
- Broadly implementing electronic signatures for contracts, significantly reducing paper copies printed, courier usage and overall time taken to review and sign documents.
- Carrying out global marketing efforts to reduce paper use in advertising, using digital means instead.



- Implementing a proper infrastructure to promote classification of waste.
- Replacing individual workstation bins with common area bins to reduce waste.
- Eliminating the use of plastic as much as possible. Replacing single-use plastic and paper cups with reusable glass or ceramic mugs, incentivized at sites like London or Madrid through discounts.
- Working with vendors that collect waste to improve its measurement and management.
- Donating and recycling office furniture and electronic equipment.
- Progressively eliminating desk phones.

### Water use

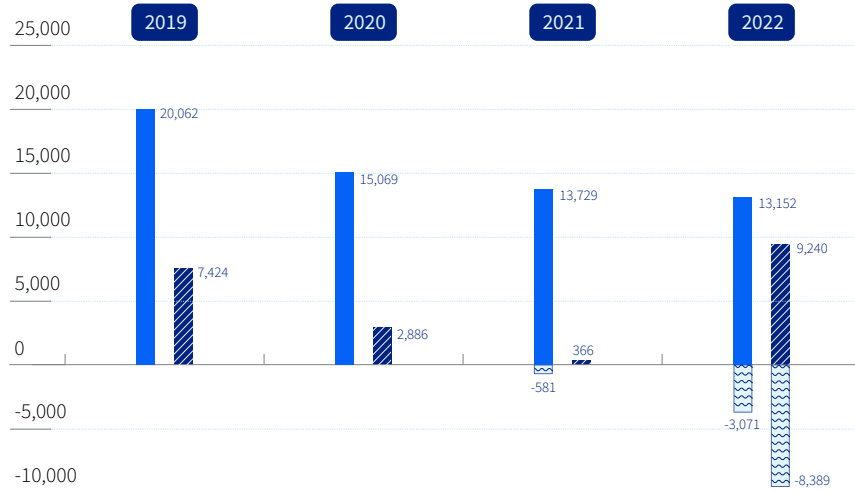
- Implementing motion sensor taps, water flow regulators and aerators in bathrooms to optimize consumption.
- Using drip irrigation systems and plants with low water consumption.
- Using water-efficient dishwashers in kitchens.
- Implementing leak detection units to reduce water loss.
- Using advanced condenser systems to avoid water waste in the cooling system due to condensation.
- Harvesting rainwater from the rooftop for various uses in our buildings in sites like Sydney.
- Installing waterless urinals in our London offices, with an estimated annual water saving of over 2,100 m<sup>3</sup>.
- Renovating water pumps, improving energy efficiency with estimated savings of 1,000 m<sup>3</sup> of water and 70 MWh at our Nice site.



GRI 3-3 (Climate change)

CO<sub>2</sub> emissions | t of CO<sub>2</sub>

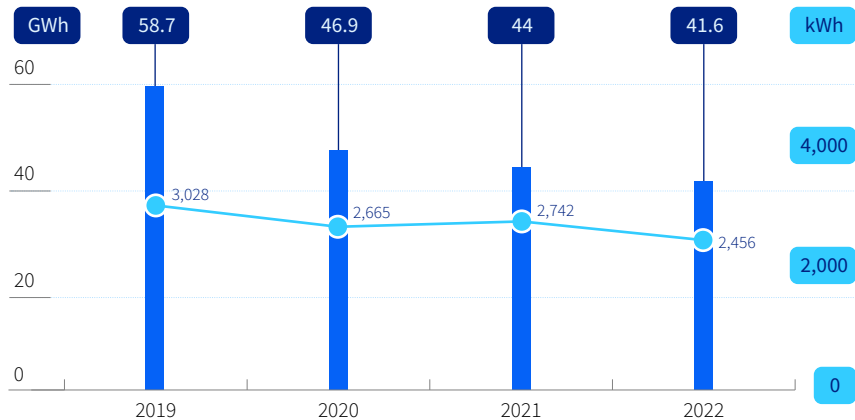
● Scope 1&2 ● Scope 3 ☹ Carbon offsetting\*



\* In 2021 we offset 581 t of CO<sub>2</sub> with Certified Emission Reductions (CERs) from Clean Development Mechanism (CDM) projects, to compensate the increase in our Scope 1 emissions compared to 2020. In 2022 we offset emissions from business air travel (8,389 t of CO<sub>2</sub>, Scope 3) and the proportion of our combined Scope 1 and 2 emissions (3,071 t of CO<sub>2</sub>) required to meet our commitment on carbon neutrality by 2025 progressively, with the baseline year of 2021.

Electricity

■ Total electricity consumption ● Electricity per employee



Long-term targets

The continuous improvement of the methodology explained above has led over the years to remarkable results. For example, since the implementation of this methodology more than a decade ago, we've reduced by almost 50% the energy used per employee and by more than 80% the paper used.

Regarding climate change, in 2016 we implemented a carbon-neutral growth policy that we've maintained since then, thanks to a large extent to the implementation of energy efficiency measures at our Data Center and to the use of Guarantees of Origin of renewable energy.

In 2022 we committed to anticipating the date for reaching carbon neutrality from the original target of 2030 to 2025. This objective includes Scope 1 and 2 emissions, and the plans to achieve this objective are principally based on the use of renewable energy, the progressive migration to the cloud and the use of carbon offsetting as the last alternative, in case the objective can't be met with the other initiatives.

In 2022 we also formally committed to the Science Based Targets initiative (SBTi) to set near-term and net-zero (long-term) science-based emission reduction targets.

Amadeus long-term climate targets

Carbon-neutral operations by 2025

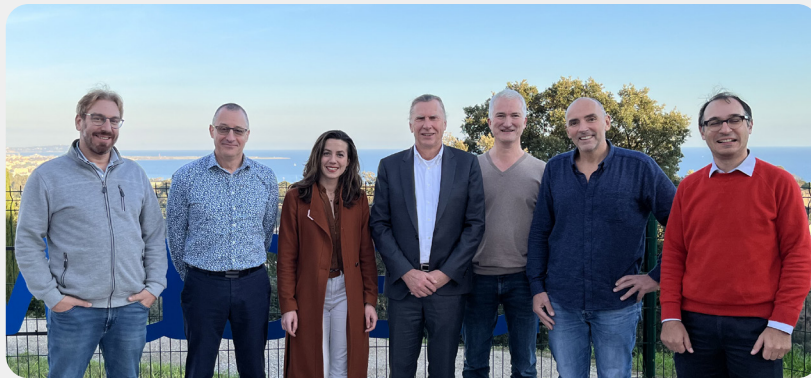
Committed to setting science-based near-term and net zero targets

## Project Helios

### One step further toward our buildings' sustainability

Facing high energy prices and animated by a strong desire to do our part for a better planet, Amadeus France is exploring options to reduce our overall energy consumption and increase the use of renewable energy.

Employee engagement and commitment are distinctive elements of Project Helios. The project is driven by more than 50 volunteers from our Nice-based 4,000+ engineers and led by Amadeus France President Denis Lacroix. The project is split in four streams to address complicated technical, economic and administrative topics:



The Helios Project leading team, from left to right: Eric Felten, Philippe Conrardy, Léa Dalian, Denis Lacroix, Eric Canamas, Hervé Schimmerling, Jean-Chafic Hays.<sup>8</sup>

- **Stream 1:** Analysis of **current and future energy needs and energy efficiency**. We analyzed our buildings' thermic performance and the energy efficiency of our current equipment. Then we looked for ways to save energy everyday through optimization and the adoption of best practices. Finally, we did a projection of our energy needs over the next decade to find the most suitable solution.

<sup>8</sup> Missing in the picture but also part of the team are Benedicte Rachet and Corinne Jolesse.

- **Stream 2:** Identification of **renewable energy options, prioritizing our own production**. Having studied wind turbines and some less-conventional options such as biomass energy, the stream rapidly zoomed in on photovoltaic panels: we have plenty of available rooftop panels, and 300 days of sun a year. In addition, some unique and promising options were identified, such as geothermal heat pumps; test drills are underway to check viability.
- **Stream 3:** Analysis of **financial solutions** to support the necessary investment. Based on the analysis of our current contracts and several models for mid- and long-term energy costs, we built three businesses respectively focusing on thermal renovation of our buildings, equipment renovation and photovoltaic panels. Although having a good return on investment wasn't specifically a goal, this metric was used to rank all potential initiatives.
- **Stream 4:** Review of **regulatory requirements and related funding options**. Amadeus Nice must comply with a national regulation that mandates a reduction in energy consumption of the French tertiary sector: all things being equal, by 2030 we need to achieve a 30% reduction of our 2016 energy consumption, and 60% by 2050. We've engaged with the appropriate local authorities as well as Ademe, a government agency tasked with supporting us and possibly funding part of the required investment.

A participatory and innovative concept, **Project Helios** entered the 2022 ARSEG\* competition, where it was awarded second place in the category New Building & Work Environment Concepts.



What makes Project Helios so special is its one-of-kind model of collaborative study. I warmly thank our 50+ volunteers and our Nice Buildings & Facilities expert team.

**Denis Lacroix, Senior Vice President, Core Shared Services Research & Development  
Amadeus**

\* Directors' Association for Facilities Management, the only representative of Work Environment's professionals in France.



**Green IT**

Our Green IT initiative was launched in 2022 as a major element of our strategy to address the environmental footprint of Amadeus' operations. Energy efficiency and the reduction of greenhouse gas emissions from our IT operations have become a sustainability imperative and a requirement from our customers, investors, employees, regulatory bodies and partners.

We aim at making green software principles a fundamental part of our engineering practices and habits. To that effect, in 2022 the Green IT initiative has focused on four axes:

1. **Driving cultural change across Amadeus' engineering community**, notably with the deployment of Climate Fresk workshops.<sup>9</sup> These were facilitated by a group of 35 Amadeus employees who trained 1,500 Amadeus engineers during 2022, with a workshop satisfaction rate of 4.7 out of 5.
2. **Engaging our engineering community in green practices**, using the latest standards of green software science. Amadeus is the first travel industry player to become a member of the Green Software Foundation (GSF)<sup>10</sup>. GSF expertise was instrumental in building Amadeus' green software practitioner kit, including Amadeus-specific engineering guidelines.
3. **Measuring and monitoring the footprint of our cloud applications** and leveraging the CO<sub>2</sub> reporting capabilities of Microsoft Azure.
4. Supporting, encouraging and **promoting actions toward the continuous optimization of our applications**.

<sup>9</sup> Climate Fresk workshops are three-hour collaborative educative workshops that invite participants to think about the causes and consequences of climate change. Climate Fresk is an NGO that promotes climate education and shared understanding of the climate change challenge.

<sup>10</sup> The Green Software Foundation (GSF) was created by Microsoft, GitHub, Accenture and other technology companies, and explores the science of green software and builds a trusted ecosystem of standards, tooling and best practices for green software.

## Amadeus Flight Search computation power reduced by 20% in 2022

Amadeus Flight Search engine processes thousands of flight search requests per second. Delivering the best answers to these requests requires intensive computation power and continuous optimizations as, behind the scenes, the search engine evaluates and combines thousands of itineraries and billions of prices while considering complex restrictions and numerous search criteria.

In 2022 the computation power required by the search engine decreased by 20% thanks to a series of algorithmic optimizations and to the implementation of profile-guided optimization (PGO), an advanced technique to improve computer power usage efficiency based on the running behavior of one application.

These initiatives allow an energy saving equivalent to 510 servers (28,560 central processing unit (CPU) cores)—an estimated cost reduction of €5 million annually and an avoidance of 2.35 tons of CO<sub>2</sub> emissions per day.<sup>11</sup>



As we launched the sustainable engineering initiative, our first focus was to foster a sustainability mindset. Thanks to our 35 volunteer trainers, we've trained 1,500 engineers through the Climate Fresk initiative.

**Virginie Corraze, Associate Director, Engineering Quality & Sustainability  
Amadeus**

<sup>11</sup> Estimation based on [green-algorithms.org](https://green-algorithms.org) methodology.

## GRI 3-3 (Climate change)

## 2. Environmental sustainability value proposition



We acknowledge that the travel industry is energy-intensive, and as a technology provider it's a fundamental part of our sustainability strategy to develop technology solutions that help travel providers reduce their impact. Quantitatively, this is much more relevant than any initiative to address the direct impact of our operations.

Amadeus invested €1,017 million in R&D projects in 2022. We develop technology solutions that help improve the operational efficiency of customers, and this improved operational efficiency is linked in many cases to environmental efficiency improvements. The environmental benefits of Amadeus solutions expand to a wide range of stakeholders in the industry, including airlines, airports, travelers and cities.

 See p. 10, “Corporate performance.”

In 2022 we have planned the implementation of transversal services covering the display, reporting and offsetting of emissions, with the objective of implementing these in the full range of Amadeus distribution solutions in a consistent manner. We've also worked with innovation teams for sustainability solutions in areas like incentive programs to motivate and reward employees for sustainable travel choices. In June we announced our venture investment in Choose, a climate-tech company that integrates climate action options into the customer experience.

We embrace a holistic approach, with the ambition to provide environmental improvements at the five stages of the travel cycle:

1. **Inspiration:** Using advanced algorithms that estimate demand and analyze the risk of disruptions, Amadeus Sky Suite helps airlines make fundamental decisions related to airline networks, flight frequencies and equipment, reducing the use of resources (fuel, aircraft, airport infrastructure, etc.) per passenger flown. In addition, information on estimated CO<sub>2</sub> emissions per passenger flight is included in some of Amadeus' distribution platforms. The source of information for the

estimations of emissions is the International Civil Aviation Organization (ICAO)'s carbon calculator, and we're looking to expand to cover other sources and means of transportation.

2. **Booking:** During the booking phase, some Amadeus solutions offer the possibility of obtaining CO<sub>2</sub> emissions estimations for different itineraries. Travelers can then incorporate CO<sub>2</sub> emissions as an additional element into their booking decision-making process, together with traditional parameters like schedules, availability and fares. Our corporate booking tool, Cytric, offers sustainability features including sustainability policies from corporations, helping travelers make informed choices by comparing for example air and rail options, filtering by carbon emissions.
3. **Pre-trip:** Amadeus Airport Sequence Manager permits improved planning of aircraft movements at airports' runways and provides a sophisticated aircraft slot assignment, helping airports and airlines reduce their environmental impact by minimizing the amount of time aircraft spend taxiing on the runway. If such solutions were to be implemented at the major airports of the European Civil Aviation Conference, the European Union estimates savings of over €120 million in fuel costs and a reduction of more than 250,000 tons of CO<sub>2</sub> emissions.<sup>12</sup> Amadeus Airport Common Use Service helps reduce energy consumption at airport buildings by reducing the amount of IT infrastructure required at airports.
4. **On-trip:** Amadeus Altéa Departure Control – Flight Management helps airlines accurately estimate the fuel needed for a specific flight, using sophisticated algorithms and historic data. The precise estimation of the aircraft's weight before the fuel is loaded (zero-fuel weight) permits significant savings in fuel burn, emissions and economic costs. In this respect, a study carried out by Amadeus in conjunction with its customer Finnair analyzed more than 40,000 flights and concluded that a mid-sized carrier can save a minimum of 100 tons of fuel and more than 315 tons of CO<sub>2</sub> emissions per year. Assuming that a similar level of savings is achieved by all our customers using the same flight management solution, the amount of CO<sub>2</sub> emissions thus reduced would exceed the total emissions associated with Amadeus' operations (Scope 1 and 2). Amadeus Schedule Recovery helps airlines make rapid decisions in moments of operational

<sup>12</sup> Eurocontrol (European Organization for the Safety of Air Navigation) (2008). *Airport CDM Cost-Benefit Analysis*.

GRI 3-3 (Climate change)

disruption. It enables them to improve operational efficiency and customer service while minimizing negative environmental impact by finding optimum solutions for each disruption.

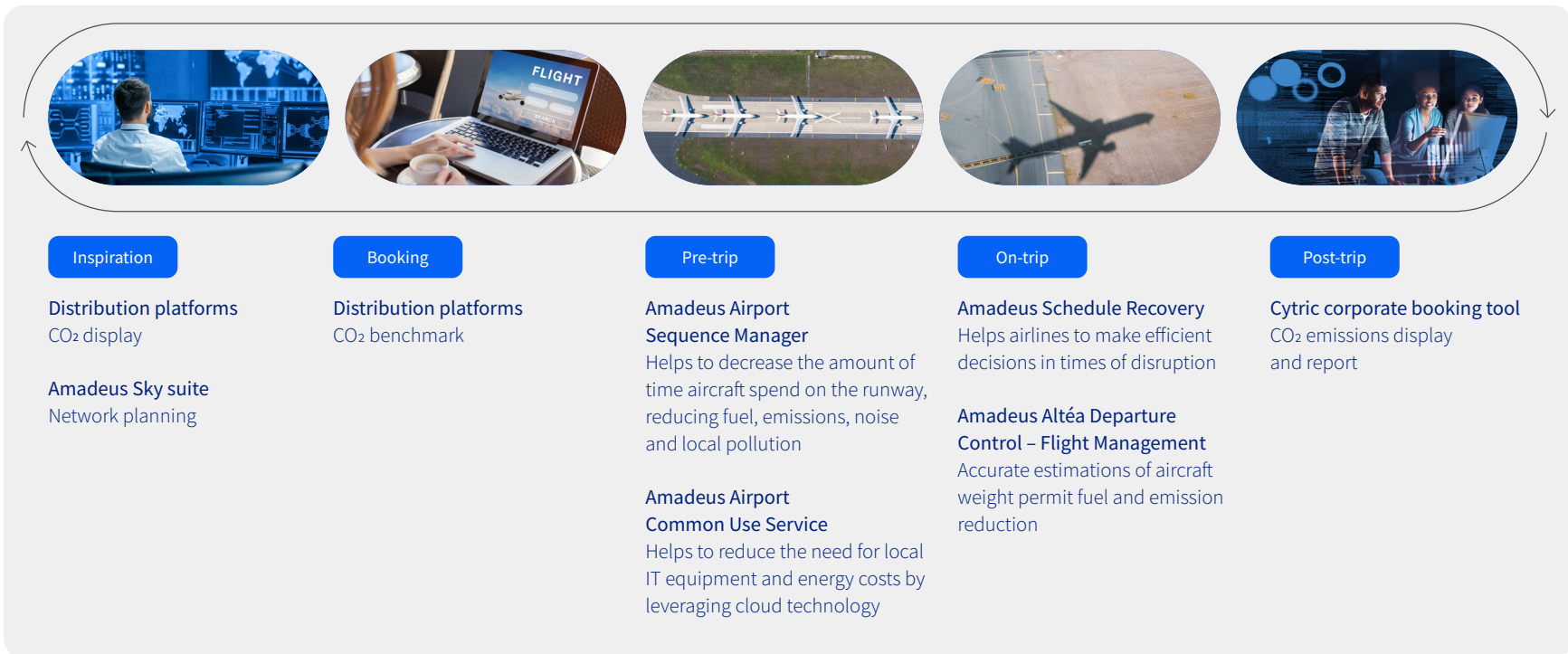
- 5. **Post-trip:** There's increased demand from corporations for solutions that help measure travel-related emissions. Some of Amadeus' solutions, like our corporate booking tool Cytric, make it possible to obtain post-trip CO<sub>2</sub> emissions reports aggregated by various criteria like geography, department or time.



With Cytric Easy collaborators can share rides at destination without leaving Microsoft Teams, enabling both corporations and business travelers to adopt responsible and sustainable behaviors.

**Rudy Daniello, Executive Vice President**  
Amadeus Cytric Solutions

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



GRI 3-3 (Climate change)

### 3. Collaboration in industry environmental initiatives



Sustainability is a global issue. Long-term travel industry sustainability requires that all industry stakeholders work together toward this common objective. For this reason, the third pillar of our environmental sustainability strategy is to identify and engage in collaborative environmental sustainability projects. Some sustainability challenges are so large that they can't simply be addressed in isolation. Below we illustrate one example.

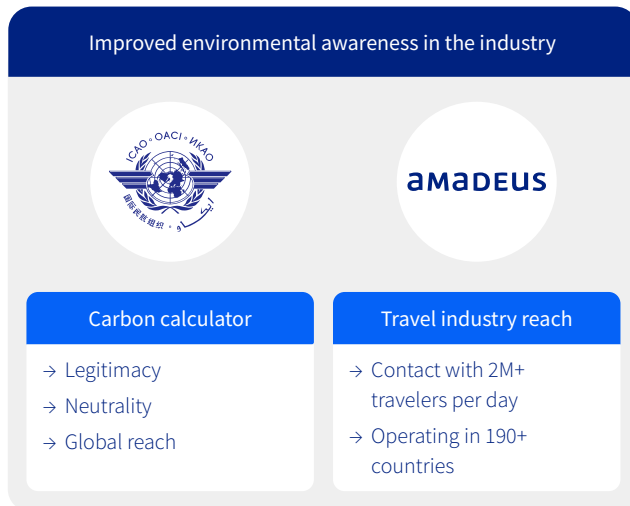
In order to raise awareness of aviation carbon emissions, and to support the use of a common methodology to estimate carbon emissions per passenger and encourage mitigation actions, Amadeus and ICAO have a long-term agreement in place whereby

Amadeus uses ICAO's carbon calculator on our distribution platforms, providing travelers with information about greenhouse gas emissions released during their trips. ICAO's carbon calculator brings the benefits of global reach, commercial neutrality and legitimacy to represent the aviation industry.

Our agreement with ICAO has also encouraged the development of local initiatives to support the use of their 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 facilitate access to carbon offsetting schemes. We're also working with other partners to display environmental impact to travelers in a way that's easy to understand.

In October 2022 Amadeus joined the Travalyst Coalition. A not-for-profit made up of some of the biggest travel and technology companies globally, Travalyst's mission is to change travel, for good. Together, we are delivering uniform, industry-wide sustainability frameworks across multiple platforms that are consistent, credible and easy to understand for both travel providers and consumers; ultimately enabling everyone to make more sustainable choices.

ICAO and Amadeus partnership



## Amadeus' sustainability credentials

Sustainability indices provide feedback on our performance and help us identify areas for improvement in ESG areas. They're also a valuable benchmark in assessing how Amadeus compares to other companies and industries on ESG performance.

➔ See p. 26, "Recognition and awards."

For the 11th consecutive year, Amadeus has been included in the Dow Jones Sustainability Indices (DJSI) both in the World and Europe categories. DJSI evaluates sustainability performance very comprehensively, including economic/governance, environmental and social dimensions. One of the most remarkable scores achieved in the DJSI results announced in December 2022 was environmental reporting, where Amadeus achieved the maximum score of 100 points. Our climate strategy received 93 points.

Amadeus obtained a score of B in CDP Climate Change in 2022. CDP (formerly the Carbon Disclosure Project) scores companies and cities based on their journey through disclosure and toward environmental leadership.

Amadeus has also been included for the ninth consecutive year in the FTSE4Good Sustainability Index. The FTSE4Good Index Series includes companies that reflect strong ESG risk management practices.

We've been recognized as a Top-Rated ESG performer by Sustainalytics, out of more than 5,000 companies in Sustainalytics' ratings universe.

The *Financial Times*, in its issue of April 12, 2022, included Amadeus in its inaugural list of [Europe's Climate Leaders 2022](#). The list is made up of the 300 companies that achieved the greatest reduction in their greenhouse gas emissions intensity<sup>13</sup> between 2014 and 2019. Amadeus' inclusion in the list further enhances our sustainability credentials and confirms the success of our climate strategy.

We believe that transparent and clear non-financial information reporting is a fundamental step toward long-term sustainability and we've reinforced our commitment in this direction.

13 Emissions intensity is defined as tons of emissions of CO<sub>2</sub> per €1 million of revenue.



Member of  
**Dow Jones  
Sustainability Indices**

Powered by the S&P Global CSA

GRI 2-9, 2-10, 2-12

Chapter 8

# Corporate governance

## ● In this chapter

---

 Structure and policies

---

 Board of Directors

---

 Corporate risk management


## Corporate governance structure and policies

Amadeus upholds the highest levels of corporate governance, which helps us maintain our market leadership and our reputation as a trusted partner for customers, suppliers and other stakeholders. Our corporate governance policies and procedures are designed to help us achieve our objectives and protect the interests of our shareholders.

Amadeus' main legal documents relating to corporate governance were drawn up when the company was listed on the Spanish stock market in April 2010. These documents are periodically revised to reflect regulatory changes, including the amendments to the Spanish Capital Companies Act (Ley de Sociedades de Capital) and the new mercantile framework resulting from these; the European Union's Market Abuse Regulation; and recommendations from the Spanish Good Governance Code of Listed Companies.

These documents comprise:

- Company bylaws
- Regulations of the Board of Directors
- Regulations of the General Shareholders' Meeting
- Internal rules of conduct relating to the securities market

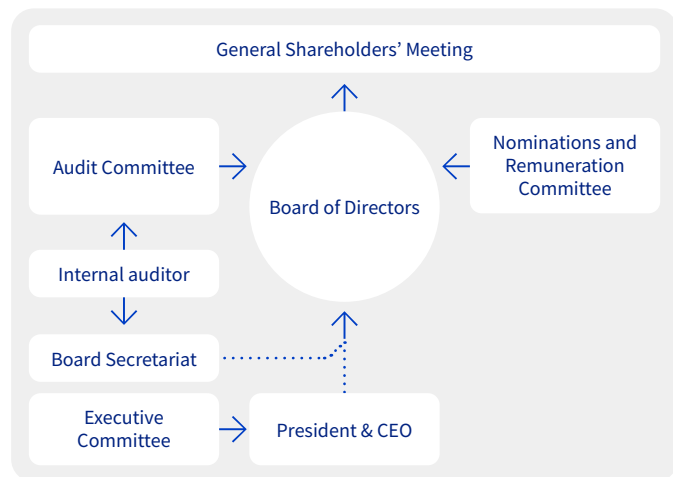
The following documents, among others, have been approved by Amadeus' various governing bodies and complement and integrate the company's general corporate governance policy:

- Corporate Tax Policy
- Regulations of the Audit Committee
- Corporate Crime Prevention Policy
- Policy Regarding Communication of Economic-Financial, non-Financial and Corporate Information and Regarding Communication and Contact with Shareholders, Institutional Investors and Proxy Advisors

GRI 2-9, 2-10, 2-12

- Directors' Selection Policy
- Directors' Remuneration Policy (2022–2024)

Amadeus' corporate governance structure



## General Shareholders' Meeting

The General Shareholders' Meeting is the highest body representing Amadeus' 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 give 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 gives further significant powers to the General Shareholders' Meeting, which is now the competent body responsible for discussing and agreeing to any purchase, sale or contribution of essential assets from or to another Amadeus Group company, as well as for approving transactions between related parties when exceeding certain thresholds.

The General Shareholders' Meeting may also decide on business transactions amounting to the liquidation of the company, as well as on the Board of Director's Remuneration Policy.

## Board of Directors

The Board of Directors is Amadeus' highest representative, administrative, managerial and controlling body. It sets out the company's general guidelines and economic objectives (financial and non-financial) and carries out the company's strategy (steering and implementation of company policies), supervision activities (management control) and communication functions (liaising with shareholders).

The Spanish Capital Companies Act also gives 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
- Dividends

## GRI 2-9, 2-10, 2-12

- Risk management and control (including fiscal risks)
- Corporate governance
- Tax strategy
- Related party transactions (other than those reserved for the General Shareholders' Meeting), with delegation faculties under certain circumstances

Members of the Board of Directors are appointed by resolution of the General Shareholders' Meeting for an initial period of three years. After this, they can be re-elected for additional periods of one year, with no limit.

Amadeus has had a Directors' Selection Policy in place since 2016 that has been updated in 2022 with the June 2020 recommendations from the Spanish Good Governance Code of Listed Companies. This selection process looks at a range of factors, including but not restricted to:

- The business's current strategy
- The Board's composition, especially its members' industry and functional and geographic experience
- The Board's diversity, especially but not limited to gender diversity

Amadeus recognizes and embraces the benefits of having a diverse Board, and sees increasing diversity of knowledge, experience and gender at Board level as an essential element in continually improving the Board's effectiveness. A truly diverse Board will include and make good use of differences in its directors' skills, regional and industry experience, background, race, gender and other distinctions. These will be considered in determining the optimum composition of the Board and will be balanced appropriately. All Board appointments are made on merit in terms of skills, experience, independence and knowledge that can contribute to the Board's effectiveness.

The Directors' Selection Policy aimed for at least 40% of the Board's seats to be held by women by the year 2022. The achievement of this goal is part of an orderly process of Board succession. In this regard, the Nominations and Remuneration Committee, at its meeting of April 14, 2021, nominated to the Board of Directors Mrs. Jana Eggers and Mrs. Amanda Mesler as independent Board members. This was approved by the

General Shareholders' Meeting of June 17, 2021. The ratification and appointment of a new director, Mrs. Eriikka Söderström, as independent Board member by the General Shareholders' Meeting of June 23, 2022, allowed the company to achieve this goal, with a 45.45% female presence on the Board as of December 31, 2022.





GRI 2-9, 2-11

## Composition of the Board of Directors

Name or corporate name of director	Position on the Board	Date of first appointment	Nature	Position on the committees	
				Audit Committee	Nominations and Remuneration Committee
Mr. William Connelly	Chairman	6/20/2019	Independent		
Mr. Francesco Loredan	Vice Chairman	2/21/2005	Other external		Member
Mr. Luis Maroto Camino	President & CEO	6/26/2014	Executive		
Mrs. Pilar García Ceballos-Zúñiga	Director	12/15/2017	Independent	Member	Member
Mr. Peter Kürpick	Director	6/21/2018	Independent		Member
Mr. Stephan Gemkow	Director	6/21/2018	Independent	Chairman	
Ms. Xiaqun Clever	Director	6/19/2020	Independent		Member
Mrs. Amanda Mesler	Director	6/17/2021	Independent	Member	Chairman
Mrs. Jana Eggers	Director	6/17/2021	Independent		
Mrs. Eriikka Söderström	Director	2/25/2022	Independent	Member	
Mr. David Vegara Figueras	Director	6/23/2022	Independent	Member	
Mr. Jacinto Esclapés Díaz	Secretary (non-director)	1/1/2022			
Mrs. Ana Gómez Ruiz	Vice Secretary (non-director)	1/1/2022			

The appointment of the independent director Mr. David Vegara Figueras was approved by the General Shareholders' Meeting of June 23, 2022, to cover the vacancy created by Mr. Josep Piqué Camps in the position, whose term of office ended in June 2022 after three years of service. The directors Dame Clara Furse and Mr. David Webster, whose term of office ended in June 2022, did not renew their position on the Board. In this respect, the General Shareholders' Meeting of June 23, 2022, approved the reduction of seats on the Board from 13 to 11. The Board of Directors agreed to put in place a renewal succession plan initiated in 2017, which has resulted in the incorporation of nine current new members since then. This renewal process has reduced the average tenure of each member to less than six years, and we expect this figure to increase in the following years.

## GRI 2-11

Mr. William Connelly  
Independent Director and  
Chairman of the Board



Mr. William Connelly is a graduate in Economics from Georgetown University in 1980. He is currently Non Executive Chairman of the Supervisory Board of Aegon N.V. He is also an independent Director of Société Générale Group and Singular Bank S.A.U.

Mr. Connelly held various management positions at ING Group NV from 1995 until he became the ING Bank Management Board member responsible for Wholesale Banking in 2011 until 2016. At ING he was also CEO of ING Real Estate from 2009 to 2015. He started his career in

1980 with the Chase Manhattan Bank where he worked for ten years and Baring Brothers Co Ltd from 1990 to 1995.

He has broad financial services experience in corporate finance, financial markets, real estate and lending.

He joined Amadeus' Board of Directors on 20 June 2019 and he is the Chairman of the Board since June 2021.

Mr. Francesco Loredan  
Director Other External  
and Vice-Chairman  
of the Board



Mr. Loredan is a graduate in 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 and as a management consultant with the 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 Director of Oneiros Investments SA (private equity), Vice Chairman of White Bridge Investments group of companies

(private equity) and Director of some of its portfolio investments (QC Terme SRL -Spas and Wellness facilities operator, Nutkao SRL -chocolate spreads manufacturer-) and Director of White Bridge Investments II (with its portfolio investment in Akeron, a company that offers software for the salesforce and professional services management-). He is also Director of Spring SA (private equity) and Director of Pictet Alternative Advisors, UK Ltd (private equity/hedge funds).

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

Mr. Luis Maroto Camino  
CEO (Executive Director)



Mr. Maroto became President & CEO of Amadeus on 1 January 2011.

From January 2009 to December 2010, he was Deputy CEO 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 in Amadeus' return to the stock market with the company's successful IPO in April 2010.

He joined Amadeus in 2000 as Director, Marketing Finance. In that role, he supported Amadeus' commercial organization throughout its international expansion and consolidation.

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 the Bertelsmann Group.

A Spanish citizen, he holds a degree in Law from the Complutense University, 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 26 June 2014, and he was appointed *Consejero Delegado* on 16 October 2014. Since May 2019 he is also Director of Dufry AG (a global travel retailer).

Mrs. Pilar García Ceballos-Zúñiga  
Independent Director



Mrs. García is a graduate in Law from the University of Madrid, CEU San Pablo, and holds an MBA from the Open University, UK. She is an experienced executive with a long history in the technology area, working in multinational environments, focusing on technological innovation and the effectiveness of organizations.

She was a leader in the IBM Corporation for more than 25 years, 12 of which she had high-level responsibilities in the European Headquarters and across the world, being 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 5 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 the IBM Global Committees of management and transformation in strategic and commercial areas, and internal process optimization.

She is currently President of the Board of Trustees for the Caja de Extremadura Foundation and Vice-President of the Spanish Association of Foundations since June 2019. Also, she is an Independent Director of Renta4 Banco.

She joined Amadeus' Board of Directors on 15 December 2017.

Mr. Peter Kürpick  
Independent Director



Mr. Kürpick holds a Ph.D. in Theoretical Physics from the University of Kassel and has conducted post-doctorate research at Kansas State University and the University of Tennessee, Knoxville. He also holds a Masters in Environmental Sciences from the University of Kassel as well as a Corporate MBA from INSEAD.

Mr. Kürpick is Senior Vice President at EPAM Systems in Berlin. In a dual role he is both responsible for the German entity of EPAM and global CTO Enterprise Software. He joined EPAM Systems from Bain Capital where he

oversaw the adoption of latest IT strategies in the Bain Capital portfolio companies in the role of a Technology Operating Partner. He also is a non executive advisor of PTV.

Previously, he has held numerous technology leadership roles at HERE Technologies, Unify, Software AG and SAP, where he was instrumental in the conception and development of SAP NetWeaver.

He joined Amadeus' Board of Directors on 21 June 2018.

Mr. Stephan Gemkow  
Independent Director



Mr. Gemkow holds a degree in business administration from the University of Paderborn.

He began his professional career as a consultant for BDO Deutsche Warentreuhand AG in 1988 before joining Deutsche Lufthansa AG in 1990, where he held various management positions in the Lufthansa Group, in the sales, finance and human resources areas. He served as Member of the Group Executive Board (CFO) at Deutsche Lufthansa AG until mid 2012, when he took his position as CEO of Franz Haniel & Cie., a globally active family owned portfolio management company, based in Duisburg, Germany, until June 30, 2019. Mr. Gemkow formed part of the Amadeus

Board of Directors from May 2006 to July 2013, as proprietary Director, representing Lufthansa. He was a Director of JetBlue Airways Corp. until April 2020.

Mr. Gemkow is a Director of Flughafen Zürich AG, airport sector, and a Director of Airbus SE, aerospace industry, since April 2020. Since May 2021 he serves as Senior Advisor for the BNP Paribas Group in Germany.

He joined Amadeus' Board of Directors on 21 June 2018.

Ms. Xiaoqun Clever  
Independent Director



Ms. Clever holds an Executive MBA from the University of West Florida and a diploma in Computer Science and International Marketing from the Karlsruhe Institute of Technology (Germany). She has also studied Computer Science & Technology at the University TsingHua (Beijing, China) and graduated from the Global Leadership Development Program of INSEAD.

Ms. Clever has over 20 years' experience in the area of software engineering, big data, cyber security and digitalization. Born in China, she has held various senior management positions in international corporations. Among others, Ms. Clever has spent sixteen years at SAP SE (from 1997 to 2013) in various positions, including Chief Operating Officer of Technology & Innovation, Senior Vice-President of Design & New

Applications and Executive Vice-President & President of Labs in China. Since 2014, Ms. Clever was driving digitalization in the media industry as Chief Technology Officer of ProSiebenSat.1 Media SE, a German media company (2014 – 2015) and Chief Technology & Data Officer and member of the Group Executive Board at Ringier AG, an international media group based in Zurich, Switzerland (from January 2016 to February 2019).

Ms. Clever is an independent Director of Capgemini SE, BHP Group Limited and a member of the Supervisory Board of Infineon Technologies AG.

She joined Amadeus' Board of Directors on 19 June 2020.

Mrs. Amanda Mesler  
Independent Director



Mrs. Amanda Mesler holds an MBA from the University of North Carolina.

Mrs. Mesler began her career as a Business Analyst for Kierulff Electronics in 1985 and then joined Exide Electronics in 1986 as a Buyer. She moved to General Electric in 1988 where she was the Asian Pacific Market Development Manager. From 1994, Mrs. Mesler held numerous executive leadership positions at the Partner level at Bearingpoint (formally KPMG Consulting), EDS and SYSCO. In 2007, she became the CEO for North America at Logica, and moved to the UK to join the Executive Committee and Operating Board of the Global company. In 2015, she worked at Microsoft as General Manager of Central and Eastern Europe, leaving Microsoft in 2018. She then served as CEO for Earthport Plc, a cross border payments company, who were acquired by Visa in 2019.

Mrs. Mesler is a business and commercial savvy executive with over 30 years of experience, having held leadership positions as CEO, COO, Chief Client Officer and a Corporate Strategy Officer as well as serving as a

Non-Executive Board Director of four companies. She currently holds the position of Executive Chairman & CEO of Minna Technologies and sits on the board of Vodeno Group since December 2022. She sat on the board of Directors of Insect Technology Group, as a Non-Executive Director until January 2021 and Pace Plc. from 2012 to 2015. She was the CEO of Cashflows Europe, Ltd. since September 2019 until August 2021. She sat on the Board of National Grid until July 2022. She is also Senior Advisor of Macquarie Capital since March 2022.

She has had a truly global experience, working across all continents, including responsibility for teams in more than 40 countries. She has strong technology and Fintech experience at the executive level. Since 2009, she has been a member of the Young Presidents Organization and International Women's Forum.

She joined the Amadeus Board of Directors on 17 June 2021.

Mrs. Jana Eggers  
Independent Director



Mrs. Eggers holds a degree in mathematics and computer studies from Hendrix College (USA). She also studied computer science at Rensselaer Polytechnic Institute (USA).

She is currently the CEO of Nara Logics, a neuroscience-based artificial intelligence company.

She began her professional career at Los Alamos National Laboratory modeling electron transfer in conducting polymers using high-performance computing and artificial intelligence. After Los Alamos, she attended graduate school in computer science, and then left research to join the business world in 1994.

Her roles always intermix engineering, product management, and business development. She has held technical and leadership roles at

start-ups, like PTCG (supply chain optimization) and Apps.com (online applications), who have been bought by large enterprises, American Airlines, Sabre Group and Intuit, respectively. Both acquisitions led to senior roles at the acquiring companies. Another small start-up she joined was Lycos, which grew to be an Internet search leader. Her career has taken her to Europe twice: to open the European operations for supply chain optimization for Sabre Group, and as CEO of Germany-based, sprd. net AG, one of the first mass-customization platforms on the Web.

She's a noted expert in artificial intelligence, software product management, and enterprise innovation.

She joined the Amadeus Board of Directors on 17 June 2021.

Mrs. Eriikka Söderström  
Independent Director



Mrs. Söderström, a Finnish citizen, holds a Master of Science (Economics) degree from the University of Vaasa (1993). She is a seasoned finance professional with a strong business acumen and has worked in several international technology companies.

Currently, she is an independent non-executive Director in Valmet (2017-), Bekaert (2020-), and Kempower (2021-) corporations. She is chairing the Audit Committees of Valmet and Kempower and she is also a member of the Audit, Risk and Finance Committee in Bekaert. She has experience in chairing the Audit Committee of Comptel (2016-2017).

Mrs. Söderström has worked as the Chief Financial Officer of F-Secure, Kone and Vacon corporations - all listed companies in Nasdaq Helsinki operating globally. She has also worked for Nokia (Nokia Networks and Nokia Siemens Networks) for 14 years, including several different senior finance leadership roles.

She joined the Amadeus Board of Directors on 25 February 2022.

Mr. David Vegara Figueras  
Independent Director



Mr. David Vegara Figueras is a graduate in Economics and Business Studies from the Universidad Autónoma de Barcelona and holds a Master in Economics (Capital Markets) from the London School of Economics and Political Science. He was Chairman of Intermoney, S.A. from 1996 to 2003. He was State Secretary for Economic Affairs in the Spanish Government from 2004 to 2009. From 2005 to 2009, he was Chairman of the European Union's Financial Services Committee, and Chairman of the EU's Group on Procyclicality from 2008 to 2009. He was Deputy Director of the IMF (International Monetary Fund) from 2010 to 2012. From 2012 to 2015, he was Deputy Managing Director of the ESM (European Stability Mechanism). He also held the position of

member of the Supervisory Board of Hellenic Corporation of Assets and Participations, S.A. until November 2022, and he currently is Executive Director of Banco Sabadell, S.A.

Mr. Vegara also has extensive practical experience in banking and finance from a regulatory standpoint, including supervision mechanisms, and in financial stability mechanisms and the management, control and anticipation of risks.

He joined the Amadeus Board of Directors on 23 June 2022.

**GRI 2-19, 2-20**

In line with 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 23, 2022:

- Mr. William Connelly, as independent director
- Mr. Luis Maroto Camino, as Executive Director
- Mrs. Pilar García Ceballos-Zúñiga, as independent director
- Mr. Francesco Loredan, as other external director
- Mr. Peter Kürpick, as independent director
- Mr. Stephan Gemkow, as independent director

Moreover, Mrs. Eriikka Söderström, who was appointed as an independent director by cooptation method as per the resolution of the Board of Directors of February 24, 2022, was ratified as an independent director by the General Shareholders' Meeting of June 23, 2022, and appointed for a term of three years.

Finally, Mr. David Vegara Figueras was appointed by the General Shareholders' Meeting of June 23, 2022, as an independent director for a term of three years.

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.

Having the Amadeus Chief Executive Officer as the Executive Director of the Board of Directors reinforces the communication channel between the Board and the company's management team. This has been key in making the Board's decision-making process more efficient.

During fiscal year 2022, six Board meetings were held, with attendance by all Board members whether in person, remotely or by proxy with specific voting instructions.

The Chairman of the Board, Mr. William Connelly, and Amadeus Group's Chief Executive Officer, Mr. Luis Maroto (Executive Director), attended all Board meetings.

The Board of Directors, at the meeting held on December 16, 2021, with the positive endorsement of the Nominations and Remuneration Committee, appointed Mr. Jacinto Esclapés Díaz as Secretary of the Board of Directors, effective January 1, 2022, replacing Mr. Tomas López Fernebrand. Mrs. Ana Gómez Ruiz, Director, Group Corporate, was appointed Vice Secretary of the Board of Directors, effective January 1, 2022, replacing the incoming Secretary Mr. Jacinto Esclapés Díaz.

## Remuneration policy

With respect to remuneration for the Chairman and non-executive directors, Amadeus offers competitive fees to fit the required time commitment and responsibilities. As part of the Directors' Remuneration Policy, every two years the Nominations and Remuneration Committee reviews the non-executive director fee data of comparable companies in the main European indices, including the IBEX 35.

In accordance with the Directors' Remuneration Policy (2022–2024), we've agreed to continue with remuneration based on a fixed amount for membership of the Board and of the various Board committees. We've also agreed not to implement any other complementary remuneration formula.

The policy on Board remuneration doesn't 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) consists primarily of: (1) a base salary; (2) short-term variable remuneration; (3) long-term variable remuneration; and (4) other remuneration (Board fees, benefits and pension).

The Directors' Remuneration Policy (2022–2024) was approved by the Ordinary General Shareholders' Meeting of June 17, 2021, with a favorable vote of 88.339%.

The corresponding Annual Report 2021 on the Remuneration of Directors of Listed Companies was endorsed by the Ordinary General Shareholders' Meeting of June 23, 2022, as it received a favorable vote of 91.22% (advisory vote).

## GRI 2-19, 2-20

Significant measures have been adopted by the Nominations and Remuneration Committee in order to provide our stakeholders with a clearer, more transparent and more comprehensive understanding of our approach to the directors' remuneration.

## 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, gives the Audit Committee a role that makes it more than just an advisory body to the Board of Directors on certain key matters.

The Board of Directors' Meeting held on June 17, 2021, approved the amendment of, among others, Article 42 of the corporate bylaws concerning the Audit Committee. Additionally, the Audit Committee, at its meeting held on November 4, 2021, endorsed the amendment of the Regulations of the Audit Committee pursuant to the amendment of the Spanish Capital Companies Act by Act 5/2021 of April 12, subsequently approved by the Board of Directors in the meeting held on December 16, 2021.

The main function of this committee is to provide support to the Board of Directors in its oversight duties. This includes, for example, the periodic review of financial statements and of the effectiveness of internal control and risk management systems as a whole, embracing both financial and non-financial risks (including operational, technological, legal, social, environmental, political and reputational risks, or those related to corruption), so that major risks are duly identified, managed and disclosed. The Audit Committee receives regular updates on corporate compliance, including corporate policies relating to bribery and corruption, the corporate Crime Prevention Program, fraud, insider trading and speaking up. It's also updated regularly on privacy and security matters.

The Audit Committee also provides support to the Board of Directors regarding compliance with all laws, regulations and internal rules affecting Amadeus, monitoring compliance with the policies and rules of the company in the environmental, social and governance (ESG) area and internal rules of conduct. It monitors compliance with the

applicable rules at a national and international level and supervises the preparation and integrity of the company's financial and non-financial information in line with regulatory requirements and the proper application of accounting principles. It 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 agenda item. 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, Ernst & Young, 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 relating to (1) the external audit (for the annual and half-year financial statements), (2) the internal audit and (3) risk management.

In 2022 the Audit Committee prepared the mandatory annual report on its activities for the fiscal year 2021, covering, among others, the following areas:

- Rules and regulations
- Composition
- Operational activity
- Items discussed during fiscal year 2021 (external audit, internal audit, risk management and other items)
- Related party transactions

\* Audit Committee members agreed in the meeting held on November 3, 2022, to invite the external auditors to attend all Audit Committee sessions.

## GRI 2-10, 2-19, 2-20

- Independence of the external auditor
- Functional and performance assessment
- Incidents and proposals for improving the company's rules of governance

The Audit Committee currently consists of five independent Board members.

The Board of Directors' Meeting held on December 16, 2021, with prior endorsement from the Audit Committee, resolved to amend the Regulations of the Audit Committee to adapt their content to the June 2020 recommendations of the Spanish Good Governance Code of Listed Companies. Additionally, the Audit Committee, at its meeting held on November 4, 2021, endorsed a new amendment of its regulations pursuant to the amendment of the Spanish Capital Companies Act by Act 5/2021 of April 12, subsequently approved by the Board of Directors in the meeting held on December 16, 2021.

The Regulations of the Audit Committee address the following areas:

1. Introduction
2. Composition
3. Requirements for appointment
4. Operating rules
5. Responsibilities and duties:
  - Supervision and evaluation of financial and non-financial information
  - Supervision and evaluation of the management and control of financial and non-financial risks
  - Supervision of the internal audit
  - Relations with the statutory auditor
  - Environmental, social and governance matters (ESG)

6. Engagement of experts and other resources
7. Annual report

## Nominations and Remuneration Committee



This committee is made up of five external Board members and evaluates the competence, knowledge and experience required of members of the Board of Directors. It also:

- Proposes independent directors for appointment to the Board of Directors
- Produces the report on non-independent members' appointment to the Board
- Reports to the Board of Directors on matters of gender diversity
- Proposes to the Board of Directors the system and amount of the annual remuneration of its directors, as well as the remuneration policy of the members of the Executive Committee
- Formulates and reviews the remuneration programs for senior management
- Monitors compliance with the remuneration policies
- Assists the Board in compiling the report on the Directors' Remuneration Policy and submits to the Board any other reports on compensation specified in the Regulations of the Board of Directors

The Board of Directors' Meeting held on December 16, 2021, agreed to the modification of, among others, the Article 36 of the Regulations of the Board of Directors concerning the Nominations and Remuneration Committee, to adapt its content to the June 2020 recommendations of the Spanish Good Governance Code of Listed Companies. Accordingly, the Ordinary General Shareholders' Meeting held



## GRI 2-10, 2-19, 2-20

on June 17, 2021, approved the amendment of, among others, Article 43 of the corporate bylaws concerning the Nominations and Remuneration Committee. A new amendment of Article 36 of the Regulations of the Board of Directors was approved by the Board of Directors in the meeting held on December 16, 2021.

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 agenda item. 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 2022 the Nominations and Remuneration Committee prepared the mandatory annual report on its operations for fiscal year 2021, covering the following areas:

- Competencies and duties
- Composition
- Operational activity
- Matters addressed during fiscal year 2021 (compensation, corporate, nomination and other)
- Nature of directorship (independent, executive and other external)
- Composition of the Board of Directors
- Gender diversity of the Board of Directors
- Self-evaluation of the Board of Directors (declarative and self-assessment sections)
- List of companies in which the Board members also serve as directors and/or executive managers
- Verification of compliance with the Directors' Selection Policy

In addition, the Nominations and Remuneration Committee produced the Annual Report 2021 on the Remuneration of Directors of Listed Companies.

The Directors' Selection Policy was approved on April 21, 2016, and it was updated in February 2022 in line with the June 2020 recommendations from the Spanish Good Governance Code of Listed Companies. In line with this policy, the Board of Directors is committed to ensuring that its composition is diverse and balanced. Having a wide range of views offered in Board debates fosters well-informed decision making in the interests of the company and all stakeholders.

Mrs. Eriikka Söderström and Mr. David Vegara Figueras were appointed Board members in 2022 in line with the Directors' Selection Policy.

The Nominations and Remuneration Committee will publish an analysis of the Board's needs in line with the Directors' Selection Policy at the same time that the General Shareholders' Meeting is called in 2023. At this time, the appointment or re-election of directors 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 presents any recommendations for approval.

## Amadeus' Management Executive Committee

Amadeus' Management Executive Committee is led by the company's Chief Executive Officer (*Consejero Delegado*) and comprises the senior management leaders.

[➤](#) See p. 27, "Amadeus' Executive Committee."

This governance structure is designed to foster direct communication between Amadeus' business and its governing bodies through the *Consejero Delegado* to facilitate effective decision making.

Ms. Sabine Hansen-Peck, SVP People, Culture, Communications & Brand and member of the Executive Management Committee, left Amadeus on September 30, 2022, and Ms. Ana Doval de las Heras took over the position and joined the Executive Management Committee effective October 1, 2022. At the end of 2022 Mr. Christophe Bousquet, Chief Technology Officer (CTO), left Amadeus, and Mr. Sylvain Roy was appointed CTO and joined the Management Executive Committee effective January 1, 2023, succeeding Mr. Christophe Bousquet.



GRI 2-12, 205-1 GRI 3-3 (Cybersecurity and data privacy) GRI 3-3 (Ethics and integrity) GRI 3-3 (Human rights) GRI 3-3 (Health, safety and well-being)

# Corporate risk management

Throughout 2022 we've continued to foster effective coordination of assurance activities across Amadeus, leveraging our "Three Lines Model" as part of our commitment to strong governance and risk management practices.

## Three Lines Model

### 1st Line: executive management, management and staff

Medium-low impact

Amadeus' commitment to integrity and transparency begins with our own staff. Amadeus employees adhere to the ethical standards set forth in the Amadeus Code of Ethics and Business Conduct and related policies. We don't 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 add value to our business and ensure the company is governed by the highest standards of integrity. The areas covered in the code are:

- Commitment to the environment
- Avoiding conflicts of interest and conducting business ethically
- 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

All employees must receive mandatory training for the Code of Ethics and Business Conduct, as well as other policies relating to bribery and corruption, fraud, insider trading and speaking up. Our Speak Up Policy encourages employees to report any breach of the Code of Ethics and Business Conduct and other corporate policies.

### Three lines model



[GRI 2-23, 2-24, 205-1](#)[GRI 3-3 \(Cybersecurity and data privacy\)](#)[GRI 3-3 \(Ethics and integrity\)](#)[GRI 3-3 \(Human rights\)](#)[GRI 3-3 \(Health, safety and well-being\)](#)

Our Human Rights Policy asserts our commitment to international human rights. Accordingly, 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 framework. We evaluate the risks of infringing on the following rights:

- Non-discrimination (based on color, sex, language, religion, political opinion, social origin, property, birth or other status)
- Collective bargaining
- Freedom of association
- Fair wages
- No child labor or forced labor
- Adequately healthy and safe working conditions

Although such risks fall relatively low on our Corporate Risk Map, we have a series of mitigating and monitoring actions to manage them, both internally and with our suppliers and business partners.

Our mergers and acquisitions procedures also include due diligence on risks related to human rights. Our Integration team ensures that Amadeus' policies are effectively implemented into newly integrated companies.

The set of corporate policies listed on the right apply globally to Amadeus. These corporate policies are supported by processes that undergo regular internal and external quality reviews to ensure regulatory compliance and application of best practices. In addition to corporate policies, there are additional policies and processes more oriented to specific units or people at the various Amadeus sites.

### Amadeus policies

- Anti-Bribery and Corruption Policy
- Anti-Fraud Policy
- Charitable Contributions Policy
- Code of Ethics and Business Conduct
- Corporate Purchasing Policy
- Entertainment/Gift Policy
- Environmental Policy
- Group Travel Policy
- Human Rights Policy
- Information Classification and Handling Policy
- Information Security Acceptable Use Policies
- Internal Rules for Securities Market
- Outside Interests and Board Membership Policy
- Political Contributions and Lobbying Policy
- Privacy Policy and Handbook
- Risk Management Policy
- Speak Up Policy



GRI 2-12, 205-1 GRI 3-3 (Cybersecurity and data privacy) GRI 3-3 (Ethics and integrity)

## 2nd Line: internal governance functions



Control activities are embedded in all areas of the company. Major control activities are carried out from units such as Corporate Risk Management, Business Resilience, IT Controls Governance and Assurance, Corporate Compliance, Corporate Security, Group Privacy, Corporate Legal, Corporate Finance and People & Culture.

### Risk management and controls

The Corporate Risk Management unit is responsible for centralizing the continuous monitoring of major risks that could affect the activities and objectives of Amadeus and its companies. It works to boost Amadeus' Risk Management Framework and develop a Group-wide risk culture that supports capability and commitment of the entire organization.

Amadeus acknowledges the importance of managing risks that could affect the reliability and sustainability of the company, in alignment with the interests of our shareholders, customers, employees and other stakeholders. To this end, Amadeus' management has endorsed a Risk Management Framework to identify the main risks faced by the Group, the effective controls to mitigate them, and information systems for their periodic monitoring. We've developed this framework based on the principles set out in the COSO II and ISO 31000 risk management frameworks as well as best practice to ensure that risks are identified, analyzed, evaluated, managed, controlled and monitored in a systematic way and within the tolerable risk levels.

Our Risk Management Policy sets out the basic principles of the framework and focuses on:

- Achieving the company's long-term objectives in line with its established strategic plan
- Contributing the maximum level of assurance to shareholders and customers to defend their respective interests
- Protecting the company's earnings

- Protecting the company's image and reputation
- Guaranteeing corporate stability and financial strength over time

The Corporate Risk Management unit develops Amadeus' Corporate Risk Map and establishes control and monitoring procedures for identified risks, working together with every risk owner of the relevant business units or projects and any others responsible for managing risks. The risks ascertained from this analysis, as well as monitoring measures, are reported on a regular basis to the Risk Steering Committee, the Audit Committee and the Board of Directors. 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 considers the global risks identified each year by the World Economic Forum<sup>1</sup>—many of them emanating from current economic, societal, territorial, environmental and technological tensions.

We also reflect in the Corporate Risk Map emerging risks, defined as either new risks or familiar risks that are in a new or unfamiliar context, that are difficult to identify and whose implications are difficult to assess and quantify. These are risks that could prevent Amadeus from achieving its strategic objectives and that are expected to have a long-term impact on our business. They may evolve over time from weak signals to clear tendencies with a high potential for danger. They may be risks that affect Amadeus specifically or global risks that impact an economic activity in general.

For example, with respect to public health risks, although the travel sector is recovering, the industry is being impacted by structural changes such as heavier regulations, security requirements, travel restrictions, long quarantines (China's "zero-COVID" policy), government controls and other macroeconomic risks adding more friction to travel. To mitigate this risk, Amadeus is constantly monitoring travel volumes, traveler behavior and forecasts from the International Air Transport Association (IATA). Amadeus is also developing recovery scenarios based on the latest industry forecasts and our own figures.

<sup>1</sup> World Economic Forum (2022). *Global Risks Report 2022, 17th Edition*.

GRI 2-12, 205-1

GRI 3-3 (Cybersecurity and data privacy)

GRI 3-3 (Ethics and integrity)

GRI 3-3 (Human rights)

The Russia–Ukraine war and its duration over time is also having an impact on the world economy, with significant price increases in food and energy. Amadeus and our customers are impacted by higher inflation, which makes travel more expensive, compromises traditional and emerging destinations and increases levels of uncertainty. The current sustained inflation and increase in cost of capital are leading us into an economic recession, with Europe and the USA being the most impacted regions. Amadeus actively monitors the evolution of key countries to anticipate potential risks, in order to react as quickly as possible. We're also actively involved in industry associations to align ourselves on how to jointly address the effects of the geopolitical crisis.

Cyber risk is another area of concern and one that continues to increase, as a result of rapid digitalization, remote working, new emerging technologies and an ever-expanding attack surface enabling a more dangerous and diverse range of cybercrimes. Over time, cybersecurity threats have become more specialized and efficient, and consequently more expensive. Ransomware and data breaches continue to dominate the external threat overview, while third-party breaches and cloud vulnerabilities have become pressing threats. An incident such as a ransomware attack on our systems could have significant operational consequences for our travel customers. We manage this type of threat not only by strengthening our access controls and incident response plans, but also through comprehensive security awareness programs, among other measures.

Climate change has become one of the most pressing global risks. The socioeconomic consequences of extreme weather events like catastrophic wildfires, heat waves and freezes are skyrocketing. Climate-related risk and its mitigation is on our radar, and it will require intensified action in our three-pillar strategy: (1) internally by reducing our footprint, (2) by supporting our customers in reducing their emissions and (3) by working collaboratively with industry stakeholders in emission reduction initiatives.

➤ See p. 165, “Climate change-related risks & opportunities.”

On the social plane, the rise of climate activism, especially among younger people, is increasing in terms of the tone and frequency of protests to provoke scandals to get on the news agenda. Other social movements such as “flight shaming,” the increasing use of social networks and the general concern regarding travel industry sustainability are events and responses that are difficult to predict as well. To mitigate these risks, Amadeus helps raise environmental awareness and reduce emissions, for example by including the display of CO<sub>2</sub> emissions in our booking platforms or the development of IT solutions that can help airlines improve their environmental performance.

➤ See p. 106, “Environmental sustainability value proposition.”

Amadeus has conducted a risk assessment of human rights in a selected number of countries based on the following criteria: (1) according to human rights standards, or (2) according to their importance in Amadeus' operations, especially in terms of reputational impact. The assessment considers how each of the human rights are rated in terms of probability and impact, and how each of these Amadeus companies comply with their employees, as well as how these companies' providers and suppliers comply with their own employees. The risk assessment performed in 2022 covers more than 70% of Amadeus operations in terms of number of employees (internal and external). The results obtained from this assessment show that the probability of these risks materializing in these countries is not material.

The risk assessment performed in 2022 was carried out in 35 countries, representing 58% of the total number of locations with employees and covering more than 78% of Amadeus operations in terms of the total employees' number. The results obtained from this assessment show that the probability of these risks materializing in these countries is not material.

The pandemic also challenged the traditional paradigms of the work environment, with organizations having to adapt through remote working. Now, the working environment has changed drastically, with attracting and retaining talent as one of the main risks given the strong competition. In relation to this risk, Amadeus is optimizing a hybrid working model to engage already remote employees, enabling recruitment from any talent market and eliminating office overheads, among other measures.

➤ See p. 79, “Hybrid working model.”

The latest version of the Corporate Risk Map defines the most critical risks relating to Amadeus' operations and objectives, including:

- ➔ Strategic risks related to the macroeconomic and geopolitical tensions or to trends in travel and tourism in the context of a slow recovery or increasing competition
- ➔ Operational risks derived from IT service failures, cybersecurity breaches or cloud migration
- ➔ Other operational risks that could affect the efficiency of business processes and services

GRI 2-12, 205-1

GRI 3-3 (Travel and tourism development through Amadeus' IT solutions)

GRI 3-3 (Cybersecurity and data privacy)

GRI 3-3 (Ethics and integrity)

- People risks, such as the inability to attract talent and highly skilled resources or the increasing talent attrition
- Security and compliance risks
- Legal and compliance risks related to potential breaches of regulations

The impact of the pandemic has demonstrated the interconnected nature of risks. Unprecedented lockdowns all over the world have directly impacted the travel industry, and the increased reliance on technology as a result of these lockdowns has led to an increase in cyber risk.

After identification and evaluation of major risks, risk owners assigned to each risk propose a specific response to intensify or add new mitigation controls. The progress achieved through mitigation measures and the evolution of key risks are submitted to the Risk Steering Committee for review and consideration, together with any proposed action plan for necessary measures or further actions. Due to its transversal and dynamic character, this process identifies new risks that affect Amadeus arising from changes in the environment or the revision of objectives and strategies.

In the current business environment, with its increasing stakeholder demand for transparency, ethics and social responsibility, reputational risk management is becoming increasingly relevant. Therefore, assessing the reputational impact of a particular risk has been embedded into our methodology.

Similarly, cybersecurity risks are managed through a security risk framework driven by our Corporate Information Security Office, which is also integrated into the Corporate Risk Map.

Amadeus is exposed to risks that could significantly disrupt key internal services as well as IT services we provide to customers. To ensure minimal disruption in such catastrophic events, we've implemented a Business Resilience Program designed to protect our people, assets and infrastructure and minimize the potential impact to acceptable limits. This consists of providing the Amadeus organization with the mechanisms and tools to anticipate, prepare for, respond to and adapt to any event that could adversely impact our people, systems and infrastructure and manage any disruption to minimize the potential impact.

When it comes to disruptive events, our priority is always to ensure the well-being of our employees in all circumstances, and as such, we have mechanisms in place to ensure we

can manage and respond to any events that can impact our workforce. We constantly monitor events that may have the potential to affect our people's health and safety and their ability to work.

More precisely, as well as global crisis management teams, we also have local crisis management teams that manage these types of events locally through:

- Established business continuity plans at both site and departmental level.
- Mass notification tools and processes to use during emergencies and/or to provide updates to employees during disruptive events. This enables immediate messaging and management of disruptive events.

Finally, through our training and awareness plan we aim to ensure that all employees understand and apply best practices on ethical behavior, security and privacy.

The Corporate Risk Management unit works closely with the Risk Steering Committee, which is a decision-making body empowered by the Executive Committee to provide oversight and guidance on risk management activities and issues across Amadeus, including risk assessment and prioritization, risk mitigation strategies and responses. The Risk Steering Committee meets several times a year.

In addition to managing risks, the IT Controls Governance and Assurance team has the mission of enabling Amadeus, as an organization, to be confident that its business processes, systems, data and technology management procedures are operating effectively within a well-controlled environment while ensuring compliance with relevant IT industry standards and regulatory requirements. This is achieved through the issuance of independent attestation reports called System and Organization Controls (SOC 1 and SOC 2), which cover the services provided by Amadeus across key areas such as IT general controls, security, confidentiality, availability and privacy.

Amadeus also focuses on ensuring compliance with data privacy regulations, including the EU's General Data Protection Regulation (GDPR), as well as other existing certification standards such as PCI DSS (credit cards) and ISO 27001 (cybersecurity).

GRI 3-3 (Cybersecurity and data privacy) GRI 3-3 (Ethics and integrity) GRI 205-1

### Regional security offices

Extended security awareness and control to all Amadeus regions and subsidiaries



### Security Operations Center

Ensures that:

- All security policies and security architecture standards are properly monitored and controlled.
- Amadeus is protected against known threats and attacks.
- Security incidents are handled with proper communication.
- Security incidents are investigated and contained.
- Artificial intelligence is used to identify vulnerabilities.
- User behavior analytics are used to provide actionable insights by identifying patterns of traffic caused by user behaviors both normal and malicious.

- **ISO 27001 certification**  
ISO 27001 Level 3 certification at Amadeus corporate level.
- **SSDLC\***  
Ensures the implementation of secure software development methodologies according to SSDLC standards.
- **Security normative framework**  
Implements policies and framework used to assess security risks, as well as mitigation plans.
- **Data leak prevention**  
Ensures that critical information in any format does not leak out to unauthorized persons/destinations.
- **Access control**  
Ensures that only authorized persons have access to confidential information on a need-to-know and need-to-handle basis.
- **PCI DSS\*\* compliance**  
Ensures that Amadeus is PCI DSS compliant and that we are prepared for changes in PCI DSS compliance requirements.
- **Security by design**  
Ensures that security is observed from the beginning of every new product and project.
- **Security awareness**  
Creates and follows up on employee security awareness.

\* SSDLC: Secure Software Development Life Cycle.

\*\* PCI DSS: Payment Card Industry Data Security Standard.

### Amadeus Corporate Information Security Office

Amadeus continuously reviews and improves its processes to keep ahead of upcoming threats, ensuring that technical controls are considered and implemented, and that our people are aware of our policies, controls and processes to avoid or minimize the impact of these threats. We follow the ISO 27001 cybersecurity standard, including:

- Corporate security objectives and controls set by our Corporate Information Security Office
- Our Security Risk Map, which prioritizes the implementation of mitigation measures
- A maturity assessment carried out by a third party to identify security gaps, which are also monitored and followed in our Corporate Security Program

All these activities are monitored and controlled by our Corporate Security Program (SHIELD).

From a global operations and technology perspective, Amadeus has established an independent Security Operations Center to monitor at all times the security status of the services we provide to customers. This service also helps us understand emerging technical threats and invest in the most appropriate technology to mitigate new risks.

Amadeus is a member of the Aviation Information Sharing and Analysis Center (A-ISAC), showing our continuous commitment to increasing our customers' trust and the sharing of best practice.

### Amadeus Group Privacy Office

Privacy is of paramount importance for Amadeus. We protect the fundamental right to privacy in any activity involving the processing of personal data from travelers but also from employees, candidates, business partners and visitors. For that purpose, Amadeus' Group Privacy Office, led by the Chief Privacy Officer, is responsible for establishing and overseeing our Privacy Program.

We've recently reviewed our corporate Privacy Policy, applicable to all our activities and endorsed by top management, establishing our privacy governance objectives.

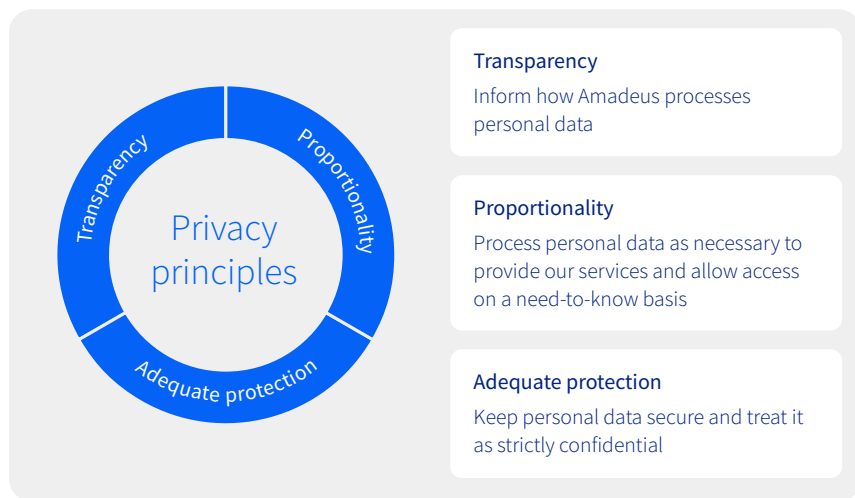
The Chief Privacy Officer is supported by a privacy organization and business privacy specialists appointed at each business unit and corporate function responsible for



GRI 2-25, 2-26, 205-1, 205-3, 406-1 GRI 3-3 (Cybersecurity and data privacy) GRI 3-3 (Ethics and integrity)

the implementation of the requirements established by the Group Privacy Office. Compliance with our Privacy Policy and more generally with the Group Privacy Office requirements is monitored via dedicated audits performed on a regular basis. Noncompliance with the Privacy Policy is subject to the same disciplinary actions as for all other relevant policies in the organization. One of the key requirements established is our Privacy by Design process, to ensure processes involving personal data are designed following Amadeus' privacy principles.

**Amadeus privacy principles**



Embedded within Amadeus' privacy principles are guidelines and standards from the EU's GDPR, the Organisation for Economic Co-operation and Development (OECD), the United Nations, the Asia-Pacific Economic Cooperation (APEC) Privacy Framework and the International Organization for Standardization (ISO), enabling application in all affiliates and ensuring value to all our customers worldwide.

Developing products and services with Amadeus' privacy principles baked in at the start contributes to the protection of privacy within the travel industry and generates trust with our customers. In addition, our robust process for reviewing and addressing information requests from authorities or law enforcement agencies ensures the appropriate balance between our legal obligations, our contractual commitments and the right to privacy of individuals.

We actively monitor changes to applicable privacy laws and regulations to ensure that our privacy principles, processes, practices and organization are updated as required.

**Amadeus corporate compliance and business ethics**

Amadeus and its executive management are committed to successful company growth in compliance with the highest standards of business ethics, as outlined in our Code of Ethics and Business Conduct (CEBC) and our Anti-Bribery and Corruption, Corporate Crime Prevention and Anti-Fraud global policies. Reports of misconduct may be submitted using safe mechanisms that respect the rights of whistleblowers, as set out in our Speak Up Policy. During 2022 Amadeus designed and implemented an improved Speak Up Reporting Channel, in line with applicable EU and Member State legislation on the protection of persons who report breaches of Union law.

The Speak Up Channel allows employees and stakeholders, anonymously if desired, to safely submit an inquiry or to report suspected issues that may contravene law, regulations or business practices or that may constitute unethical conduct that could result in a breach of the CEBC. In July 2022 Amadeus implemented an online web-based portal to manage speak up reporting on an end-to-end basis.

In 2022, 34 communications were received, 27 of which were inquiries or other messages, and 7 of which were reports. No cases of discrimination, corruption or violations of human rights have been confirmed.

All communications received through the Speak Up Channel are confidential and treated with the utmost diligence. In addition, we guarantee the presumption of innocence of anyone mentioned in the report and commit to avoiding retaliation, threats or discrimination against any person who reports in good faith.

The Amadeus Corporate Compliance and Business Ethics unit works closely with the Ethics Committee, which provides guidance on ethical behavior and compliance issues. In addition to the abovementioned Speak Up Reporting Channel, employees may address any concerns they may have regarding the Code of Ethics and Business Conduct to the Ethics Committee. Promoting integrity, transparency and ethical conduct in all our operations is very important to us, and we have a zero-tolerance approach to prohibited practices, both in our internal affairs and external operations.

Corporate Compliance designs and delivers global mandatory compliance and business ethics training for the whole workforce. Eligible vendors and third parties undergo

GRI 2-12, 2-16, 205-1

GRI 3-3 (Cybersecurity and data privacy)

GRI 3-3 (Ethics and integrity)

a risk-based compliance due diligence, ensuring that equivalent compliance and business ethics standards to those of Amadeus are applied by them. Amadeus runs a yearly Corporate Crime Prevention Program, monitoring extensive corporate crime and corruption-related risks as defined in the Spanish Criminal Code, such as those related to fraud, bribery, intellectual property, privacy, security, investor protection or money laundering, ensuring appropriate controls are in place to detect and prevent them.

➔ See p. 161, “Training in 2022.”

### 3rd Line: Group Internal Audit



Amadeus' Group Internal Audit:

- Supports the Audit Committee in monitoring the effectiveness of the company's internal control and risk management systems.
- Provides independent and objective assurance and consulting services designed to add value and improve Amadeus' operations. It helps accomplish our goals by using a systematic, disciplined approach to evaluate and improve the effectiveness of governance, risk management and control processes. This includes the potential for fraud and how the organization manages fraud risk.
- 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 our audit priorities. This considers, among others:
  - The Group's strategic objectives and projects
  - The Corporate Risk Map
  - Internal/external challenges and enablers identified through interviews with senior management and major control functions

→ Magnitudes and the geographical footprint of the Group's entities and activities

→ The outcomes and recency of different assurance activities carried over time

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 2022<sup>2</sup> represented more than 40% of the total Amadeus workforce. The main risks identified during internal auditing are reported to senior management and the Audit Committee, and their status is periodically updated until resolution or acceptance by the governing bodies.

As an optimum complement to its independent reviews, Group Internal Audit holds periodic coordination meetings with the main control, business and technology units.

The purpose, mission, reporting lines, independence and objectivity, scope of activities, resources, responsibilities and authority of Group Internal Audit are set by the Audit Committee to ensure that it has sufficient means to carry out its duties. To further ensure Group Internal Audit's objectivity, its staff have no direct operational responsibility or authority over any of the activities audited. Accordingly, internal auditors don't implement internal controls, develop procedures, install systems, prepare records or engage in any other activity that may impair their judgment.

Group Internal Audit is governed according to the mandatory elements of the Institute of Internal Auditors' (IIA) International Professional Practices Framework (IPPF). This includes its Core Principles, its definition of Internal Auditing, its International Standards and its Code of Ethics.

Group Internal Audit also runs a Quality Assurance and Improvement Program that combines ongoing monitoring with periodic internal and external assessments. The program includes periodic independent evaluations of Group Internal Audit's conformance with the IPPF. It also assesses the efficiency and effectiveness of Group Internal Audit and identifies opportunities for continuous improvement.

<sup>2</sup> Including internal audit and advisory reviews, and the assessment of the design and effectiveness of Amadeus' Internal Control over Financial Reporting (ICFR) and Corporate Crime Prevention (CCP) models.

## Chapter 9

# Shareholders and financial institutions

## ● In this chapter

### Amadeus Investor Relations' mission and activity



## Amadeus Investor Relations' mission and activity

Amadeus Investor Relations' mission is to maintain an open dialogue and build long-term relationships based on credibility and trust with its financial community, including investors, research analysts and the regulator of the Spanish stock market, the Comisión Nacional del Mercado de Valores (CNMV).

The Investor Relations function—part of the Finance function—aims to increase awareness about Amadeus and ensures that stakeholders are informed on relevant company or industry news and our operational and financial performance. We aim to communicate effectively and proactively, in a consistent and timely manner.

Our communications policy was defined in compliance with best practice and recommendations of good governance applicable to listed companies. It's based on the following principles:

- Responsibility, diligence and transparency of information disclosure
- Equal treatment of stakeholders and protection of their rights and interests
- Cooperation with shareholders

We use different channels of communication to reach our financial community, including supervisory bodies such as the CNMV in Spain. These entities swiftly distribute key information through their websites, which is simultaneously posted on our corporate website. We also use our corporate website, quarterly earnings market calls, corporate event-driven market calls, Annual General Shareholders' Meeting and Investor Day events to channel information to shareholders, along with an extensive investor relations program. During 2022 this included:

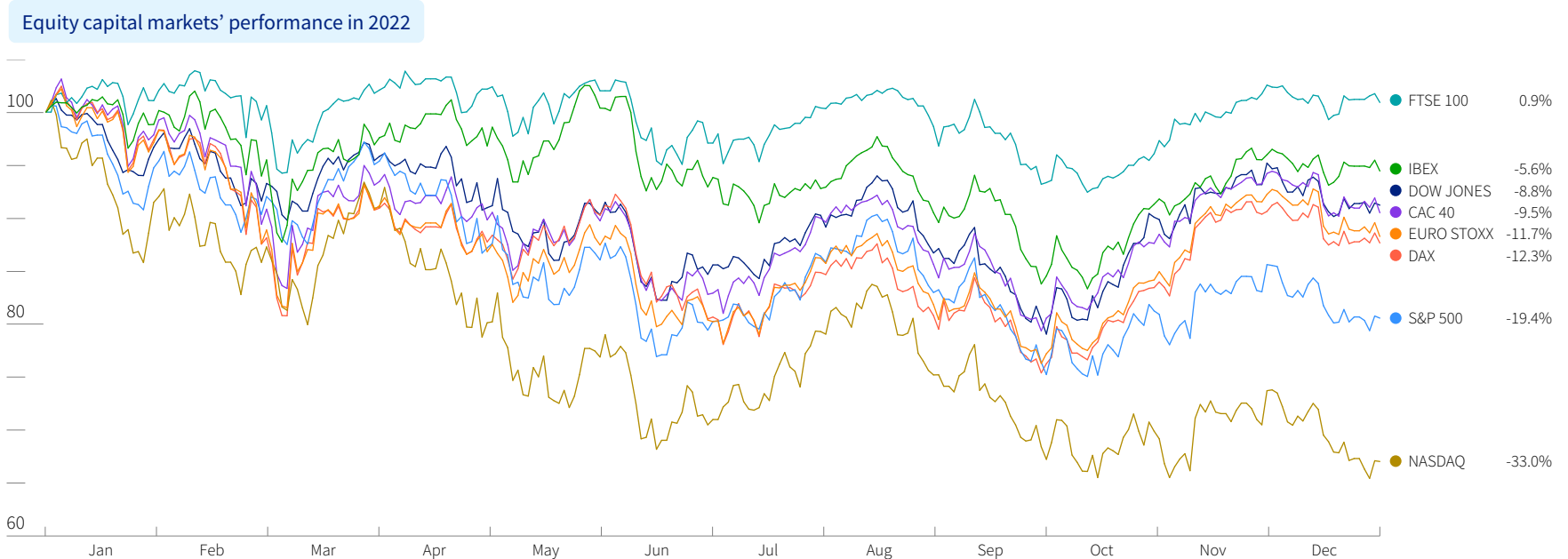
- Participation in investor conferences and roadshows all over the world. Cities visited included Boston, New York, Montreal, Toronto, London and Paris
- A high number of individual investor conference calls
- Meetings and ongoing communication with the research analysts (31 at the end of 2022) covering Amadeus' stock

Investor Relations seeks to foster a two-way relationship between Amadeus and the financial community. As well as providing our stakeholders with pertinent and relevant information, we also collect and consolidate valuable feedback used in our top management decision-making processes.

For the 11th year in a row, Amadeus has earned the prestigious recognition of being included in the Dow Jones Sustainability Indices (DJSI), in both the Europe and World indices. The DJSI are made up of global sustainability leaders based on economic, environmental and social criteria. This success has been the result of our commitment to developing a sustainable business that brings long-term rewards to all our stakeholders and places emphasis on the careful management of resources.

## The stock market in 2022

2022 was a difficult year for the stock market. A challenging macroeconomic environment—mainly due to rising inflation and interest rates and geopolitical instability—impacted the performance of European and US stock indices, which ranged between high single-digit and double-digit decreases versus the beginning of the year.



## Amadeus' share performance in 2022

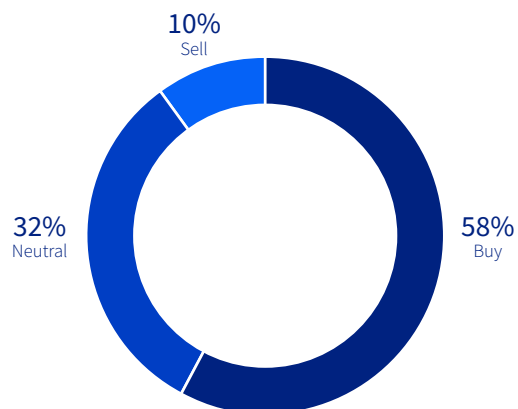
Amadeus' share price decreased by 18.6% in 2022, outperforming the S&P 500 and NASDAQ but underperforming the EURO STOXX and IBEX. The technology sector has been particularly impacted in 2022, due to high inflation and the tightening in monetary policy, as high valuations were more difficult to support. Our maximum share price during 2022 was €63.86 on January 6. We closed the year at €48.55.

Our market capitalization at December 31, 2022, was €21,872 million. The average daily trading volume was 769,195 shares, for a total traded volume of €10.9 billion for the year. Amadeus' free float stock reached 99.87% of Amadeus' share capital at year-end.

Amadeus' share performance in 2022



Analysts' recommendations at year-end 2022



Amadeus key trading data for the year

	2021	2022
Change in share price (%)	0.1%	(18.6%)
Maximum share price (figures in €)	65.70	63.86
Minimum share price (figures in €)	49.69	45.79
Weighted average share price (figures in €)*	57.75	55.13
Average daily volume (number of shares)	1,094,420	769,195
Average daily volume (figures in € thousand)	62,801	42,525
Annual volume (figures in € thousand)	16,139,783	10,928,812

\* Excluding cross trades.

Amadeus key trading data at year-end

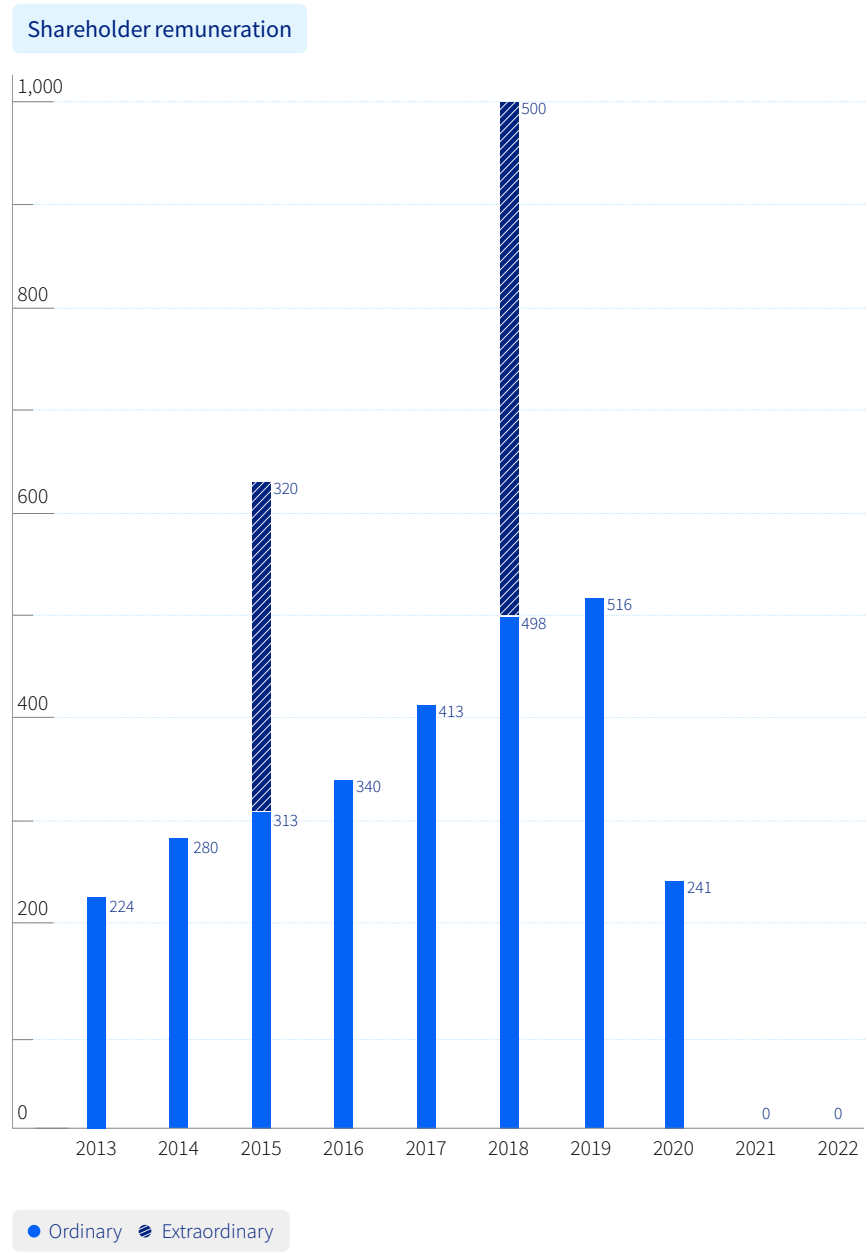
	2021	2022
Number of shares issued at Dec 31	450,499,205	450,499,205
Share price at Dec 31 (figures in €)	59.64	48.55
Market capitalization at Dec 31 (figures in € million)	26,868	21,872
Adjusted earnings per share, full year (figures in €)	(0.10)	1.65

## Shareholder remuneration

Amadeus operates 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. Driven by Amadeus’ business and financial expansion, ordinary dividends paid have grown consistently every year since Amadeus’ initial public offering (IPO) in 2010, at an average annual rate of 18% from 2011 to 2019. Amadeus complemented this with share repurchase programs in 2015 and 2018.

Since 2020, Amadeus’ financial performance has been impacted by the COVID-19 pandemic, and for the first time since its IPO, Amadeus reported losses in 2020 and 2021. As a consequence, in 2020 the ordinary dividend paid declined with respect to 2019 (as part of the measures in response to the pandemic, Amadeus canceled the payment of the complementary dividend). Considering the 2020 and 2021 financial results due to the COVID-19 pandemic, Amadeus’ Board of Directors agreed to not distribute dividends pertaining to the 2020 and 2021 financial years.

In June 2023 the Board of Directors will submit to the General Shareholders’ Meeting for approval a final gross dividend of €0.74 per share, representing 50% of the reported profit. Based on this, the proposed appropriation of the 2022 results included in our 2022 audited consolidated financial statements includes a total amount of €333.4 million corresponding to dividends pertaining to the financial year 2022.



## Financial institutions

Net financial debt, as per the terms of our credit facility agreements, amounted to €2,284.5 million at December 31, 2022 (representing 1.4 times last-12-month EBITDA).

The main changes to our debt in 2022 were:

- On February 18, 2022, Amadeus redeemed the outstanding notes issued on February 9, 2021 (with a maturity date of February 9, 2023) for a principal amount of €500 million. At the same time, Amadeus issued a €500 million floating rate note (FRN) with a two-year term (January 25, 2024) and an optional redemption for the issuer within 373 days after the issuance date (February 2, 2023). This note's issue was increased by €250 million on April 1, 2022. On December 21, 2022, Amadeus announced the early redemption, in February 2023, of this €750 million outstanding note.
- On September 22, 2022, Amadeus carried out a partial repurchase of the outstanding notes issued in September 2020 (with maturity in September 2028), for a principal amount of €250 million.
- The amortization of €500 million bonds, which reached maturity in March 2022 (issued in September 2018).
- The repayment of €15.0 million related to our European Investment Bank loans.

On April 27, 2018, Amadeus executed a €1,000 million revolving loan facility, with maturity in April 2025, to be used for working capital requirements and general corporate purposes. On January 17, 2023, its maturity was extended to January 2028 (plus two annual extensions at maturity). This facility remained undrawn at December 31, 2022.





## GRI 3-3 (Industry collaboration)

## Chapter 10

# Amadeus industry affairs

## ● In this chapter

Engaging public stakeholders

---

Engaging private sector and trade industry stakeholders

---



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

The year 2022 has seen the beginning of the recovery of travel from the pandemic. The access to vaccines, milder variants, governments opening their borders and a common approach toward digital health passes have encouraged travelers to take to the skies again. Even if the recovery has been mainly domestic, long-haul travel, especially in the latter half of the year, has also begun to take off.

During this year, Amadeus has taken a leadership position in driving the recovery through a number of initiatives together with public and private stakeholders. We've continued supporting governments, trade industry customers, partners and travelers with our Safe Travel initiative in a collaborative manner; we've maintained our commitment to the digitalization of SMEs; and we've continued to advance toward a more sustainable and resilient travel recovery. Additionally, this year we've taken a step forward in our objective of enabling a true smart and sustainable multimodal transport system in different geographies, especially in the European Union, by advising policy makers and by commissioning a multimodality white paper that shows the economic, consumer and sustainable opportunities that multimodality can unveil.


However, 2022 has also been a year of political and economic uncertainty. The breakout of the war in Ukraine, rising prices, political instability and fears of recession threatened the global economy and the travel industry in particular. Facing this situation, Amadeus has taken a proactive advisory role. We've been asked to provide information to governments at national and European level, as well as collaborate in the definition of policies and provide expertise in digital areas.

Amadeus' Industry and Regulatory Affairs unit continues to work jointly with stakeholders—public and private—across the global travel industry to build a common agenda based on the principles of transparency, fair competition, consumer choice and respect for society, showing a commitment to a reinforced public–private collaboration encompassing all the stakeholders in our industry.

GRI 3-3 (Industry collaboration)

Our approach to industry engagement

Industry engagement



Key principles	Priority areas
<ul style="list-style-type: none"> <li>→ Consumer choice</li> <li>→ Fair competition</li> <li>→ Transparency and neutrality</li> <li>→ Collaboration and broad engagement</li> <li>→ Fact-based analysis</li> </ul>	<ul style="list-style-type: none"> <li>→ Regulations and public policy</li> <li>→ Fair competition and market access</li> <li>→ Industry sustainability and environmental performance</li> <li>→ Industry standards</li> <li>→ Consumer and passenger rights</li> </ul>

## Sharing our insight and balanced perspective with public stakeholders



We believe in transparency and choice in a fair and competitive marketplace that serves consumers' best interests.

Amadeus contributes to regulatory reviews in the transport, tourism and technology sectors and provides input for relevant policy and industry initiatives.

The travel and tourism industry, as well as the digital sector, are complex, so we're proud to be asked to contribute to consultations, research studies and workshops sponsored by national and regional public stakeholders. We share our experience, insight and balanced perspective, always supported by evidence and fact-based analysis.

This year, our Industry and Regulatory Affairs unit has continued to strongly engage with the European Commission and with Member States to provide input and analyses on the best policies and regulations to tackle the challenges in our industry. Amadeus has engaged in a number of initiatives that testify to our ambitions in different areas.

## Promoting transparency and fair competition in the transport distribution market

In 2022 Amadeus worked closely with the European Commission and the European Parliament in an advisory capacity to offer balanced, fact-based views on how best to develop the complex and challenging transport marketplace. The transport distribution market is currently facing some challenges relating to transparency, fair competition and consumer choice. This development affects the level playing field required for the right functioning of the market, and also impacts the ability of SME players to access and compete in the market, as well as consumers' ability to make the best purchasing choices in the absence of transparent comparison.

**GRI 3-3 (Industry collaboration)**

The right policy framework at European level should help address some of these issues. The Multimodal Digital Mobility Services (MDMS) regulatory initiative launched by the European Commission aims at increasing the deployment and operational use of digital mobility services within and across passenger transport modes, with the intention of significantly improving the development of the multimodal digital mobility services ecosystem, inclusiveness and sustainability in the EU. This initiative represents an opportunity to promote a more favorable and integrated policy environment that ensures effective access to relevant data and includes relevant modes of transport (aviation, railway and others) to promote competition, choice and greener travel options.

This policy is key in facilitating a true European multimodal market where consumers can access and compare different transport options from multiple platforms to go from point A to point B, thus leveraging the existing digital infrastructure of intermediaries and operators competing on the merits of their offers and services.

Amadeus has actively contributed to the formulation of this future policy this year. We've continued our engagement with the European Commission through periodic meetings, consultations and workshops. Additionally, Amadeus has commissioned a research paper on multimodality that shows its economic, consumer and sustainability benefits.

## A European digital leader supporting the global agenda on innovation, digitalization and digital sovereignty

In 2022 Amadeus continued to actively engage with the EU and the Member States on cloud-related projects and digital sovereignty issues:

- Amadeus is one of the 22 founding members of Gaia-X, the European sovereign cloud project initiated by Germany and France. Amadeus is member of the French hub, contributed to the creation of the Spanish hub and has been appointed as a Board member of the Spanish hub.
- Amadeus, in collaboration with other travel industry players, is leading EONA-X, the European mobility, travel and tourism data space that will make it possible to share data and cloud-based solutions following the Gaia-X principles. During this year, we've developed a first pilot on multimodality, defined the governance principles and increased our activity and members.

- Amadeus joined two winning consortia appointed by the European Commission to provide a roadmap on data space mobility and data space tourism. This EU initiative is funded by the Digital Europe Program.
- Amadeus has engaged with the French, Spanish and German governments on the Important Project of Common European Interest for Next Generation Cloud Infrastructure and Services (IPCEI-CIS) by presenting different projects relating to data exchange platforms in France, multicloud cybersecurity in Spain and industry use cases in Germany. Amadeus participated in the EU presentation event and has been selected to lead one of the IPCEI's workstreams relating to data exchange platforms.
- Amadeus joined the European Alliance for Industrial Data, Cloud and Edge, and is thus contributing to the roadmap that will be submitted to the European Commission for the deployment of the next-generation sovereign digital solutions.



GRI 2-28 GRI 3-3 (Industry collaboration)

## Contributing to competitiveness and economic growth in emerging markets

Despite the challenging global economic situation, emerging markets represent a hot spot for investment. Markets in Asia, the Middle East and Africa are technologically booming and at the same time are eager for foreign investment, particularly in the form of technological innovations.

Amadeus has been very active in Turkey and in Saudi Arabia. In Turkey, with the support of the Republic of Türkiye Investment Office, the Spanish Embassy, the Spanish-Turkish Chamber of Commerce and the Spanish trade federation CEOE, we've further increased our engagement with Turkish government authorities as well as enhanced Amadeus' public presence in Turkey. In order to increase Amadeus' relevance in policy discussions, we've engaged with different actors, including during our participation in the Organization for Economic Co-operation and Development (OECD)'s opening of their new dedicated center in Istanbul, where we met with ministers of the Middle East and North Africa region to discuss the role of digitalization. Similarly, with the support of both the French and Spanish authorities, Amadeus offered its digital capabilities to help the Kingdom of Saudi Arabia achieve its Vision 2030 objectives, a vision that puts travel at the forefront of the Saudi economy with multimillion investments in aviation and hotel infrastructure.

In South Africa, Amadeus successfully cooperated with the country's Department of Trade, Industry and Competition and Department of Tourism on a data-driven digital platform that supports South Africa's objective to build, promote and commercialize an expanded tourism offering.

## Supporting the digitalization of SMEs in travel and tourism

SMEs are the structural heart of the travel and tourism sector, and policymakers have identified the digitalization of SMEs as a key objective to restore the economic activity of this sector. The challenge is how to effectively implement all these policies together with the private sector.

Amadeus currently works with a wide number of SMEs in different countries: travel agents, hotels and destination management organizations (DMOs), among others. We've been working with industry stakeholders to set up projects targeting (1) the digitalization of SMEs operating in national and local tourism destinations jointly with DMOs and (2) small and medium-sized hotels. The objective is to help them compete in an increasingly digitalized environment while protecting their efficiencies through innovative technology, business intelligence and upskilling.

## Engaging private sector and trade industry stakeholders

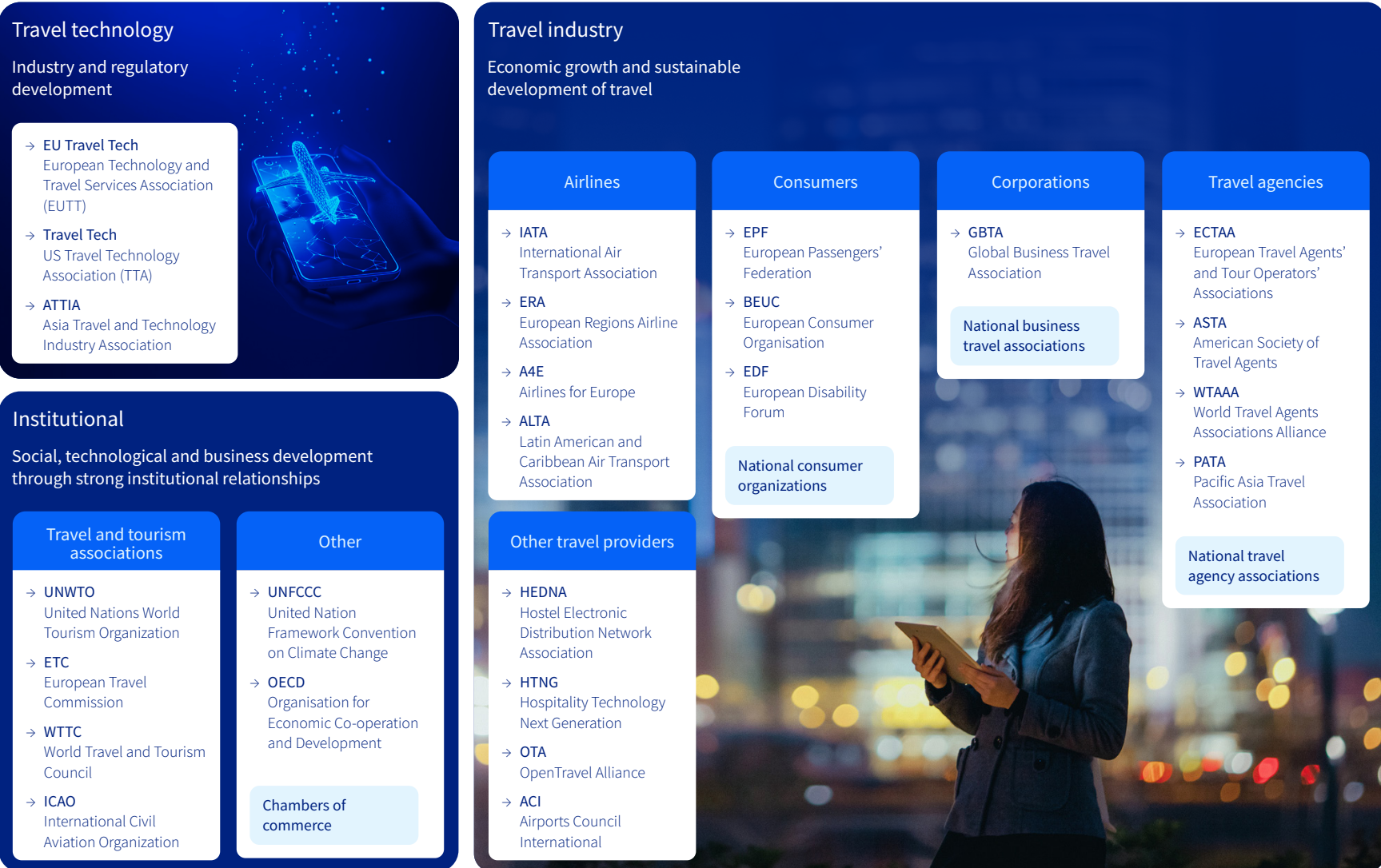


In the vast landscape of different private sector and trade industry stakeholders in travel and tourism, Amadeus engages with selected players in an open and constructive dialogue on industry issues.

We collaborate with our own trade associations and partner with our airline and travel agency customer organizations to work toward common public policy goals. As an active partner, our door is always open, and we maintain strong and close relationships with institutional stakeholders, consumer advocates and many other travel and tourism associations across the globe.

GRI 2-28 GRI 3-3 (Industry collaboration)

Mapping of Amadeus stakeholders in the private sector and travel industry



[GRI 2-28](#) [GRI 3-3 \(Industry collaboration\)](#)

## Travel technology associations championing fair competition and transparency

At the travel technology industry level, Amadeus is represented through its memberships with EU Travel Tech (EUTT), the US Travel Technology Association (Travel Tech) and the Asia Travel and Technology Industry Association (ATTIA). These three associations represent the travel tech industry on regulatory and industry matters.

Amadeus chairs EUTT, which has been particularly active in engaging on key issues related to the Code of Conduct for Computerized Reservation Systems (Regulation [EC] No. 80/2009), the Air Services Regulation (regulation [EC] No. 1008/2008) and the European Commission's proposal for a regulation for multimodal digital mobility services. EUTT promotes the adoption of policies that support the principles of transparency, consumer choice, fair competition, non-discrimination in the access to data and a level playing field.

In 2022 EUTT has also worked on the EU digital agenda and key regulations such as the Digital Markets Act, the Digital Services Act and the forthcoming Data Act to ensure that precise criteria are set to target the appropriate stakeholders.

In North America, Travel Tech advocates for policies that promote fair competition, industry standardization and improved transparency for consumers.

In Asia, ATTIA has maintained a focus on the recovery of the tourism sector in Asia-Pacific, the region that has been the slowest to return to pre-pandemic levels. This has meant a focus on market-specific priorities, including regional short-term rental accommodation (STRA) regulations in Malaysia and Australia, tourism tax initiatives in Thailand and Malaysia, and payment tokenization in India.

## Working with the travel industry on common agendas

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

## Supporting consumers' best interests

Travel consumers are naturally the most important element in the travel chain but also the most vulnerable, especially when they don't have full visibility and thus can't access the most adequate travel options. Transparency would make it easier for travelers to compare and combine travel options to provide a single, seamless point-to-point offer. The European Consumer Organisation (BEUC) and the European Passengers' Federation (EPF) are engaged in a working group for the Multimodal Digital Mobility Services regulation proposal, and Amadeus, through EUTT, is also actively helping to ensure access to travel providers' content on fair, reasonable and non-discriminatory (FRAND) terms.

On this front, Amadeus organized together with Kearney [the Passenger Multimodality in Europe Dialogue](#) in an effort to bring stakeholders to discuss business opportunities and barriers to building a more sustainable and digital transport market in Europe.

## Close collaboration to bring value to the travel agency community

The travel agency community is an important partner for Amadeus to develop common industry initiatives related to key policy areas. Our strong commitment to multimodality will also bring new capabilities to the travel agency community.

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.

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

GRI 2-28 GRI 3-3 (Industry collaboration)

## Institutional associations fueling public-private sector collaboration

As a trusted advisor willing to share insights and views, Amadeus is invited to participate in many sector initiatives across the world. We actively participate where we can make a meaningful contribution.

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

We work closely with the United Nations World Tourism Organization (UNWTO), of which Amadeus is an affiliate member and strategic technology partner.

During 2022 we continued our partnership with UNWTO to promote digital transformation and innovation in the tourism industry. We launched a collaboration in a new initiative, the Digital Futures Program for SMEs, which aims to support the digital transformation journey of SMEs by facilitating the diffusion of relevant technologies in the tourism value chain, and we participated for the second time in the Sustainable Development Goals Global Startup Competition, which fosters and rewards travel start-ups embracing sustainable solutions.

UNWTO has also supported Amadeus in its innovation skills-building efforts, as a partner in the Amadeus #1AHACK4SUSTAINABILITY Global Hackathon dedicated to sustainability, and by contributing to our Travel4Impact Network, an ongoing program on SME capacity-building in sustainability and digitalization.

Amadeus is also a global member of the World Travel and Tourism Council (WTTC) to support the advancement of the broader travel and tourism industry. WTTC is a globally recognized private sector platform from which we advocate jointly with other industry stakeholders on issues of common interest affecting the travel and tourism sector. In 2022 Amadeus continued to actively participate in WTTC's Global Summits (Manila, Riyadh) and engaged in industry dialogue to drive key concepts such as sustainability, seamless travel, global standardization and a more resilient and inclusive recovery of the global travel industry.



GRI 3-1

Chapter 11

# Materiality and stakeholder engagement

● **In this chapter**

Materiality analysis

---

Amadeus' contribution to the Sustainable Development Goals

---

Approach to stakeholder engagement

---

Relationship with vendors

---



## Materiality analysis

A principal driver for the selection of the specific environmental, social and governance (ESG) indicators is the materiality analysis carried out by Amadeus. Materiality helps us understand our impacts and our stakeholders' concerns and to meet their expectations. We prioritize reporting on those topics that reflect our most significant impacts on the economy, environment and people, including impacts on human rights.

In 2022 Amadeus updated its materiality assessment based on the “double materiality”<sup>1</sup> principle. Nevertheless, we've only considered the impact materiality in the 2022 update of the materiality analysis and we're including the financial materiality assessment in a second phase that's being carried in 2023. This materiality study was led by external consultants (Mazars).

The scope of the assessment encompasses the most representative stakeholder groups: employees and external candidates, customers, suppliers, shareholders, governments and regulatory bodies, industry associations, society and the environment.

The methodology followed is aligned with the GRI Universal Standards and with the drafts of the European Sustainability Reporting Standards (ESRS) prepared by the European Financial Reporting Advisory Group (EFRAG). The update consisted of the following phases:

1. Identification of actual and potential impacts that Amadeus has or could potentially have on its stakeholders.
2. Amadeus' impact assessment being carried out with input from members of top management and a relevant group of Amadeus staff. Amadeus ESG strategy has also been considered in this assessment.
3. Grouping of the actual and potential impacts identified into specific ESG issues. These ESG issues were—later in the process—the focus of the questions asked to our stakeholders.

<sup>1</sup> Double materiality has two dimensions: impact materiality and financial materiality. Impact materiality refers to information on the reporting company's impact on the economy, environment and people for the benefit of multiple stakeholders, such as investors, employees, customers, suppliers and local communities. Financial materiality refers to information on economic value creation at the level of the reporting company for the benefit of investors (shareholders).



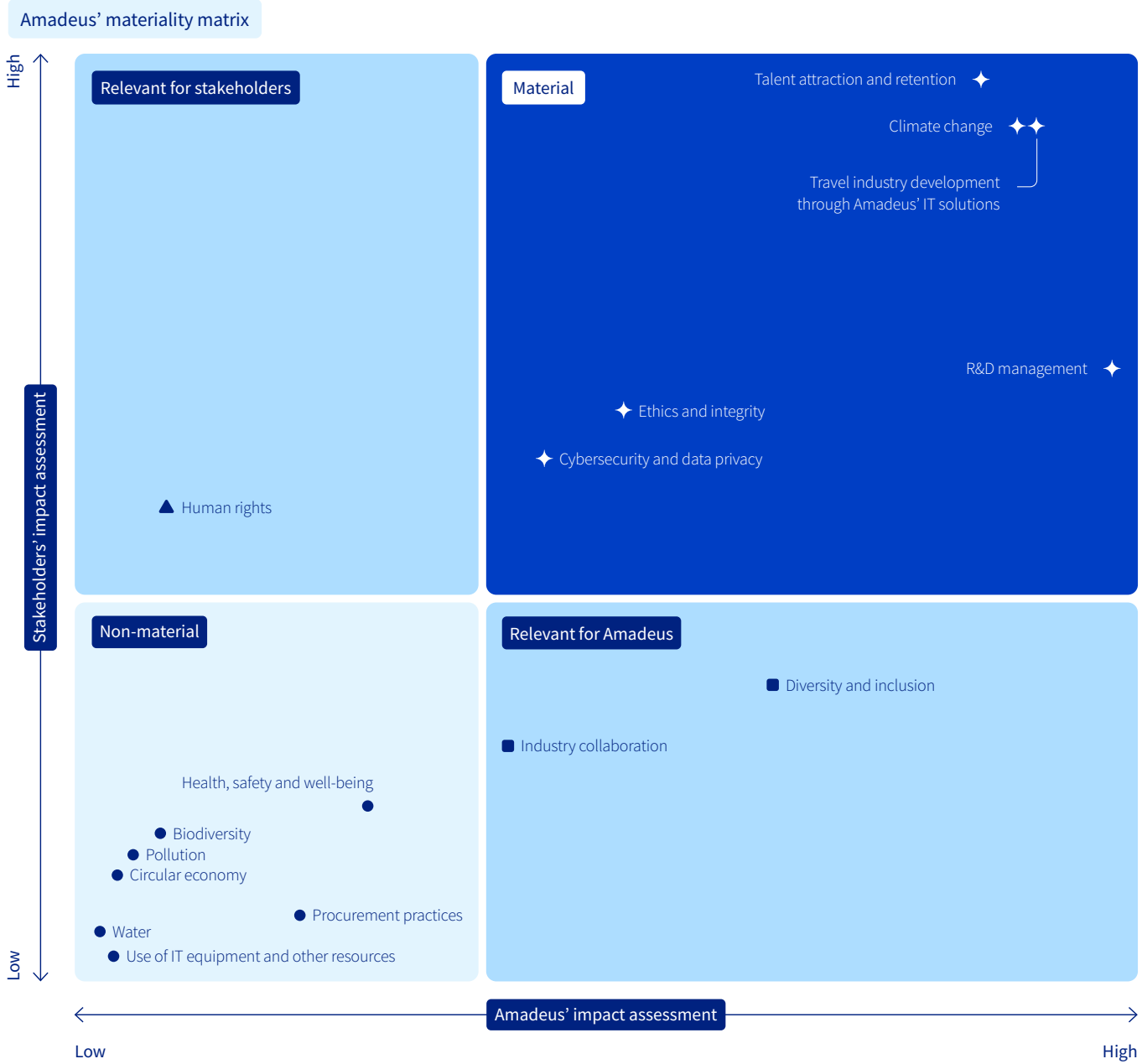
## GRI 3-1

4. Stakeholders' impact assessment: reflecting the viewpoint that external stakeholders have on the importance of the impacts that Amadeus activities have on its stakeholders. To that end, we carried out a survey on a significant group of our suppliers and included the results of a large client survey. Analysts and investors have also been considered through the analysis of the Dow Jones Sustainability Index and FTSE4Good.
5. Consolidation and prioritization of the results of the previous phases to create a materiality matrix. This matrix has two axes representing Amadeus' impact assessment and stakeholders' impact assessment, and prioritizes ESG issues according to both. Material issues are defined as those that exceed the average scoring on both axes, while issues exceeding average scores on only one of them are considered externally or internally relevant (see graph on the following page).

This matrix is reviewed on a yearly basis. It's important to note that the materiality matrix isn't meant to be a precise representation but rather an indication of principal factors.



GRI 3-2



According to the 2022 ESG materiality analysis review, our customers and employees, among other stakeholders, are prioritizing how Amadeus can provide technology that contributes to the sustainability of the travel industry. Our suppliers considered cybersecurity, data privacy and R&D investment to be the most relevant issues. External and internal stakeholders are also increasingly concerned about talent attraction and retention and climate change, and have also prioritized ethics and integrity.

The materiality analysis has helped to define what must be reported in more detail. From that starting point, we report not only on our material issues but also on the main topics identified as relevant either in the Amadeus or in the stakeholders' impact assessment: diversity and inclusion, human rights and industry collaboration.

Additionally, current regulation and key sustainability ratings require that we report specific issues even if they're non-material. Therefore, for the purpose of improving overall transparency and stakeholder engagement, we've included indicators on materials (paper consumption), water usage, waste generation, circular economy, social and environmental assessment of suppliers, human rights and occupational health, safety and well-being.

## Amadeus' contribution to the Sustainable Development Goals

The United Nations has outlined 17 Sustainable Development Goals (SDGs) for Member States and businesses to strive toward by 2030. The SDGs represent a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. The 17 goals balance the three dimensions of sustainable development: economic, social and environmental.

The SDGs represent a global standard and common language that facilitates targeted collaboration among a wide diversity of partners. In this respect, the SDGs help identify the best opportunities for and maximize everyone's contribution toward sustainable development.

We've updated our impact in relation to the SDGs based on the results of our materiality analysis (described in the previous section). The relationship between our material issues and the SDGs' targets, quantified according to the level of our contribution, has led us to prioritize SDGs 4, 5, 7, 8, 9, 10, 13, 16 and 17.

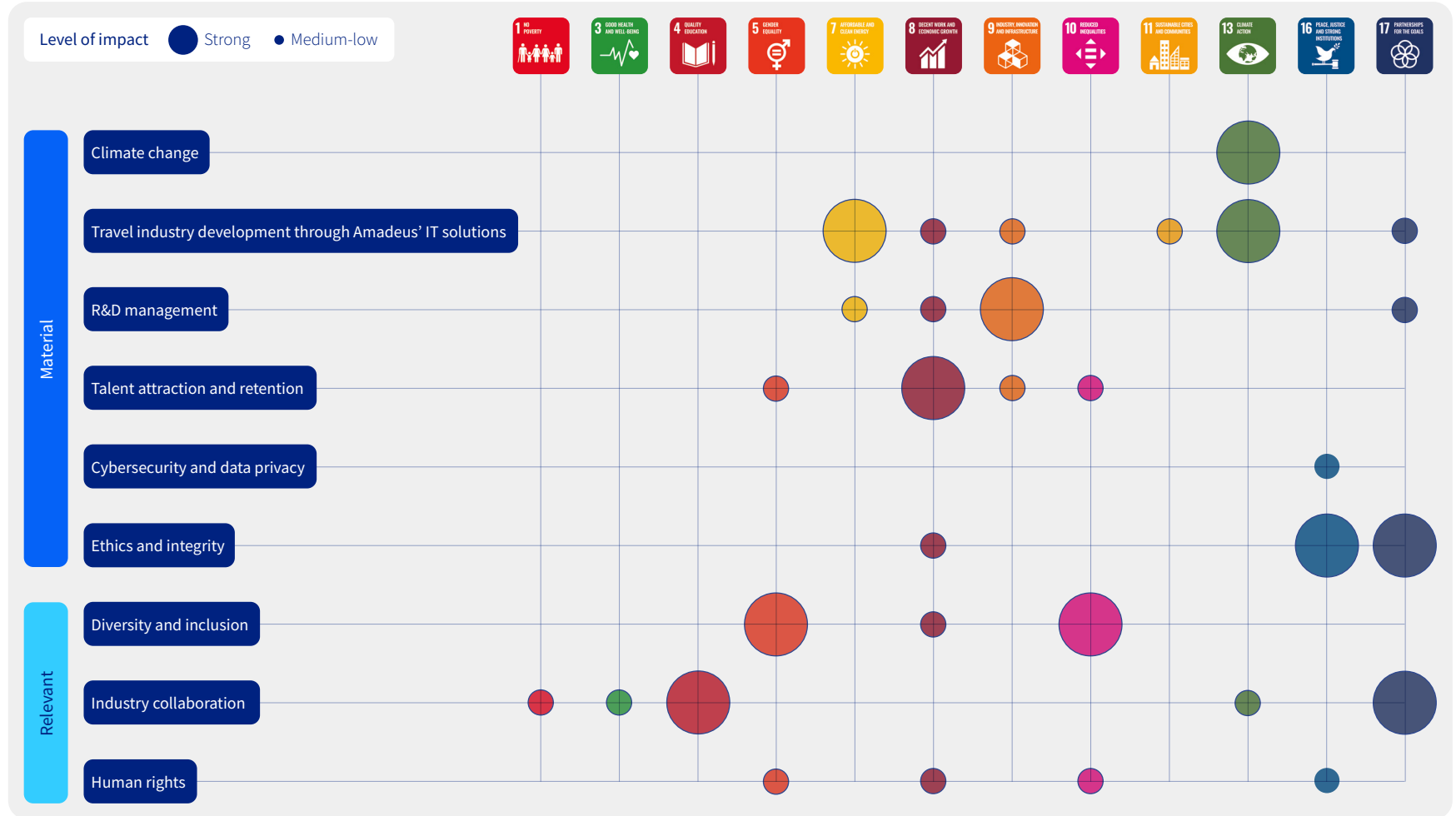
Our technological innovation has tremendous potential to make a positive contribution to SDGs 8 and 9. As a travel technology company, we invest in IT solutions that help make the travel industry more sustainable over the long term. The travel industry has a significant environmental impact, and we need to address this impact by finding ways to travel more sustainably, thus contributing also to SDG 13.

As a global company, we create social and economic value. From the point of view of corporate governance, finance and labor practices, we aim to increase our positive impact on society. In this way, we contribute to goals that are directly linked to people's welfare (SDGs 4, 5, 8 and 10) in aspects such as standards of living, working conditions, education, economic growth and social equality.

The goals that include targets on transparent institutions and multistakeholder partnerships (SDGs 16 and 17) tie in very well with our profile as a global company that connects all kinds of players in the travel industry. We need to join forces with other stakeholders and share different perspectives, working together with the common goal of long-term sustainability and transparency in the industry.

The following table summarizes our contribution to the goals per material issue, based on the analysis of our initiatives and projects. Besides our main contributions to the SDGs mentioned above, we've also contributed indirectly or with less intensity to SDGs 1, 3 and 11 through our social responsibility program and collaboration with the industry and other stakeholders. In addition, we've identified our specific actions toward these goals and have highlighted them with an SDG icon along the different sections of the Global Report.

Amadeus' contribution to the Sustainable Development Goals



GRI 2-29

## Approach to stakeholder engagement

At Amadeus, we want to make sure that all our stakeholders have easy access to up-to-date information about the company. The following are the main publications reporting our activities, which help ensure clear communication and transparency:

- Amadeus Global Report
- Consolidated Annual Accounts and Directors' Report (including Non-Financial Information Statement)
- Annual Report on Corporate Governance of Listed Stock Corporations
- Annual Report on the Remuneration of Directors of Listed Companies
- Quarterly financial results announcements
- Blog posts on global, regional and local Amadeus websites
- Social media updates on LinkedIn, Facebook, Twitter, Instagram and YouTube

In addition to these publications and the specific approaches to stakeholder engagement described throughout this report, we maintain dialogue with our stakeholders on a regular basis depending on need, and at least once a year.

➤ See p. 28, "Business areas;" p. 77, "Amadeus people and culture;" p. 87, "Social responsibility;" p. 95, "Environmental sustainability;" p. 137, "Amadeus industry affairs;" and p. 131, "Shareholders and financial institutions."

Stakeholder	Communication channel
Employees and external candidates	<ul style="list-style-type: none"> <li>→ Direct engagement through local, regional and global Amadeus People &amp; Culture teams</li> <li>→ Engagement surveys across all sites</li> <li>→ Collective bargaining agreements</li> <li>→ Employee Box email</li> <li>→ Intranet and internal weekly newsletter</li> <li>→ Participation in external events to showcase our expertise and attract new talent, covered by our social media channels</li> <li>→ <a href="https://jobs.amadeus.com/">https://jobs.amadeus.com/</a></li> <li>→ Speak Up Channel* <a href="https://amadeus.com/en/speak-up-channel">https://amadeus.com/en/speak-up-channel</a></li> </ul>
Shareholders	<ul style="list-style-type: none"> <li>→ Direct engagement through Investor Relations team and periodic reports</li> <li>→ Roadshows and conferences</li> <li>→ Investor Relations Inbox</li> <li>→ Specific pages for investors at <a href="https://corporate.amadeus.com/">https://corporate.amadeus.com/</a></li> </ul>
Customers	<ul style="list-style-type: none"> <li>→ Regular press releases announcing new solutions, deals and other important news</li> <li>→ Guest blog posts in which our customers offer their view on the industry and how they collaborate with us</li> <li>→ Direct engagement through local, regional and global sales channels as well as customer management teams around the world</li> <li>→ Voice of the Customer Program</li> <li>→ Local and global customer support centers</li> <li>→ Customer-focused events showcasing our offerings and expertise and working on how to better collaborate with our customers, covered by our corporate blog and social media channels</li> </ul>
Suppliers	<ul style="list-style-type: none"> <li>→ Direct contact through the Amadeus Corporate Purchasing department as well as internal units and local teams across offices worldwide</li> <li>→ Social responsibility and environmental surveys</li> </ul>
Industry associations	<ul style="list-style-type: none"> <li>→ Direct engagement through participation in main industry associations</li> <li>→ Blog posts, bylines and other media engagements through which Amadeus offers its views on trending industry matters</li> </ul>
Governments, authorities and regulatory bodies	<ul style="list-style-type: none"> <li>→ Direct contact through the Industry Affairs team and local Amadeus general managers</li> <li>→ Participation in related meetings and events</li> <li>→ Specific pages for industry relations at <a href="https://corporate.amadeus.com/">https://corporate.amadeus.com/</a></li> </ul>
Society and the environment	<ul style="list-style-type: none"> <li>→ Direct engagement through multistakeholder panels</li> <li>→ Industry Affairs Box email</li> <li>→ Collaboration on joint social responsibility and sustainability initiatives</li> <li>→ Blog posts showcasing our engagement in these areas</li> <li>→ <a href="https://corporate.amadeus.com/en/sustainability">https://corporate.amadeus.com/en/sustainability</a></li> </ul>

\* The Speak Up Channel is a communication channel available for Amadeus employees, former employees, customers, suppliers, business partners and any third parties.

GRI 2-6, 2-8, 2-29, 403-7 GRI 3-3 (Procurement practices)

Appropriate engagement with our stakeholders allows us to understand their chief concerns and what they expect from us. In the table above we describe the main communication channels for each of our stakeholders.

Some examples of Amadeus' engagement with our stakeholders include:

- Active collaboration with more than 30 private sector and trade industry stakeholders in travel and tourism
- Involvement in corporate social responsibility (CRS) activities in 45 countries
- In 2022, over 300 institutions empowered and supported through our through our CSR programs
- Customer service Net Promoter Score (NPS) for Air Distribution customers of +74.3 and relational NPS of +54.6
- Nearly 7,000 employees watching *Amadeus Live*, which had two annual global editions in 2022
- The Investor Relations team attending 32 conferences and roadshows during 2022

## Relationship with vendors

Most of our external vendors fall under the following categories:

- Consulting and marketing services
- Hardware vendors
- Software vendors
- Data communication vendors

From a supply chain perspective, our principal activity is related to online transaction processing and technology development. In this context, Amadeus' exposure to third-party vendors that may not comply with minimal social or environmental requirements is relatively low.

The majority of spend is concentrated on a limited number of vendors, mainly hardware producers (servers) and consultancy companies. Generally, Amadeus has a stable situation in terms of vendor concentration. The top 50 Amadeus vendors represent almost 61% of the total spend.

The Amadeus Corporate Purchasing Policy aims to ensure that all employees involved in the procurement of goods and services factor in social and environmental responsibility in their purchasing decisions. An organization of local, regional and global purchasing teams oversees the operations on the supply chain side and deals with both internal stakeholders and vendors.

All vendors must be fully committed to complying with all appropriate laws and regulations in all countries and jurisdictions in which they operate. The scope of these laws and regulations includes health and safety, labor relations, human rights and non-discrimination, insider trading, taxation, data privacy, competition and anti-trust, the environment, public tenders and anti-bribery. We expect vendors to be guided by the highest ethical standards and to be firmly committed to excellence in the fields of corporate governance, social responsibility and environmental sustainability. In order to verify vendors' commitments to sustainability, we apply the following measures:

- At least strategic vendors for each Amadeus company will have to explicitly adhere in writing to the Amadeus Code of Ethics and Business Conduct (CEBC)

GRI 403-7, 308-1, 414-1 GRI 3-3 (Procurement practices)

extract for vendors. If any of these vendors have their own documented CEBC (which Amadeus has the right to ask for and/or audit) and it's demonstrated to be at least as strict as Amadeus', they may adhere to their own, with confirmation in writing. If the vendor is not in agreement with this wording, it's the vendor's responsibility to explicitly state if they're not adhering to the CEBC and why. In this case, our Purchasing department together with our Risk and Compliance department will decide how to move forward in each specific case. In 2022 vendors representing 45% of our turnover signed our CEBC.

- We favor vendors that are committed to environmental and social responsibility practices, such as having an environmental policy in place, demonstrating compliance with environmental regulations and prioritizing goods aligned with circular economy principles.
- We avoid relationships with vendors that don't comply with the following principles:
  - Respect for human rights
  - Prevention of forced and child labor
  - Non-discrimination in recruitment practices
  - Prevention of unfair low-wage labor
  - Respect for employees' right to freedom of association
  - Healthy and safe working conditions for employees
  - Observation of all related local and international laws and regulations

## Vendor qualification policy

The vendor qualification process helps identify candidates for strategic relationships, facilitates communication with potential vendors and ensures new suppliers meet firm-wide quality, management and safety standards.

Amadeus' vendor qualification procedure provides a holistic view of our entire global supply base by:

- Identifying approved and preferred vendors for the products and services we want to buy
- Better understanding the potential risks of buying products or services in all geographies
- Encouraging improvements in supplier standards

There is a two-step qualification process applied to any new Amadeus vendor: (1) the vendor must be qualified to provide any kind of service to Amadeus, and (2) the vendor must possess a service qualification confirming that they can provide specific types of services such as business continuity or IT security.

In 2021 our Corporate Compliance and Purchasing teams integrated automated compliance due diligence tools into the vendor-creation process. A compliance due diligence check is performed on eligible vendors before the business relationship is entered into so risks can be appropriately mitigated during contractual negotiations.

 See p. 129, "Amadeus corporate compliance and business ethics."

## Supervision systems and audits, and their results

The evaluation of our vendors' supervision systems is carried out by audits, both internal (by Amadeus' Group Internal Audit) and external (by third parties).

The selection of activities to be reviewed by Group Internal Audit is mostly risk-based, and has to be formally approved by the Audit Committee of the Group. Through our engagements, we assess the adequacy and effectiveness of the internal controls within the organization. This includes, whenever deemed relevant, the effectiveness of controls over outsourced activities.

In addition to this, and on an ad hoc basis according to our risk-based approach, Group Internal Audit can also directly assess the activity at selected vendors, both at the Group and entity level.

Amadeus' vendor risk management approach is multidisciplinary and includes areas such as privacy, cybersecurity, business continuity, IT controls, compliance and legal. This allows us evaluate and monitor vendor performance and risk.

**GRI 3-3 (Procurement practices)** **GRI 308-1, 308-2, 414-1, 414-2**

In relation to climate change, we ask our vendors to provide their sustainability strategy or to comply with the requirements of Amadeus' Environmental Policy. We believe that the systematic implementation of this approach helps to increasingly raise awareness in the industry about the importance of reducing greenhouse gas emissions overall, and it also helps us identify potential risks and areas for improvement.

As part of Amadeus' new vendor-creation process, a mandatory questionnaire is to be completed by all the new vendors (with a yearly spend over €10,000). The questionnaire includes issues related to human rights, non-discrimination and environmental policies. They must also either confirm adherence to our CEBC or Environmental Policy or confirm that they have similar policies. If the vendor response is inadequate, they may not move forward in the process and Amadeus declines to work with them.

This process is effective at most Amadeus entities, covering more than 90% of our relationships with vendors (vendors that represent 45% of our turnover have signed our CEBC for Vendors).

In 2022 Amadeus didn't identify any significant environmental or social impact in the supply chain.





## GRI 2-2

## Annex 1

# About this report

## ● In this chapter

Objectives, scope and limitations

---

Methodology

---

Production process overview

---



## Objectives, scope and limitations of the Amadeus Global Report

Non-financial reporting is becoming increasingly relevant. In recent years, we perceive a growing interest from industry stakeholders and regulators in non-financial information as a fundamental component of corporate reporting.

The Amadeus Global Report has the following objectives:

1. To comply with market requirements and best practice expectations regarding the transparent reporting of environmental, social and governance (ESG) information. The report is published in accordance with the GRI Sustainability Reporting Standards and integrates financial and non-financial information. In this edition, we've also followed the reporting standards of the Task Force on Climate-related Financial Disclosures (TCFD) and included a mapping of Sustainability Accounting Standards Board (SASB) standards to our GRI reporting.
2. To provide input to external stakeholders interested in our sustainability practices and performance, including sustainability indices and the United Nations Global Compact.
3. To serve as a source of information for any internal or external party wanting to know more about Amadeus, for example in induction programs. The data and information included in the report have been validated internally and externally.
4. To highlight Amadeus' sustainability and social initiatives, which are not included in other public Amadeus documents.

The reporting scope of the Amadeus Global Report includes the entire Amadeus Group unless otherwise indicated. This document focuses on our activities in 2022. For comparability purposes, we include historical data for KPIs that facilitate comparison over time.

In terms of the data-gathering process, we considered the materiality of the information on the one hand and the effort of collecting the data on the other. In cases where data is limited, this is specified in the corresponding section.

The materiality analysis has served to define what must be reported in more detail, as well as the information to include in the GRI Content Index. From that starting point, we report not only on our material issues but also on the main topics identified as either externally or internally relevant, namely energy consumption, social responsibility and human rights.

[↗](#) See p. 164, “GRI Content Index;” p. 144, “Materiality analysis.”

Additionally, current regulation and key sustainability ratings require that we report specific issues that are non-material to Amadeus. Therefore, for the purpose of improving overall transparency, we’ve included the GRI Standards on:

- Water
- Circular economy
- Procurement practices
- Health, safety and well-being

Amadeus complies with the legal reporting obligations of EU Directive 2014/95 on disclosure of non-financial and diversity information and its transposition into Spanish regulation (Law 22/2015 of July 20, modified in Law 11/2018 of December 28) and EU Taxonomy reporting as per EU Regulation 2020/852 in our [non-financial information statement](#). Therefore, the scope of the Global Report does not include the reporting obligations under the abovementioned regulations.

## Methodology

### Reporting principles

We define the content and structure of the Amadeus Global Report based on the aforementioned objectives. From that starting point, we build the document in line with reporting frameworks, reporting standards and legal requirements presented hereafter.



## Reporting frameworks

- **International Integrated Reporting Council.** This report brings together information about Amadeus' "capitals"<sup>1</sup> into a single corporate document. We explain how Amadeus' strategy leads to the creation of value. In line with the <IR> concept of connectivity, we report the activities of our various units by using cross-references to point readers to other sections for more detailed information.
- **United Nations Global Compact.** This compact is a call for organizations to align their strategies and operations with 10 universal principles on human rights, labor standards, the environment and anti-corruption. Amadeus has been a participant of the United Nations Global Compact since 2018 and is committed to integrating the 10 principles into our strategy, culture and day-to-day operations. This report has been prepared in accordance with these principles.
- **United Nations Sustainable Development Goals.** Since 2018, the Global Report has included an analysis on what our value is in meeting the United Nations Sustainable Development Goals (SDGs). This analysis has helped us identify how our business growth has a positive impact on the protection of the environment and on social development.

 See p. 123, "Amadeus' contribution to the Sustainable Development Goals."



- **Task Force on Climate-related Financial Disclosures (TCFD).** In 2017 the task force established by the Financial Stability Board issued standardized climate-related financial disclosure recommendations structured into four thematic areas: governance, strategy, risk management, and metrics and targets. Amadeus is aligned to this framework and presents climate-related information in this report following these recommendations.

1 As the International Integrated Reporting Council explains in its International <IR> Framework, "capitals" are stocks of value that are affected or transformed by the activities and outputs of an organization. The framework categorizes them as financial capital, manufactured capital, intellectual capital, human capital, social/relationship capital and natural capital.

- **Business for Societal Impact Framework (B4SI).** This framework is a measurement standard for understanding the impact of initiatives on business and society. Through this approach, organizations can benchmark initiatives and strategically evaluate the contribution they make to the community. Amadeus has followed this methodology of community investment calculation since 2019.

## Reporting standards

- **Global Reporting Initiative (GRI).** The GRI reporting framework is the main point of reference for defining the minimum topics and metrics to include in the Global Report. We select the GRI Sustainability Reporting Standards in line with our materiality analysis in order to report our impact on the economy, the environment and society. This report has been prepared in accordance with the GRI Standards. For the Content Index – Essentials Service, GRI Services reviewed that the GRI content index is clearly presented, in a manner consistent with the Standards, and that the references for disclosures 2-1 to 2-5, 3-1 and 3-2 are aligned with the appropriate sections in the body of the report.
- **Greenhouse Gas Protocol (GHG Protocol).** The GHG Protocol Corporate Accounting and Reporting Standard, being the most widely used international accounting tool, establishes guidance and requirements for the development of a greenhouse gas emissions inventory in organizations. This standard, applied by Amadeus, considers direct greenhouse gas emissions (Scope 1) as emissions from sources owned or controlled by the company. On the other hand, indirect greenhouse gas emissions (Scope 2 and 3) are those emissions resulting from the company's activities, but which occur at sources owned or controlled by a third party. Scope 2 refers to the use of electricity and Scope 3 to the emissions released by a company's providers in the activities related to the delivery of their services.

## External verification

- **Third-party verification.** The external assurance of the report by an independent organization (Ernst & Young) ensures the reliability of the quantitative and qualitative material issues listed in the GRI Content Index in Annex 2.

GRI 2-14

# Production process overview

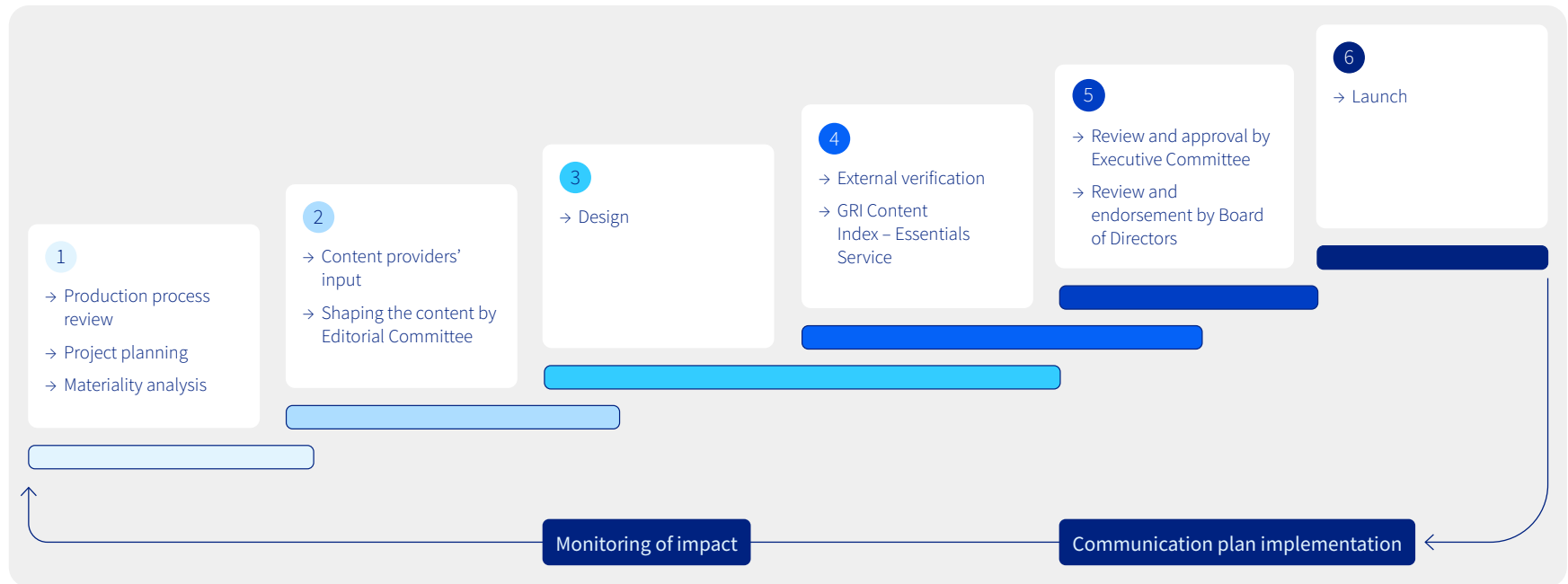
The Global Report’s production process is led by Amadeus’ ESG team at the CEO Office.

As non-financial information is increasing in relevance, the process to build the Amadeus Global Report is becoming more complex. The graph on the next page provides an overview of the different stages in this process, involving close to 100 contributors worldwide. In line with the GRI reporting principles, we constantly aim to improve the report’s balance, comparability, accuracy, timeliness, clarity and reliability.<sup>2</sup>

The Amadeus Global Report Editorial Committee plays a key role in shaping the content of the report. Its main mission is to agree on the strategic overview of the content. This transversal team is composed of heads of key units at corporate level: Communications, Branding, Industry Affairs, Strategy, Investor Relations and CEO Office.

The Amadeus Executive Committee reviews and approves the Global Report. Once the document is endorsed by the Board of Directors, it’s released globally through internal and external communication campaigns.

## Production process of the Amadeus Global Report



<sup>2</sup> The principles for defining report quality according to the GRI Standards are explained at [globalreporting.org/standards](https://www.globalreporting.org/standards).

GRI 302-1, 302-3, 201-1

Annex 2

# Quantitative information and GRI Content Index



## Direct economic value generated and distributed<sup>1</sup>



### Distributed economic value | figures in € million

	2022
Operating costs	1,331.1
Employee wages and benefits	1,514.5
Payments to providers of capital*	80.5
Payments to governments	68.4
	<b>2,944.5</b>

\* All financial payments made to providers of the organization's capital (interest and dividends paid).

### Generated economic value | figures in € million

	2022
Net sales	4,485.9
Financial incomes	35.6
Sales of assets	0
	<b>4,521.5</b>

<sup>1</sup> As defined by the GRI Standards (Disclosure 201-1).

GRI 302-1, 305-1, 305-2, 305-3, 305-4

## Tables related to environmental sustainability<sup>2</sup>



### Energy consumption

	2020	2021	2022*
Electricity consumption Amadeus sites** (GJ)	168,761	158,377	149,844
Number of employees	17,593	16,042	16,948
Electricity consumption per employee (GJ)	9.6	9.9	8.8
Electricity consumption Amadeus Data Center (GJ)	228,611	221,446	230,317
Number of transactions processed at the Data Center (millions)	473	737	1,341
Electricity required per 1 million transactions (GJ)	483.4	300.4	171.7
<b>Total electricity consumption top Amadeus sites and Data Center (GJ)</b>	<b>397,372</b>	<b>379,823</b>	<b>380,161</b>
Natural gas (GJ)	22,234	33,760	26,211
Diesel oil (GJ)	3,076	2,769	3,282
<b>Total energy consumption top Amadeus sites and Data Center (GJ)</b>	<b>422,683</b>	<b>416,352</b>	<b>409,505</b>

\* Targets and results are described and explained on page 101.

\*\* Does not include Amadeus Data Center.

2 Scope: total Amadeus sites worldwide. Figures have been calculated considering the direct reporting of the sites included in the Environmental Management System (EMS) plus the estimation of the rest of the sites. This estimation is based on the average consumption reported by the EMS sites. For environmental reporting, given the fact that resources consumption take place across the year, we use average full-time equivalents (FTEs) in the year.

### Type of fuel used for electricity generation in 2022 (GJ)\*

	Coal	Fuel oil	Natural gas	Biofuel	Waste	Other**	Total
Amadeus sites worldwide (excluding the Data Center)	93,576	5,951	56,815	8,936	2,857	89,583	257,717
Data Center***	0	0	0	0	0	230,317	230,317

\* All figures expressed in gigajoules equivalent, obtained from the energy mix data of each country and the energy-transformation efficiency factor for each type of energy source.

\*\* Other: nuclear, hydropower, geothermal, photovoltaic, solar thermal, wind power and tidal power.

\*\*\* In 2022 we purchased Guarantees of Origin (GOs) of renewable energy from hydropower plants in Northern Europe for all electricity used at the Data Center. Without considering the use of GOs, the energy mix for the Data Center would result in the following split, calculated as per the German energy mix: Coal: 201,120; Fuel Oil: 5,064; Natural Gas: 92,520; Biofuel: 46,146; Waste: 12,673; Other: 100,013; Total: 466,536.

## GRI 2-7, 306-3, 303-5, 301-1

## Fuel consumption

	2020	2021	2022	2022 target
Natural gas (m <sup>3</sup> )	578,834	878,897	682,375	878,897
Diesel oil (L)	79,675	71,707	85,002	71,707

## Paper consumption

	2020	2021	2022	2022 target
Paper consumption (kg)	22,307	14,440	18,307	14,440
Number of employees	17,593	16,042	16,948	-
Paper consumption per employee (A4 sheets per working day)	1.15	0.82	0.98	0.82

The increase in paper consumption in 2022 compared to the previous year is mainly due to the partial closure of offices in 2021 because of COVID-19 protocols and the increase in employee attendance at our offices in 2022.

## Water consumption and waste generation

	2020	2021	2022	2022 target
Water consumption (m <sup>3</sup> )	152,105	130,707	149,269	130,707
Total estimated waste (kg)*	184,034	164,644	241,444	164,644

\* For comparability purposes, the figures for waste don't include obsolete equipment or hazardous waste. Total obsolete equipment in 2022 was 6,395 kg and total hazardous waste was 8,946 kg. The percentage of obsolete equipment and hazardous waste that was sent for recycling in 2022 was 88% and 100%, respectively. For non-hazardous waste, 93% is the estimated average percentage of waste that was sent for recycling at the sites included in our direct reporting.

The increase in waste generated and water consumption in 2022 compared to the previous year is mainly due to the partial closure of offices in 2021 because of COVID-19 protocols and the increase in employee attendance at our offices in 2022.

Tables related to human resources information<sup>3</sup>

## Diversity in the workforce

## Workforce by employment contract by region in 2022

	Permanent	Temporary
Europe	8,912	205
Asia-Pacific	4,704	49
North America	2,281	-
South America	741	-
Middle East & Africa	354	6
<b>Total</b>	<b>16,992</b>	<b>260</b>

## Gender diversity by employment type and contract in 2022

	Employment type		Employment contract	
	Full-time	Part-time	Permanent	Temporary
Male	10,329	203	10,386	146
Female	6,156	564	6,606	114
<b>Total</b>	<b>16,485</b>	<b>767</b>	<b>16,992</b>	<b>260</b>

<sup>3</sup> Figures in headcounts as of December 31. Scope: all employees in controlled companies.

GRI 405-1

	VPs and directors			Senior managers and managers			Staff		
	2020	2021	2022	2020	2021	2022	2020	2021	2022
<b>Total</b>	<b>206</b>	<b>206</b>	<b>217</b>	<b>4,142</b>	<b>5,033</b>	<b>5,586</b>	<b>12,202</b>	<b>10,697</b>	<b>11,449</b>

By age range

< 30	0	0	0	9	26	35	2,296	2,368	2,860
30-50	82	80	79	2,913	3,547	3,903	8,046	6,756	6,980
> 50	124	126	138	1,220	1,460	1,648	1,860	1,573	1,609

By gender

Male	164	162	171	2,784	3,326	3,674	7,179	6,270	6,687
Female	42	44	46	1,358	1,707	1,912	5,023	4,427	4,762

Governance bodies

	2020	2021	2022
<b>Percentage by age range</b>			
< 30	0%	0%	0%
30-50	8%	0%	0%
> 50	92%	100%	100%
<b>Percentage by gender</b>			
Male	77%	58%	55%
Female	23%	42%	45%
<b>Percentage by nationality</b>			
Other than Spanish	69%	75%	73%

Employees with disabilities

	2020	2021	2022
<b>Total</b>	<b>217</b>	<b>219</b>	<b>210</b>



GRI 2-24, 404-1, 205-2

## Training in 2022

### Average hours of training in 2022

Employee category	Male	Female	Total
SVPs, EVPs and VPs	3.03	2.49	2.96
Directors	11.75	7.41	10.71
Associate directors	11.40	7.18	10.27
Senior managers	11.12	12.52	11.57
Managers	14.25	12.10	13.51
Staff	14.90	13.26	14.24

### Employees hires and turnover

	Employee hires				Employee turnover			
	2020	2021	2022	% of total headcount	2020	2021	2022	% of total headcount
<b>Total headcount</b>	<b>827</b>	<b>2,358</b>	<b>3,434</b>	<b>19.9%</b>	<b>2,078</b>	<b>2,987</b>	<b>2,231</b>	<b>12.93%</b>
<b>By region</b>								
Europe	281	704	1,394	15.3%	891	1,507	1,024	11.23%
Asia-Pacific	420	1,196	1,418	29.8%	525	887	836	17.59%
North America	72	227	343	15.0%	553	465	262	11.49%
South America	46	220	235	31.7%	52	89	87	11.74%
Middle East & Africa	8	11	44	12.2%	57	39	22	6.11%
<b>By age range</b>								
Male	556	1,535	2,181	20.7%	1,299	1,918	1,468	13.94%
Female	271	823	1,253	18.6%	779	1,069	763	11.35%
<b>By gender</b>								
< 30	404	1,238	1,585	54.7%	525	608	602	20.79%
30-50	391	1,036	1,688	15.4%	1,187	1,825	1,337	12.20%
> 50	32	84	161	4.7%	366	554	292	8.60%

### Global anti-corruption training in 2022\*

Number of employees and externals trained	17,947
Percentage of employees and externals trained**	90%
Number of training hours	8,974

\* These figures are for 2021 and 2022 combined, as our training cycle is bi-yearly. The anti-corruption training is conducted online and includes: the Code of Ethics and Business Conduct, Anti-Bribery & Corruption, Gifts & Entertainment, Anti-Fraud, Prevention of Insider Trading and Speak-Up (complaint mechanisms). Breakdown by region is as follows: 3,870 employees in APAC (Asia-Pacific), 8,722 employees in EMEA (Europe, Middle East and Africa), 2,951 employees in the Americas (North America and South America); 2,404 FTEs have not been assigned to any region.

\*\* Members of top management attend our general employee training sessions.

\*\* Figures include average FTEs internal and external in 2021 - 2022.

GRI 401-1

Work-related injuries in 2022

Type of injury	Europe		Asia-Pacific		North America		South America		Middle East & Africa		Total
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Neck or back	-	3	-	-	-	-	-	-	-	-	3
Bone	-	-	-	-	-	-	-	-	-	-	0
Soft tissue	-	-	-	-	-	-	-	-	-	-	0
Burns	-	1	-	-	-	-	-	-	-	-	1
RMI	-	-	-	-	-	-	-	-	-	-	0
Other	5	15	-	-	-	-	-	-	-	-	20
<b>Total injuries</b>	<b>5</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>
Injury rate	0.59	2.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80
Occupational diseases rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lost day rate	0.12	0.45	0.00	0.00	0.00	0.00	0.26	0.44	0.01	0.02	0.15
Absentee rate	1.45	2.90	0.25	0.46	0.00	0.00	0.22	0.38	1.30	2.56	1.11
Work-related fatalities	0	0	0	0	0	0	0	0	0	0	0.00

Collective bargaining agreements

	2020	2021	2022
Percentage of employees covered by collective agreements	48%	46%	43%

GRI 2-30, 403-9

# GRI Content Index\*

- Material topics
- Other topics reported, internally or externally relevant
- Other topics reported



<b>Statement of use:</b>	Amadeus IT Group, S.A. has reported in accordance with the GRI Standards for the period from January 1, 2022 to December 31, 2022.			
<b>GRI 1 used:</b>	GRI Foundation 2021			
<b>Applicable GRI Sector Standard:</b>	N/A			
GRI standard	Disclosure	Page number(s) or direct answer(s)	Omission(s)	SASB Standard (Software & IT Services)
GRI 1	Foundation 2021			
GRI 2	General Disclosures 2021			
The organization and its reporting practices	2-1 Organizational details	p. 22; 180		
	2-2 Entities included in the organization's sustainability reporting	p. 153		
	2-3 Reporting period, frequency and contact point	As in the financial reports, Amadeus' Global Report refers to the period from January 1, 2022 to December 31, 2022, and is reported on an annual basis. Contact point: sustainability@amadeus.com		
	2-4 Restatements of information	No restatements of information have been made from previous reporting periods.		
	2-5 External assurance	p. 176		
Activities and workers	2-6 Activities, value chain and other business relationships	p. 20-21; 23; 28-36; 38-50; 53-58; 150		
	2-7 Employees	p. 159		
	2-8 Workers who are not employees	p. 78; 150		

\* For the Content Index - Essentials Service, GRI Services reviewed that the GRI content index is clearly presented, in a manner consistent with the Standards, and that the references for disclosures 2-1 to 2-5, 3-1 and 3-2 are aligned with the appropriate sections in the body of the report. The service was performed on the English version of the report.

GRI standard	Disclosure	Page number(s) or direct answer(s)	Omission(s)	SASB Standard (Software & IT Services)
	2-9 Governance structure and composition	p. 110-113		
	2-10 Nomination and selection of the highest governance body	p. 110-112; 120-121		
	2-11 Chair of the highest governance body	p. 113-114		
	2-12 Role of the highest governance body in overseeing the management of impacts	p. 110-112; 123; 125-127; 130		
	2-13 Delegation of responsibility for managing impacts	Amadeus' Board of Directors delegates the responsibility for managing impacts to the CEO Office and subsequently to the ESG Office. The ESG Office is responsible for producing reports that include information on these topics and are reviewed and endorsed by the Board on an annual basis.		
	2-14 Role of the highest governance body in sustainability reporting	p. 156		
	2-15 Conflicts of interest	<a href="#">Amadeus Corporate Governance Report 2022</a> (p. 49-50)		
Governance	2-16 Communication of critical concerns	2-16a: p. 130 2-16b: In 2022 no critical concerns were communicated to the Board of Directors.		
	2-17 Collective knowledge of the highest governance body	It is a common view of the Board members to consider the area of ESG as a competency area for the Board as a whole, and not just of one expert Board member, without prejudice of analyzing in the future such a need. In this regard, we are currently evaluating the possibility of implementing measures to advance the collective knowledge, skills and experience of Amadeus Board of Directors on sustainable development.		
	2-18 Evaluation of the performance of the highest governance body	<a href="#">Amadeus Corporate Governance Report 2022</a> (p. 23, 42, 44)		
	2-19 Remuneration policies	p. 118-119; 120-121		
	2-20 Process to determine remuneration	p. 118-119; 120-121 <a href="#">Amadeus Directors' Remuneration Report 2022</a> (p. 27)		
	2-21 Annual total compensation ratio	In the <a href="#">Amadeus Non-financial information 2022</a> (p. 39-41) we disclose the average compensation per employee and the total executive remuneration.		

GRI standard	Disclosure	Page number(s) or direct answer(s)	Omission(s)	SASB Standard (Software & IT Services)
Strategy, policies and practices	2-22 Statement on sustainable development strategy	p. 3-6		
	2-23 Policy commitments	p. 124		
	2-24 Embedding policy commitments	p. 124; 161		
	2-25 Processes to remediate negative impacts	p. 129		
	2-26 Mechanisms for seeking advice and raising concerns	p. 129		
	2-27 Compliance with laws and regulations	In 2022 there have not been significant instances of non-compliance with laws and regulations by the Group.		TC-SI-520a.1
	2-28 Membership associations	p. 140-143		
Stakeholder engagement	2-29 Approach to stakeholder engagement	p. 149-150		
	2-30 Collective bargaining agreements	p. 163		
<b>GRI 3</b>	<b>Material Topics 2021</b>			
Disclosures on material topics	3-1 Process to determine material topics	p. 144-145		
	3-2 List of material topics	p. 146		
<b>Climate Change</b>				
GRI 3 Material topics 2021	3-3 Management of material topics	p. 96-98; 100-103; 106-108		TC-SI-130a.3
GRI 201 Economic Performance 2016	201-2 Financial implications and other risks and opportunities due to climate change	p. 172-175		

GRI standard	Disclosure	Page number(s) or direct answer(s)	Omission(s)	SASB Standard (Software & IT Services)
GRI 302 Energy 2016	302-1 Energy consumption within the organization	p. 157-158		TC-SI-130a.1
	302-2 Energy consumption outside of the organization	In 2022 energy consumption outside of the organization was 114,554 GJ.		
	302-3 Energy intensity	p. 157		
	302-4 Reduction of energy consumption	p. 101-102		
	302-5 Reductions in energy requirements of products and services	p. 66-67		
GRI 305 Emissions 2016	305-1 Direct (Scope 1) GHG emissions	p. 158		
	305-2 Energy indirect (Scope 2) GHG emissions	p. 158		
	305-3 Other indirect (Scope 3) GHG emissions	p. 158		
	305-4 GHG emissions intensity	p. 158		
	305-5 Reduction of GHG emissions	p. 99-102		
<b>Travel and tourism development through Amadeus' IT solutions</b>				
GRI 3 Material Topics 2021	3-3 Management of material topics	p. 28; 38; 53; 57; 87-88; 127		TC-SI-550a.1 TC-SI-550a.2
GRI 201 Economic performance 2016	201-1 Direct economic value generated and distributed	p. 157		
GRI 203 Indirect economic impacts 2016	203-2 Significant indirect economic impacts	p. 87-88		
<b>R&amp;D management</b>				
GRI 3 Material Topics 2021	3-3 Management of material topics	p. 60-66		
<b>Talent attraction and retention</b>				
GRI 3 Material Topics 2021	3-3 Management of material topics	p. 78; 79-82		TC-SI-330a.2

GRI standard	Disclosure	Page number(s) or direct answer(s)	Omission(s)	SASB Standard (Software & IT Services)
GRI 404 Training and Education 2016	404-1 Average hours of training per year per employee	p. 161		
	404-2 Programs for upgrading employees skills and transition assistance programs	p. 80-81		
	404-3 Percentage of employees receiving regular performance and career development reviews	All Amadeus employees receive a Performance & Development Review on a yearly basis.		
GRI 401 Employment 2016	401-1 New employee hires and employee turnover	p. 162		
<b>Cybersecurity and data privacy</b>				
GRI 3 Material Topics 2021	3-3 Management of material topics	p. 67-68; 123-129; 130		TC-SI-220a.1 TC-SI-220a.2 TC-SI-220a.4 TC-SI-220a.5 TC-SI-230a.2
GRI 418 Customer privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	In 2022 there was no complaint concerning breaches of customer data privacy and/or losses of customer data.		TC-SI-220a.3 TC-SI-230a.1
<b>Ethics and integrity</b>				
GRI 3 Material Topics 2021	3-3 Management of material topics	p. 123-130		
GRI 205 Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	p. 123-130		
	205-2 Communication and training about anti-corruption policies and procedures	p. 161		
	205-3 Confirmed incidents of corruption and actions taken	p. 129		
GRI 206 Anti-competitive behavior 2016	206-1 Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	There were no legal actions against Amadeus in 2022 for anticompetitive behavior, anti-trust and monopoly practices.		
GRI 207 Tax 2019	207-1 Approach to tax	<a href="#">Amadeus Non-financial information 2022</a> (p. 57-59)		
	207-2 Tax governance, control, and risk management	<a href="#">Amadeus Non-financial information 2022</a> (p. 59-61)		
	207-3 Stakeholder engagement and management of concerns related to tax	<a href="#">Amadeus Non-financial information 2022</a> (p. 61)		

GRI standard	Disclosure	Page number(s) or direct answer(s)	Omission(s)	SASB Standard (Software & IT Services)
GRI 207 Tax 2019	207-4 Country-by-country reporting	<p>207-4a, b vi; b viii: <a href="#">Amadeus Non-financial information 2022</a> (p. 62-64)</p> <p>207-4b i, b ii: <a href="#">Amadeus IT Group, S.A. and Subsidiaries Consolidated Annual Accounts</a> (p. 66-78)</p> <p>207-4b iii: <a href="#">Amadeus Non-financial information 2022</a> (p. 36)</p> <p>207-4 c: The time period covered by the information provided is January 1st, 2022 to December 31st, 2022.</p>	<p><b>Requirements omitted</b> 207-4b iv; v; vii; ix; x</p> <p><b>Reason</b> Confidentiality constraints</p> <p><b>Explanation</b> The information is not disclosed due to confidentiality constraints, as it depicts critical strategic business information that would therefore leave Amadeus in a competitive disadvantage. Nonetheless, we are analyzing the additional requirements and preparing our systems to eventually obtain and report the information in the future.</p>	
GRI 415 Public policy 2016	415-1 Political contributions	Amadeus does not make contributions to political parties		
<b>Diversity and inclusion</b>				
GRI 3 Material Topics 2021	3-3 Management of material topics	p. 82-84		
GRI 405 Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	p. 160		TC-SI-330a.1 TC-SI-330a.3
	405-2 Ratio of basic salary and remuneration of women to men	<a href="#">Amadeus Non-financial information 2022</a> (p. 40-41)		
GRI 406 Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	p. 129		
<b>Human Rights</b>				
GRI 3 Material Topics 2021	3-3 Management of material topics	p. 123-124; 126		



GRI standard	Disclosure	Page number(s) or direct answer(s)	Omission(s)	SASB Standard (Software & IT Services)
GRI 408 Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	<p>We avoid relationships with vendors that don't comply with the following principles: Respect for human rights; Prevention of forced and child labor; Non-discrimination recruitment practices; Prevention of unfair low-wage labor; Respect for employees' right to freedom of association; Healthy and safe working conditions for employees; Observation of all related local and international laws and regulations.</p> <p>Eligible vendors and third parties undergo a risk-based compliance due diligence, ensuring that equivalent compliance and business ethics standards to those of Amadeus are applied by them. Eligible vendors and third parties identified as high risk are asked about their Modern Slavery and Human Trafficking policies and programs.</p>		
GRI 409 Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	<p>We avoid relationships with vendors that don't comply with the following principles: Respect for human rights; Prevention of forced and child labor; Non-discrimination recruitment practices; Prevention of unfair low-wage labor; Respect for employees' right to freedom of association; Healthy and safe working conditions for employees; Observation of all related local and international laws and regulations.</p> <p>Eligible vendors and third parties undergo a risk-based compliance due diligence, ensuring that equivalent compliance and business ethics standards to those of Amadeus are applied by them. Eligible vendors and third parties identified as high risk are asked about their Modern Slavery and Human Trafficking policies and programs.</p>		
GRI 410 Security Practices 2016	410-1 Security personnel trained in human rights policies or procedures	<p>All employees must receive mandatory training for the Code of Ethics and Business Conduct, as well as other policies relating to bribery and corruption, fraud, insider trading and speaking up.</p> <p>Corporate Compliance designs and delivers global mandatory compliance and business ethics training for the whole workforce.</p> <p>Eligible vendors and third parties undergo a risk-based compliance due diligence, ensuring that equivalent compliance and business ethics standards to those of Amadeus are applied by them.</p>		
GRI 411 Rights of Indigenous Peoples 2016	411-1 Incidents of violations involving rights of indigenous peoples	In 2022 Amadeus didn't identify any incident of violations involving rights of indigenous peoples.		
<b>Industry collaboration</b>				
GRI 3 Material Topics 2021	3-3 Management of material topics	p. 137-143		

GRI standard	Disclosure	Page number(s) or direct answer(s)	Omission(s)	SASB Standard (Software & IT Services)
<b>Circular Economy</b>				
GRI 3 Material topics 2021	3-3 Management of material topics	p. 99-102		
	306-1 Waste generation and significant waste-related impacts	Waste generation is one of the five elements monitored in our Environmental Management System. Nonetheless waste has not been identified in our materiality analysis as a material topic since, as an IT provider, Amadeus does not generate significant amounts of waste.		
	306-2 Management of significant waste-related impacts	p. 102		
	306-3 Waste generated	p. 159		
GRI 306 Waste 2020	306-4 Waste diverted from disposal	From the main 14 sites in our EMS direct reporting, the total obsolete equipment in 2022 was 6.4 tons, of which a 88% (5.6 tons) was sent to recycling; total hazardous waste was 8.9 tons, of which 100% was sent to recycling. The non-hazardous waste in the sites included in our direct reporting was 179 tons, and 93% (166.5 tons) is the estimated average percentage of waste that was sent to recycling. Overall, the estimated percentage of waste sent to recycling in 2022 was 93% (181 out of 194 tons).		
	306-5 Waste directed to disposal	From the main 14 sites in our EMS direct reporting, the total obsolete equipment in 2022 was 6.4 tons, of which a 12% (0.8 tons) was directed to disposal; total hazardous waste was 8.9 tons, of which 0% was directed to disposal. The non-hazardous waste in the sites included in our direct reporting was 179 tons, and 7% (12.5 tons) is the estimated average percentage of waste that was directed to disposal. Overall, the estimated percentage of waste directed to disposal in 2022 was 7% (13 out of 194 tons).		
<b>Water</b>				
GRI 303 Water and Effluents 2018	3-3 Management of material topics	p. 96-97; 99-102		
	303-1 Interactions with water as a shared resource	p. 96-97; 99-102		
	303-2 Management of water discharge-related impacts	p. 96-97; 102		
	303-5 Water consumption	p. 159		TC-SI-130a.2

GRI standard	Disclosure	Page number(s) or direct answer(s)	Omission(s)	SASB Standard (Software & IT Services)
<b>Use of IT equipment and other resources</b>				
GRI 3 Material topics 2021	3-3 Management of material topics	p. 96-97; 99-102		
GRI 301 Materials 2016	301-1 Materials used by weight or volume	p. 159		
<b>Health, safety and well-being</b>				
GRI 3 Material Topics 2021	3-3 Management of material topics	p. 79; 123-124		
GRI 403 Occupational health and safety 2018	403-1 Occupational health and safety management system		Amadeus' Health and Safety Policy requires that each of its companies or legal entities develops and approves a Health and Safety policy. Programs and procedures in line with this policy are developed and implemented at local level following the approval of the General Manager/Site Manager.	
	403-2 Hazard identification, risk assessment, and incident investigation			
	403-3 Occupational health services			
	403-4 Worker participation, consultation, and communication on occupational health and safety			
	403-5 Worker training on occupational health and safety			
	403-6 Promotion of worker health	p. 82		
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	p. 150-151		
	403-9 Work-related injuries	p. 163		
<b>Procurement practices</b>				
GRI 3 Material Topics 2021	3-3 Management of material topics	p. 150-152		
GRI 308 Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	p. 151-152		
	308-2 Negative environmental impacts in the supply chain and actions taken	p. 152		
GRI 414 Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	p. 151-152		
	414-2 Negative social impacts in the supply chain and actions taken	p. 152		

GRI 201-2

Annex 3

# Task Force on Climate-related Financial Disclosures Index



Amadeus has been a supporter of the Task Force on Climate-related Financial Disclosures (TCFD) since 2021 and follows its reporting recommendations. The table below covers the content of TCFD reporting and provides the location in the Global Report where the information is reported.

	TCFD-recommended disclosure	Disclosure location
	a) Describe the Board's oversight of climate-related risks and opportunities.	p. 173
Governance	b) Describe management's role in assessing and managing climate-related risks and opportunities.	p. 173
	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.	p. 174-175
Strategy	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.	p. 173-175
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	p. 95-108
	a) Describe the organization's processes for identifying and assessing climate-related risks.	p. 173-175
Risk management	b) Describe the organization's processes for managing climate-related risks.	p. 123-127; 173
	c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.	p. 173
	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	p. 96-105
Metrics and targets	b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas emissions, and the related risks.	p. 99-101; 103
	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	p. 99-105

## GRI 201-2

## Governance

Amadeus' Board of Directors is the highest representative, administrative and controlling body of the company. Among its responsibilities lie risk management, which includes transition and physical risks related to climate change. The Board also reviews and approves Amadeus' environmental, social and governance (ESG) strategy. The Audit Committee of the Board supervises compliance with Amadeus' ESG strategy and related policies, including the environmental management policy, as well as the company's environmental performance. This process is carried out at least once a year.

Given the increasing relevance of sustainability topics, since February 2022 Amadeus' President and CEO has assumed direct responsibility over ESG matters, with a dedicated ESG team assuming a governance role over company-wide ESG initiatives.

The analysis of risks and opportunities related to climate change is led by Amadeus' Environmental Sustainability team, which monitors climate change impacts on a regular basis, at least once a year. To ensure proper identification of major risks, the analysis is reviewed in close cooperation with Amadeus' Corporate Risk Management unit. The Corporate Risk Management unit is responsible for centralizing and monitoring risks. This unit produces the Corporate Risk Map, which considers global risks such as economic, environmental, geopolitical, societal and technological risks.

Although Amadeus' operations involve a relatively low environmental impact, we're involved in an energy- and emissions-intensive industry. We acknowledge and act on our responsibility to contribute, with our technology and global reach, to a more sustainable and carbon-neutral travel industry, working in cooperation with industry partners.

## Risk management

Amadeus uses the Three Lines of Defense Model to ensure strong governance and risk management practices. This model, endorsed by the Board of Directors and the Executive Committee, allows Amadeus to coordinate all support and assurance functions to appropriately manage risk.

 See p. 123, "Corporate risk management."

Climate change-related risks are embedded in Amadeus' corporate risk management. Our commitment to the environment is integrated in our Code of Ethics and Business Conduct (1st Line), and emerging risks such as those related to climate change are considered in our Corporate Risk Map (2nd Line).

The Corporate Risk Management unit develops and revises Amadeus' Corporate Risk Map, working together with the owner responsible for each of the risks. Amadeus' Environmental Sustainability team is responsible for identifying and reporting climate change-related risks, supervised by the President and CEO.

Every risk identified is assessed according to its impact and probability and classified into a four-level scale for each criterion. Following the risk assessment, specific prevention and mitigation measures are defined. Detailed information of this analysis is included in the table "Management and assessment of climate change-related risks".

## Climate change-related risks & opportunities

For Amadeus, climate change-related risks identified are mainly linked to travel demand. This is due in part to the fact that incrementally higher environmental costs imply increased economic costs, and this leads to a reduced demand for travel. Moreover, travelers, in order to avoid negative environmental impact, might look for alternatives to traveling.

The table on the following page details the main risks related to climate change that may affect Amadeus' business.

GRI 201-2

Management and assessment of climate change-related risks

Climate change-related risk	Description	Management	Assessment
<b>Physical risks</b>			
Physical risks affecting the communities where we operate	As Amadeus operates in over 190 countries, we're exposed to extreme weather events affecting the communities where we operate, our providers and/or customers and our operations.	Our global presence helps us to diversify our risk. Amadeus has built a global team to coordinate social responsibility responses to cope with adverse events occurring in the markets where we operate.	Probability: Very high Impact: Minor
Physical risks affecting our travel providers and/or customers		Our 24-hour follow-the sun customer service is ready to provide extra support if needed.	Probability: Medium Impact: Moderate
Physical risks affecting Amadeus operations		For events affecting any of our offices, mitigation is facilitated with communications technology, allowing us to maintain uninterrupted operations.  The most significant risk is related to events affecting the regular operations of our Data Center in Erding (Germany). To manage this risk, the design of the Data Center includes resilience measures, such as reinforced concrete insulation and redundant water and power supplies.  Moreover, business continuity strategies have been implemented to minimize, among other things, the effects of extreme weather events.	Probability: Low Impact: Catastrophic
<b>Transition risks</b>			
Regulatory risks: carbon reporting-related regulations	Increasingly, new regulations are being approved involving mandatory reporting on climate change topics.	These regulations can affect Amadeus directly or indirectly, since our customers could ask us to help them comply with new regulations.  These regulations do not represent a relevant risk for Amadeus, unless they become too complex and heterogeneous. For this reason, we're engaging in active dialogue with EU representatives to raise awareness about the importance of a homogeneous international approach to carbon emissions reporting.	Probability: Low Impact: Moderate
Regulatory risks: regulations imposing charges and/or emission reductions	Since the travel industry is global by nature, the implementation of regional emissions limitations could create some competitive and political disruptions.	Due to the geographical diversification of Amadeus' business, this risk could have a limited effect.  Amadeus maintains close relationships with regulatory bodies in the EU and US and remains alert to relevant changes.	Probability: Medium Impact: Minor
Reputational risks	This risk is related to increasing public awareness and concern about climate change, and our commitment to implementing environmentally friendly operations.	Companies are expected to comply with all industry environmental standards and to monitor their environmental performance. Amadeus' Environmental Management System (EMS) and our participation in sustainability indices allow us to transparently report our environmental performance.	Probability: Low Impact: Moderate
Technology risks	Sustainability needs to be included in our IT solutions value proposition to maintain and increase our competitiveness in the market.	Environmental performance is becoming an important element in overall operational performance. We need to make sure our IT solutions help customers improve their environmental performance.	Probability: Medium Impact: Moderate
Market risks	Increasing concern from travelers and our own workforce regarding our initiatives against climate change.	Travelers are increasingly demanding information on sustainable travel options. We're working to improve our content on sustainable travel options and provide tools to inform travelers on the environmental impact of trips.  Optimizing the environmental performance of operations is also important to attract and/or retain the talent of younger generations. Our EMS provides the basis for the continuous environmental performance improvement of our operations.	Probability: Medium Impact: Moderate

GRI 201-2

Climate change–related opportunities for Amadeus are linked to the development of IT solutions that help inform travelers about sustainable travel options and help travel providers improve the environmental efficiency of their operations. These solutions can improve customer conversion, loyalty and market reputation. Identified climate change–related opportunities are detailed in the table on the right.



Climate change–related opportunities for Amadeus

Type of opportunity	Solution/functionality	Description
New products and services	Display	Providing the traveler with an estimation of the emissions released in a journey at the time of booking.
	Compare	Comparing emissions from different itineraries or means of transport.
	Reporting	Compiling all emissions released in business trips by an organization.
	Offsetting	Including the option of offsetting carbon emissions released on a journey. The concept may be expanded to the use of sustainable fuels and carbon capture from the atmosphere.
Competitive advantages	Altéa Departure Control System – Flight Management module	Uses sophisticated algorithms and historical data to help estimate the fuel used per flight, reducing overall fuel consumption.
	Airport Sequence Manager	Helps reduce the time aircraft spend on the runway, entailing reductions in fuel consumption, CO <sub>2</sub> emissions, local pollution and noise, as well as increased efficiency at airports and traveler satisfaction.
	Airport Common Use Service	Helps reduce the need for local IT equipment and energy costs by leveraging cloud technology.
	Amadeus Sky Suite	Facilitates airline network planning with sophisticated algorithms to estimate travel demand, helping to optimize the use of resources, including fuel and related emissions.
	Amadeus Schedule Recovery	Helps airlines make efficient decisions in times of disruptions.

GRI 2-5



Ernst & Young, S.L.  
Torre Azca  
Calle de Raimundo Fernández Villaverde, 65  
28003 Madrid  
España

Tel: 915 727 200  
Fax: 915 727 238  
ey.com

INDEPENDENT REVIEW REPORT OF THE AMADEUS GLOBAL REPORT 2022 OF AMADEUS IT GROUP, S.A. AND SUBSIDIARIES

To the Management of Amadeus It Group, S.A. and Subsidiaries:

**Scope**

As commissioned by the Management of Amadeus It Group, S.A. and Subsidiaries (hereinafter, Amadeus), we have carried out the review of the 2022 Amadeus Global Report. This information has been prepared in accordance with the GRI Sustainability Reporting Standards (GRI Standards), as detailed in "Annex 1. About this report."

The scope considered by Amadeus for the preparation of the Report is defined in "Annex 1. About this report."

The preparation of the attached report, as well as its content, is the responsibility of the Management of Amadeus, which is also responsible for defining, adapting and maintaining the management and internal control systems from which the information is obtained. Our responsibility is to issue an independent report based on the procedures applied in our review.

**Criteria**

Our review was carried out based on:

- The guidelines for reviewing Corporate Responsibility Reports, issued by the Spanish Official Register of Auditors of Accounts (ICJCE).
- Standard ISAE 3000, Assurance Engagements Other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standard Board (IAASB) of the International Federation of Accountants (IFAC), with a limited assurance scope.

**Applied procedures**

Our review consisted in requesting information from the Sustainability Department and the various business units participating in the preparation of the Amadeus Global Report 2022, applying processes and analytical procedures, and sampling review tests as described in the general terms below:

- Interviews with the staff in charge of the preparation of the sustainability information in order to gain a deep understanding of how the objectives and sustainability policies are considered, set into practice, and integrated within Amadeus's global strategy.
- Reviewing the processes for the compilation and validation of the information presented in Amadeus Global Report 2022.
- Checking the processes held by Amadeus in order to define the material aspects and stakeholder participation.
- Reviewing the adaptation of the structure and content of the 2022 Amadeus Global Report, in accordance with the GRI Sustainability Reporting Standards of the Global Reporting Initiative.

- Checking selected samples of the quantitative and qualitative information of the contents included in the 2022 Amadeus Global Report, as well as their adequate compilation from data supplied by information sources. The review tests have been defined to provide the aforementioned assurance levels.
- Checking that the financial information included in the Report has been audited by independent third parties.

These procedures have been applied to the contents in "Annex 2. Quantitative information and GRI Content Index," with the aforementioned scope.

The scope of our review is considerably lower than a reasonable assurance report. Therefore, the degree of assurance is also less extensive. This report in no case should be considered as an audit report.

**Independence and quality control**

We have complied with the requirements of independence and the other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants (IESBA, for its acronym in English).

Our firm applies the International Standard on Quality Control 1 (ISQC 1) and maintains, as a result, a global quality control system that includes documented policies and procedures related to compliance with ethical requirements, professional standards, and legal and regulatory provisions.

Our work has been performed by a team of sustainability experts with a wide experience in reviewing this type of information.

**Conclusions**

As a result of our limited review, we conclude that no matter came to our attention that would indicate that the 2022 Amadeus Global Report has not been prepared, in all material respects, in accordance with the GRI Standards sustainability reporting framework, which includes the data reliability, the adequacy of the information presented and the absence of significant deviations and omissions.

This report has been prepared solely for the management of Amadeus, in accordance with the terms set out in our engagement letter.

ERNST & YOUNG, S.L.

This report corresponds to the distinctive seal nº 01/23/06020 issued by the Institute of Chartered Accountants of Spain

Elena Fernandez Garcia



Annex 4

# Glossary



**Amadeus travel agency air bookings:**

Air bookings processed by travel agencies using Amadeus' distribution platform.

**Ancillary services:**

Additional services provided to customers beyond the ticket. Typical examples of airline ancillary services include extra baggage, priority seating, catering on board, etc.

**API:**

Application programming interface, a language that enables communication between computer programs.

**CRS:**

Computer Reservation System, a computer network containing travel-related information such as schedules, availability, fares and other services, which enables automated travel-related transactions between travel providers and travel agents.

**Double materiality:**

A concept which provides criteria for the determination of whether a sustainability matter has to be included in the undertaking's sustainability report. Double materiality is the union of impact materiality and financial materiality. A sustainability matter meets therefore the criteria of double materiality if it is material from either the impact perspective or the financial perspective or both perspectives.

**Fare families:**

Groups of fares with different sets of benefits/restrictions.

**Financial materiality:**

A sustainability matter is material from a financial perspective if it triggers or may trigger significant financial effects on undertakings, i.e., it generates or may generate significant risks or opportunities that influence or are likely to influence the future cash flows and therefore the enterprise value of the undertaking in the short-, medium- or long-term, but it is not captured or not yet fully captured by financial reporting at the reporting date.

**GDS:**

A Global Distribution System, 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 Computer Reservation System (see CRS entry above), GDSs offer travel-related content to a broad range of agents worldwide, making global reach an important element of their value proposition.

**Greenhouse Gas Protocol:**

The Greenhouse Gas Protocol is the most widely used international accounting tool for government and businesses 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 from electricity use; and Scope 3: emissions released by third parties as a consequence of the use of their services, such as emissions from travel providers for business travel.

**Guarantee of Origin:**

A EU green label that guarantees that electricity has been produced from renewable sources. Guarantees of Origin are traded as a commodity.

**Hardware acceleration:**

Using specific physical processor computation capabilities to execute a dedicated task faster than a regular computer could do.

**IATA:**

International Air Transport Association, 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.

**Impact materiality:**

A sustainability matter is material from an impact perspective if it is connected to actual or potential significant impacts by the undertaking on people or the environment over the short-, medium- or long-term. refers to information on the reporting company's impact on the economy, environment and people for the benefit of multiple stakeholders, such as investors, employees, customers, suppliers and local communities.

**Interline:**

A commercial agreement between airlines to handle passengers traveling on itineraries that require more than one flight and more than one airline. As opposed to codesharing, interlining implies there is more than one operating carrier.

**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.

**KPI:**

Key performance indicator.

**NDC:**

NDC refers to New Distribution Capability, a program launched by IATA for the development and market adoption of a new XML-based data transmission standard (NDC Standard) between airlines and travel agencies. IATA establishes various levels of NDC certification, depending on the NDC capabilities.

**NPS:**

Net Promoter Score, a widely used measure of customer loyalty. It is the percentage of customers rating their likelihood to recommend a company, a product, or a service to a friend or colleague. NPS ranges between -100 (all respondents are "detractors") and +100 (all respondents are "promoters"). A positive score is desirable and, for a B2B company a score above +25 is a frequent target.

**Offer and Order Management:**

An airline industry initiative led by the International Air Transport Association (IATA) to modernize airline retailing to support omnichannel and customer-centric processes using centralized capabilities and data.

**ONE Order:**

As described by IATA, it's an industry-led initiative intended to simplify the airline reservation, delivery, and accounting systems by gradually phasing out the current booking (PNRs) and ticketing records (e-tickets and electronic miscellaneous documents, or EMDs). It creates a single integrated customer record to streamline fulfillment, delivery and accounting processes across the life cycle of an order.

**Passengers boarded (PBs):**

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.

**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).

**Property management system:**

A computerized system that facilitates the management of hotel properties.

**Passenger service system (PSS):**

A series of mission-critical systems used by airlines. The PSS usually comprises a Reservation System, an Inventory System and a Departure Control System (DCS).

**PUE:**

Power Usage Effectiveness, a common metric used to measure the energy efficiency of data centers. It is equal to Total Facility Power/IT Equipment Power. The closer to 1 the PUE, the more efficient the data center is.

**SAFe®:**

A set of organizational and workflow patterns that help enterprises in scaling lean and agile practices.

**Science-based targets:**

Science-based targets provide a clearly-defined pathway for companies to reduce greenhouse gas (GHG) emissions. Targets are considered 'science-based' if they are in line with what the latest climate science deems necessary to meet the goals of the

Paris Agreement – limiting global warming to well-below 2°C above pre-industrial levels and pursuing efforts to limit warming to 1.5°C. They are validated by the Science Based Targets initiative (SBTi).

**Transactions processed at the Amadeus Data Center:**

Basic operations linked directly to Amadeus' business, such as bookings or processed passengers boarded.

**United Nations Clean Development Mechanism:**

One of the market-based mechanisms defined in the Kyoto Protocol. The CDM facilitates investment in emission reduction projects in exchange for Certified Emission Reductions (CERs). One CER unit is equivalent to the reduction of 1 ton of CO<sub>2</sub>. The United Nations market-based mechanisms defined in the Kyoto Protocol stimulate sustainable development, address emissions in a cost-effective way and facilitate contribution by the private sector to emission reduction efforts.

GRI 2-1

## amadeus

Amadeus IT Group S.A.  
C/ Salvador de Madariaga, 1  
28027 - Madrid, Spain

Phone: +34 915 820 100  
[sustainability@amadeus.com](mailto:sustainability@amadeus.com)  
[amadeus.com](http://amadeus.com)

