Amadeus business overview
3.1 Distribution

Business overview

Within the travel and tourism industry, global distribution systems connect a large number of travel providers with a large number of travel agencies, through which corporations and end consumers can buy travel. As such, Amadeus creates value in the travel distribution chain for both travel providers and travel agencies:

- Amadeus creates value for travel providers by extending their sales distribution reach to countries and market segments they would not be able to sell to through other distribution channels.

- At the same time, Amadeus creates value for travel agencies by aggregating inventory from multiple travel suppliers into an integrated display and by offering enhanced functionalities, such as advanced search and booking engines, to enable them to efficiently access this wide inventory and sell a wide variety of choices, prices and itineraries to their customers.

We operate within a two-sided business model where (i) success in attracting and retaining travel agency customers and (ii) breadth of travel provider offering can create a virtuous cycle: the more comprehensive our content, the more attractive we are to travel agencies and the more travel agency subscribers we have, the more attractive we are to travel providers in offering them enhanced global reach.

We operate primarily on a fee-per-transaction basis, collecting a booking fee from the relevant travel provider for travel bookings processed through our platform. Although such bookings are initiated and completed through travel agencies, the fee is paid by the travel provider.

Amadeus is the largest distribution provider serving the worldwide travel and tourism industry, with an estimated market share of 38.6% in 2012[3]. Amadeus holds the number one position in travel distribution in Western Europe and Central, Eastern and Southern Europe (CESE), as well as in faster growing emerging regions such as the Middle East and Africa and the Asia-Pacific region.

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3 Market share is calculated based on the total volume of travel agency air bookings processed by the global or regional CRS. Excludes air bookings made through in-house or single country operators, primarily in China, Japan, South Korea and Russia. Also excludes bookings of other types of travel products, such as hotel rooms, car rentals and train tickets.
Financial performance in 2012

In 2012 Amadeus has successfully delivered against its targets, achieving profitable growth in both its business units.

In general terms, 2012 was a strong year for Amadeus, despite a difficult global macroeconomic backdrop and weak levels of business and consumer confidence. Once again Amadeus benefitted from its successful business model, which provides strong resilience and economies of scale. In addition, our continued investment in R&D and differentiated value proposition allowed us to deliver market share gains, adding new clients to our platform, both in Distribution and IT Solutions.

Our Distribution business continued to grow during 2012, despite the weakness in the distribution industry, driven by our market share gains, leading to a 2.9% booking volume growth, and the strength in average booking fees, thanks to the positive booking mix and positive FX impact. As a result of the above, our revenue increased by 5.8% in the year. Our contribution margin in 2012 was 44.3%, a decrease vs. 2011 as per the outlook provided at the beginning of the year, (also driven by the negative FX impact).

### Distribution. Key operating and financial highlights

<table>
<thead>
<tr>
<th>Figures in million euros</th>
<th>2011</th>
<th>2012</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KPI</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDS industry growth</td>
<td>2.2%</td>
<td>1.2%</td>
<td></td>
</tr>
<tr>
<td>Air TA market share</td>
<td>37.7%</td>
<td>38.6%</td>
<td>0.9 p.p.</td>
</tr>
<tr>
<td>Air TA bookings (m)</td>
<td>402</td>
<td>417</td>
<td>3.5%</td>
</tr>
<tr>
<td>Non air bookings (m)</td>
<td>61</td>
<td>61</td>
<td>(1.1%)</td>
</tr>
<tr>
<td>Total bookings (m)</td>
<td>464</td>
<td>477</td>
<td>2.9%</td>
</tr>
<tr>
<td><strong>Results</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td>2,079</td>
<td>2,201</td>
<td>5.8%</td>
</tr>
<tr>
<td>Operating costs</td>
<td>(1,174)</td>
<td>(1,278)</td>
<td>8.9%</td>
</tr>
<tr>
<td>Direct capitalisations</td>
<td>45</td>
<td>52</td>
<td>15.7%</td>
</tr>
<tr>
<td>Net operating costs</td>
<td>(1,129)</td>
<td>(1,226)</td>
<td>8.6%</td>
</tr>
<tr>
<td>Contribution</td>
<td>950</td>
<td>975</td>
<td>2.5%</td>
</tr>
<tr>
<td>As % of Revenue</td>
<td>45.7%</td>
<td>44.3%</td>
<td>(1.4 p.p.)</td>
</tr>
</tbody>
</table>

Photo by Carolina de Caso
Evolution of KPI

As shown in the table below, during the year the volume of air bookings processed through travel agencies connected to Amadeus increased by 3.5% and our market share\(^4\) gain was 0.9 p.p.

This market share gain was partially driven by our organic growth in the different markets, as well as a positive region mix, despite a weak industry performance in Western Europe and India, where Amadeus has a very large presence. This positive region mix was mainly driven by our exposure to CESE, Latin America and Middle East and Africa, all of which performed strongly in the year.

As a whole, the industry increased by a modest 1.2% in 2012, supported by a strong first half of the year which was followed by an important slowdown during the second half, driven generally by the macroeconomic environment.

More specifically, some important factors affecting the industry in 2012 include: (i) the negative performance experienced in the US, (ii) one-off events in India, Spain and Hungary, with the cessation of operations of one of the country’s main full service carriers, whose traffic was taken over partially or totally by LCCs which are not currently distributed through travel agencies, (iii) higher levels of disintermediation experienced in some countries in Asia as a result of the success of certain low cost carriers and (iv) the weakness in corporate travel, the bulk of which is managed by travel agencies. These negative factors were partially offset by a strong performance in Latin America, MEA and CESE.

Within non-air distribution, our bookings for 2012 decreased by 1.1% to 60.7 million, driven mainly by the decrease in rail bookings, and despite an increase in hotel bookings.

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\(^4\) Market share is calculated based on the total volume of travel agency air bookings processed by the global or regional CRS. Excludes air bookings made through in-house or single country operators, primarily in China, Japan, South Korea and Russia. Also excludes bookings of other types of travel products, such as hotel rooms, car rentals and train tickets.
Revenue
Our Distribution revenue increased by 5.8% vs. 2011. This increase was driven by growth both in booking revenue (+6.6%) and in non-booking revenue (+1.5%):

> Booking revenue: 6.6% increase, driven by a combination of volume growth (2.9% increase in total bookings) and a positive pricing impact (an increase of 3.6% in our unit booking fee due to the favourable booking mix, positive impact from recent renewals and positive FX impact).

> Non booking revenue: 1.5% increase in 2012, related to the strong contribution from revenues from travel agencies (growth in products and services sold to travel agencies, such as availability and shopping tools), a positive performance of our subsidiary Traveltainment in the leisure business and the contribution from the recent contract signed with Kayak in the US. In addition, we also had a positive impact derived from certain of our hedging instruments.

Contribution
The contribution of our Distribution business is calculated after deducting from our revenue those operating costs which can be directly allocated to the business (variable costs, mainly related to distribution fees and incentives, and those product development, marketing and commercial costs which are directly attributable to the business).

The contribution of our Distribution business increased by 2.5% for 2012, leading to a total contribution of €974.6 million in 2012 vs. €950.4 million in 2011. As a percentage of revenue, this represents 44.3%, a decline vs. 45.7% in 2011, as expected by management based on industry dynamics, including higher incentive payments, as well as a significant number of commercial successes, leading to a short term increase in costs. R&D expenditure also increased in the year.

Finally, it should also be noted that our margins were negatively affected by FX evolution, which positively affected our revenue (as discussed above) but negatively impacted our cost base, leading to a slightly better contribution figure, in absolute terms, but a lower contribution margin, as % of revenue.

Operating costs in 2012 increased by 8.9%, as a result of: (i) the increase in our booking volumes, (ii) the increase in our average unit incentive fees, paid to travel agencies, driven by a combination of the tougher competitive environment and the mix of travel agencies originating our bookings, with significant growth in the online segment, (iii) significant development activities associated to distribution such as: (a) new products and applications for travel agencies, airlines, and corporations to provide sophisticated booking and search engines (e.g. Amadeus Meta Pricer), (b) regionalisation efforts or (c) increased investment in relation to hotel and rail (iv) commercial expenses related to new client wins and the increased activity in the regions and (v) negative impact of the EUR depreciation in our cost base.

Products and services
As a global distribution system platform, Amadeus serves both the sales and distribution needs of travel providers, (airlines, hotels, railway companies) as well as providing travel agencies with access to a wide travel content inventory, with enhanced functionality and management solutions for their key business processes.

The following pages describe our business proposition to both groups of clients, including an overview of some of the key solutions in our portfolio.

<table>
<thead>
<tr>
<th>Figures in million euros</th>
<th>2011</th>
<th>2012</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution - Revenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Booking revenue</td>
<td>1,769</td>
<td>1,886</td>
<td>6.6%</td>
</tr>
<tr>
<td>Non booking revenue</td>
<td>311</td>
<td>315</td>
<td>1.5%</td>
</tr>
<tr>
<td>Revenue</td>
<td>2,079</td>
<td>2,201</td>
<td>5.8%</td>
</tr>
<tr>
<td>Average fee per booking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(air and non air) (1) (euros)</td>
<td>3.81</td>
<td>3.95</td>
<td>3.6%</td>
</tr>
</tbody>
</table>

(1) Represents our booking revenue divided by the total number of air and non air bookings.
Business impact

With the Amadeus distribution platform, airlines can benefit from global reach, higher value sales and brand differentiation, as well as enhanced control and reduced time to market. Our improved distribution portfolio offers the best of the traditional strengths of a global distribution system combined with the target marketing and brand differentiation techniques offered by direct channels.
### Amadeus business overview

#### Portfolio overview

<table>
<thead>
<tr>
<th>Area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airline Distribution</td>
<td>Our <strong>Availability</strong> portfolio helps customers ensure that their product is available and accurately reflected on the agency desktop.</td>
</tr>
<tr>
<td></td>
<td>The <strong>Fares</strong> portfolio is designed to enable customers to get the right fares to the right agents.</td>
</tr>
<tr>
<td></td>
<td>The <strong>Customer</strong> portfolio helps airlines make sure that their top-tier customers receive a differentiated service, and also prevent errors and data misuse.</td>
</tr>
<tr>
<td></td>
<td>Our <strong>Booking</strong> portfolio is used to inform agents about airlines' booking policies. It lets them book airline inventory and request related services with ease and efficiency. It also enables them to service agency bookings and perform quality checks.</td>
</tr>
<tr>
<td></td>
<td>The <strong>Fulfilment</strong> portfolio facilitates automated ticketing and fulfilment by agents, including fee collection.</td>
</tr>
<tr>
<td></td>
<td>Our <strong>Revenue maximisation</strong> portfolio is designed to boost sales and develop the target marketing capabilities of airlines.</td>
</tr>
<tr>
<td></td>
<td>The <strong>Booking integrity</strong> portfolio enhances control over travel agency sales.</td>
</tr>
<tr>
<td></td>
<td>The <strong>Merchandising</strong> portfolio assists airlines in making a real brand impact and up-selling their product offer.</td>
</tr>
<tr>
<td></td>
<td>The <strong>Business intelligence</strong> portfolio facilitates informed decision making in the areas of sales, marketing, network planning, scheduling, pricing and yield management to optimise revenues and identify the potential for cost-cutting.</td>
</tr>
</tbody>
</table>
1. Availability & schedules

Offers instant visibility with travel agencies globally.

Facilitates management and distribution of airline availability and schedule information to travel agents.

**Standard schedule and availability**

The Amadeus system makes flight details available to over 91,000 travel agencies worldwide, giving them access to all the information and features necessary to price and sell seats, issue accountable documents and report sales back to the airline.

**Direct access**

Provides travel agents with real time schedule and availability information, taken directly from an airline's inventory system, as well as instant booking confirmation through secondary, ‘direct access’ displays.

**Access update (dynamic schedules, daily schedule update and numeric availability)**

Provides travel agents with real time schedule and availability information through Amadeus principal neutral displays and to load flight schedule information directly into Amadeus on a daily basis.

### Business benefits

<table>
<thead>
<tr>
<th><strong>Reduced time to market</strong></th>
<th>Provides real time availability and schedule information to travel agents, enabling them to book flights with total confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enhanced brand awareness</strong></td>
<td>Instantly distributes availability and schedule information to over 91,000 travel agents</td>
</tr>
<tr>
<td><strong>Superior customer service</strong></td>
<td>Makes sure that the airline product is rightly reflected on the agency desktop and therefore lets customers have access to accurate schedules and availability information</td>
</tr>
</tbody>
</table>
2. Fares portfolio

Makes sure the right fares are available to the right agents.

Facilitates management and distribution of fares and related information to travel agents.

**Fare data loading**

Enables the distribution and display to travel agents of public fares and related information, which are seamlessly uploaded from the airlines’ preferred fare filing source.

**FareXpert filing platform**

Allows airlines to load and update all non-public fares in the Amadeus system for display, pricing and ticketing by selected travel agencies.

**Web fare access in meta pricer**

Enables the display of content to travel search companies without incurring the costs associated with them.

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### Business benefits

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reduced time to market</strong></td>
<td>Makes confidential fares instantly available to target travel agency points of sale</td>
</tr>
<tr>
<td><strong>Superior customer service</strong></td>
<td>Services preferred agents and consolidators with automated pricing and ticketing of fares with any type of incentive schemes supported, all in line with an airline's revenue accounting</td>
</tr>
<tr>
<td><strong>Optimised distribution costs</strong></td>
<td>Reduces transaction related costs generated by travel search companies</td>
</tr>
<tr>
<td><strong>Increased productivity</strong></td>
<td>Facilitates fare filing with a graphical user interface that saves up to 80% of the time required for cryptic entries and minimises training efforts through a guided filing process</td>
</tr>
</tbody>
</table>
3. Customer portfolio

Provides superior levels of customer service.

Supports Client Relationship Management (CRM) initiatives and facilitates management of high-yield customers by travel agents.

Frequent flyer

Enables agents to use customer data when making reservations, giving an airline the ability to track frequent flyer Passenger Name Records (PNRs) and/or identify frequent flyer requests in real time.

Business benefits

<table>
<thead>
<tr>
<th>Superior customer service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhances service for frequent flyers by easily identifying their requests and acting accordingly, and improves service to travel agents by enabling them to handle frequent flyer reservations in a much faster, professional and secure manner</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Optimised distribution costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevents errors and misuse of customer data through real time validation and the automatic transmission of frequent flyer information to all the partners of the airline</td>
</tr>
</tbody>
</table>

Photo by Jannine Adams
4. Booking portfolio

Easy and efficient sales through over 91,000 travel agents.

**Facilitates information provision and enables sales execution and customer servicing by travel agents, as well as Passenger Name Record (PNR) servicing and quality checks.**

**Standard access**
Provides standard booking facilities in accordance with IATA AIRIMP (universally agreed upon communications standards for the handling of passenger reservations interline messages).

**Interactive Sell (previously access sell)**
Enables real time sales by travel agents using an interactive process that sends a request to your system when a sell request is made by an agent.

**Interactive seat map and advance seat reservation**
Provides travel agents with real time seat map information on flights and the ability to request specific seats in real time and receive an instant acknowledgment from an airline’s system.

**Automatic special service request (SSR) handling**
Helps to automatically handle special service requests in the Amadeus system based on a powerful set of defined business rules.

**Auxiliary services**
Facilitates the ordering of value-added non air services provided by the airline. e.g. taxi pick-up, limousine services, etc.

**Negotiated space**
Allows an airline to define blocked space and assign it to preferred travel agents whilst retaining full synchronisation with the inventory of the airline.

**PNR claim**
Lets travel agents retrieve Passenger Name Records (PNRs) initially created in the system and take control of them for the purpose of ticket fulfilment or further PNR servicing.

**PNR Synchronisation**
Amadeus PNR Synchronisation product provides non-Altéa airlines with the ability to synchronise PNRs created in Amadeus and subsequently updated in the airline system. Thanks to this feature PNR items are kept in sync between Amadeus and the airline system.
Operational flight information

Provides travel agents with access to full flight details before and after departure, including departure gate and take-off times, estimated time of arrival, real landing and final arrival times.

System servicing

Allows servicing of agency bookings and quality checks via the connection of terminals to the Amadeus system.

Amadeus Group Passenger Name Record

Allows agents to handle groups of up to 99 passengers in one single booking record with flexibility.

Group bookings are managed efficiently thanks to features like advanced group seating and individual name management.

Business benefits

<table>
<thead>
<tr>
<th>Superior customer service</th>
<th>Facilitates sales in real time and enables travel agents to provide superior levels of customer service to the customers of the airline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased productivity</td>
<td>Performs servicing functions required for distribution through travel agents, including PNR servicing, past date booking requests, availability and fare checks</td>
</tr>
<tr>
<td>Optimised distribution costs</td>
<td>Decreases the amount of messages that the airline has to process manually or automatically, eliminates unproductive bookings and saves time and money by sharing the responsibility for PNR follow up directly to travel agents</td>
</tr>
</tbody>
</table>
5. Fulfilment portfolio

Facilitates automated ticketing and fulfilment.

**Facilitates ticketing and issuance of relevant documentation by travel agents as well as collection of fees.**

### Ticketing

Enables travel agents all over the world to issue electronic tickets for customers, facilitating instant access to ticketing and fare information for revenue accounting systems. We also support Electronic Miscellaneous Documents (EMD) for the fulfilment of miscellaneous charges including ancillary services.

### Card acceptance

Allows the airline to establish credit card acceptance and process authorisation for major international credit and payment cards.

### Airline service fees

Facilitates the processing, collection and reporting of the airline’s credit card fees by travel agents. These fees are seamlessly integrated into the agency booking flow being applied automatically at the time of fare pricing and ticket issuance.

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### Business benefits

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Increased revenue</strong></td>
<td>Enables the collection of credit card fees through the Amadeus travel agency channel in a fully automated manner</td>
</tr>
<tr>
<td><strong>Superior customer service</strong></td>
<td>Encourages transparency by enabling end users to view the total price associated with their tickets as well as the breakdown of fees at any step of the booking process</td>
</tr>
<tr>
<td><strong>Optimised distribution costs</strong></td>
<td>Reduces fraud through the issuance of electronic tickets and improves the cash flow of the airline by increasing security and speed of ticket data reporting to its revenue accounting system</td>
</tr>
<tr>
<td><strong>Increased productivity</strong></td>
<td>Tracks collection performance with real time information about tickets, fares, customers and sales channels</td>
</tr>
</tbody>
</table>
6. Revenue maximisation portfolio

Allows airlines to make smarter sales and increase revenue.

Facilitates distribution decisions in line with revenue management policies and customer and market segmentation.

Carrier preferred display management

Gives the opportunity to influence the selling behaviour of Amadeus travel agents by creating and managing an airline’s own biased displays to support its business requirements and customer and market segmentation objectives.

Availability management

Enables airlines to differentiate their offer in line with their customer and market segmentation. By applying revenue management controls at the channel level, an airline can tailor availability information to individual points of sale.

Dynamic availability

Works in conjunction with the airline’s own system to reflect its recommendations through Amadeus powered channels.

This allows an airline to reply to availability requests by agents in real time, customising its offer based on the value of the booking, taking into account origin and destination (O&D) information as well as its customer and market segmentation.

Availability calculator

Provides the airline with the ability to get automatic computed availability information directly in the Amadeus system using a calculation algorithm provided by the airline, therefore reducing the volume of polling transactions.

Journey data

Allows an airline to receive real time information about the rest of a passenger’s journey and make more accurate decisions about what offer to propose and/or how to react to a booking request.

Married segment control

Links connecting flight segments together to be treated as a single unit during the booking process and beyond, for the entire existence of the booking record.

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### Business benefits

| **Increased revenue** | Improves the profitability of sales across the network and ensures that forecast yield translates into revenue collected, plus gets agents to book preferred flight connections |
| **Optimised distribution costs** | Controls travel agency sales more effectively through the prevention of agency abuse, and ensures travel agents sell in the way that the airline wants them to sell |
| **Enhanced brand awareness** | Targets the airline’s offer based on customer and market segmentation, and customises the offer based on customer value and who is selling |
7. Booking integrity portfolio

Enhances airlines’ control over travel agency sales.

Facilitates travel agents’ adherence to an airline’s reservation policies.

Automates ticketing limits
Facilitates advanced, real time flight firming to ensure a product is sold strictly in compliance with its terms and conditions, so that non-committed inventory is not released for sale.

Pricing override management
Provides the ability to restrict or inhibit the use of pricing override functions by Amadeus travel agents when pricing an itinerary.

Image Passenger Name Record (PNR)
Allows access to a complete picture of the PNR created by a travel agent, over and above the standard information provided in a PNR wrap-up message as defined by IATA.

Name change controller
Allows control of the ability of travel agents to perform name changes on an airline’s flights by defining rules directly in the Amadeus system.

Passive segment notification
Allows an airline to be notified each time a travel agent inserts a passive segment on the airline’s flights into an Amadeus PNR, helping to identify how and by whom the customer has been serviced.

Business benefits

Superior customer service
Encourages pricing and policy transparency to passengers

Optimised distribution costs
Protects revenues through increased control over travel agency sales
8. Merchandising portfolio

Allows airlines to make a real brand impact and upsell.

Facilitates the communication of airlines and their products and the ability to promote special offers to travel agents in the most relevant and visually impactful manner.

**Flight features**

Enables airlines to differentiate their product on the travel agent’s booking screen with a pop-up box which displays text and pictures supplied by the airline.

**Banners**

Provides the means to deploy real time and extremely visual promotional campaigns to selected travel agents, communicating product offering, positioning, special promotions, new services and others.

**Airline ancillary services**

Enables airlines to sell à la carte ancillary services (seats, bags, meals, etc.) in all distribution channels including travel agencies.

**Personalisation**

Airlines are looking to provide services and offers which are customised according to who is looking for a flight. There are current functionalities which enable airlines to do this in the Amadeus platform today. Airlines can, for example, charge a different price for ancillary services depending on the traveller’s frequent flyer tier.

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**Business benefits**

<table>
<thead>
<tr>
<th>Superior customer service</th>
<th>Enhanced brand awareness</th>
<th>Increased revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provides additional information about products and services and facilitates real time promotion on a worldwide basis or selectively to the agent(s) or on the displays of the airline’s choice</td>
<td>Communicates promotional news at the right time to the right, targeted audience in a cost-effective way</td>
<td>Generates new revenues as well as higher revenues per sale by offering a wide range of chargeable services</td>
</tr>
</tbody>
</table>
9. Business intelligence portfolio

Provides a firm foundation for informed decisions.

Provides powerful sales and market data as a basis for informed decision making and channel performance analysis.

**Market Information Data Tapes (MIDT)**
Facilitates identification of business opportunities and traffic patterns, demand and market size through detailed reservation data.

**Amadeus Total Demand by airconomy**
Provides airlines with a comprehensive and accurate view of passenger volume on any given route. Total Demand includes market intelligence data on bookings made with low-cost carriers and on airlines’ websites and call centres.

**Ticket data**
Provides fast and automated access to comprehensive information on ticket sales.

**City pair data**
Provides airlines with relevant information to monitor booking activity for specific city pairs.

**Billing information**
Provides the foundation for analysis of an airline’s distribution through the travel agency channel, giving detailed billing data covering every booking made on an airline’s flights by travel agents as well as any distribution service for which it has been billed and/or received an invoice or credit report.

**Business benefits**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced time to market</td>
<td>Determines how and where to focus market spend</td>
</tr>
<tr>
<td>Optimised distribution costs</td>
<td>Identifies different areas of distribution expenditure with data on cancellation rates as well as waitlisted and passive segments and abusive travel agents or sources of unproductive bookings</td>
</tr>
<tr>
<td>Increased productivity</td>
<td>Identifies the most productive agents and monitors how they are booking an airline’s services and those of its competitors</td>
</tr>
</tbody>
</table>
At Amadeus, we have developed a complete range of products and services designed to benefit every area of the travel agent’s business.

Because not all our customers are the same, Amadeus has developed specific products for specific travel agency segments, based on their priorities and business needs.

Amadeus’ range of products and services for travel agencies

- **Travel management companies**
  - Business travel agencies
  - Leisure specialists
  - Online travel agencies
  - Consolidators
  - Single-site travel agencies
  - Travel search companies

- **Services and consulting**
  - Leverages the full value of business processes and IT investments

- **Content**
  - Access to the most reliable global and local bookable content
  - Our technology ensures that accessing content and fares is an efficient process

- **Business management tools**
  - Products created to improve travel agencies’ mid and back office, and general services operations by streamlining and automating travel agency processes

- **Selling tools**
  - Customer solutions to sell content across all channels, geared to maximise travel agencies’ revenue potential
## Portfolio overview
### Travel agencies Distribution

<table>
<thead>
<tr>
<th>Travel agency needs</th>
<th>Points of sale / selling tools</th>
<th>Added value products</th>
<th>Added value products</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Selling Platform</td>
<td>Master Pricer</td>
<td>Content: air, hotel, rails, car, cruise, insurance and ferry</td>
</tr>
<tr>
<td></td>
<td>Selling Platform Connect</td>
<td>Extreme Search</td>
<td>Consulting Services</td>
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<td>E-Power Consolidator</td>
<td>Offers</td>
<td>E-Support and Helpdesk</td>
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<td></td>
<td>E-Power</td>
<td>Open Profile Suite</td>
<td>Check My Trip</td>
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<td></td>
<td>E-Travel Management</td>
<td>Ticket Changer</td>
<td>Customised training</td>
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<td></td>
<td>Web Services</td>
<td>Mini Rules</td>
<td>Call Centre Solution</td>
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<tr>
<td>Optimise multi-channel processes</td>
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<tr>
<td>Boost productivity</td>
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<tr>
<td>Customise business processes</td>
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<tr>
<td>Strengthen revenue management</td>
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<tr>
<td>Excellence in operations</td>
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<tr>
<td>Single access to best content</td>
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<tr>
<td>Multi-channel solutions</td>
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<tr>
<td>Reliable support services</td>
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<tr>
<td>Deliver great service and improve efficiencies</td>
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<tr>
<td>Full support for the travel agency IT investment</td>
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Amadeus Selling Platform

Portfolio overview

Amadeus Selling Platform is a truly scalable solution that in its simplest form is suitable for the smallest start-up agency, yet is robust enough to be scaled up and customised to suit the most demanding multinational customers. The solution allows multinationals to seamlessly integrate their own packages to provide a truly customised solution.

Main features

Amadeus Selling Platform is built on state-of-the-art technology delivering the most sophisticated features:

Dual usage with combined graphic/cryptic interface

- The fully integrated graphical user interface and cryptic host window make Selling Platform an ideal platform for all levels of user expertise and allows consultants to choose how they work. It gives travel professionals fast, integrated, single-screen access to all travel content and fares.

Amadeus Ancillary Services

- Increased parity with the airlines’ own online offer strengthens aggregated content and consultancy value.

Amadeus All Fares Plus

- Amadeus All Fares is to access, browse and sell the widest range of aggregated air fare content, saving time and enabling optimal service packaging: the best deals with professional advice.
- Fully web-based, new features are available immediately over the web – no install or upgrade required.

Amadeus Ticket Changer

- The Amadeus solution to automate the calculations necessary to reissue a ticket and store the results in the correct ticketing formats ready for travel documents issuance.

Amadeus Travel Preference Manager

- Automatic highlighting of customers’ preferences.

Amadeus Multi-content Desktop

- All third-party content and applications, integrated into one professional booking tool.

Amadeus Hotels Plus and Cars Plus

- Professional and intuitive graphical interfaces which bring web application benefits to travel agents’ sales: easy to use & quick to book for improved efficiency and added value to customer offer.

Amadeus Hotel Multisource

- Integrated non-GDS content from aggregators, including features such as pre-paid rates, and with guaranteed commissions.

Amadeus Speedmode

- Enables experienced agents to work even faster.

Amadeus Electronic Miscellaneous Documents

- Amadeus Selling Platform enables travel agencies to issue electronic documents for standalone services.
- EMD facilitates the sale of ancillary services which are not necessarily linked to a flight segment but which can be issued in connection with the ticket for reference. Amadeus EMD is fully integrated with standard PNR workflows, including Amadeus Ticket Changer and document print facilities, making it a real cost saver.
### Amadeus Profiles Plus

- The quickest way to make a booking, while remaining fully compliant with the travel agency customers’ preferences.
- Manage all profile types (traveller, company, agency and group), and get unified access to business and leisure profiles. In addition, traveller preferences can be managed for non air bookings: cars, hotels and rail.

### Business benefits

<table>
<thead>
<tr>
<th>Increased selling capabilities: single access to all fares and broadest content</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Access to comprehensive air, land &amp; sea content in a fully integrated way</td>
</tr>
<tr>
<td>• Access to the same ancillary services offered by airline web sites</td>
</tr>
<tr>
<td>• Add specific content through integrated partners</td>
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</table>

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<thead>
<tr>
<th>Streamlined processes to keep costs down</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Amadeus Selling Platform is loaded with tools designed to speed up the booking process and boost productivity</td>
</tr>
<tr>
<td>• Built-in efficiency tools and integration enable faster sales</td>
</tr>
<tr>
<td>• Instant integration from front to back-office</td>
</tr>
<tr>
<td>• Reduces the complexity of business processes &amp; administration time</td>
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</table>

<table>
<thead>
<tr>
<th>Exceed customers’ expectations with personalised services</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Wide offering and flexibility for corporate clients to provide for trouble-free travelling</td>
</tr>
<tr>
<td>• Ability to comply with clients’ preferred supplier agreements</td>
</tr>
<tr>
<td>• Automated processes for easy handling of customer profiles, policies and preferences</td>
</tr>
<tr>
<td>• Customer profiles are easily created and their purchase history and preferences can be saved</td>
</tr>
</tbody>
</table>

> Quick and easy search for profiles thanks to internet search engine type technology. The new ‘merge’ display combines data from the traveller, the linked company and the owning agency for a much clearer view. Easy transfer data to the PNR.
Amadeus Selling Platform Connect

Amadeus Selling Platform Connect is the only professional sales and fulfilment platform that is fully web-based, yet built for travel professionals. It can be tailored to the travel agent needs and is packed with innovative features such as Booking File, Integrated Partners, Cryptic Magic and more. Amadeus Selling Platform Connect requires minimal training and no installation, it is accessible from anywhere at anytime and provides access to the best content, Amadeus, regional and local, seamless through a single application.

Main features

Customisable

- Customisable desktop can be set up based on individual travel agent needs and behaviours with the exact travel content required. Travel agents can configure the platform themselves or work directly with Amadeus to develop specific customisation. Third party content that is specifically requested can be integrated directly into the booking flow.

No installation

- Amadeus Selling Platform Connect is not only a new graphical interface completely re-thought, it also features industrial-strength tools needed by the travel professional and is fully accessible on the web! Can be accessed any time and from any machine simply using travel agency credentials. No lengthy or costly installation or deployment required. New features can be deployed even faster and accessed instantly over the web.

Intuitive workflow

- The air, hotels, cars, and profiles components have been re-thought to gain the same intuitive workflow across the board. Selling Platform Connect includes many productivity enhancing features, such as pre-population from the air segment, auto-complete entries, progressive displays for fast results and filtering options that instantly adjust your displays.

Booking File

- At the core of the new Amadeus Selling Platform Connect framework is a re-engineered interface boasting new toolbars and menus with a navigation that is centred around the Booking File. The Booking File concept offers one unique repository for all the information that an agency needs to store for a passenger’s trip.

- Trip components can be easily accessed from the ‘Go To’ panel there is a ‘Check List’ to remind agents of key steps when building a customer’s itinerary.

Cryptic Magic

- Cryptic Magic is a unique feature that allows the entry of cryptic commands but with results displayed in a rich graphical display. Speed can be maintained with control over workflow while enriching the results display thanks to the Amadeus Selling Platform Connect powerful graphical interface.

- Cryptic Magic will truly improve productivity and give an optimal balance between the speed of cryptic
entries and the rich content of the graphical page. It also brings significant cost savings.

**Integrated Partners**

As well as the external web sites that can be brought into Amadeus Selling Platform Connect through the 'External links' feature, it is also possible to fully integrate specific providers through the Integrated Partners framework. Integrated Partners allows booking non-GDS content using the same workflow and integrate it fully into the Booking File and back office.

**Productivity Suite**

- Amadeus Selling Platform Connect already boasts revolutionary, timesaving features, but even more options can be added to further increase productivity and quality.
- **File finishing**: facilitates the completion of booking files based on defined rules
- **Agent assistant**: the evolution of smart keys and predefined workflows to help agents complete tasks more efficiently

<table>
<thead>
<tr>
<th>Business benefits</th>
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</thead>
<tbody>
<tr>
<td><strong>Best content: Find and book Amadeus, regional and local content seamlessly through one application</strong></td>
</tr>
<tr>
<td>- Satisfies all traveller needs and enhances customer service</td>
</tr>
<tr>
<td>- Access to the same ancillary services offered by the airline web sites</td>
</tr>
<tr>
<td>- Add specific content through integrated partners</td>
</tr>
<tr>
<td>- Rich content and interactive maps</td>
</tr>
<tr>
<td><strong>Built by and for travel professionals, designed to boost productivity and access to information and differentiate through a tailored approach</strong></td>
</tr>
<tr>
<td>- Intuitive interface, user-friendly toolbars, menus and productivity tools</td>
</tr>
<tr>
<td>- Efficient processing and follow-up</td>
</tr>
<tr>
<td>- Reduces training cost and time</td>
</tr>
<tr>
<td>- Agency specific customisation for a ‘tailored fit’ that matches business objectives</td>
</tr>
<tr>
<td><strong>Anywhere, anytime, accessed entirely through the internet with all features, functionalities and content at agent’s fingertips</strong></td>
</tr>
<tr>
<td>- Easy to install, deploy and access</td>
</tr>
<tr>
<td>- No need for upgrades</td>
</tr>
<tr>
<td>- Agents have access to the same platform and feature set, across offices and countries</td>
</tr>
</tbody>
</table>
Amadeus e-Travel Management

Amadeus e-Travel Management is the online self-booking tool that gives corporations unparalleled control over their travel programme and business travellers greater choice with their trips while complying with corporate travel policies.

Planning, booking and purchasing complete travel itineraries (while adhering to company guidelines) becomes simple. Corporations and travel agencies alike can integrate all elements of their global travel programmes (including travel policies, preferred suppliers and negotiated rates) into one easy-to-use website.

Amadeus e-Travel Management is the number one international Corporate Travel Solution with full integration with the main Expense Management systems.

Main features

Sophisticated and intuitive interface and work flows

› Easy to use overview of the key features, enabling users to quickly plan a travel itinerary as traveller or as a travel arranger and providing visibility to users on their trips and their status
› Intuitive tab structure to navigate to the included modules; travel planning, book, review, profiles and administration
› Efficient service tools to view maps, weather and additional information
› Plan & book itineraries that include air, rail, hotel, car, and destination services such as taxi
› Quickly fill in your mini-profile
› Avoid misleading fare conditions with Mini Rules
› Manage templates when booking or from any existing PNR

Administration

› System with communities to define the different roles (e.g. administrator, profile manager, traveller, approver etc.) and their associated processes
› The hierarchical structure based on communities enables to keep control of important details regarding roles definition and settings.
› The administrative tool allows the building of fine tuned travel policies and customisation of the interface

Integration of external applications and content

With Amadeus e-Travel Management, corporations and travel agencies alike can integrate all the elements of their global travel programmes, including travel policies, preferred suppliers and negotiated rates, into one website.

› Profile management integration
› Silent login; users logging in through external applications seamlessly linked into e-Travel Management
› Integration with external workflows
› Expense systems

Amadeus Mobile Partner

› Access Amadeus e-Travel Management from a mobile device
› Full trip lists, details and travel approval functionality
### Business benefits

**Control**
- Controls costs and expenses through control over corporate travel programme and policy implementation
- Defines travel policies easily and provides access to sophisticated reports using the built-in reporting tool
- Enables substantial savings through touchless processing, travel policy compliance and best content
- Increases efficiency

**Choice of travel, technology and content suppliers**
- Provider choice flexibility
- Off the shelf and/ or customised integration between HR, expense, finance and travel management company systems
- Availability of GDS and external content with advanced search tools

**Increases customer satisfaction**
- Intuitive application and easy booking
- Environmental care including CO₂ emission indicators
- Offline flow enhancements help save time answering requests
- Avoids misunderstandings and provides clarity on fare conditions through Mini Rules
- Easy comparison on fares, return and one-way
- Templates and tools speeding up booking processes and increased accuracy through seamless workflows
**Amadeus Shopping Solutions**

**Amadeus Master Pricer**

Amadeus Master Pricer is Amadeus’ leading shopping solutions portfolio, allowing travel agencies to generate more revenue and benefit from state-of-the-art technology.

It is the most revolutionary and comprehensive low fare search and merchandising solution for online travel agencies and online sites of traditional travel agencies. As their technology partner, we are committed to ensure that our travel agencies remain at the forefront of the industry equipped with the most innovative online products.

Based on state-of-the-art technology, the Amadeus Master Pricer Portfolio is specifically designed to meet the needs of different end consumers and is composed of the following products, dedicated to online travel agencies:

- **Amadeus Master Pricer Travelboard**
  > Specifically designed for the cost-conscious traveller seeking the lowest fares.

- **Master Pricer Special Offer**
  > Allows travel agencies to differentiate beyond price to attract choice conscious customers. Customers are able to book the most attractive or profitable content allowing travel agencies to drastically improve the efficiency of marketing campaigns.

- **Master Pricer Agent Fare Families**
  > Allows travel agencies to offer an improved shopping experience to customers and direct them to the most profitable content using the travel agency’s own defined fare families.

- **Amadeus Master Pricer Calendar**
  > Expertly addresses the needs of travellers who are flexible with their dates in order to obtain the most cost effective options.

- **Amadeus Extreme Search**
  Amadeus Extreme Search is a unique inspirational shopping solution for online travel agencies that revolutionises the way customers search for air travel online.

Amadeus Extreme Search provides intuitive and efficient options where users can explore and determine their trip based on their holiday requirements. Travellers are engaged right at the beginning of the shopping process, before decision on destination has been made. Using flexible parameters and open search criteria the best deals from hundreds of airlines are returned instantly over a full calendar year and results can be displayed using interactive maps.

Amadeus Extreme Search is based on Massive Computation Platform which computes huge volume of prices on itineraries and dates defined by the traveller. The platform is capable of computing billions of combinations in batch mode and stores them into a cache called the Massive Search Platform. These results are searched in transactional mode enabling almost instantaneous results.

**Business benefits**

<table>
<thead>
<tr>
<th>Increased business growth</th>
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<tbody>
<tr>
<td>&gt; Increased level of service to customers by proposing a list of relevant alternatives</td>
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<tr>
<td>&gt; Competitive travel solutions, finding the lowest fare for heavily price-driven customers</td>
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<tr>
<td>&gt; Enable corporate clients to control travel costs</td>
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<tr>
<th>Improved productivity</th>
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<tr>
<td>&gt; Specific features such as cryptic, PNR search and context management</td>
</tr>
<tr>
<td>&gt; Efficient and reliable shopping tool with high bookability and price accuracy rates</td>
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<tr>
<td>&gt; Ability to manage complex itineraries with up to six separate city pairs</td>
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<tr>
<th>Enhanced customer satisfaction</th>
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<tbody>
<tr>
<td>&gt; Ability to find travel solutions matching customer’s profile and preferences (thanks to flexible, powerful options allowing customer’s expectations to be met) and corporate travel policies</td>
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Amadeus Offers

Amadeus Offers is a comprehensive demand management solution, from handling trip proposals in the pre-booking phase to offering alternative travel arrangements after departure.

The management of pre-booking activities typically constitutes about a half of the daily agency activities, but to date there has been a lack of appropriate tools to facilitate this complex and essential phase of the reservation process.

Amadeus Offers provides a central, innovative cross-channel solution that allows managing pre-booking activities, proposing and storing a list of saved travel quotes, or offers, in a single location, with the possibility to exchange trip proposal details with travellers via e-mail.

In addition, the travel data stored provides the opportunity to generate reports for analysis, as well as business intelligence on pre-booking behaviours and trends, giving a valuable source of information to optimise operations management.

Main features

Automated process with full integration

- Using the existing booking flow, pricing methods and tools itinerary proposals are stored in the same Total Travel Record (ie. PNR), offers can be refreshed to ensure information is up-to-date, and an offer can be confirmed into a booking in a single transaction.

Offer Notice

- The Offer Notice is a customisable, preformatted e-mail that includes flight and/or hotel details, pricing and a summary of fare conditions, providing fast and efficient communication.

- The Offer Notice simplifies follow up, saving valuable time and enhancing the support delivered.

Business intelligence and reporting

- As all itinerary proposals are stored, the data enables the generation of reports for analysis and business intelligence on pre-booking behaviour and trends.

<table>
<thead>
<tr>
<th>Business benefits</th>
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<tbody>
<tr>
<td>Increased productivity and revenues</td>
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<tr>
<td>- Replaces time consuming workarounds, saving time and money</td>
</tr>
<tr>
<td>- Facilitates pro-active chase-up by proposing additional services based on stored trip data</td>
</tr>
<tr>
<td>- Manages constraints during a trip with alternatives accessible at any time</td>
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</table>

| Enhanced customer satisfaction and retention |
| - Transparent and efficient communication channels provide customers with a faster, more convenient travel experience |
| - Allows travel agencies to demonstrate the value delivered to the customer, comparing the price of booked items with the price of offers made |

| Optimised operations management |
| - Products are tailored to customer needs by tracking the details of confirmed bookings with offers made |
| - Synchronised management of customer requests |
| - Improved negotiating power with providers using business intelligence from compared offers |
Hotels

Complexity continues to define the hotels sector, which faces both fragmentation of the selling channel as well as changing guest preferences, driven by major geographic shifts and attitudes.

Amadeus brings value to both the hotelier and the seller by providing the content and the technology to meet the needs of today’s guests. The key to Amadeus’ advantage is having visibility of the total spectrum - hotelier, seller and guest - which allows us to drive complexity out of the industry, a key requirement to ensure innovation flourishes.

Today, Amadeus connects some 300 of the world’s leading hotel chain providers with our global community of travel agencies.

» Via our various hotel reservation channels and solutions Amadeus gives hoteliers the possibility to target and sell their rooms and rates to business and leisure travellers globally. Our portfolio of booking tools maximise hoteliers’ visibility and sales opportunities in the travel agency arena. In addition we offer high-value marketing and promotional solutions and services for hotels to reach the right booker with the right offer at the right time, helping them manage their pricing strategies and customer relationships.

» By working in partnership with hoteliers, Amadeus is able to ensure travel agents and travel management companies remain relevant by giving them what they require to deliver customer value when it comes to hotels. We give our booking customers access to offers on over 250,000 hotels via custom-built reservation applications which are speedy, efficient and tailored to the way our business partners operate.
Amadeus is committed to delivering next generation solutions to support rail companies modernise and meet the triple challenge of deregulation and increased competition, fulfilling the needs of the 21st century traveller and generating sustainable revenue growth. Amadeus Rail is the business arm dedicated to serving the needs of some 100 rail companies around the world, and we have a global network of rail travel sellers including business and leisure travel agents, corporations, online travel companies and railway companies themselves.

A rail renaissance

The rail industry is undergoing a period of rapid transformation. Central to this is the liberalisation of the European rail industry. In addition, the EC’s 2011 whitepaper, Roadmap to a Single European Transport Area, emphasises rail’s central role in its vision for the future of European transport: by 2050, the majority of medium-distance passenger transport, about 300km and beyond, should go by rail.

Europe’s high-speed network will add 5000 km between 2012 and 2020, and, as Amadeus’ own research has found, long-distance passenger traffic in Europe will increase by 21% (2.2% annually) to reach over 1.35 billion by 2020, up by almost 250 million from 2012 figures.

The opportunity for rail companies is clear – but to capitalise upon it, they must put the traveller at the heart of everything they do. This will involve a new approach to distribution, if they are to reach new customer segments, drive passenger growth and meet the expectations of the 21st century traveller.

Whilst regulatory change is driving the rail renaissance in Europe, rail companies around the world will also benefit from taking a new approach to distribution and meeting the needs of the traveller. Increased investment in high-speed rail infrastructure in Asia, the US and Brazil means an unprecedented global rail opportunity is emerging.
Amadeus: understanding the future of rail

Amadeus has commissioned a number of rail-focused thought leadership studies to better understand the future of the industry, particularly as it undergoes a period of rapid change. The most recent is The Rail Journey to 2020, published in February 2013, and which identifies six key factors that will influence the growth of long-distance rail passenger traffic in Europe over the period to 2020.

The six key factors include: liberalisation, new market entrants, completion of new high-speed lines, new hubs, Air-Rail and Rail-Rail cooperation, and railways’ costs, and the study finds that, if developments in six key areas progress as currently anticipated, long-distance passenger traffic in Europe will increase by 21% (2.2% annually) by 2020.

White papers can be downloaded at www.amadeusrail.net/research
Products – investing in technology to make booking rail easier

Amadeus’ distribution solutions aim to make booking rail easier. They are multi-channel and multi-railway.

Amadeus Global Rail Sales Platform

The Amadeus Global Rail Sales Platform provides availability, booking and ticketing capabilities to both travel sellers (travel agencies, online travel agencies and corporations) and railways’ direct sales channels. To date, SNCF, Eurostar, Thalys, Lyria, Trenitalia and SJ have selected Amadeus as their global, multichannel distribution partner.

Amadeus FlyByRail Track

FlyByRail Track is an industry-first solution that allows air-rail comparison and the possibility to book rail services from the same screen as flights, enabling railways to seriously compete against airlines at the booking stage. It has recently been adopted by Trenitalia and Thalys, and Eurostar has been using it since 2006.

FlyByRail Track enables high-speed rail services to be displayed alongside airline routes on the travel agent’s screen, allowing customers to be presented with a choice of journey in an open and transparent way. If a customer chooses the rail option, the ticket is booked in exactly the same way as an airline ticket. For the first time therefore, travel agents are able to compare and sell rail routes with airline journeys.

The platform crucially allows for seamless integration with Amadeus Passenger Name Record and mid/back office systems, making the rail booking process simple and intuitive for the agent.

FlyByRail Track makes the possibility of interlining between rail companies and airlines a reality, dependent upon the commercial agreement between the two. Using this innovative system, rail companies are finally able to compete with airlines on short-haul routes, with real-time availability and schedules.

UVET Amex, in Italy, was the first travel agency/travel management company to pilot the Trenitalia offering via FlyByRail Track. UVET Amex achieved a 50% reduction in the overall booking process times, thereby improving productivity and reducing cost.

Amadeus Web Services Track

Amadeus Web Services Track is a toolkit that enables railways and online travel agencies to build their own web interface, selecting the train services, fares and inventory they wish to sell to make online railway ticket booking easier. Online travel agencies in France are using Web Services Track to sell services from SNCF and we are working with other online travel agencies to make rail more visible through the online channel.

Amadeus Agent Track

Amadeus Agent Track is a state-of-the-art rail booking solution that allows travel sellers to perform large volumes of rail bookings quickly and efficiently, using the same interface and process flow as well as benefitting from full integration with Amadeus products.

Agent Track’s intuitive Graphical User Interface (GUI) has been designed to remove the complexity from rail bookings, yet incorporates all key steps and elements of standard travel agency processes. Once adopted, a rail company’s offering will be available to agents worldwide, making it simple for agents to book global rail travel for their customers.

So far, SNCF, Eurostar, Thalys, Lyria, SJ, Deutsche Bahn and Trenitalia are being integrated on Agent Track and other major European railways will also soon be available.

These solutions are part of Amadeus Total Rail, a complete suite of next generation distribution and technology solutions based on a single data source allowing rail companies to meet the needs of today’s market by providing them with the ability to manage all customer interactions, distribute tickets across any sales channel, and streamline operations.
3.2 IT Solutions

Business overview

IT Solutions refers to (i) the development and the provision of IT solutions and (ii) the provision of consulting, bespoke system integration and migration services, application hosting, training and other services to travel providers.

Our current product offering primarily addresses the Passenger Service Systems (PSS) segment of the airline IT market, enabling processes such as central reservation, inventory management, departure control and e-commerce, as well as providing direct distribution technologies. We are also expanding our airline IT solutions offering with new modules such as Revenue Accounting and Revenue Management and we are seeking to grow our market share within the non-airline markets, including the hotel, airport and rail IT markets.

Travel providers have historically developed many of their core technology systems in-house, but given the complex operating environment and greater competitive and cost pressures they are increasingly looking to replace inflexible in-house legacy systems. By moving towards outsourced IT systems with a provider of scalable next-generation technology platforms such as Amadeus, our customers enhance the quality and functionality of their product and service offerings and improve their ability to respond to changing market conditions, while reducing their spend on development and ongoing maintenance of their legacy systems and converting the fixed costs associated with such systems into variable costs.

In addition to our airline IT portfolio of solutions, we are gradually expanding into the provision of IT solutions to other travel providers, mainly hotels and ground handlers. Building in our unique experience in delivering mission-critical systems for airlines, Amadeus is working in partnership with hoteliers and ground handlers to develop next generation solutions for their business.
The principal service of this business area is the Amadeus Altéa Suite, a new-generation set of passenger management solutions which address airlines' mission-critical operating functions: sales and reservations, inventory management and departure control.

- Amadeus Altéa Reservation enables our airline customers to manage all their bookings, fare prices and ticketing through a single interface and is compatible with distribution via direct and indirect channels, both online and offline. We launched our initial airline IT offering, known as System User, in 1991 and are gradually converting System Users to our other Altéa PSS modules.

- Amadeus Altéa Inventory permits airlines to create and manage schedules, seat capacity and associated fares on a flight-by-flight basis. This allows the airline to monitor and control availability and reassign passengers in real time. Altéa Inventory also incorporates a seat-mapping functionality. Since we introduced Altéa in 2000, with British Airways and Qantas, we have successfully migrated 110 airlines. Each airline that uses our Altéa Inventory module must also have implemented our Altéa Reservation module.

- Amadeus Altéa Departure Control covers many aspects of flight departure, including check-in, issuance of boarding passes, gate control and other functions related to passenger flight boarding, while enabling airlines to manage disruptions and other flight events efficiently. In addition, Altéa Departure Control offers aircraft load control functionality, which enables airlines to evaluate and optimise fuel utilisation. As of December 31, 2012, 57 airlines were using our Altéa Departure Control solution. Each airline that uses our Altéa Departure Control module must also have implemented our Altéa Reservation and Altéa Inventory modules.

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### Amadeus Altéa Suite

- **Amadeus Altéa Reservation**
  - Customer profiles
  - Availability
  - Bookings
  - Fares & pricing
  - Ticketing & e-ticketing

- **Amadeus Altéa Inventory**
  - Inventory control
  - Schedule management
  - Re-accommodation
  - Seating management

- **Amadeus Altéa Departure Control**
  - Check-in
  - Boarding pass issuance
  - Baggage management
  - Flight boarding
  - Aircraft weight & balance
Amadeus Altéa is complemented by our e-Commerce product offering.

Amadeus Airline e-Commerce Suite is a set of solutions that seeks to improve the profitability and efficiency of an airline e-Commerce sales and support process. The suite comprises solutions that can be fully integrated such as Amadeus Flex Pricer, for pre-sales faring and multi-currency online shopping, or Amadeus e-Retail, a sophisticated booking solution for airline websites, and for post-sales servicing solutions, including online award redemptions and online ticket changes. As of December 31, 2012, over 100 airline clients were using our e-Commerce solutions (operating over 280 websites), including more than 25 of the top 50 IATA airlines (measured in terms of total annual passenger numbers) and our airline e-Commerce Suite is available in 29 languages.

Unlike the carriers’ legacy IT systems, which use different technologies, the Altéa platform is based on a common technical infrastructure and software. With Altéa, airlines outsource their operations onto a community platform which delivers superior operational efficiency and allows them to share information with both airline alliance and code-share partners.

The Altéa Suite offers a high degree of flexibility through standardised, modular products that can be selected by airlines to suit their particular needs. We offer our Altéa Suite on a community-based platform, with all of our airline customers sharing the applications on a single system fully hosted by us. We believe that this approach, unique among passenger service system providers, enables us to provide users, simultaneously and at a low cost, with upgrades and enhancements we make to the platform, incorporating new industry standards or adapting to the changing needs of a dynamic and rapidly evolving market. In addition, this approach facilitates our connecting of new users and adding new functionalities at limited marginal costs, providing us with significant operational leverage as we grow our business. The development of Altéa was based on the following five core principles:
Single data source: elimination of duplication and inconsistency by sharing a single version between components of all key data.

Customer centricity: core processes driven by customer value; full customer and journey information captured and made available.

Automation & flexibility: business rules drive the main business processes; intuitive graphical user interfaces and customisable workflows facilitate efficient and consistent service.

Common platform: benefits from the combined input of a community of world leading airlines; seamless integration with alliances and partners.

Designed for Change: modular architecture based on next-generation, open systems technology; highly configurable solutions, designed with latest business concepts, such as self-service and customer value in mind.

Airline Passenger Service Systems (PSS) are mission-critical and highly complex platforms. To migrate and run such systems requires a particularly high level of competence and experience. Since launching our Altéa Suite, we have acquired and developed the tools, methodologies and experience necessary to ensure an efficient and seamless migration of our Altéa customers, securing the transfer of their critical data and delivering a smooth migration without any downtime affecting our customers’ systems. We place a strong emphasis on ensuring a low-risk implementation through a detailed migration planning process and a focus on ensuring critical business functions are protected throughout the implementation.
In addition to our core Amadeus Altéa Suite, we offer a range of stand-alone IT solutions to support airlines in certain critical customer-related processes, including:

**Amadeus Ticketing Platform:** a sophisticated ticketing tool that allows airlines to issue all standard paper and e-ticket traffic documents, to maintain a ticket database and generate sales and transaction reports, to cross-sell additional content (such as car, hotel and insurance products) and to produce highly customisable revenue accounting reports.

**Amadeus Revenue Integrity:** a revenue management tool designed to assist airlines to increase capacity utilisation through the reduction of no-shows and cancellations and to eliminate distribution costs associated with non-productive bookings. This tool also enables a better enforcement of the fare conditions and avoids revenue leakage related to fraudulent activities. Airlines benefit from these advantages at any time from pre-sales to after travel stages.

**Amadeus Payment:** facilitates airline’s access to the complex and fragmented payment industry. The tool offers payment transactions management for sales performed across all channels on behalf of an airline merchant, through a wide range of international and local methods of payment. It provides protection of revenue via a number of sophisticated checks, including 3D secure for web payments and a full fraud prevention module. The payment processing is fully integrated within the airline’s selling flow and across all systems, creating an enriched capture file, and leading to very detailed statistical capabilities.
Amadeus Altéa Revenue Management: combines innovative demand forecasting techniques and perfect integration with the airline’s systems to ensure the maximum revenue return over an airline’s full network. Amadeus Revenue Management provides network optimisation through a combination of traditional airline revenue management techniques, plus demand forecasting for a customer’s ‘willingness to pay’ in markets where fare fences have been removed. This allows airlines to directly reverse the ‘spiral down’ effect increasingly affecting markets across the globe. A number of complementary products further help to improve yield including Yield Generation - which calculates yields based on Revenue Accounting/Fares information, Altéa Group Negotiator - which supports the analyst in group quotation, and Amadeus Revenue Availability with Active Valuation - which further maximises revenue through more precise customer segmentation.

Amadeus Ticket Changer: Amadeus Ticket Changer was launched in 2006 to simplify the ticket re-issuing process. Amadeus Ticket Changer combines the state-of-the-art Amadeus Fares and Pricing engine with a powerful, multi-channel ticketing functionality. Since its launch, Amadeus Ticket Changer has evolved in response to the changing requirements of airlines in the area of customer servicing, and today boasts a full portfolio of products and features known as the Amadeus Ticket Changer Suite. Based on the ATPCO Category 31 and 33 rules governing airline re-issue and refund conditions, the Amadeus Ticket Changer Suite is now used by almost 60 customers, including major airlines from all regions of the world. Today Amadeus Ticket Changer Suite is comprised of Amadeus Ticket Changer Reissue, Amadeus Ticket Changer Refund, Amadeus Ticket Changer Upgrade, Amadeus Ticket Changer Disruption and Amadeus Ticket Changer Shopper.

Amadeus Airline Ancillary Services: delivers a comprehensive solution that enables airlines to create a highly profitable ancillary services offering and deliver unmatched levels of customer service. Amadeus Airline Ancillary Services is fully integrated with all Amadeus Airline IT solutions including the Amadeus e-Commerce Suite. In addition, it is fully industry compliant so can be distributed through other participating GDS and airlines.

Amadeus Electronic Miscellaneous Document Server: provides an electronic solution for airlines to issue, store, manage and distribute Electronic Miscellaneous Documents. Electronic Miscellaneous Document is the industry standard electronic document used to track the sale and usage of fees for services currently collected with paper or virtual MCO such as ancillary services. The Amadeus Electronic Miscellaneous Document Server solution is fully integrated across the Amadeus Altéa Suite including Reservation, Inventory and Departure Control systems.
Amadeus Passenger Revenue Accounting: as mentioned above, in 2012 we have launched a new module, Amadeus Revenue Accounting together with British Airways as first customer. Amadeus Passenger Revenue Accounting is an airline revenue accounting solution that increases profitability by tracking revenue from all distribution channels in real time. Airlines can instantly and automatically collect data, which is critical for their business model. It enhances an airline’s visibility on the full revenue picture through instant, consolidated sales and usage information, advanced reporting, and decision support. Also Saudia has signed up for this new module that will start to be implemented on the airline form Saudi Arabia during the first half of 2013.

This solution can be taken for both existing Altéa clients and non Altea clients.

Each of our stand-alone IT solutions has been designed to integrate fully with our Altéa solutions, to take advantage of their customer-centric features, but they can also be used, on a stand-alone basis, with other in-house or third-party systems.
Amadeus business overview

Amadeus works in partnership with hoteliers to build IT solutions for next generation hotel management systems focused on delivering a single view of rates, inventory, reservations, content and guest information plus enhanced distribution and merchandising tools, in order to enable hotel business and brand transformation. In addition, this single view of the guest and all operations helps to remove operational complexity. Our solutions are based on open technology and offered as a Software as a Service model (SaaS) which is less expensive and more flexible than traditional solutions for hoteliers.

Building on our unique experience in delivering mission-critical systems for airlines, Amadeus is now extending its offer to ground handlers. Amadeus has leveraged its leadership position in airline departure control systems to propose a fully automated and integrated set of solutions for ground handlers using the technological capabilities of Amadeus Altéa Departure Control Systems - Customer Management and Altéa Departure Control Systems - Flight Management services for airlines as a base.

With Altéa Departure Control Systems for Ground Handlers, the complexity of pairing the ground handler’s system with the airline’s own specific business rules is removed, permitting a seamless integration of the ground handler’s and the airline’s operations regardless of whether the airline uses the Amadeus Altéa suite or not.

This enhanced level of integration results in increased productivity for ground handlers and provides higher quality services to the airlines and their customers. Ground handlers migrating to the Altéa suite have the capability to service all types of airlines through a single terminal and one intuitive interface, gaining operational efficiency while providing best quality services. The benefits of higher staff flexibility and reduced training expenses are considerable.

Amadeus Altéa Departure Control Systems for Ground Handlers is a community platform developed by working closely with ground handlers that allows customers to take advantage of a combination of ground handlers’ expertise and Amadeus technology.
Financial performance in 2012

Revenue from IT Solutions accelerated its growth in 2012 to 13.0%. This increase was driven both by IT Transactional revenue growth, fuelled by growth in PB volumes, together with an improvement in non-transactional revenue.

Contribution margin continues to benefit from certain operational leverage and is 73.2% for 2012 vs. 72.6% for 2011, despite negative FX impact on margins.

From a commercial perspective, 2012 was a very successful year. We continued to sign new clients to the Altéa platform with special mention of Southwest Airlines, the largest U.S. carrier in terms of domestic passengers boarded. This airline is the first US carrier to contract Amadeus’ Altéa reservations solution in order to support the carrier’s international service. While the agreement focuses on the international element of Southwest’s reservation system, the contract also provides the option for Southwest to convert its domestic business to Amadeus in the future.

During the year, we continued to invest significantly, not only in preparation for the migrations of 2013 and 2014, but also in the new business areas, with the aim to enlarge our Total Addressable Market, reaching other businesses outside Airline IT, within travel.
Evolution of KPI

During the year 2012, the number of passengers boarded reached 563.8 million, 28.4% higher than in 2011, despite the loss of traffic from Spanair and Malev, both of which ceased operations early in the year. On a like-for-like basis, the organic underlying PB growth was 7.4%, ahead of traffic growth, given the positive mix in our client base.

As of December 31, 2012, 52.5% of our total PB were generated by Western European airlines, where growth was fuelled by the contribution from airberlin and Norwegian (both migrated in December 2011) as well as SAS, migrated in the first quarter of 2012. The number of PB related to carriers in the Asia Pacific region also increased very significantly, driven by the migration of Cathay Pacific and Singapore Airlines. Asia Pacific now represents 12% of our total PB.
Revenue

In 2012, IT Solutions revenue grew by a remarkable 13.0%. As detailed in the table, group revenue was fueled by growth in both IT transactional and non-transactional revenues, and despite the expected decrease in direct distribution revenue.

IT transactional revenue

IT Transactional revenue increased by 20.7% in 2012, to €519.2 million. This increase was supported by strong growth in all main revenue lines:

Altéa: strong growth driven by the increase in PB, both in relation to new migrations that took place in the year and the full year impact of the 2011 migrations. Additionally, we had a strong contribution from the up selling of functionalities such as revenue integrity services, availability calculator or code share services.

e-commerce: significant increase in Passenger Name Record volumes, despite negative impact from the loss of clients (mainly Spanair, Malev and Cimber). Positive contribution from up selling activities (e.g. affinity shopper, mobile solutions).

Stand-alone IT Solutions: strong performance in most products, such as ancillary services, the Amadeus Ticket Changer product or web services. As in the case of Altéa, growth is driven both by the organic growth from existing customers, as well as new clients implemented.

### Figures in million euros

<table>
<thead>
<tr>
<th>Figures in million euros</th>
<th>2011</th>
<th>2012</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT Solutions - Revenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT transactional revenue</td>
<td>430</td>
<td>519</td>
<td>20.7%</td>
</tr>
<tr>
<td>Direct distribution revenue</td>
<td>134</td>
<td>120</td>
<td>(10.6%)</td>
</tr>
<tr>
<td>Transactional revenue</td>
<td>564</td>
<td>639</td>
<td>13.3%</td>
</tr>
<tr>
<td>Non transactional revenue</td>
<td>64</td>
<td>71</td>
<td>10.4%</td>
</tr>
<tr>
<td>Revenue</td>
<td>628</td>
<td>709</td>
<td>13.0%</td>
</tr>
<tr>
<td>IT transactional revenue per PB(^{(1)}) (euros)</td>
<td>0.98</td>
<td>0.92</td>
<td>(6.0%)</td>
</tr>
</tbody>
</table>

\(^{(1)}\) Represents our IT transactional revenue divided by the total PB figure.
Average IT transactional revenue per PB for the year was €0.92, below the average fee of €0.98 reported in 2011, and in line with internal expectations. The main reasons for this dilution are (i) the change in the Altéa client mix, due to the migration of new hybrid carriers to the platform at the end of 2011 (whose service and fee level are reduced vs. the existing average), (ii) revenue mix within IT transactional revenue, as e-commerce and standalone IT solutions grow at lower rates than Altéa (these revenue streams are not charged on a per PB basis and therefore do not grow in line with PB). This dilution was partially offset by the positive FX (translational) impact.

**Direct distribution**

Revenue from Direct Distribution fell by 10.6% in 2012 compared to 2011. This decrease in revenue was mostly driven by a drop in bookings as a consequence of the migration of some of our existing users of our Reservations module (notably SAS) to the Inventory module of our Amadeus Altéa Suite in 2012. Once migrated on to the Altéa platform, these clients pay a fee per PB, and revenue is accounted for under IT Transactional revenue, rather than in Direct Distribution. In addition, revenue growth was negatively affected by the demigration of LAN in the second half of the year.

**Non transactional revenue**

Non-transactional revenue increased by 10.4% in 2012, driven both by higher revenue from gaps and implementations (deferred revenues starting to be recognised after the client cutover) and from services, such as consulting or hosting.

**Contribution**

The contribution of our IT Solutions business is calculated after deducting from our revenue those operating costs which can be directly allocated to this business (variable costs, including certain distribution fees, and those product development, marketing and commercial costs which are directly attributable to this business).

In 2012, the contribution of the IT Solutions business grew by a significant 13.9% to €519.3 million. As % of revenue, there was a slight margin expansion of 0.6 p.p. vs. a contribution margin of 72.6% in 2011.

The 13.9% increase in the contribution of our IT Solutions business in 2012 was driven by a 13.0% increase in revenues and a more limited 10.5% increase in net operating costs.

The increase in operating costs was mainly driven by activities which were subject to capitalisation, as they relate to investment in R&D to fuel future growth (portfolio expansion with new modules and functionalities, new business areas, etc). In particular, costs were driven by: (i) an increase in our R&D expenditure associated with client implementations, as well as increased efforts on new functionality and New Business areas (as reflected in a strong increase in FTE in our development area), (ii) an increase in commercial and technical efforts related to local support (regionalisation), with the establishment of new local sites such as Korea and Dubai and new services to support customer satisfaction. We have also increased the focus on post-implementation teams to support our growing customer base and (iii) negative impact of EUR depreciation on our cost base.
**Products and services**

Through our current portfolio of innovative IT solutions, we believe that we can help airlines differentiate and ensure a competitive advantage, not only in the short-term by rapidly delivering cost savings and revenue gains, but also in the long-term by improving market agility and adapting quickly to their business model.

The following pages describe the value that our new generation technology can bring to airlines, as well as an overview of some selected solutions in our portfolio.

**IT Solutions business benefits**

The airline’s Passenger Service system is as vital as their aircraft. It can simplify processes, lower cost structures, ensure differentiated and consistent customer service, facilitate seamless alliances and enable faster decision making. Airlines migrating to new generation passenger management solutions can radically transform their business instead of just making incremental changes. What is more, they can do this for a minimal cost while also building a sustainable competitive advantage that will make the difference for their customers and shareholders alike.
Amadeus Altéa Reservation

A new generation reservation solution, offering seamless service across channels and partners.

Main features

Booking management
> Amadeus SSR Static Notification
> Default carrier preferred display
> Unique automation features to create bookings
> Automated PNR update with customer profile
> Easy cross-selling with Amadeus Hotel, Car, Insurance and Rail content as well as PNR integration
> Real-time access to archive PNR to facilitate servicing
> Management of airline specific bookings and processes (frequent flyers, staff, groups and non-commercial)

Fares & pricing
> Most up-to-date fare databases
> Best-in-class algorithms to calculate pricing

Ticketing

Altéa Reservation can be adapted to meet every airline’s needs and a number of optional features are available to meet specific business requirements.

Main options

Amadeus Altéa Reservation Desktop
Amadeus Altéa Airline Service Fees
Amadeus Altéa Credit Card Acceptance
Amadeus Altéa Real-Time Data Feeds

Amadeus Customer Value
Amadeus Altéa Data Nexus
Notification
Altéa Reservation is an airline reservation system that offers multiple business benefits. In particular, it enables you to provide enhanced, faster customer service as well as better control of the various channels.

**Increased productivity**
- Reduces the time it takes for reservation agents to complete bookings by using automated processes
- Save up to 30% of reservation time

**Increased revenue**
- Increases sales from and to alliance partners using the carrier-preferred display. Increases revenue by optimising the distribution of selling classes at points of sale

**Customer satisfaction**
- Applies customer preferences consistently across all channels and partners during reservation. Speeds up servicing

**Increase revenue from CRM action**
- Captures full journey information into enriched PNRs and uses them dynamically to launch more efficient CRM activities

**Efficient IT model**
- Variable IT cost and benefit from shared infrastructure and community development. Reduces total cost of ownership
Amadeus Altéa Inventory

A new generation inventory management solution, which maximises yield and automates schedules, seating and re-accommodation.

Main features

Schedule management
- Automated schedule reception
- Automated massive schedule change
- Flight dressing using market pair logic
- Automated and customised schedule publication

Inventory control
- Revenue Availability (O&D), control airline inventory and calculate availability by revenue bid price and market based yields
- Support for all revenue management techniques
- Point of sale control down to IATA agency ID
- Real-time interaction with RMS and Departure Control Systems
- Automated availability publication rules
- Prioritisation of users’ daily workload

Seating management
- Single seat map used across reservation and departure control.
- Automated seating rules using customer value
- Graphical seat map

Waitlist management
- Customised customer access to waitlist
- Automated waitlist clearance based on customer value

Re-accommodation
- Guided re-accommodation mode
- Automated flight selection, including partners
- Fully automated re-accommodation mode based on full itinerary and customer value

Altéa Inventory can be adapted to meet every airline’s needs and a number of optional features are available to meet specific business requirements.

Main options

- Amadeus Altéa Automated Schedule and Re-accommodation
- Amadeus Altéa Point of Sale Inventory Control
- Amadeus Altéa Revenue Inventory Control
- Amadeus Altéa Customer Value Real-Time Interface
**Business impact**

Altéa Inventory delivers multiple business benefits. Enables more advanced revenue management techniques to capture full yield opportunities.

<table>
<thead>
<tr>
<th>Business benefit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Increased yield</strong></td>
<td>Maximises the yield of the entire network by using latest revenue management techniques. Increases revenue by up to 6%, depending on current business characteristics</td>
</tr>
<tr>
<td><strong>Time to market</strong></td>
<td>Responds instantly to competitor’s actions, changes business policies dynamically (seating, schedules) using market-based business rules. Saves several days or weeks, depending on current processes</td>
</tr>
<tr>
<td><strong>Customer satisfaction</strong></td>
<td>Applies customer preferences consistently and gives priority to high value customers (waitlist clearance, re-accommodation)</td>
</tr>
<tr>
<td></td>
<td>Increases revenue from repeat customers</td>
</tr>
<tr>
<td><strong>Increased productivity</strong></td>
<td>Saves time for all schedule, seating and re-accommodation management agents, as well as flight controllers</td>
</tr>
<tr>
<td></td>
<td>Reduces processing time by up to 30%</td>
</tr>
<tr>
<td><strong>Efficient IT model</strong></td>
<td>Variable IT cost and benefit from shared infrastructure and community development</td>
</tr>
<tr>
<td></td>
<td>Reduces total cost of ownership</td>
</tr>
</tbody>
</table>
Amadeus Altéa Departure Control – Customer Management

A complete, new generation departure control solution, enhancing customer experience at the airport through differentiated customer service.

Main features

Customer Value

- Used throughout all airport processes
- Adaptable to each airline using business rules
- Enabling offer of differentiated customer service

Check-in

- Simplified customer-centric identification
- Smart workflow
- Automated validation of tickets, regulatory checks and through check-in etc.
- Flow forward search for earlier flight possibility

Self-service support

- 100% self-service enabled
- Easy integration with Altéa multi-channel self-service application
- Advanced self-service logic

Customer management

- Full automation of activities
- Proactive onload and re-grade
- Automated, optimised seating

Baggage management

- Same seat map used for pre-seating and departure
- Automated enforcement of airline baggage policies
- Easy collection of baggage fees
- Integrated with automated baggage systems

Disruption management

- Powerful decision support tool
- Process starts as soon as flight information is updated
- Automated or guided transfer of passengers
- Priority given according to customer value

Boarding management

- Customer tracking
- Centralised control of flight departures
- Integrated dynamic agent alert system

Ground Handling Management

- Manage all handled airlines customers and proceed to customer records update with the same fully graphical application

A number of additional functional options are also available to allow an airline to customise the solution to meet their specific business needs.

Main options

- Amadeus Altéa Check-in Desktop
- Amadeus Altéa Self Service Check-in
- Amadeus Altéa Automated Passenger Transfer
- Amadeus Altéa Passenger Watchlist and Altéa Ticket Blacklist
- Amadeus Altéa Airport Link
- Amadeus Altéa Customer Value
### Business impact

Altéa Departure Control – Customer Management delivers multiple business benefits. In particular, increases airport agents’ productivity, improves customer satisfaction at the airport and maximises revenue opportunities.

#### Increased productivity
- Saves time for airport customer service agents at check-in, boarding and to manage disrupted passengers
- Manages all handled airline customers and proceeds to customer records update with the same fully graphical application
- Achieves automation of back office tasks and performs them for multiple carriers without switching systems
- Some implemented airlines have seen typical productivity increases of up to 30%

#### Increased revenue
- Ensures collection of excess baggage charges
- Make any seats released at the airport immediately available for re-sale thanks to real-time integration with inventory and reservation systems
- Some implemented airlines have seen their revenues increased by up to 0.1%
- Increases revenue from repeat customers

#### Customer satisfaction
- Offers faster and simpler check-in
- Applies customer preferences for seating consistently
- Enables effective service recovery actions
- Provides consistent given priority to high-value customers (seating, alternative flights proposal upgrade, disruption management)

#### Cost reduction
- Reduces cost of penalties due to reach of regulatory requirements
- Reduces costs related to flight delays due to early detection of passengers’ issues that could impact flight departure

#### Efficient IT model
- Variable IT cost and benefit from shared infrastructure and community development to reduce total cost of ownership
- Tight integration of Altéa Departure Control – Customer Management with Altéa Reservation, Altéa Inventory and Altéa Departure Control – Flight Management
Amadeus Altéa Departure Control
– Flight Management

A new generation load control platform to ensure efficient flight departures and optimises the weight and balance process.

Main features

Flight activity plan
> Very flexible flight activity plan, customisable down to flight level, aircraft type etc.
> Scheduled activities initiated automatically

Load distribution & balance
> Detailed allocation of passenger weight, improving capacity and trim management
> Automated and optimised aircraft load distribution
> Graphical user interface for easy handling
> Graphical LIR (Load Instruction Report) sent to ramp
> All activities can be fully automated
> Apply operating carriers preferences and processes into the Ground Handling environment

Flight departure monitoring
> Graphical user interface enables supervision of multiple flights on the same screen
> Automated alerts if any activity needs attention

Staff Management
> Powerful tools to support shift management, load controller licensing and recency, dangerous goods certification etc.

Ground Handling Management
> Airlines or ground handlers can handle any carrier (Altéa or Non-Altéa)
> A unique User Interface to manage all flights from all handled airlines

A number of additional functional options are also available to allow an airline to customise the solutions to meet their specific business needs.

Main options

Automated feed of archived departure plans and related data to an airline’s data warehouse
**Business impact**

With Altéa Departure Control – Flight Management, you can implement the most efficient aircraft load control process, while optimising fuel usage and cargo uplift.

<table>
<thead>
<tr>
<th>Increased productivity</th>
<th>Reduced costs</th>
<th>Increased revenue</th>
<th>Increased reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significantly increases productivity for load controllers with automated flight departure monitoring and business rules</td>
<td>Centralises load control sites and reduces fuel costs through improved capacity management and optimises aircraft trim</td>
<td>Gain load capacity for freight thanks to optimised weight and balance</td>
<td>Reduces the cost of delays caused by unexpected or late changes and achieves flight departure excellence and fast turnaround</td>
</tr>
</tbody>
</table>
Amadeus e-Retail

The world’s most widely used integrated airline internet booking engine. Offering the widest range of travel services to customers.

Main features

Flight search
- Powerful search by city pair

Fares and prices
- Best in class faring and pricing capabilities, including advanced low-fare search and an improved framework for special offers

Ticketing and payment
- e-Ticketing fully integrated with online credit card validation

Booking notification
- Automatically sends an e-mail confirmation for each booking, including total fares and rate information

Cross-selling
- Ability to distribute a growing amount of additional content including car, hotel, insurance, etc

Fully customisable interface
- Hundreds of customisable settings to choose from in order to fully adapt the layout and structure of the interface

Global solution
- Available in over 28 languages
- Fare calculations in all major currencies

Reporting
- Online Performance Improvement, backed-up by an expert e-Business Consulting team and integration with any web analytics platform

Business impact

Amadeus e-Retail, lowers direct distribution costs and builds long-term relationships with your customers.

Customer loyalty
- Offers an efficient online booking system 24/7 and establishes a direct relationship while promoting brand and offer

Reduced costs
- Reduces distribution costs by boosting channel shift from offline to online and from indirect to direct

Increased revenue
- Increases market share in the online market and thus generate additional bookings

Efficient IT model
- Variable IT cost and benefit from shared infrastructure and community development
- Manages websites cost-efficiently in various markets
- Reduces total cost of ownership
Amadeus Flex Pricer

A powerful online search interface, offering comprehensive and easy-to-find fares by product family, enabling an airline to strengthen customer loyalty and significantly increase yield.

Main features

**Advanced grouping of fares**
- Flexible grouping of fares by family
- Up to six customisable fare families proposed for each booking

**Advanced calendar search capability**
- Ability to propose up to 200 availability or fare options per request at once for up to 15 days around the preferred date of departure
- Clearly provide all the information required to facilitate customer choice
- Best in class fare accuracy for both domestic and international flights, including code share and interline partners’ flights

**Fully customisable graphical interface**
- Hundreds of customisable settings to choose from in order to fully adapt the layout and structure of the interface

**Global solution**
- Available in over 28 languages
- Fares calculation in all major currencies

<table>
<thead>
<tr>
<th>Business impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amadeus Flex Pricer, strengthens customer loyalty and increases yield and revenue at the same time.</strong></td>
</tr>
</tbody>
</table>

**Increased yield**
- Maximises the yield per online booking by offering not only the lowest fare, but also a choice of dates and various fares with clear fare conditions

**Increased revenue**
- Increases online sales and market share

**Customer satisfaction**
- Boosts customer loyalty by providing very efficient service and multiple choices

**Efficient IT model**
- Variable IT cost and benefit from shared infrastructure and community development
- Manages the shopping solution in various markets cost-efficiently
- Reduces total cost of ownership
Amadeus Affinity Shopper

Enables airlines to accelerate the mobile shift.

Main features

Search options

- Ability to define a wide range of search criteria such as specific interests and maximum budget, in addition to more traditional criteria like dates and destinations
- Weekend search

Usability

- Map based interface provides an easily understood display of flights that match with the shopper’s motivation for travel
- Choice of map provider
- Ability to link destinations with activities
- Ability to restrict cities to origins and/or destinations
- Customisation of look and feel
- Customisation of displayed search criteria

Business benefits

<table>
<thead>
<tr>
<th>Increased revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increases share of leisure travel market by giving customers the ability to quickly find perfect travel alternatives</td>
</tr>
<tr>
<td>Increases load factors by enhancing your ability to steer price sensitive demand towards flights with excess capacity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Customer Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gives your customers all of the tools they need to be able to manage their own travel and find the travel solutions that best meet their needs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improves look to book ratio by providing extremely relevant search results for every shopper</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Efficient IT model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared infrastructure and product evolution costs</td>
</tr>
</tbody>
</table>
Amadeus Airline Ancillary Services

A unique integrated solution that enables airlines to implement their ancillary services strategy, adding more profitability to their business.

Main features

Completeness
- A single comprehensive ancillary system
- Unique integrated solution encompassing sales, service delivery and revenue tracking and reporting
- Enabling sales via all channels (direct, indirect, airport...)
- Available at all customer touch points from shopping to arrival
- Seamlessly integrated with all airline processes (planning, sales, accounting, airport operations, etc.)

Consistency
- Centralised control and administration
- Ensuring consistent policies across all touch points
- Synchronisation between all business areas
- Real time integration between all system components
- Able to comply with industry standards (ATPCO products, RESCOM resolutions, Electronic Miscellaneous Documents)

Flexibility
- Designed to manage all types of services
  - Both flight and non-flight related services
  - Both industry standard and airline specific services
- Enabling sales at any time
  - Before, during or after ticket purchase
    - At the airport: during or after check-in, in the departure lounge...
    - Multiple fee filing mechanisms
- Able to tailor the offer for each channel
  - Channel discrimination enables a targeted offering
  - Equally able to follow industry standards or a bespoke approach

Simplicity
- Easy to add new ancillary services
- Simple filing of offer and price
- New services automatically added to all channels
- High levels of automation
- Automation designed to minimise staff interactions and requirement for procedural changes
- Seamless integration with Airlines’ loyalty systems & CRMs
- Airlines able to control and maintain their own offering
- Business rules framework

Business impact

More efficient servicing
- High levels of automation avoiding the need for manual processing

Customer satisfaction
- Consistent and seamless service delivery, even following flight disruptions
- Automatic recognition of loyalty program status
- A solution that works across all you partners and across the alliances

Reduced costs
- Single solution covering all channels
- Simplified systems integration

Increased profitability
- Multi channel solution able to capture every sales opportunity
- Full visibility of payment status at airport enabling control of waivers
- Systematic tracking of revenues enabling improved decision making on services offer, pricing and targeting
- Automated cancellation of booked services when payment not received in time
Amadeus Payment

Globally streamlines payment processing in a fragmented industry, with a seamless integration from point of sale to back office.

Main features

**Front-Office**

- Full integration to the selling flow. Amadeus Payment enables airline payment services through all types of point of sale: Call Centers, Face to Face, travel agencies, web, mobile, and kiosk
- A wide range of methods of payment, from both international to local methods, including credit and debit cards, card present and alternative methods of payment
- Real-time airline fraud prevention based on booking and payment data, covering all the above. The Amadeus Payment Fraud Prevention is available through ReD Shield, a Retail Decisions product

**Back-Office**

- Payment Capture: Unique capability to offer the payment data fully complemented by the sales data creating an enriched capture file(s). Amadeus Payment capture enables full visibility to the acquirer, potentially allowing a merchant service fee decrease and removing the complexity of complying with PCI-DSS regulations
- Management Information Services (MIS): Web interface to the Amadeus Payment Server allowing to retrieve payment transactions details and provide statistics on airline payment traffic.
- Enables time savings in airlines’ back office processing, for example for dispute management
## Business benefits

<table>
<thead>
<tr>
<th><strong>Revenue gain / protection</strong></th>
<th>Supports merchants in their effort to protect revenue by offering leading edge features such as Fraud Prevention, advanced security checks and an enriched capture</th>
</tr>
</thead>
</table>
| **Increase revenue** | Brings additional revenue thanks to a better sales conversion rate and market penetration, achieved through a wide range of methods of payment  
> Covers all airline sales channels and ensures payment collection for new services such as ancillary services |
| **Productivity gain** | Integrates payment information to the booking, issuance and reporting processes thanks to integration into the Amadeus Reservation Platform  
> This seamless integration leads to time savings both for sales agents and financial analysts responsible for reconciliation and dispute management |
| **Efficient IT model** | Complete and unique solution for airline Payment processing |
| **Customer satisfaction** | Offers a wide choice of methods of payment |
Amadeus Ticket Changer Suite

Amadeus Ticket Changer was launched in 2006 to simplify the airline ticket re-issuing process. Amadeus Ticket Changer combines the state-of-the-art Amadeus Fares and Pricing engine with a powerful, multi-channel ticketing functionality.

Amadeus Ticket Changer Suite Products

**Amadeus Ticket Changer Reissue**

- Amadeus Ticket Changer Reissue automates the necessary calculations to re-issue a ticket and stores the results in the correct ticketing formats required for subsequent document issuance.
- Previously, these complex calculations had to be performed manually by highly experienced staff, and were subject to the risk of human error resulting in incorrect charges and collections.

**Amadeus Ticket Changer Shopper**

- Combining the advanced shopping experience of Amadeus Flex Pricer with the superior reliability and accuracy of Amadeus Ticket Changer, Amadeus has developed an industry-leading shopping solution – Amadeus Ticket Changer Shopper. This tool enables users to book, rebook and service itineraries entirely in the online environment.

**Amadeus Ticket Changer Upgrade**

- Amadeus Ticket Changer Upgrade automatically computes the upgrade of a commercial ticket to a superior class using air miles. The calculation of the upgrade is filed in miles and the calculation of the tax difference is provided in the payment currency.

**Amadeus Ticket Changer Disruption**

- Amadeus Ticket Changer Disruption offers two different features to help airlines handle flight disruption situations: Amadeus Ticket Changer Invol and Amadeus Ticket Changer Dynamic Waiver.
- Amadeus Ticket Changer Invol allows airlines to handle the re-routing of passengers caused by unexpected events such as flight cancellation, and re-issue tickets at the airport.
- With Amadeus Ticket Changer Dynamic Waiver, airlines can implement new commercial measures and react immediately to more lengthy unexpected events such as strikes, snow storms and volcano eruptions, allowing passengers to change their tickets or postpone trips without being penalised.

**Amadeus Ticket Changer Refund**

- Amadeus Ticket Changer Refund is the latest feature of the Amadeus Ticket Changer Suite.
- Amadeus Ticket Changer Refund is integrated into the existing Auto Refund solution. Upon request of a refund, the Amadeus Ticket Changer Refund function automatically fills in the refund mask and calculates the refund quantities.
Amadeus Passenger Revenue Accounting

Amadeus Passenger Revenue Accounting is an airline revenue accounting solution that increases profitability by tracking revenue from all distribution channels in real time. Airlines can instantly and automatically collect data, which is critical for their business model. It enhances the airline’s visibility on the full revenue picture through instant, consolidated sales and usage information, advanced reporting, and decision support.

Amadeus Passenger Revenue Accounting helps airlines optimise their revenue accounting process, and can be fully integrated with the Amadeus Altéa Suite.

Main features
- Sales registration: online registration of all sales from all channels
- Usage registration: online recording of all flights and services used
- Interline billing: management of interline invoices
- Airline Accounting: preparation and posting to airline’s financial system
- Sales and revenues reporting: online monitoring of airline’s unearned and earned revenue
- Card capture and settlement
- Sales auditing
- Agency incentive manager

Business impact

- **Increased revenue**
  - Integration with other solutions enables revenue identification to be made earlier and with increased accuracy
  - Rich real-time online reporting, first-class comparative capabilities and analysis of planned, unearned and earned revenues enables timely internal or alliance strategy adaptations for optimal revenue generation

- **Increased productivity**
  - Full integration with other Amadeus airline IT solutions ensures data consistency, accuracy and elimination of manual loading requirements
  - Easy to use, thanks to a modern and user-friendly web interface. Users can easily customise workflows and access booking, ticketing and usage history all along the ticket lifecycle

- **Reduced costs**
  - Integration with other solutions enables instant controls and audit checks at time of sale
  - Proactive alert and reporting mechanisms reduce frauds, as well as the amount of time and money spent in post-flight auditing and recovery processes
  - Immediate compliance: latest industry standards embedded; system continuously updated to ensure full compliance with SIS, ancillary services and EMD implementation requirements
Amadeus Hotel IT

Amadeus Hotel Platform

Our solutions allow hoteliers to be more agile in delivering innovative guest services, generating new revenues and responding to market changes in order to succeed in today’s highly competitive marketplace.

- Shopping and booking tools to reach, attract and retain guests
- Check-in / out and Guest services to improve management of hotel operations
- Revenue management functionalities to forecast and manage pricing, therefore maximising revenue opportunities
- Business intelligence and data analytics, to better understand business trends

Amadeus Hotel Platform enablers

- Content Management
- Channel Hub
- Search Engine
- e-Commerce
- Call Center

Central Reservation System

- Profiles and preferences
- Rates and inventory controls
- Administration
- Groups and blocks

Property Desktop

- Provides an above-property technology with a true single image of inventory, rates, profiles and reservations
- Allows for guest centric services and brand promise delivery
- Reduces technology requirements and investment at property

Maximising hotel capacity at profitable rates

- Helps anticipate future room sales with advanced forecasting technology
- Defines optimal room allocation and rate
- Responds quickly to market changes with customisable alerts

Understanding business trends

- Provides instant access to the latest booking information
- Provides a 360° view of cross-company activity to support strategic decisions
- Allows flexibility to manipulate data and tailor reports

Automated travel agency bookings as received by independent hotels thanks to Amadeus LinkHotel
Amadeus’ solutions for Ground Handlers

Amadeus Altéa Departure Control Systems for Ground Handlers is a community platform developed by working closely with ground handlers that allows customers to take advantage of a combination of ground handlers’ expertise and Amadeus technology.

The following section provides information about the Amadeus’ portfolio of solutions for ground handlers in 2012, a portfolio which will continue to grow in the coming years.

The diagram below provides a snapshot of our current offering. Amadeus Altéa DCS for Ground Handlers can be divided into two core solutions: Altéa DCS-Customer Management for Ground Handlers and Altéa DCS-Flight Management for Ground Handlers. We also offer options to tailor services more precisely to ground handlers’ needs.
Amadeus Altéa Departure Control Systems
– Customer Management for Ground handlers

This new generation departure control solution enables ground handlers to boost productivity and increase revenue while enhancing the passenger experience of their airline customers through differentiated customer service.

**Main features**

- Easily handles check-in for multiple airlines within the same platform
- Manages all handled airlines’ passengers and updates customer records within a single fully graphical application using a unique sign-in
- Real-time integration with inventory and reservation systems allows any seats released at the airport to be immediately available for re-sale
- Powerful decision-support tool with automated or guided re-accommodation of disrupted passengers
- Customer tracking for boarding management, centralized control of flight departure and integrated dynamic agent alert system

<table>
<thead>
<tr>
<th>Key benefits at a glance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency. Enables moving to variable IT costs and benefits from shared infrastructure and community development, thereby reducing total cost of ownership. Full integration with Altéa Reservation, Altéa Inventory and Altéa DCS Flight Management for Ground Handlers</td>
</tr>
<tr>
<td>Maximisation of productivity, efficiency at check-in and boarding, and management of disrupted passengers. The solution automates back-office tasks for multiple carriers without switching systems</td>
</tr>
<tr>
<td>Ensures collection of excess baggage charges and makes any seats released at the airport immediately available for re-sale. It provides direct access to data to facilitate the invoicing process</td>
</tr>
<tr>
<td>Reinforces relationships with airline customers by providing better passenger services, reflecting directly on the airline’s image. For passengers, it allows ground handling agents to quickly handle simple requests so that more time can be spent on complex and value added personalised services</td>
</tr>
<tr>
<td>Training costs are minimised for new and seasonal staff thanks to the platform’s flexible usability. Operational costs are also reduced by using fewer check-in counters to handle passenger flow</td>
</tr>
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Photo by Carolina de Caso
Amadeus Altéa Departure Control Systems
– Flight Management for Ground handlers

It is a new generation load control platform that boosts productivity, optimises fuel requirements and ensures efficient flight departures, ramp and load control.

Main features

- A unique graphical user interface to manage flights from all handled airlines (Altéa or non-Altéa). Multiple flights on the same screen
- Very flexible flight activity plan, customisable down to flight level, aircraft type, etc.
- Scheduled activities are initiated automatically
- Detailed allocation of passenger weight for complete confidence
- Automated and optimised load distribution
- Graphical LIR (Load Instruction Report) sent to ramp
- Powerful tools to support shift management, load controller licensing, dangerous goods certification, etc.

Key benefits at a glance

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>Reduces the costs of delays caused by unexpected or late changes and creates flight departure excellence and fast turnaround. Full integration with Altéa Reservation, Altéa Inventory, and Altéa DCS Customer Management for Ground handlers</td>
</tr>
<tr>
<td>Significantly increases productivity</td>
<td>for load controllers with automated flight departure monitoring and business rules. Manages all handled airlines flights with a single fully graphical application and easily switches between flights of multiple carriers in a single view</td>
</tr>
<tr>
<td>Bigger load capacity for freight</td>
<td>thanks to optimised weights and balance</td>
</tr>
<tr>
<td>Satisfied airline customers</td>
<td>as it reduces fuel costs through improved accuracy and optimised trim</td>
</tr>
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Additional options to packages

**Amadeus Altéa Reservation Desktop for Ground Handlers**

A solution to perform travel reservation and ticketing tasks easier and faster, this solution provides a single access to service multiple airlines with a seamless integration of customer database and CRM systems.

**Amadeus Altéa Self-Service Check-in for Ground Handlers**

A kiosk, internet and mobile check-in solution that optimises operations by limiting the number of passengers using airport desks, this solution reduces costs by lowering the number of counters needed during the day. It is fully customisable (branding, screen layout, language, process flow).

**Amadeus Altéa Airport Link**

Ideal for establishing cost-effective communication links between airport stations and the Amadeus data center, it is an easy data connection to airports leveraging the Amadeus global network. The links are customisable by airport, with scalable bandwidth and no limit to the number of terminals per link.