Amadeus Airline IT

Airline Solutions

value IT
Make IT a competitive advantage

From the proliferation of low cost carriers to increasing fuel prices; from market downturns to deregulation, these are challenging times in which to try and generate sustainable profit.

The airline industry is more profitable than it has been for years by cutting costs, rationalising networks and benefiting from improved economic conditions. But how can airlines differentiate and ensure a long-term competitive advantage?

Amadeus believes that innovative IT solutions can provide this competitive advantage, not only in the short-term by rapidly delivering cost savings and revenue gains, but also in the long-term by improving your market agility, adapting quickly to your business model.

The power of new generation IT solutions

Your Passenger Service System is as vital as your aircraft. It can simplify processes, lower cost structures, ensure differentiated and consistent customer service, facilitate seamless alliances and enable faster decision making.

But it is almost impossible to achieve such breakthroughs within the constraints of legacy systems designed to suit the business models of 30 years ago.

Airlines migrating to new generation Customer Management Solutions can radically transform their business instead of just making incremental changes. What’s 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.

The right technology & transformation partner

Few airlines can afford to build and implement new generation systems and achieve such a radical transformation on their own.

Do you have the skills and experience in-house to manage a risk-free migration? Could you convince your shareholders to divert financial resources from your core business? Can you expect to reach the critical mass to amortise the development cost and maintenance over the long run?

Amadeus can partner with any airline to provide the new generation solution you need, and we can share our unique expertise in managing the technology enabled transformation of your business.
Why Amadeus?

Not all Airline IT providers are the same

1. Long term & reliable IT partner
   - The fastest growing Airline IT provider
   - Proven commitment to Airline IT market
   - Airline industry focus
   - Partnership approach

2. Innovative & proven solutions
   - The only new generation PSS solution available on the market
   - Increased functionality leading to significant business benefits
   - Modular design to meet current and future needs
   - Continuous development

5. Migration & transformation expertise
   - Impressive track record of successful migrations
   - Unique know-how and proven methodology
   - Consulting & system integration services
   - Highly satisfied customers
   - Partnership approach

6. Best in class IT Services
   - A unique development team with 2,500 experts
   - Best in class data centre with no scalability limit
   - Unique back-up service
   - ‘Follow the sun’ global support
New generation technology
› Advanced technology enabling superior performance, reliability and smooth evolution
› Elimination of legacy technology constraints
› Open to rapid integration of new services
› Easy to use graphical user interface

Largest airline IT community
› Most widely used Customer Management Solution
› Faster & better integration with your alliance partners
› Community development funded by Amadeus
› The largest e-ticketing network

Superior value for money
› Value derived from added value features
› Value derived from the common platform
› Value derived from superior IT service performance
› Competitive pay as you use model

Minimised risk
› Proven solution used by over 55 airlines
› Peace of mind migration
› Peace of mind IT operating service
› 100% back up services
› Continually evolving platform
The fastest growing Airline IT provider
In only 20 years of innovation, Amadeus has become the leading airline IT provider, with a unique portfolio of new generation solutions and the largest customer base for Passenger Service Systems.

1987 - 1999: TAKE OFF with a unique reservation platform
The four founders of Amadeus commission Amadeus to develop Altéa Reservation, pioneering the concept of seamless reservation service across all sales channels.

2000 - 2007: ASCENT with the full Altéa Suite
British Airways and Qantas ask Amadeus to develop their new generation Customer Management Solution. Creation of Altéa Inventory and Altéa Departure Control.

2007 - : ACCELERATION with the expansion of the Airline IT portfolio
Amadeus continues to invest in building an unrivalled portfolio of solutions to help airlines improve the way they do business.

Proven commitment to the Airline IT market
Providing best-in-class IT solutions to the travel industry has always been the business of Amadeus since its origin.

In order to develop the leading global distribution system when its competitors had a 20-year head start, Amadeus recruited the best IT experts, used the latest technologies and built a unique data centre.

We have used this unique know-how to diversify into the airline IT market. This has become the cornerstone of our growth strategy and is supported by our long-term, continuous investment plan.

Amadeus has all the core competencies for long-term success: the IT resources; the experience of successfully migrating critical airline systems; the financial resources to expand its product portfolio; and, of course, a critical mass of satisfied customers.

Unique partnership approach
Founded by four airlines, Amadeus has maintained and increased its airline industry expertise to provide the right airline solution and the right experienced team of people for each new project.

Based around three main sites, we have developed a significant presence in each region of the world to ensure close relationships with our customers.

Our enduring customer-focused approach applies to the development of any new solution with our launch partners.
After an exhaustive evaluation of various scenarios and possible suppliers, in 2000 we turned to Amadeus to become our IT partner. Amadeus has offered a unique combination of an exciting vision and capability to deliver...

Paul Coby
CIO
British Airways
Altéa, the only new generation passenger service system already available

The strategic objective of changing your Passenger Service System must be to get more functionality and renew your technology. Otherwise, how could you justify the cost of change?

Altéa is the only solution available that is able to deliver these two critical benefits.

Competitive solutions are either based around flight-centric business concepts dating from the 1970s or are ‘dream’ solutions still at a project stage – years from being developed, tested and proven.

It took Amadeus seven years and more than €300 million investment to complete the full Altéa Suite, which covers the entire customer value chain.

More features for more business benefits

Amadeus had the privilege of building its solution portfolio 20 years after its main competitors – on brand new technology, without legacy constraints and in partnership with blue chip airlines.

Amadeus took this opportunity to design applications based around the latest business requirements and concepts, ensuring that it would deliver as many added value features as possible while also matching – or exceeding – the best-in-class systems currently available in the industry.

As more and more airlines join our common platform Altéa, new added value features are continuously implemented – to the benefit of all users.

Modular design to meet current and future needs

Business context and business strategy vary greatly from one airline to another.

Amadeus recognises that each situation requires a customised Customer Management Solution. So we have adopted a modular approach to ensure that each airline can build the solution it needs, when it needs it.

You can select appropriate modules from a large portfolio based around the Altéa Customer Management Solution, plus Stand Alone IT Solutions that can be implemented before, after or jointly with Altéa.

For an easy overview of the various modules available, go to p22.

Continuous improvement and portfolio expansion

Migrating to innovative solutions is good, but it is even better if these solutions are kept at the cutting edge of the industry through continuous innovation.

Amadeus took the unique approach of a common solution, which is upgraded continuously. This not only enables the implementation of industry mandates but also the integration of new features required by the whole airline community or new members.

We also continue to expand our portfolio by developing new solutions as they are requested by airlines. Amadeus innovation never stops.

Fully Integrated Customer Management Solution

<table>
<thead>
<tr>
<th>Altéa Reservation</th>
<th>Altéa Inventory</th>
<th>Altéa Departure Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer profiles</td>
<td>Inventory control</td>
<td>Check-in</td>
</tr>
<tr>
<td>Availability</td>
<td>Schedules management</td>
<td>Boarding pass issuance</td>
</tr>
<tr>
<td>Bookings</td>
<td>Re-accommodation</td>
<td>Baggage management</td>
</tr>
<tr>
<td>Fares &amp; pricing</td>
<td>Seating management</td>
<td>Flight boarding</td>
</tr>
<tr>
<td>Ticketing &amp; e-Ticketing</td>
<td></td>
<td>Aircraft weight &amp; balance</td>
</tr>
</tbody>
</table>
Amadeus is continuously investing in innovative airline IT solutions, which enable us to improve specific processes. Amadeus Ticket Changer was the latest Amadeus solution implemented by BA and it immediately delivered the expected results.

Mike Thorne
IT Manager
British Airways
New generation technology

Latest technology for superior performance
Since its launch 20 years ago, Amadeus has always used the latest technology available to build IT solutions for airlines:

> New generation hardware, high performance systems based on Linux;
> Open standards, new generation protocols (IP);
> Modern architecture, easy to change and expand;
> Modern languages: C++ easy to maintain;
> Modern network: backbones of optical fibre; secured IP protocols.

In particular, Amadeus is progressively decommissioning costly TPF systems to move to more open platform systems and maintain cost-effective processing power.

In 2008, only 15% of the current Altéa application is running under TPF licence. By 2010, Amadeus IT solutions will all work on open systems.

Elimination of legacy technology constraints
Airlines that are still using systems designed in the 1970s face significant constraints:

> Difficult scalability: increased business volumes can only be accommodated by adding significant processing capacity;
> Difficult addition of new features because there is no modular approach;
> Increased cost of maintenance as the cost of developers is higher for old generation languages;
> Increased IT operating costs due to costly licence fees associated with proprietary mainframes;

All airlines understand that legacy systems are a dead end, and they intend to renew their application technology. But the early adopters will benefit from a competitive advantage over the followers.

Rapid integration of new services and application
The airline industry is changing faster and faster, and adapting your core applications to the evolving business environment is a critical survival factor.

Because of their modular design and use of open standards, new generation technology solutions will enable you to launch a new feature or interface with new partners more cost-effectively and timely than with legacy systems.

You will see a huge difference each time you want to introduce a new IT module or interface with a new application.

Continuous investment
In 2006 and 2007, Amadeus has been ranked Europe’s number one company in terms of R&D investment in the travel and tourism industry, according to the European Commission’s Top 1000 Ranking of European companies.

Investment in R&D is at the very core of Amadeus’ strategy to facilitate the emergence of innovative solutions for our customers at a competitive price.

This brings a wide array of benefits for you: faster delivery of new solutions, more cost-effective development and enhanced cost control.
The big technology change is that we are going out of TPF structures and constraints into modern technology, which is robust, real-time and leveraging all the business benefits you can drive from a relational database.

Fiona Balfour
Former CIO
Qantas
The STAR Alliance Common IT Platform represents the realisation of a long-time strategic goal, driven by the effort to better serve the customer and dramatically increase the speed of delivering new products to market.

Jaan Albrecht
CEO
Star Alliance
The most widely used Customer Management Solution

With over 145 airlines already using Altéa Reservation, over 55 airlines using or about to use Altéa Inventory and nearly 50 airlines about to use Altéa Departure Control, Amadeus is now the market leader in passenger service systems, with 27% market share.

New clients continue to join this unique common platform, and many Altéa Reservation airlines are moving towards the full Altéa Suite to reap the benefits of integration and seamless management of the full customer travel experience.

Amadeus Altéa airlines span all sizes, ranging from 70 million to below 1 million passengers, and have various levels of sophistication.

The Altéa community embrace airlines from every part of the world. Unlike many competitors, Amadeus has a truly balanced customer base, enabling genuine experience sharing across regional boundaries.

Faster and better integration with your alliance partners

Amadeus accelerates the seamless integration of alliance partners and ensures significant savings on the integration costs.

In 2005, Altéa was selected as the Common IT Platform for the Star Alliance. Altéa is also becoming the de facto solution of choice for oneworld and Skyteam, with key players already using the platform.

Community development funded by Amadeus

In what is a unique advantage of joining the Amadeus common platform, each airline is able to benefit from our economy of scale of development.

Amadeus’ objective is to maintain a state-of-the-art Customer Management Solution, which can serve the needs of every airline. This common platform approach entails upgrading the platform continuously, not only to incorporate new industry mandates but also to fulfill new needs that are emerging within an evolving market.

Amadeus is committed to deliver 50 man years of common development every year, without taking into account development work undertaken on Altéa Reservation, which is supported by our GDS activity.

It makes sense to share, but this model is unique in an industry where each airline has traditionally adopted its own solution.

The largest e-ticketing network

Amadeus is the first IT provider of e-Ticketing solutions. More than 70 airlines, carrying more than 250 million passengers between them, currently use Amadeus e-Ticketing Server.

Perhaps even more importantly, over the years Amadeus has built a leading e-ticketing network, connecting 225 airlines, as well as interfacing with all the main Departure Control Systems currently in use.

Amadeus has already implemented over 1100 interline agreements and this unique network enables any new customer to connect very quickly with the 225 airlines – and more as the Amadeus e-Ticketing network develops further.

Amadeus progress in Passenger Service System market*

Source: Amadeus Analysis, January 2008

* Including all contracted airlines with at least one component of Altéa
In a 16-hour operation, all Finnair flight data, representing 200,000 flight dates and some 25,000 PNRs, were migrated seamlessly to Altéa Inventory. And we were delighted to see immediate, considerable savings as a result of totally switching off our old inventory system one week after successful cutover.

Tom Källstrom
VP e-Business Development
Finnair
Impressive track record of successful migrations

Can you afford the risk of failure or major delay in the implementation of vital passenger service systems?

Amadeus has a proven track record in delivering new generation solutions on time, with minimal disruption to business.

To date, Amadeus has successfully migrated over 150 airlines (over 500 million passengers) to Altéa Reservation, nearly 50 airlines (and over 250 million passengers) to Altéa Inventory and 10 airlines (over 100 million passengers) to Altéa Departure Control RTB, our previous departure control system.

We can achieve this because our new generation Customer Management Solution Altéa is already in operation, while competing solutions only exist on paper.

Amadeus will always choose the lowest risk migration pathway.

Unique know-how and proven methodology

Amadeus offers a unique team of experts and exceptional know-how, enabling us to deliver each migration project on time.

Besides the largest pool of experienced implementation experts, Amadeus has unrivalled product development power, with more than 2500 developers guaranteeing on-time delivery of both the core system and any extra functionality.

Over the years, Amadeus has also developed unique and proven tools and methodologies to ensure the most efficient migration, secure transfer of your critical data and a smooth cutover.

Consulting and system integration services

Airlines often require additional support to make significant changes in their business operations. The most efficient method is to mandate a single project partner to deliver both the IT solution and the transformation.

Amadeus offers a range of business transformation services, drawing on our unique experience and resources:

> System integration services - to integrate your various applications cost-effectively and with unique service quality.
> Consulting services - to analyse your current business, identify opportunities for improvement, build the transformation plan and finally help you to deliver the projected benefits.

---

1 Altéa Departure Control RTB is an evolution of the departure control system RTB inherited from British Airways, enhanced by Amadeus to fully integrate with Altéa Reservation and Inventory.

* Projected figure
Impressive development power
Unlike its competitors, Amadeus retains control of its development power. We believe this is a critical core competence for a long-term, reliable IT partner.

Amadeus has an unrivalled team of IT experts, experienced in the latest new generation technologies and capable of delivering the next generation of IT solutions that airlines need.

Our growth, both in terms of our Airline IT solutions portfolio and our Global Distribution System, has enabled us to capitalise on unique know-how while keeping our development costs low by recruiting new talent.

To optimise the cost of development, Amadeus might outsource limited non-strategic development to third parties, but we will always retain ownership of the entire solution.

Best-in-class data centre, with no scalability limit
The Amadeus Data Centre is located in Erding, close to Munich in Germany, and operates both the Amadeus Airline IT applications and the Amadeus Global Distribution System.

It is owned and operated by Amadeus because we believe it is a critical core competence for offering end-to-end service while decreasing IT operating costs over time.

Our data centre boasts impressive processing power and quality standards to ensure unlimited scalability for each airline, as well as best-in-class levels of reliability and security.

Because their Customer Management Solution is as business critical as their fleet of aircraft, Altéa airlines also enjoy best-in-class service availability above 99.98%.

Unique back-up service
Amadeus offers additional 100% back-up services, with a second data centre located 30km away from the main site.

This guarantees full service recovery within 48 hours in the event of the loss of the main data centre due to external disaster.

Once again, it is much more cost effective to share a second site data centre among the Altéa airline community — it certainly would not make sense for a single airline to bear this considerable cost alone.

Amadeus Data Centre facts & figures
- Largest civil data centre in Europe: 480 million transactions daily
- Vast processing capacity:
  - Peak transactions of 11,500 msg/sec and over 8,700 end-user requests per second
- Best-in-class Altéa services availability: 99.98% on average
- Secure worldwide area network
- ISO 9001 compliant
- Stringent Service Level Agreements

Best in class IT services
Resources & know-how
Since we migrated our reservation and inventory systems to Amadeus, we have experienced an improvement in our service availability.

Mike Thorne
IT Manager
British Airways

‘Follow the sun’ global support

Although core customer management applications are operated by our data centre in Germany, airlines all over the world can benefit from complete peace of mind thanks to our ‘follow the sun’ global support.

Amadeus offers 24/7 seamless support through three service centres spread across the globe – in Miami, Erding (Germany) and Sydney.
Superior value for money

Worth the change

Moving to the Altéa Customer Management Solution is a strategic decision based on our need to replace current legacy systems, and to realise the benefits of a Common IT Platform for the Star Alliance.

Greg Taylor
Senior VP of Corporate Planning & Strategy
United Airlines
Superior value results and ROI
When it comes to selecting the right IT solution, value for money is not just about price.
Airlines can find several passenger systems on the market at a lower price because they are amortised over decades. But outsourcing to these providers is not a wise decision when you take into account the cost of the migration project and the fact that further migrations will be necessary to renew the legacy technology.
In fact, return on investment depends mainly on the value that the new Customer Management Solution can generate for the business, but only new generation solutions – those that deliver new added value features, integration benefits with partners and superior service performance – can generate significant value.
Airlines estimate the value that Altéa brings to their operations at several dollars per passenger boarded. And that sort of level of ROI is necessary to justify the launch of a major transformation project.

Value derived from added value features
The main sources of value creation are the added value features that new generation solutions bring to an airline.
Amadeus IT solutions have been designed to provide additional features to meet the needs of airlines of all types, sizes and locations.
These added value features will have multiple impacts on your business: productivity enhancement, reduction of some direct operating costs, improvement of direct revenue, increase of revenue from repeat customers and/or faster time to market.
The impact varies for each airline, but it always translates into significant bottom line benefits.

Value derived from the common platform & superior IT performance
The second source of value creation is the common platform, which provides unique benefits for integration with partners.
Obviously, the integration with alliance, code share or even interline partners is greatly facilitated and accelerated, which generates significant cost savings.
Most of the value comes from the fact that airlines can integrate better with their partners, leading to ongoing benefits like seamless service for passengers, joint cost reduction or revenue enhancement opportunities.
Migrating to Amadeus Altéa provides most airlines with improved service availability, which means less service outage that is usually very costly (cost of flight delay, lost sales, cost of non-optimised inventory, etc). This translates into significant value.

Competitive ‘pay as you use’ model
Amadeus offers a flexible pricing model for most of its IT solutions, based on the value provided.
You pay only for the modules you use, so that you can get a competitive offer for the solution scope you need.
Our application service provider model enables you to benefit from a variable price, eliminating the risk of increased IT operating costs in the case of business downturns. Also, you no longer need to divert financial resources from your core business to fund new and necessary IT development.
As part of a long-term partnership approach, Amadeus attempts to set competitive but fair price levels, which take into account the value brought to your business and the incurred development cost.
Minimised risk
Your safe alternative

Proven solution used by over 55 airlines
Amadeus is in a unique position to almost eliminate the risk on solution delivery.
We are able to do this not only because Altéa is the only new generation solution in production, but also because we employ thousands of IT experts to upgrade and maintain this platform.
It took over €300 million of investment and seven years of effort to build this new generation common platform with the help of blue chip airlines as our launch partners.
New vendors tend to underestimate the financial resources, expertise and time required to build such a long-lasting new generation solution – one that is flexible enough to meet the needs of several airlines and therefore attract the critical customer base that is essential for it to remain viable.

Peace of mind migration
Migrating an airline’s critical system can be a risky project – one that is often described as akin to open heart surgery.
A smooth cutover minimises business disruption. But this demands a team of experienced professionals as well as all the appropriate tools and methodologies. There is a significant learning curve, which entails thorough testing at the beginning.
Amadeus leverages its unique track record of successful migrations with airlines of all sizes and in all environments to provide the lowest level of risk on each new migration project. What’s more, Amadeus has now industrialised the migration process to offer the fastest possible migration path for every airline.

Peace of mind IT operating services
Airlines outsource their critical business systems to Amadeus in full confidence – and they generally experience an increase in service performance.
They benefit from the capabilities of the state-of-the-art Amadeus Data Centre and its secured network, which was built to meet the current and future needs of the world’s leading Global Distribution System. This guarantees unlimited scalability, world-class service levels and outstanding IT support for any airline joining the Amadeus common platform.
Providers that do not have similar business volumes on a single platform cannot afford to deliver such reliability and service quality over the long term – and service availability is certainly a risk that airlines should carefully evaluate.
Amadeus also offers an additional 100% back-up service with its second site data centre, which could not be offered at such a competitive price by providers who do not reach similar business volumes.

Continually evolving platform
Selecting a solution that will last and meet your needs for decades to come is critical if you do not want to pay the cost of change several times over.
The Amadeus Altéa platform is definitely your safest choice in the long run, matching all the important criteria for a long lifecycle:
> Already available (necessary investment already made);
> Already used by a critical mass of airlines and chosen by major players within every global alliance;
> Using latest technology and built around latest business concepts;
> Easy to upgrade and adapt, thanks to a modular approach;
> Continuous evolution with a unique community model.
All these factors minimise the risk of having to migrate to another platform in a couple of years’ time due to a lack of evolution, the need to replace technology, the need to integrate an alliance or simply due to service termination.
Amadeus Altéa came out as the best solution after an exhaustive evaluation of potential providers who could help us to securely implement new generation processes. It will really improve the customer experience and ensure seamless service within the Star Alliance.

Friedhelm Schuck
VP Common IT Platform
Lufthansa
Get updated and detailed information

www.amadeus.com/airlineIT

An up-to-date overview of our fast-growing airline IT solution portfolio • More detailed information on each solution • All the latest customer references
Build IT

The products and options that make up the Amadeus IT portfolio of solutions
Amadeus IT Portfolio overview

Optimise your schedules, inventory and revenue

Altéa Customer Management Solution
Core Components
4 core components to cover the full customer travel experience, as well as critical flight departure operations

Optimise your sales channels

Altéa Customer Management Solution
Options
16 main Altéa options to configure Altéa to your particular needs

Stand Alone IT Solutions
12 business case driven solutions to improve specific processes before or after migrating to Altéa

> Altéa Inventory
> Altéa Reservation

> Altéa Advanced Inventory Control
> Altéa Automated Schedule and Re-accomodation
> Altéa Codeshare Management
> Altéa Dynamic Codeshare

> Altéa Reservation Desktop
> Altéa Call Centre
> Altéa e-Ticket Synchroniser
> Altéa Airline Service Fees

> Amadeus Revenue Integrity
> Revenue Management System hosted by Amadeus*

> Amadeus e-Retail
> Amadeus e-Merchandise
> Amadeus e-Service
> Amadeus Credit Card Acceptance
> Amadeus Ticket Changer
> Amadeus Ticket Changer Shopper
> Amadeus e-Ticket Server
> Amadeus e-Ticket Gateway

* Solution delivered with partners
Optimise your airport services

- Altéa Departure Control – Customer
- Altéa Departure Control – Flight

Optimise your customer and data management

- Altéa Check-In Desktop
- Altéa Self Service Check-In
- Altéa Automated Customer Transfer
- Altéa Airport Connect
- Altéa Customer Value
- Altéa Data Nexus

Optimise your infrastructure and security

- Altéa Printing and Reading
- Altéa Second Site Disaster Recovery
- Amadeus Customer Loyalty
- Amadeus Message Net

See IT Visit www.amadeus.com/airlineIT
Altéa Core Component

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

MAIN FEATURES
- Schedule management
- Inventory control
- Seating management
- Waitlist management
- Re-accommodation

MAIN OPTIONS
- Altéa Automated Schedule & Re-accommodation
- Altéa Point Of Sale Inventory Control
- Altéa Revenue Inventory Control
- Altéa Customer Value
- Real-Time Interface

HIGHLIGHTS
- Automated schedule reception and publication
- Market pair logic for flight setting
- Inventory control up to the point of sale level
- Full O&D capability
- Real-time interaction with RMS and update with Departure Control
- Single seat map for Inventory, Reservation and Departure Control
- Prioritisation for seating, waitlist and re-accommodation based on customer value
- Automated re-accommodation based on full itinerary and customer value

CURRENT CUSTOMERS
- More than 55 airlines of all sizes and in all locations, carrying 350 million passengers, contracted for Altéa Inventory
- Nearly 50 airlines already use Altéa Inventory, including:
Altéa Inventory adds real value through its ability to prioritise manual workload, its automated functionality for every facet of the lifecycle of the flight and the capability to further enhance our revenue management via O&D functionality.

Simon Cook
Former Head of International Pricing and Yield
Qantas

Business impact

**Increased yield**
Maximize the yield of your entire network by using the latest revenue management techniques

**Time to market**
Respond instantly to competitor’s action, change business policies dynamically using market based rules, save several days or weeks depending on your processes

**Customer satisfaction**
Apply customer preferences consistently and give priority to high value customers

**Increase productivity**
Save time for all your schedule, seating and re-accommodation agents, as well as flight controllers

**Efficient IT model**
Move to variable IT cost and benefit from shared infrastructure and community development
Reduce total cost of ownership

Why take it?

> Enables you to implement the most suitable revenue management technique for you now and in the future
> Increases your business agility
> Unique capability to differentiate your customer service based on customer value
> More efficient IT model
> Take advantage of a perfect integration with Altéa Reservation and Altéa Departure Control
Altéa Core Component

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

MAIN FEATURES
- Customer profile management
- Booking management
- Fares & pricing
- Ticketing
- Sales via direct channels
- Distribution via indirect channels

MAIN OPTIONS
- Altéa Reservation Desktop
- Altéa Call Centre
- Altéa Service Fee Manager
- Altéa Credit Card Acceptance
- Altéa Real-Time Data Feeds
- Altéa Interactive Redemption & Upgrade

HIGHLIGHTS
- Easy creation of customer profile from a PNR
- Sharing of customer records among airlines on Altéa platform
- Advanced carrier preferred display
- Unique automation features (for group, non homogeneous PNR...)
- Automated PNR update with customer profile
- Most updated fare database
- Unique interlining capability using the largest e-ticketing network
- Easy integration of solutions for online and offline direct channels
- Sharing of the same PNR and level of availability between airlines on Altéa platform and Amadeus travel agencies

CURRENT CUSTOMERS
- Over 145 airlines of all sizes and in all locations, carrying 550 million passengers, contracted for Altéa Reservation
- 140 airlines already use Altéa Reservation, including:

![TACA](image1.png)  [KLM](image2.png)  [Royal Dutch Airlines](image3.png)  [SAS](image4.png)  [Scandinavian Airlines](image5.png)

![Air Astana](image6.png)  [LAN](image7.png)

![Air France](image8.png)  [Austrian](image9.png)  [Iberia](image10.png)  [THAI](image11.png)
Consistent seamless service between KLM operated flights and partner airline flights is of critical importance to KLM. Altéa’s single PNR code share capabilities ensure that we can deliver on our promise to customers that they will receive the same level of service on our codeshare flights.

Martijn van der Zee
VP Distribution and E-Commerce
KLM Royal Dutch Airlines

Business impact

**Increased productivity**
Reduce the time it takes for your reservation agents to complete bookings by using automated processes – save up to 30% of reservation time

**Increased revenue**
Increase sales from and to alliance partners using the carrier-preferred display, plus increase revenue by optimising the distribution of selling classes at your points of sale

**Customer satisfaction**
Apply customer preferences consistently across all your channels and partners during reservation, plus speed up servicing

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

**Efficient IT model**
Move to variable IT cost and benefit from shared infrastructure and community development, plus reduce total cost of ownership

Why take it?

> Successfully implement an optimised distribution strategy with all online and offline channels
> Apply customer preferences consistently and provide seamless reservation services with your partners
> Improve the productivity of your airline sales offices and call centres
> Take advantage of a more efficient IT model
> Perfect integration with Altéa Inventory and Altéa Departure Control
Altéa Departure Control – Customer
A complete, new generation departure control solution, enhancing customer experience at the airport through differentiated customer service

**MAIN FEATURES**
- Check-in
- Self service support
- Customer management
- Baggage management
- Disruption management
- Boarding management

**MAIN OPTIONS**
- Altéa Check-in Desktop
- Altéa Self Service Check-in
- Altéa Automated Passenger Transfer
- Altéa Passenger Watchlist and Altéa Ticket Blacklist
- Altéa Airport Connect
- Altéa Customer Value

**HIGHLIGHTS**
- Easy customer identification
- Smart check-in workflow optimising check-in tasks
- Automated validation of tickets and regulatory checks through check-in
- Automated optimised seating based on customer preference
- Flow forward search for an earlier flight possibility
- Easy onload and re-grade
- Easy collection of excess baggage fee
- 100% self service enabled (including disruption handling)
- Automated or guided re-accommodation of disrupted passengers
- Priority given to high value customers (seating, denied boarding, disruption...)

**CURRENT CUSTOMERS**
- 45 airlines of all sizes and in all locations, carrying 325 million passengers, contracted for Altéa Departure Control
- Qantas and Finnair are the first airlines to implement Altéa Departure Control – Customer in 2008 and 2009 respectively
Amadeus Altéa Departure Control will give our staff a system that really supports their ability to offer a personalised, distinctive service to our customers at all customer contact points, while at the same time delivering cost-effective and reliable operations.

Mike Re
CIO
South African Airways

Business impact

**Increased productivity**
Save time for all your airport customer service agents at check-in, collection of excess baggage, boarding and the management of disrupted passengers

**Increased revenue**
Collect all excess baggage charges and ensure that any seats released at the airport are immediately available for re-sale, plus increase total revenue by up to 0.1% thanks to real-time system integration

**Customer satisfaction**
Speed up check-in, apply customer preferences for seating consistently, enable effective service recovery actions and give priority to high-value customers, plus increase revenue from repeat customers

**Cost reduction**
Reduce cost of penalties due to visa irregularities as well as cost of flight delays due to passengers, plus save the cost of a specific seat map for DCS

**Efficient IT model**
Move to variable IT cost and benefit from shared infrastructure and community development, plus reduce total cost of ownership

Why take it?

> Simplify and speed up your core customer processes at the airport and increase the productivity of your agents
> Ensure a superior customer experience at the airport and deliver differential service according to customer value
> Exploit all last minute airport revenue opportunities and avoid regulatory penalties
> More efficient IT model
> Take advantage of perfect integration with Altéa Reservation, Altéa Inventory and Altéa Departure Control – Flight
Altéa Departure Control – Flight
A new generation load control platform to ensure efficient flight departures and optimise the weight and balance process

MAIN FEATURES
- Flexible flight activity plan
- Flight departure monitoring
- Load distribution & balance
- Powerful staff management tools

MAIN OPTIONS
- Automated feed of archived departure plans and related data to your data warehouse

HIGHLIGHTS
- Automated and optimised load distribution for any aircraft type
- Graphical user interface, enabling supervision of multiple flights on the same screen
- Easy manual modification of load distribution
- Very flexible flight plan, customisable down to flight level, aircraft type etc.
- Scheduled activities initiated automatically
- Automated alerts for activities needing attention
- Archiving of all departure plans
- Detailed allocation of passenger weight leading to reduced uncertainty
- Tools to support shift management, staff certification, training, etc.

CURRENT CUSTOMERS
- 45 airlines of all sizes and in all locations, carrying 325 million passengers, contracted for Altéa Departure Control
- Qantas implemented Altéa Departure Control - Flight in 2007, Finnair have implemented in early 2008
Qantas has recorded 100,000 flight departures since the Departure Control – Flight technology was implemented in Sydney and Melbourne in June of last year. The system’s intuitive graphical load control interface makes it easier for load controllers to use. A feature of the new system is the Autoload function that ensures items to be loaded onto the aircraft are automatically designated to positions to optimize fuel efficiency and streamline loading and unloading.

Jamila Gordon  
Chief Information Officer  
Qantas

### Business impact

| **Increased productivity** | Massively increase productivity for load controllers with automated flight departure monitoring, graphical user interface and business rules |
| **Reduced costs** | Centralise your load control sites and reduce fuel costs due to optimised aircraft trim |
| **Increased revenue** | Gain load capacity for freight due to optimised weight and balance |
| **Increased reliability** | Reduce the cost of delays due to unexpected or late changes in load or other contributing factors |

### Why take it?

- Optimise the weight and balance of every flight
- Achieve flight departure excellence and fast turnaround
- Easily centralise load planning operations
- More efficient IT model
- Take advantage of perfect integration with Altéa Reservation, Altéa Inventory and Altéa Departure Control – Customer
Altéa Advanced Inventory Control
Highly sophisticated inventory management options, which offer differentiated availability by taking into account the customer’s O&D and other factors that will influence the revenue you receive.

**MAIN FEATURES**
- Full Origin & Destination control capability
- Revenue based control via storage of bid price vectors and market based yields
- Point of sale control down to IATA agency ID
- Supports commercial O&D systems, such as PROS
- Advanced features, such as availability modifiers based on customer value, preferred partner connections, etc.

**WHY TAKE IT?**
- Maximise the yield of your entire network by using the latest revenue management techniques
- Ensure maximum return on your revenue management investment
- Increase integration with your alliance partners
- Implement point of sale control without needing to upgrade your RMS

Altéa Automated Schedule & Re-accommodation
Smart options to automatically process schedule changes and re-accommodate passengers, ensuring their preferences are retained.

**MAIN FEATURES**
- Automated bulk seasonal schedule change, eliminating cyclical re-accommodation
- Automated itinerary based re-accommodation, taking into consideration the customer’s complete journey
- Re-accommodation based on customer value
- Allow codeshare schedule update directly from your partner airline (in conjunction with Altéa Codeshare Management)

**WHY TAKE IT?**
- Greatly improve time to market for schedule changes, no matter how complex
- Boost efficiency and productivity of your scheduling staff
- Improve customer satisfaction by ensuring that each customer’s full journey and value to the airline is recognised
Altéa Codeshare Management
Efficiently manage all your codeshare partner agreements and implement new partnerships quickly and easily

**MAIN FEATURES**
- A streamlined system to rapidly implement new partnership agreements
- Simplified codeshare flight management, with full schedule integration
- Allow automated codeshare creation/update from both your schedule planning system and/or your partner airlines, in conjunction with Altéa Automated Schedule & Re-accommodation

**WHY TAKE IT?**
- Develop your codeshare partnership agreements faster and further
- Improve time to market for your codeshare schedules
- Minimise the cost of implementing and maintaining codeshare services, with all link testing performed by Amadeus on behalf of the airline
- Centralised set-up and full integration with Altéa Reservation, Inventory and Departure Control

Altéa Dynamic Codeshare
An advanced option to provide seamless service levels on all codeshare flights, and interactive availability between operating and marketing partners

**MAIN FEATURES**
- Single PNR view for both airline partners ensures seamless customer service between your operated and marketed flights
- Allows last seat availability for the marketing carrier, elimination of availability discrepancies, and ability to apply full revenue management controls

**WHY TAKE IT?**
- Increase codeshare passenger yield
- Provide a truly seamless service to your codeshare customers
- Maximise synergies with your alliance partners
- Take full advantage of the benefits of integration with Altéa Reservation, Inventory and Departure Control
Altéa Options - Sales and Reservation

Altéa Reservation Desktop
A browser-based intuitive graphical user interface designed to empower your reservation agents

MAIN FEATURES
› Single screen access to all reservation functions with a choice of fully graphical or enhanced cryptic interface
› Dynamic workflows guide agents to relevant items on the display, and smart keys reduce repetitive tasks to a single keystroke
› Highly customisable interface enabling easy creation of new workflows
› Browser based installation and maintenance

WHY TAKE IT?
› Empower your own sales offices to become the preferred points of sale for your repeat customers
› Increase sales agent productivity and minimise booking errors
› Sell increased travel content to each customer
› Facilitate the introduction of new agents while reducing training costs

Altéa Call Centre
The ultimate solution for airline call centres, combining an intuitive graphical user interface with dynamic display and full integration with your telephony system

MAIN FEATURES
› Same core features as Amadeus Reservation Desktop
› Dynamic desktop, integrating with any CTI application to give call centre staff the ability to serve customers from multiple countries
› Automated switching of Office-ID and local settings depending on each call’s point of origin
› Display ACD information and call status

WHY TAKE IT?
› Reduce call centre costs through centralisation and load sharing
› Deliver consistent service across all direct channels and in all markets
› Increase call centre agent productivity dramatically
› Sell more, via fast access to the full range of GDS content and third party partners
› Minimise errors and omissions in bookings
› Benefit from perfect integration with Altéa Reservation and external website content
Altéa Options - Sales and Reservation

Altéa e-Ticket Synchroniser
An optimal solution, ensuring that your e-tickets are always synchronised in the event of changes to the booking

**MAIN FEATURES**
- Real-time detection of any e-ticket mismatch following a booking change
- Automated correction of de-synchronisations following involuntary booking changes
- Customised notification whenever PNR is retrieved to ensure action is taken
- Reports of all mismatches between bookings and tickets
- Business rules to guide corrective actions

**WHY TAKE IT?**
- Reduce the number of customers needing ticketing service at the airport and save time for airport staff
- Minimise customer inconvenience and frustration
- Increase usage of self service check-in facilities
- Protect revenue derived from ticket changes

Altéa Airline Service Fees
A smart integrated solution automating the entire value chain for airline ticketing and credit card fees, in all sales channels

**MAIN FEATURES**
- Ticketing, credit card and miscellaneous fees filed via ATPCO 5 times per day
- Automatically included in PNR pricing and fare searches, with clear itemisation
- Automatic storage of fees in the pricing record
- Automatic printing of fees on the itinerary receipt
- Automatic reporting of fees with the ticket data via RET-HOT
- Full compliance with industry standards

**WHY TAKE IT?**
- Maximise fee revenues and ensure 100% collection of fees
- Apply fees across all channels, including travel agents
- Increase the productivity of your sales staff
- Unbundle fees to better compete on pure air price
- Manage fees transparently and consistently
- Guaranteed pricing accuracy
### Altéa Check-in Desktop

*An efficient solution for optimising the check-in process*

#### MAIN FEATURES
- Easy customer identification via multiple means, such as swiping passport, credit card or frequent flyer card
- Guided workflows for check-in and boarding optimised for each passenger
- Integrated dynamic agent alert system
- Full passenger information (connecting flight, special service requests, frequent flyer details, etc) available at each customer contact point

#### WHY TAKE IT?
- Take advantage of perfect integration with Altéa Departure Control – Customer
- Save time for all your airport customer service agents
- Ensure consistent use of best practice methods across all of your airport operations
- Enhance customer satisfaction via fast, efficient and comprehensive airport services
- Benefit from a single supplier across the entire scope of departure control

### Altéa Self Service Check-in

*A kiosk, internet and mobile check-in solution to empower your customers and reduce check-in costs*

#### MAIN FEATURES
- Supports all customer check-in requirements, including multiple forms of customer identification, seat assignment and multi-passenger check-in
- Seamless integration with Altéa Departure Control ensuring consistent check-in experience across channels and allowing recognition of customer value
- Multi-channel self service: available for internet, kiosk and SMS check-in.
- Fully customisable (branding, screen layout, language, process flow)

#### WHY TAKE IT?
- Develop self service check-in as fast as possible with a comprehensive multi-channel solution and slash check-in costs
- Take advantage of perfect integration with Altéa Departure Control to ensure consistency of service across all channels
- Create and capture up-sell and cross-sell opportunities
- Minimise the impact of airport disruption
- Benefit from a single supplier for the entire scope of departure control
Altéa Automated Customer Transfer
A smart option that enables airports to respond to disruption more efficiently and proactively

MAIN FEATURES
- Workflow driven process to transfer customers (individually or up to an entire flight), with different flight options automatically offered
- Full synchronisation between Altéa DCS, Reservation and Inventory allowing immediate update of customer records and availability
- All customer preferences are immediately re-applied (including meals, seats, etc)
- Automatic transfer of e-tickets and re-routing of baggage

WHY TAKE IT?
- Improve airport productivity and efficiency
- Eliminate long queues for passengers waiting for flight changes after disruption
- Improve customer satisfaction by proactively offering flight alternatives and retaining service preferences
- Use the true value of your customers in any airport customer transfer activity

Altéa Airport Connect
Ideal for establishing cost-effective communication links between your airport stations and the Amadeus Data Centre

MAIN FEATURES
- Easy data connection to every airport, leveraging Amadeus’ global network in 218 countries
- Links customisable by airport, with scalable bandwidth and no limit on the number of terminals per link
- 100% IP infrastructure, removing reliance on legacy protocols
- Assured service levels

WHY TAKE IT?
- Cut telecommunication costs between the Amadeus Data Centre and your airport stations
- Ensure optimal operation of Altéa Departure Control and minimise disruption due to communication failure
- Replace legacy protocols
- Adopt a fully scalable solution
Altéa Customer Value
A unique customer centric option, which enables you to provide preferential services to your most valuable customers, from reservation to check-in

**MAIN FEATURES**
- Used throughout the Altéa Suite to recognise true customer value
- Ranks customers in priority order for automatic waitlist clearance, re-accommodation, airport check-in, seating and airport re-grade, among others
- Rankings customised for each process, taking into account customer data such as tier level, airline defined customer value, revenue value, date of booking, etc

**WHY TAKE IT?**
- Increase customer satisfaction by consistently recognising customer value across all touchpoints
- Increase customer retention, leading to a direct impact on your bottom line
- Leverage your investment in customer loyalty and CRM initiatives
- Facilitate alliance integration

Altéa Data Nexus
Ideal for providing real-time decision support data for your operational business processes and consolidating customer data

**MAIN FEATURES**
- Hosted central database collecting all live data from Altéa Solutions, including Reservation, Inventory and DCS, and maintaining historical data for several months
- Ability to also integrate external airline systems (loyalty, revenue accounting, etc)
- Direct external access through the Amadeus API, and feeds to downstream systems
- Storage of critical customer information in real time

**WHY TAKE IT?**
- Leverage information captured by the Altéa Customer Management Solution in a consistent and reliable manner
- Easy access to critical data across your entire organisation
- Cost-effective solution that requires minimal initial investment
- Facilitate the implementation of strategic downstream systems, such as CRM or Advanced Revenue Management
Altéa Options - Infrastructure and Security

Altéa Printing and Reading
A powerful and universal solution, which enables the printing of any customer document in any sales or airport office

**MAIN FEATURES**
- Centralised functionality to manage printing and reading for all Altéa services
- Supports data capture (e.g., from optical readers) as well as printing
- Graphical user interface for administration
- Automated device management ('plug and play' principle)
- CUTE certified for common use airport environments

**WHY TAKE IT?**
- Single printing solution for all workstations: Reservation/DCS; CUTE/Non-CUTE, etc
- Significantly reduce administration and deployment costs
- Share devices between Reservation and Departure Control
- High availability solution hosted by Amadeus
- Flexible, modern architecture that can be adapted to the needs of all airlines

Altéa Second Site Disaster Recovery
A unique business continuity option ensuring continuation of your critical business systems, even in the event of a catastrophic disaster at our prime data centre

**MAIN FEATURES**
- Second site Recovery Data Centre with full back-up of all Altéa data and services
- Detailed disaster recovery plan developed jointly
- Design and other consulting support for networking requirements
- Service levels defined for recovery of systems
- Recovery Data Centre provides same level of service as our prime Data Centre

**WHY TAKE IT?**
- Safeguard your business against events beyond your control
- Reduce business insurance costs
Amadeus Revenue Integrity

Enables you to plug leaks in your revenue stream by detecting and eliminating non-productive bookings

MAIN FEATURES
› Automatic screening of all new and updated PNRs
› Flight firming: checks for fake names, duplicate segments, ticket conditions, etc
› Duplicate PNR checks: sophisticated name matching, itinerary screening
› Automated action for each problem PNR identified
› Flexible business rules
› Detailed reporting
› Automated removal of HX segments

WHY TAKE IT?
› The most complete and sophisticated set of revenue integrity tools
› Eliminate non-productive bookings earlier, increase revenue and eliminate associated distribution costs
› Enforce airline policy and protect fares
› Ensure accuracy of revenue management forecasts and controls
› Processing according to a business logic, rather than inflexible robotics
› Relational PNR database to check for duplicate or conflicting PNRs
› Unique in-depth integration for Altéa Reservation airlines

In addition to having a product line that helps us firm flights and maximize our revenues, the folks at Amadeus Revenue Integrity have always been very responsive to our needs and extremely easy to work with.

Scott Nason
VP, Revenue Management
American Airlines

CURRENT CUSTOMERS
› More than 45 airlines of all sizes and in all locations contracted for Amadeus Revenue Integrity, including:

American Airlines  DELTA  Aerolíneas Argentinas  South African Airways  CSA Czech Airlines

Airberlin  Mexicana  United  Garuda Indonesia
As one of the most progressive regional airlines in Europe, we are fully committed to expanding internationally. As such, it is critical that we have a next generation technology system in place that is able to support our commercial objectives. Importantly, our profitability is decided by how effectively the inventory and Revenue Management System work.

Arni Sigurdsson
Director, Distribution
Icelandair

CURRENT CUSTOMERS

First airlines to use RMS hosted by Amadeus:
Amadeus e-Retail

The world’s most widely used integrated airline internet booking engine. To offer the widest range of travel services to your customers through an award-winning interface.

MAIN FEATURES
- Powerful and easy-to-use flight search capability
- Best-in-class faring and pricing, including advanced low fare search
- E-ticketing fully integrated with online credit card validation
- Automated delivery of booking confirmation e-mail
- Ability to cross-sell other content, such as car, hotel, insurance etc
- Fully customisable interface (over 1,000 settings to choose from, 23 languages)
- Online reporting of your e-retail business

WHY TAKE IT?
- Increase your online presence
- A fast and efficient way to develop and manage your e-commerce solution
- Strengthen your customer relationships
- Adopt a complete solution that integrates fully with Altéa and easily with your existing infrastructure
- Adopt a cost-efficient IT model and maintain state-of-the-art technology
- First step toward building a powerful e-commerce solution
- Technology leadership recognised by 18 awards in 2007

We are using Amadeus e-Retail to provide a simple, flexible and customer-friendly booking platform that can support the expansion of American Airlines’ international web presence. Amadeus has built a deep knowledge of international website requirements, including multi-language, multi-currency, multi-point-of-sale and multi-payment format prerequisites.

Cory Garner
Product Manager AA.com International
American Airlines

CURRENT CUSTOMERS
- 250 websites already use Amadeus e-Retail
- 80 airlines of all sizes and in all locations, including:
Amadeus e-Merchandise
A powerful online calendar search interface, offering comprehensive and easy-to-find fares by product family, enabling you to up-sell and significantly increase yield

MAIN FEATURES
- Advanced grouping of fares by family (up to 6 fare families)
- Advanced calendar search capability (Ability to propose up to 225 availability or fare options per request at once, for up to 15 days around the preferred date of departure)
- Ability to unbundle fare and propose new up-sell options
- Fully customisable graphical interface (over 1,000 settings to choose from)
- Global solution: over 23 languages, fare calculation in all major currencies

WHY TAKE IT?
- Increase the yield per online booking
- Offer the most efficient and transparent shopping experience to your customers
- Further develop your share of the online market place and accelerate the shift from offline to online
- Fully customise your shopping solution (fare families, layout)
- Generate new revenues with “a la carte” up-sell functionalities
- Can be implemented as a stand alone solution or as part of the Amadeus e-commerce suite

Over the one-year period following the launch of e-Merchandise, our revenue has increased by 40%, the average monthly bookings on Iberia.com have skyrocketed by 75% and our average PNR price has increased by over 20%.

Javier Pérez-Ríos
Vice President
Iberia.com

CURRENT CUSTOMERS
- 200 websites already use Amadeus e-Merchandise
- 50 airlines of all sizes and in all locations, including:
Amadeus e-Service

Amadeus e-Service is a comprehensive online servicing solution, which gives your customers the opportunity to serve themselves over the internet between booking and check-in.

**MAIN FEATURES**
- Online re-booking with real-time confirmation
- PNR servicing: change of free-of-charge services (seat, meal...) and addition of chargeable services (excess baggage...)
- Easy redemption of miles using a calendar-based availability display
- Sell gift e-voucher and manage compensation e-voucher
- Fully customisable graphical interface (hundreds of settings)
- Available in 23 languages and in all major currencies

**WHY TAKE IT?**
- Move your customers towards self-servicing and increase the usage of your online channel
- Increase your customer loyalty by offering an end-to-end online experience
- Reduce miles liability
- Get additional revenues with new up-sell opportunities at re-booking time and gift e-voucher
- Leverage Amadeus’ extensive e-commerce experience
- Ensure rapid and risk-free roll-out

The Amadeus Award Calendar has increased the number of online award bookings, resulting in not only an enhanced service but also increased efficiency. By working closely with Amadeus, we have been able to integrate and launch the solution on time and to specification, beyond our expectations.

Jean-Michel Mathieu
Director, e-Business
Air France

**CURRENT CUSTOMERS**
- 40 websites already use Amadeus e-Service
- 9 airlines of all sizes and in all locations, including:
Our new card payment process, developed in close collaboration with Amadeus, improves the quality and reliability of the card acceptance among our customers and facilitates all accounting reconciliation back-end processing.

Nadine Nortier
Manager Payment Solutions
Air France

MAIN FEATURES

› Secure links with card issuing or acquiring banks
› Selection of credit cards to be accepted among all major ones (Visa, Master Card, American Express, etc)
› Option for 3D secure authentication of the cardholder using a secret password
› Real-time credit card authorisation after verification of the address, card verification number and available credit
› Authorisation recorded in the PNR and propagated to any downstream system

WHY TAKE IT?

› Reduce credit card fraud across all your direct channels, online and offline
› Opportunity to transfer credit liabilities to the card issuing bank
› Enable reduced bank interchange fees
› Real-time and reliable security checks
› One single provider for credit card acceptance across all your channels
› Seamless and faster integration with Altéa Reservation and Amadeus e-Retail
› Eliminate the need to consolidate payment and sales information from multiple sources

CURRENT CUSTOMERS

› 150+ airlines of all sizes and in all locations contracted for Amadeus Credit Card Acceptance, including:
Amadeus Ticket Changer
An automated solution for changing and re-issuing tickets, which ensures the collection of all applicable charges

MAIN FEATURES
- Immediate display of current fare information and change conditions
- Automatically calculate new fares, taxes and change penalties
- Manage all types of change for any type of ticket in the currency required
- Clearly display full ticket change information
- Automatically prepare accounting and travel documents
- Available across all direct sales channels

WHY TAKE IT?
- Collect significant revenue, which you would otherwise lose on ticket changes
- Save as much as 80% of the time required to change a ticket
- Provide fast, consistent and transparent service to your customers
- A truly international solution, supporting all currencies, all tickets, all channels
- Enjoy immediate and seamless integration with Altéa Reservation and Amadeus Ticketing Platform, which enables you to also automate the re-issue

Amadeus Ticket Changer enables us to drastically streamline our business process to change and re-issue tickets. This enhances our agents productivity, provides more responsive service to our customers whilst at the same time capture additional revenues in terms of new fares and other fees which can often be lost.

Tom Kallstrom
VP e-Business Development Commercial Division
Finnair

CURRENT CUSTOMERS
- 29 airlines of all sizes and in all locations contracted for Amadeus Ticket Changer, including:
Amadeus Ticket Changer Shopper
A fully integrated online shopping solution for ticket re-issue

MAIN FEATURES
› Online automated ticket change
› Calendar search display showing up to 200 travel alternatives
› Choice of display options: one way or itinerary
› Unlimited re-issues prior to departure, and one permitted after first departure
› Clear display of old and new fares and taxes, penalty fee, plus extra charge to pay
› Re-issue up to 9 passengers in one go

WHY TAKE IT?
› Promote customer self service and reduce call centre costs
› Generate up-sell opportunities by clearly displaying multiple options
› Empower your customers, leading to increased satisfaction and loyalty
› Enjoy immediate and seamless integration with Amadeus e-Commerce solutions, Altéa Reservation and Amadeus Ticketing Platform

CURRENT CUSTOMERS
› 5 airlines have already contracted for Amadeus Ticket Changer Shopper:
Amadeus e-Ticket Server
A state-of-the-art e-ticketing solution hosted by Amadeus, included in Altéa Reservation and also available as a standalone solution

MAIN FEATURES
- Securely issue and store e-tickets and electronic miscellaneous documents
- Instant interlining with the industry’s largest community of airlines, and easy interlining with other airlines
- Ground handling with e-ticketing for other airlines
- Automated refunds
- Link to any required GDS, DCS or ground handler
- Automated data feeds to DCS and revenue accounting

WHY TAKE IT?
- Fully IATA/ATA compliant e-ticketing solution, certified in over 70 BSPs worldwide
- Quickly achieve 100% e-ticketing
- Reduce the total cost of ownership of your e-ticketing solution
- Reduce the cost of implementing new e-ticket interline links and the maintenance cost of these links
- Highly reliable, secure and based on modern technology
- Take advantage of Amadeus’ unique expertise in e-ticketing to quickly implement any e-ticket interline link

Implementing interlining was simplified and faster. Thanks to the technology and the great support from Amadeus, we have been able to establish interline e-Ticketing quicker than any other alliance.

Michael Blunt
Vice President Corporate Affairs
Oneworld Alliance

CURRENT CUSTOMERS
- 71 airlines of all sizes and in all locations use Amadeus e-Ticket Server, including:
Amadeus e-Ticket Gateway

This solution enables any airline with its own e-ticketing platform to join the Amadeus e-Ticketing network and interline quickly with other airlines.

**MAIN FEATURES**

- Single link to Amadeus network
- EDIFACT translation and message adaptation
- Connection to any required GDS
- Connection to any required DCS
- Instant interlining with the industry’s largest community of airlines, and easy interlining with other airlines
- Interline e-ticket management (display, change of status, airport control, etc)

**WHY TAKE IT?**

- Implement faster e-ticketing with all your interline partners and benefit from Amadeus’ leading e-Ticketing network, which connects over 140 airlines
- Reduce the cost of implementing new e-ticket interline links and the maintenance cost of these links
- Highly reliable, secure interline links and standards
- Take advantage of Amadeus’ unique expertise in e-ticketing deployment and capacity to quickly implement any e-ticket interline link as required

The Amadeus e-Ticket Gateway fulfills TAM’s requirements in establishing interline agreements, helping us to consolidate our leadership position in the domestic and international markets.

Mauricélio Lauand
IT Director
TAM

**CURRENT CUSTOMERS**

- 7 airlines of all sizes and in all locations use Amadeus e-Ticket Gateway, including:
  - TAM
  - Hawaiian Airlines
  - Lufthansa
  - Continental
Amadeus Customer Loyalty
A new off-the-shelf and flexible solution to power your relationship marketing activities

MAIN FEATURES

➤ Comprehensive and flexible customer database
➤ Supports all types of accrual and redemption models, including cash top-ups
➤ Integration with loyalty scheme partners
➤ CRM module for customer segmentation, marketing campaign management, etc
➤ Web enabled interfaces
➤ Able to support any language and script

WHY TAKE IT?

➤ Turnkey solution to develop and manage your loyalty solution
➤ Strengthen your loyalty programme as a profit centre in its own right
➤ Flexible solution able to support all loyalty programme models
➤ Scalable solution able to grow alongside your business needs
➤ Hosted in a modern data centre providing 24/7 support
➤ Unique integration benefits for Altéa customers leveraging the unique Altéa customer-centric features

We found in Amadeus the right IT provider that could develop and rapidly implement an airline-specific, cost effective and flexible loyalty solution. We were very delighted to benefit from the industry experience of the team based in Tucson.

Les Murashige
COO
Island Air

CURRENT CUSTOMERS

➤ Island Air is the launch partner of Amadeus Customer Loyalty solution: 
Stand Alone IT Solutions - Infrastructure

Amadeus Message Net
To deliver your critical system communication messages cost-effectively and with guaranteed service levels

MAIN FEATURES
- Guaranteed delivery of Type B teletype messages, supporting three levels of delivery priority
- Secure browser based portal to create and manage Type B messages
- Direct access to Amadeus’ worldwide network, connecting over 450 airlines, all GDSs and the majority of airport DCSs
- Interactive communication services to deliver host-to-host Type A traffic
- Guaranteed service level and 24/7 support

WHY TAKE IT?
- Decrease your communication costs
- Remove the fixed cost of access lines to third party providers
- Simplified IT infrastructure with a single link for all host-to-host communications without the need for multiple legacy protocols
- Enjoy guaranteed service levels with a high level of performance
- Amadeus’ proven and scalable solution and implementation expertise
- A single provider for passenger service systems and communication services

Amadeus Message Net is in line with our corporate strategy. The solution from Amadeus provides Qantas with clear economic and technical benefits whilst simplifying the environment, increasing our service level and maintaining our strategy of reducing the number of strategic partners providing services.

Fiona Balfour
Former CIO
Qantas Airways

CURRENT CUSTOMERS
- 18 airlines of all sizes and in all locations contracted for Amadeus Message Net including:

See IT Visit www.amadeus.com/airlineIT
Solution for low cost operations
For LCCs or new model airlines

New generation PSS for new model airlines
Amadeus works in all airline segments and provides new generation Customer Management Solutions for both full service airlines (Altéa CMS) and low cost carriers (Pioneer CMS). These two platforms, while catering for different models both use the same open technology and benefit from synergies where necessary.

The benefit of a single trusted IT partner
Having one IT provider to implement a Customer Management Solution to support your current and future business model simplifies the maintenance and evolution process while avoiding fragmentation of your organisation and systems.

What’s more, working with a single trusted IT partner enables you to not only reduce the total cost of ownership of your IT solution but also to offer seamless service to your customers.

For example, an existing Altéa customer looking to merge with, set up or work with an LCC operation will benefit from open architecture and the shared technology platform in various ways - not least sharing the same single PNR repository data - allowing for synchronisation in terms of:

- handling customers
- IT integration and interfaces to third party systems.

Amadeus Pioneer
The new generation Customer Management Solution for low cost operations

<table>
<thead>
<tr>
<th>Online interface</th>
<th>Call Centre interface</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amadeus Pioneer Inventory</strong></td>
<td></td>
</tr>
<tr>
<td>Schedule</td>
<td></td>
</tr>
<tr>
<td>Inventory</td>
<td></td>
</tr>
<tr>
<td>Reference Data</td>
<td></td>
</tr>
<tr>
<td>Messaging System</td>
<td></td>
</tr>
<tr>
<td>Reaccommodation</td>
<td></td>
</tr>
<tr>
<td><strong>Amadeus Pioneer Reservation</strong></td>
<td></td>
</tr>
<tr>
<td>Availability &amp; Fares</td>
<td></td>
</tr>
<tr>
<td>Air &amp; non-Air booking</td>
<td></td>
</tr>
<tr>
<td>Reporting</td>
<td></td>
</tr>
<tr>
<td><strong>Amadeus Pioneer Departure Control</strong></td>
<td></td>
</tr>
<tr>
<td>Check-in</td>
<td></td>
</tr>
<tr>
<td>Boarding</td>
<td></td>
</tr>
<tr>
<td>Baggage</td>
<td></td>
</tr>
<tr>
<td>Weight &amp; balance</td>
<td></td>
</tr>
</tbody>
</table>
Pioneer Overview

Pioneer Customer Management Solution

A complete Customer Management System providing an efficient and adaptable solution for low cost operations

MAIN FEATURES

- Internet booking engine with lowest-fare search
- Call centre desktop for PNR full management
- Seamless Amadeus travel agency distribution with payment enforcement
- Business rules-driven inventory to support low-cost carrier model
- Real-time fare filing tool
- Comprehensive DCS, including self service check-in, through check-in, weight and balance
- Non-air booking features (insurance, hotel and car rental)
- Interfaces with Revenue Management Systems, and other airline or 3rd party systems

HIGHLIGHTS

- Pure ticketless
- No IATA checks for pricing
- No needs for ATPCo/SITA fare filing
- No lengthy and costly BSP settlement
- Web-sales oriented solution with up-sell opportunities
- Minimum training needs for Call Centre agents
- Management tool for direct distribution to travel agencies and corporation via dedicated web portal
- Eligibility and pricing of SSRs integrated in the internet booking engine
- Credit shell to avoid refund of not used tickets
Amadeus has demonstrated Pioneer CMS to be an advanced, robust platform with a high degree of adaptability that will provide Norwegian Air Shuttle with a clear upgrade and development path to meet future needs.

_Hans-Petter Aanby_
CIO
Norwegian Air Shuttle

### Business impact

- Increase revenue and yield due to wide market reach and efficient sales tools, including up-selling and cross-selling
- Improve productivity by simplifying your business processes and improving the levels of automation
- More flexible business model with less dependency on industry standards
- Generate ancillary revenue from selling extra services

### Why take it?

- Reach all types of customers
- Expand into new markets
- Support co-operation with airline partners
- Increase revenues from both air and non-air products
- Adopt a comprehensive Customer Management Solution
- Benefit from unrivalled system availability levels

> Visit [www.amadeus.com/AirlinesIT](http://www.amadeus.com/AirlinesIT) for more information
Amadeus Airline IT Centres

A truly global company with Airline IT centres close to you.

Amadeus is expanding its geographical presence by creating regional Airline IT Centres. In 2008, Amadeus will further develop local Airline IT resources in Asia Pacific (Bangkok), North America (Chicago) and Latin America (Bogota).
Contact us

Thank you for your interest. While this brief overview provides an insight into what we can deliver, we appreciate that you will require more information about Amadeus’ Airline IT capabilities in order to take the next step.

For a more in-depth investigation of how Amadeus can help you to implement new generation solutions or achieve a radical business transformation, please do not hesitate to contact your dedicated Amadeus Account Manager.

You can find details of both your global and regional contacts on our website: www.amadeus.com/airlineIT

We will gladly arrange an initial meeting with the appropriate Amadeus Airline IT specialists to understand your specific situation and start thinking about how we can meet your objectives.

For any general comments, please email us at: airline.it@amadeus.com
Join the Amadeus Altéa community

Adria Airways
Aeropelican Air Services
Aerosvit Airlines
Aigle Azur
Air Astana
Air Austral
airBaltic
Air Berlin
Air Caraïbes
Air Dolomiti
Air Europa
Air Fiji
Air France
Air Greenland
Air Ivoire
Air Link
Air Madagascar
Air Marshall Islands
Air Mauritius
Airnorth Regional
Air Pacific
Air Plus Comet
Air Senegal International
Air Sinai
Air Vanuatu
Aircalin
Airlinair
Arkefly
Atlantic Airways
(Faroe Islands)
Austrian Airlines
Austrian Arrows
Aviateca
Avianca
BH Airlines
Belair
Binter Canarias
Blue1
bmi
Brindabella Airlines
Brit Air
British Airways
Cathay Pacific Airways
CCM Airlines
Central Connect Airlines
Cimber Air
Cirrus Airlines
City Airline
CityJet
Coast Air
Condor
Conviasa
Croatia Airlines
Cubana de Aviacion
Danish Air Transport
Darwin Airlines
DBA
Dragonair
Egyptair
El Al
Estonian Air
Etihad Airways
Finnair
Finncomm Airlines
FlyLal
Georgian National Airlines
Golden Air
Hahn Air
Hamburg International
HapagFly
Helisureste
Helvetic Airways
Hewa Bora Airways
Hex’ Air
Iberia
Icelandair
Islas Airways
Jet Airways
Kato Airline
KLM - Royal Dutch Airlines
LACSA - Lineas Aereas
- Costarricenses
Lagun Air
LAN Airlines
Lan Argentina
Lan Ecuador
Lan Peru
Lauda Air
Libyan Arab Airlines
Lufthafmrgesellschaft Walter
LOT Polish Airlines
LTU Billa
LTU International Airways
Lufthansa Airlines
Luxair
Macair Airlines
Malév
Mexicana
Middle East Airlines
Montenegro Airlines
Munich Airlines
National Jet Systems
Niki
Norwegian Air Shuttle
O’Connor Airlines
Ocean Air
OLT Ostfriesische
- Lufttransport
Pluna
Private Wings
Qantas Airways
Qatar Airways
Rossiya-Russian Airlines
Regional Air Lines
Regional Compagnie
- Aérienne
Royal Air Maroc
Santa Barbara Airlines
SAS - Scandinavian Airlines
SAS Norway
SATA Air Acores
SATA International
Saudi Arabian Airlines
Sevenair
Skyways
Smart Wings
Solomon Airlines
South African Airlink
South African Airways
South African Express Airways
Spanair
Star Airlines
Sterling Airlines
SunExpress
Sylt Air
TACA International Airlines
TAROM
Ted
Thai Airways
Thomas Cook Airlines (UK)
Toumai Air Tchad
Trans African Airlines
Trans Air Congo (TAC)
Tunisair
Twin Jet
United Airlines
V Australia
Welcome Air
Widerøes Flyveselskap AS

3 Airlines using at least Altéa Reservation and Altéa Inventory

2 Airlines using Altéa Reservation only