

# Session 4: Information and Communication

Georg Langenberg,  
Amadeus Airport IT  
Braunschweig, October 16<sup>th</sup>, 2013

**TAM**SYMPOSIUM  
BY AVI**ALLIANCE** 

**amadeus**  
Your technology partner

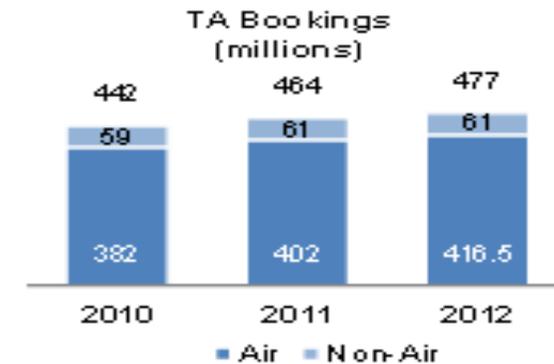


# Amadeus solutions for airports

**amadeus**  
Your technology partner

# Amadeus Corporate overview

- ▶ Created in 1987 by Air France, Lufthansa, Iberia, and SAS and became the market leader in GDS
- ▶ Three main business activities:
  - ▶ Travel Distribution
  - ▶ Airline IT
  - ▶ **Airport IT**
- ▶ Key figures:
  - ▶ Over **11,000** employees worldwide
  - ▶ Operating mission critical systems in more than **700** airports
  - ▶ Over **175 airport** experts in 6 geographical locations (Nice, Madrid, London, Munich, Bangalore, Dubai)
  - ▶ Number one Research & Development investor in Europe for the travel & computer services sector for the past two years
  - ▶ **16** R&D centres around the world
  - ▶ More than **120** airlines using Amadeus Altéa solutions
  - ▶ Already servicing top worldwide ground handlers
  - ▶ One of the largest data centres worldwide fully dedicated to travel, processing up to **1.6** billion transactions daily



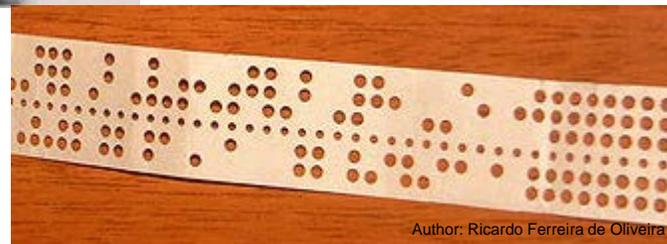


ICT is about technology but more about enabling humans to assess, analyse, and draw conclusions about ever-increasing quantities of information and to share these with their colleagues across the network.

# Yesterday



Siemens



Author: Ricardo Ferreira de Oliveira

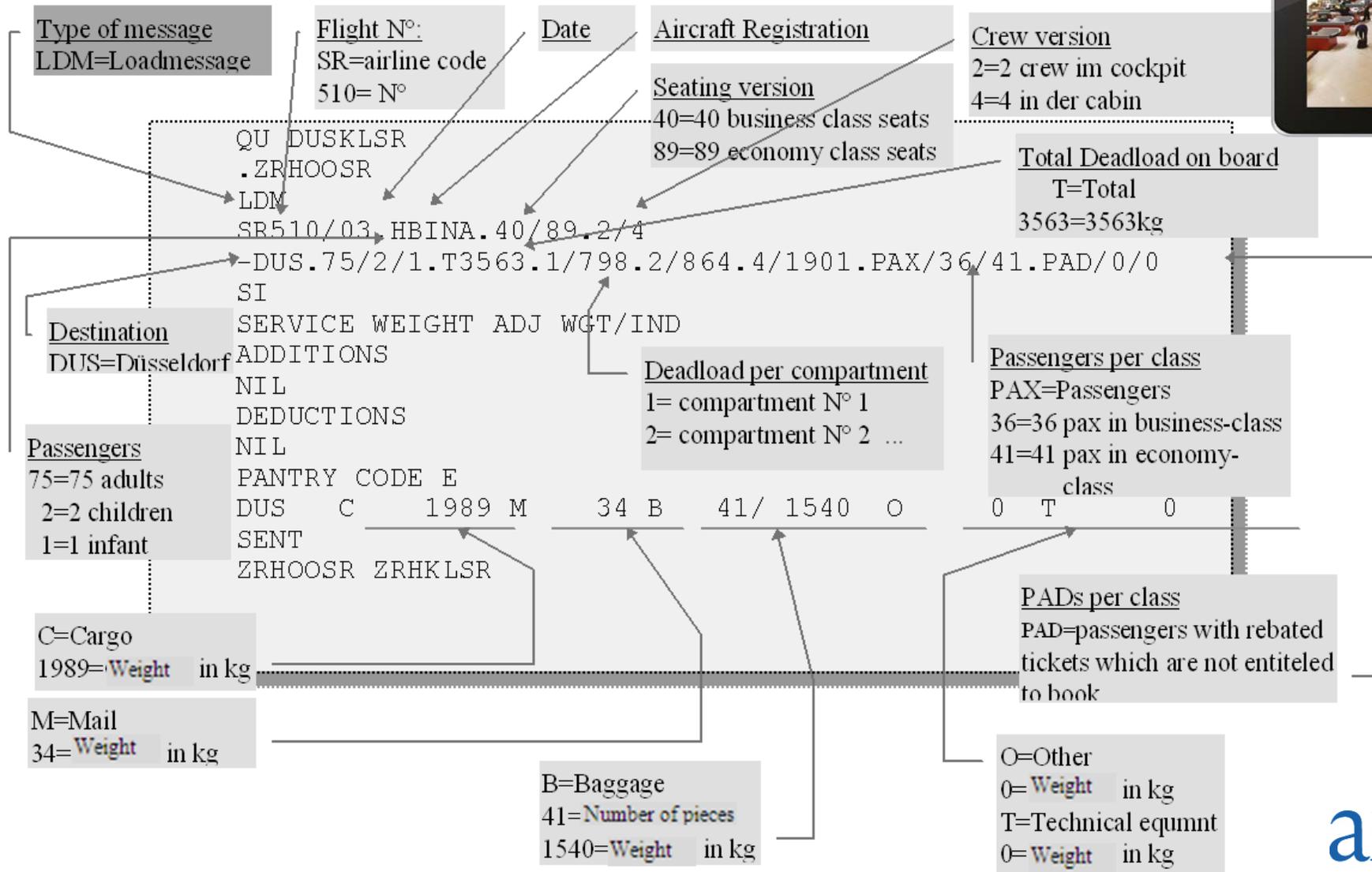


# Yesterday



```
QU DUSKLSR
.ZRHOOSR
LDM
SR511/03.HBINA.40/89.2/4
-ZRH.75/2/1.T3563.1/798.2/864.4/1901.PAX/36/41.PAD/0/0
SI
SERVICE WEIGHT ADJ WGT/IND
ADDITIONS
NIL
DEDUCTIONS
NIL
PANTRY CODE E
ZRH C 1989 M 34 B 41/ 1540 O 0 T 0
SENT
ZRHOOSR ZRHKLSR
```

# Yesterday



# Today



Amadeus Altéa Administration TST uat - Outbound Teletype Message Delivery Rule

File Tools Window Help

Outbound T... DBM

Outbound Teletype Message Delivery Rule

Actions Refresh Display Print... History

Search Criteria  
Reference Data Airline: 7X, Client Application: Amadeus Altéa Departure Control, Rule Type Group: Departure Control Flight Management, Rule Type: Outbound Teletype Message Delivery Rule

Carrier	Market	Teletype Message Identifier	Terminal	Flight No Range	Day of Week	Effective From	Effective To
7X	WORLD	BGD					
7X	WORLD	CCD					
7X	WORLD	CGO					
7X	WORLD	CPM					
7X	WORLD	DGA					
7X	WORLD	DUO					
7X	WORLD						
7X	WORLD						
7X	WORLD	LDM					
7X	WORLD						
7X	WORLD						
7X	WORLD	PLI					
7X	WORLD	GLR					
7X	WORLD	LDM					
7X	WORLD	LIR					
7X	WORLD	NAP					
7X	WORLD	NJF					
7X	WORLD	NJP					
7X	WORLD	NDA					
7X	WORLD	NOF					
7X	WORLD	NTF					
7X	WORLD	NTP					

New... Update... Duplicate... Delete View Market View Flight Group Compare Rule

Outbound Teletype Message Delivery

Priority: QU

Recipients  
LHRKL7X

New Row  
Delete Row

Close

Connected: NCE1A0955, 1A, PMADONNA/SU (uat/sj) 23/10/08 15:25 PM



ICT is about technology but more about enabling humans to *assess*, *analyse*, and *draw conclusions* about ever-increasing quantities of information and *to share* these with their colleagues across the network.

# Information is needed in all areas

## Ground handlers

“What’s the load in the aircraft?”



## Airport operators

“Where do I park the aircraft?”



## ATM operators

“When will the flight be ready for start-up?”



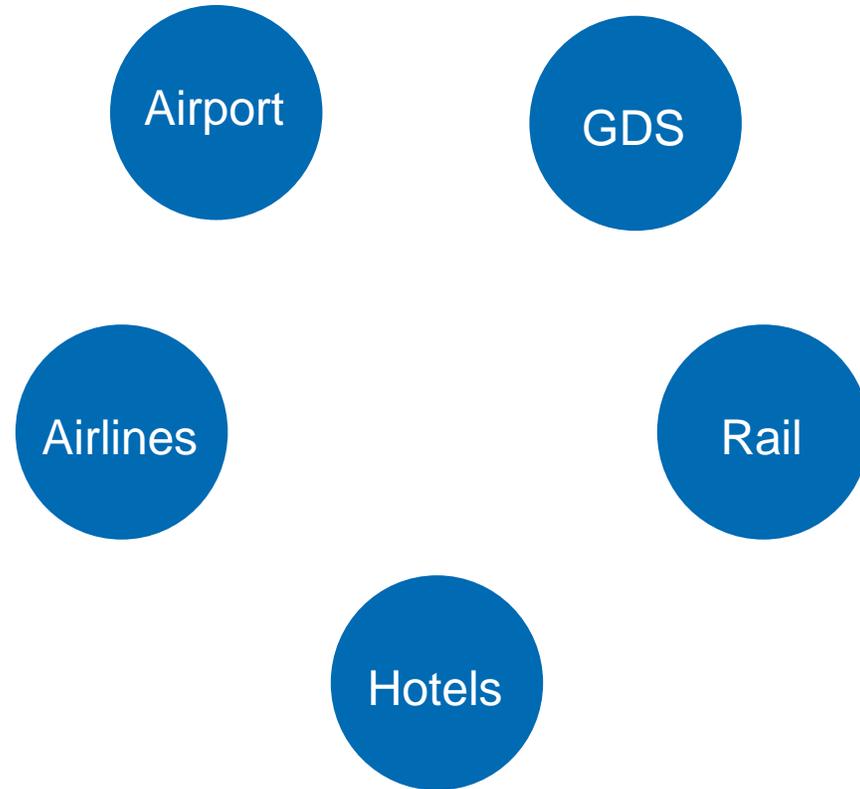
## Airlines

“When will the service be completed?”

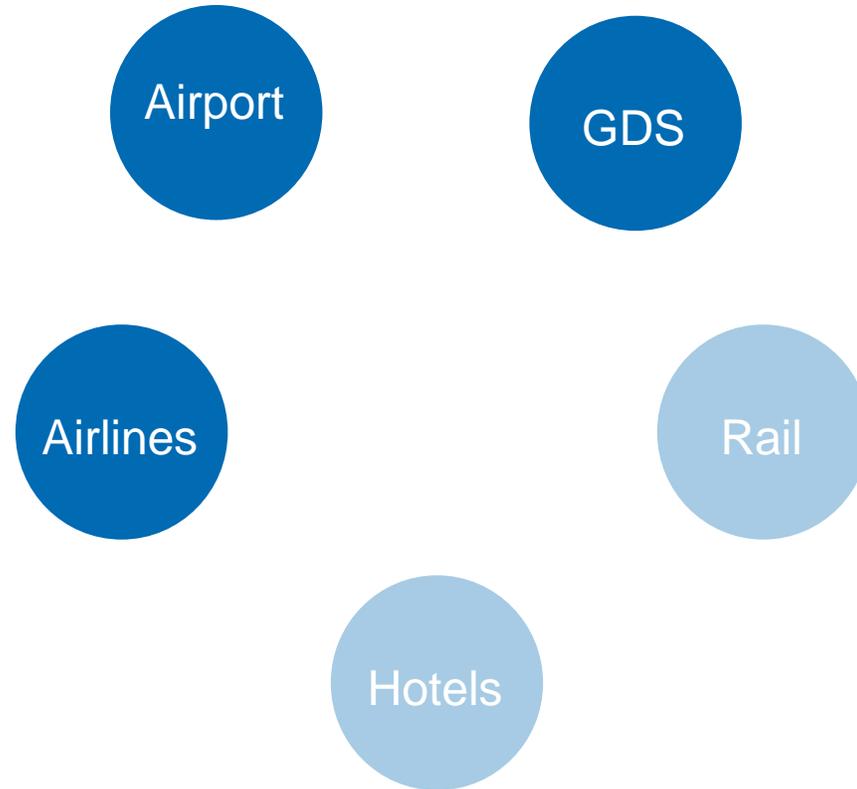


- Do I have the correct schedule info -- correct STD, correct A/C type, etc.
- How many transfer passengers are still missing ?
- Is all transfer baggage loaded ?
- boarding completed -- all passengers on board ?
- Pushback available or already at the aircraft ?
- Loading soon or already completed ?
- Has the flight already the start-up clearance ?
- What’s about a slot time ?
- ...

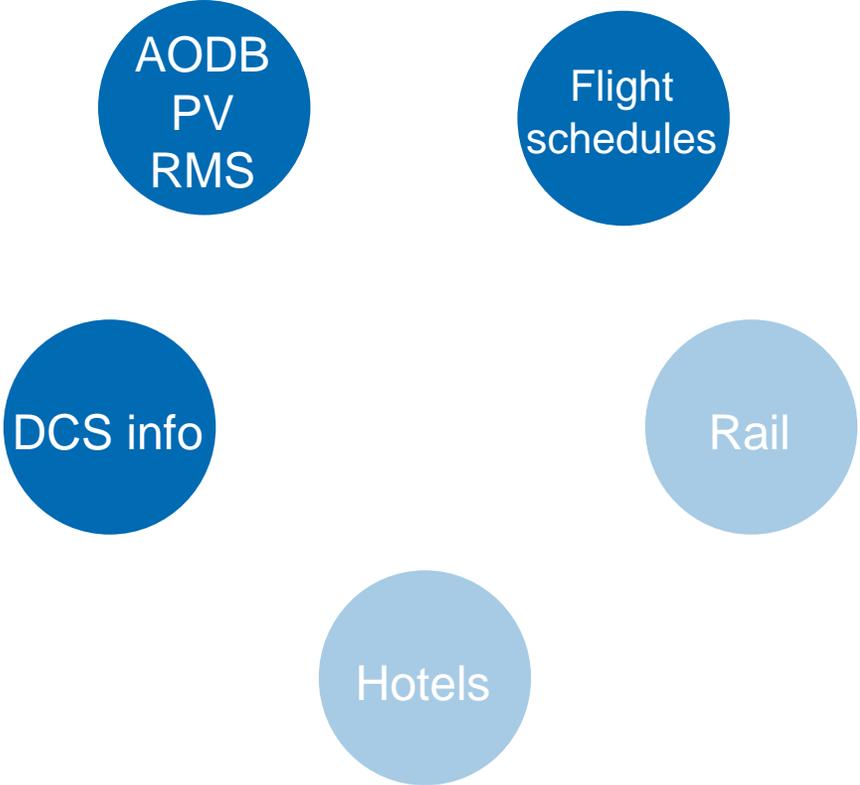
# Actors in the travel chain



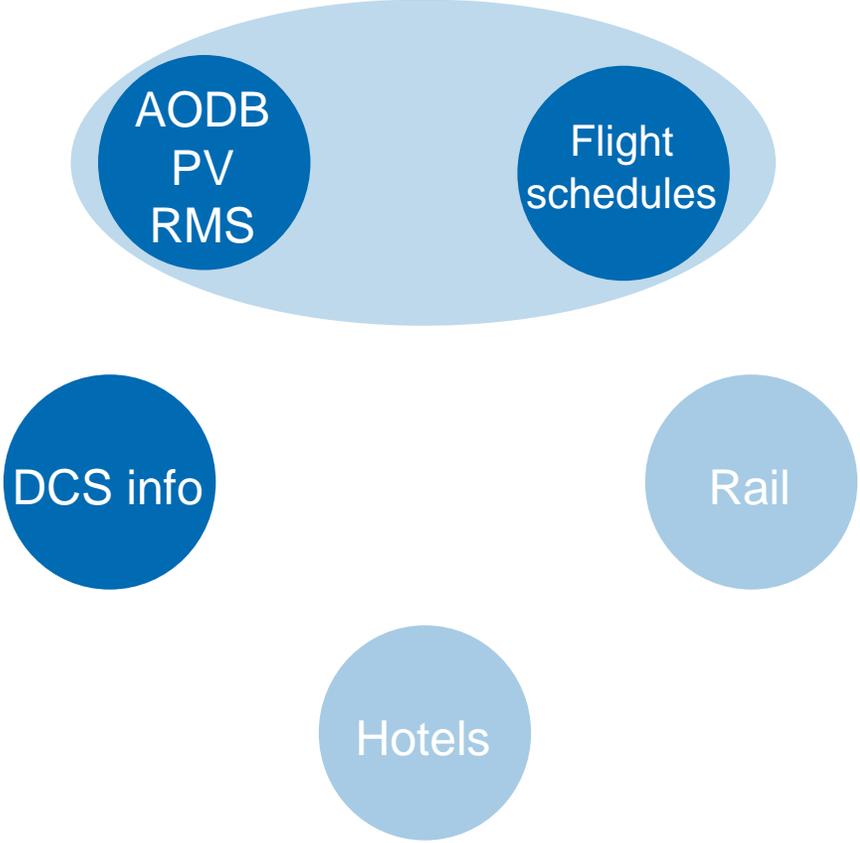
# Actors in the travel chain



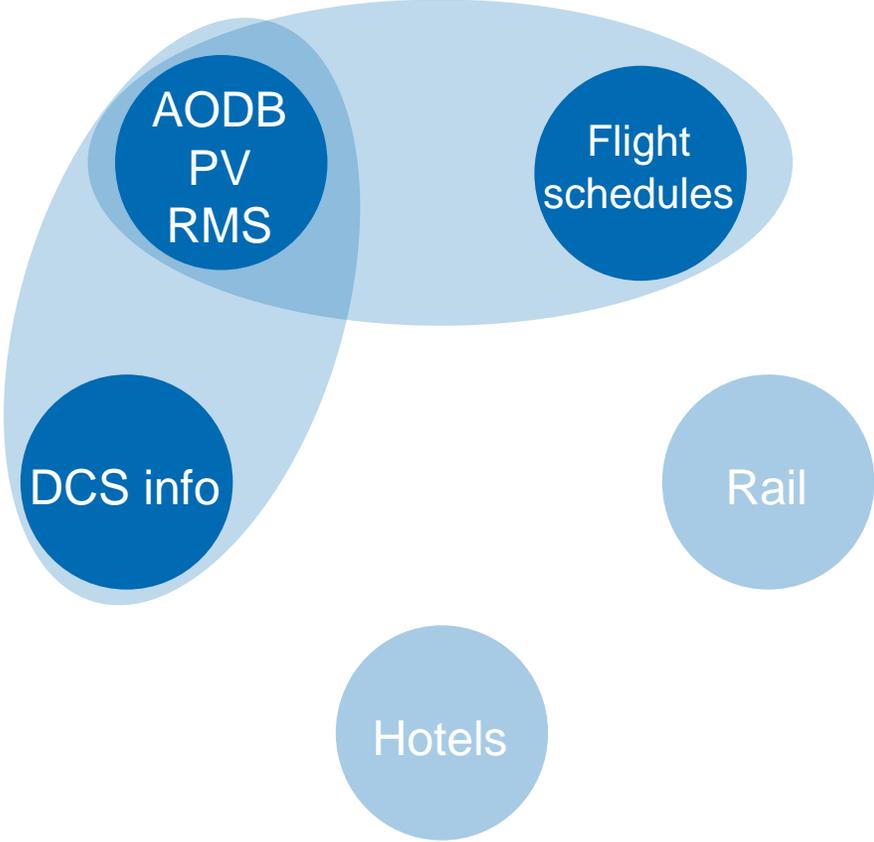
# Information available in the actors' systems



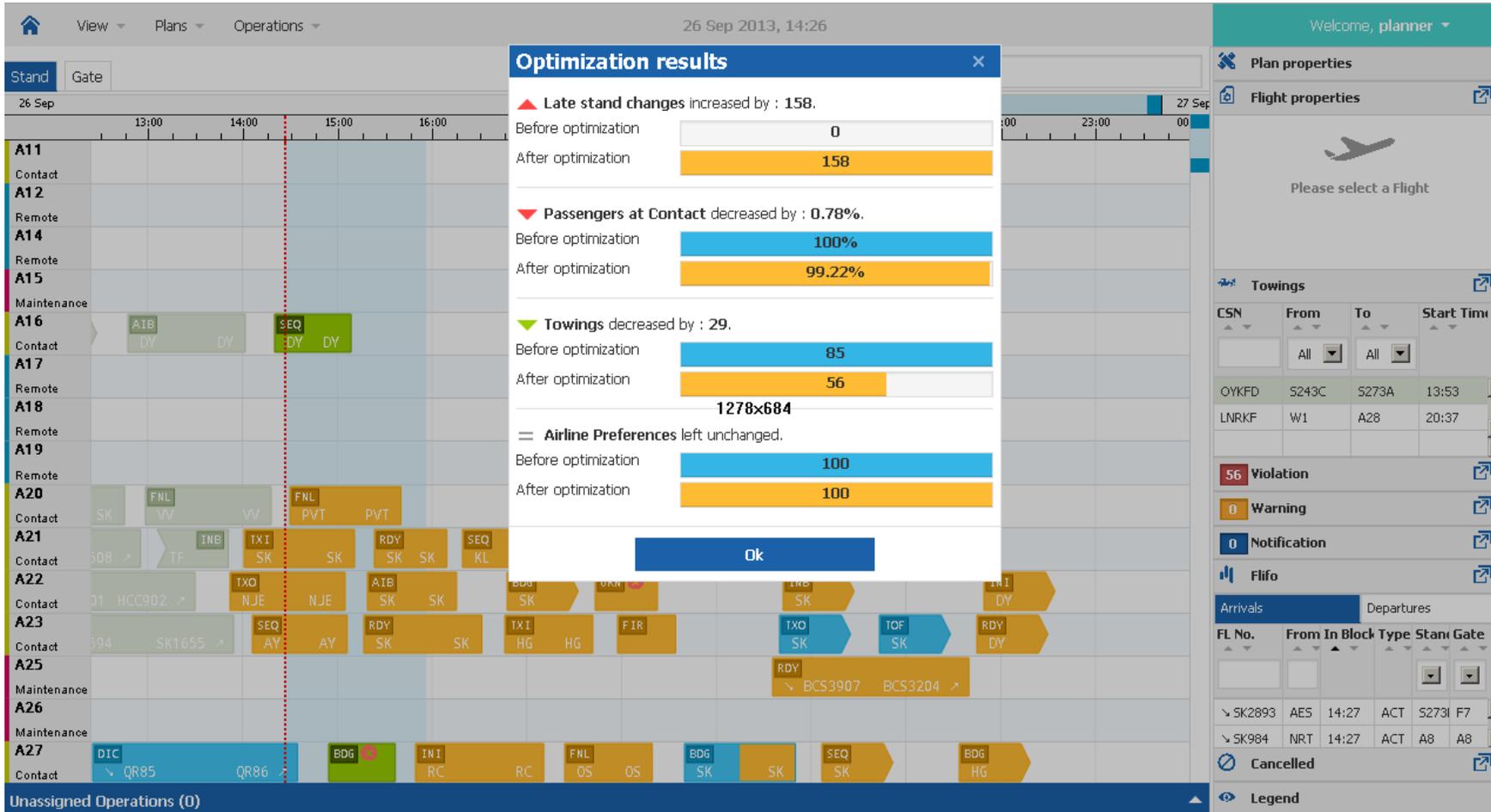
# Information available in the actors' systems



# Information available in the actors' systems



# Multiple KPI Optimisation Result



# For example: Errors and Warnings - Visual impact

**Altéa Fly - Flight Management - Load Distribution**

Flight Information | Deadload | **Load Distribution** | Fuel | Passenger | Documents | Messenger

6X654 01JAN Area/Bay combination errors  
LHR-CDG S1000 Z Compartment 4 weight exceeded by 580  
73K ACARS BPP 12 weight exceeded by 69

**My Flights**

- OF107 LAX -24:33
- OF107 LAX -126:53
- OF107 LAX -192:33
- OF107 LAX -80:43
- 6X654 LHR -80:33:43
- 6X987 LHR -80:33:43
- 6X789 FRA -80:35:43

CPT 4 + 3 Remain 2792 kg  
CPT 4 Overload 580 kg  
CPT 3 Remain 2792 kg

Ext	ULD/Bulk	ULD Dest	Gross Wgt	Commodity	R	T	Priority
	CDG BM	42	41	CDG DT			
				CDG DC			

Unlocated Load

Ext	ULD/Bulk	ULD Dest	Gross Wgt	Commodity	R	T	Priority

Autoload 6X Bags Fwd - 1Leg

Aircraft Deck: Apply Approve Distribution  
Lower Deck: Create Load Unlocate Load

**Messages**

TIME	MESSAGE
02Feb06 11:16	TEST MSG
02Feb06 11:16	TEST MSG

**Altéa Fly - Flight Management - Load Distribution**

Flight Information | Deadload | **Load Distribution** | Fuel | Passenger | Documents | Messenger

6X6021 17NOV Area/Bay combination errors  
SYD-NRT S1630 D Compartment 1 weight exceeded by 90  
744 6XGB-YGA ACARS BPP 52 weight exceeded by 312

**My Flights**

- OF6943 DRW -784:29
- OF6018 CDG -785:44
- OF6943 GOV -786:29
- OF6018 SIN -812:44
- OF6018 SIN -836:44
- OF6047 DRW -869:59
- OF6047 GOV -871:54

CPT 5 REM 336  
CPT 4 + 3 Remain 13424 kg  
CPT 3 Remain 6842 kg  
CPT 2 + 1 Remain 15972 kg  
CPT 2 Remain 15870 kg  
CPT 1 Overload 90 kg

46L	44L	43L	42L	41L	33L	32L	31L	25L	24L	23L	22L	21L	13L	12L	11L
AKE 6X* 10	AKE 6X* 12	42F	42R	AKE 6X* 11	AKE 6X* 5	AKE 6X* 9	AKE 6X* 8						AKE 6X* 15	AKE 6X* 18	AKE 6X* 19
NRT BM 40 PCS	NRT Bjr 31 PCS	PHC 6X 8765		NRT BM 23 PCS	NRT BM 40 PCS	NRT BM 40 PCS	NRT BM 40 PCS	N					NRT C 1570	NRT M 1570	NRT C 1570
AKE 6X* 12	AKE 6X* 14			AKE 6X* 6	AKE 6X* 7	AKE 6X* 8							AKE 6X* 16	AKE 6X* 17	AKE 6X* 20
NRT BwH 29 PCS	NRT BFT 13 PCS	NRT CG	NRT CP	NRT BM 40 PCS	NRT BM 40 PCS	NRT BM 40 PCS							NRT C 1570	NRT C 1570	NRT M 1570
		NRT C 6197 E	RRY												
		RPB													

Unlocated Load

Ext	ULD/Bulk	ULD Dest	Gross Wgt	Commodity	R	T	Priority	DG/SL	Next Flt/Dest

Autoload 6X BagsAft - 1Leg

Aircraft Deck: Apply Approve Distribution  
Lower Deck: Create Load Unlocate Load

**Centre Of Gravity**

ULDs Assigned: 1 Pallets, 16 Containers

TOW: 493.8  
MLDW: 439.57  
LDW: 504.87  
MCFW: 439.57  
ZFW: 504.87  
MTOW: 888.79  
Trim by Cabin Section

GO LO AI BI LIR 0 PRV 0 15:31

Display all errors indicate severity

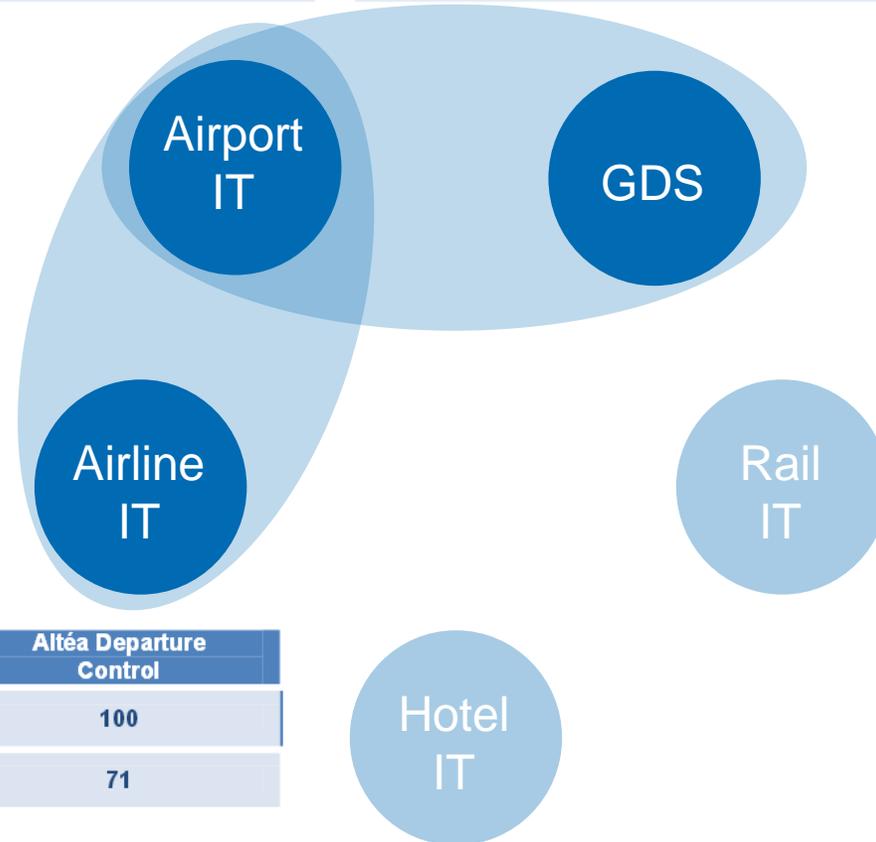
Dynamic impact assessment



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# Amadeus is working on IT

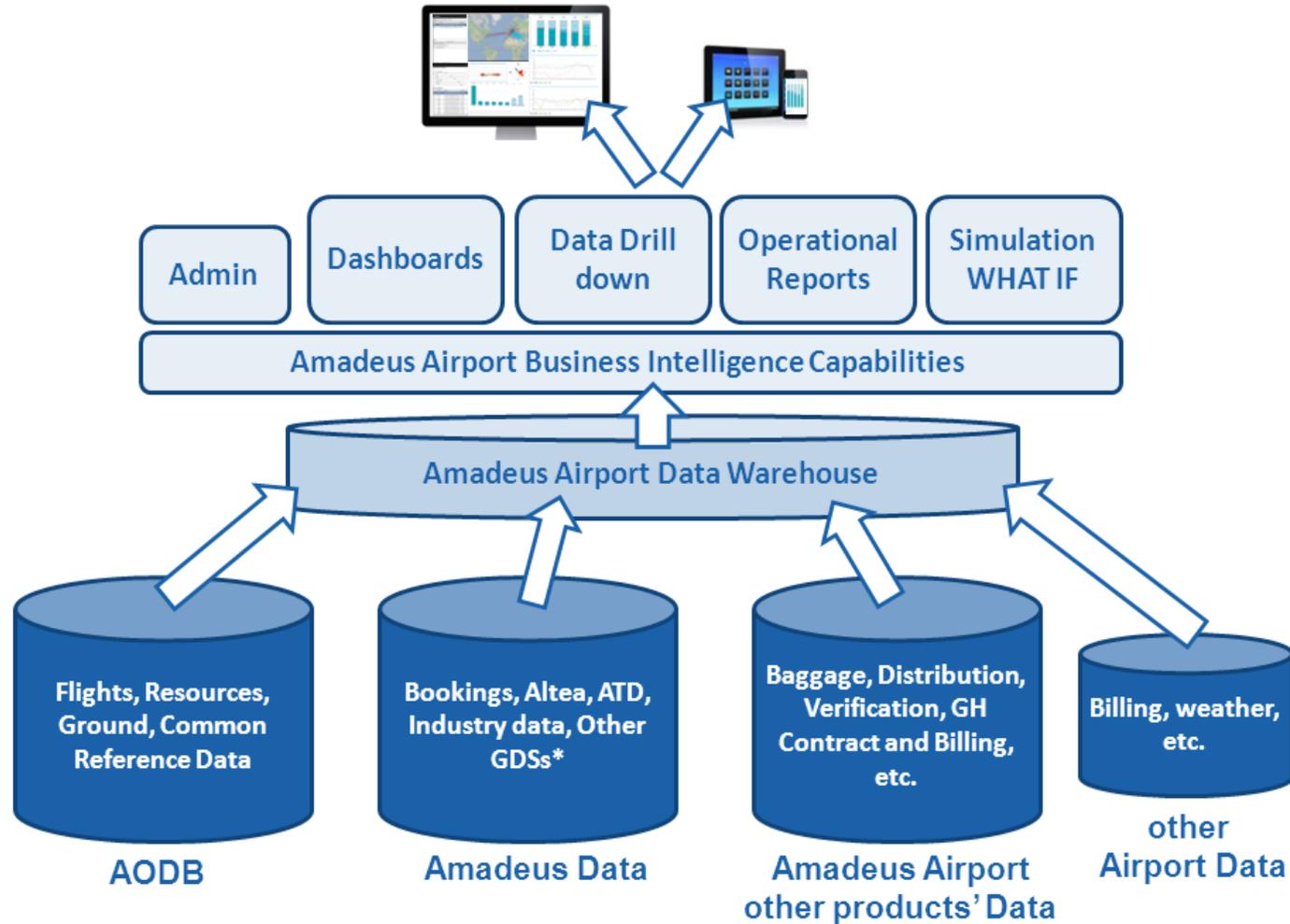
Travel agencies & airline sales offices		Airline distribution customers	
Travel agency locations	93,000	Airlines storing flight schedules	707
Airlines sales office locations	70,000	Airlines bookable, including 70 low cost carriers	423



	Altéa Reservation and Inventory	Altéa Departure Control
Airlines contracted	116	100
Airlines implemented	108	71



# Amadeus Airport Business Intelligence



\*With the appropriate permission of the data owner





**Thank you very much for your attention!**

[amadeus.com/airport](https://amadeus.com/airport)

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