



# Best practice in air logistics

Impulsreferat

**Holger Sindemann**

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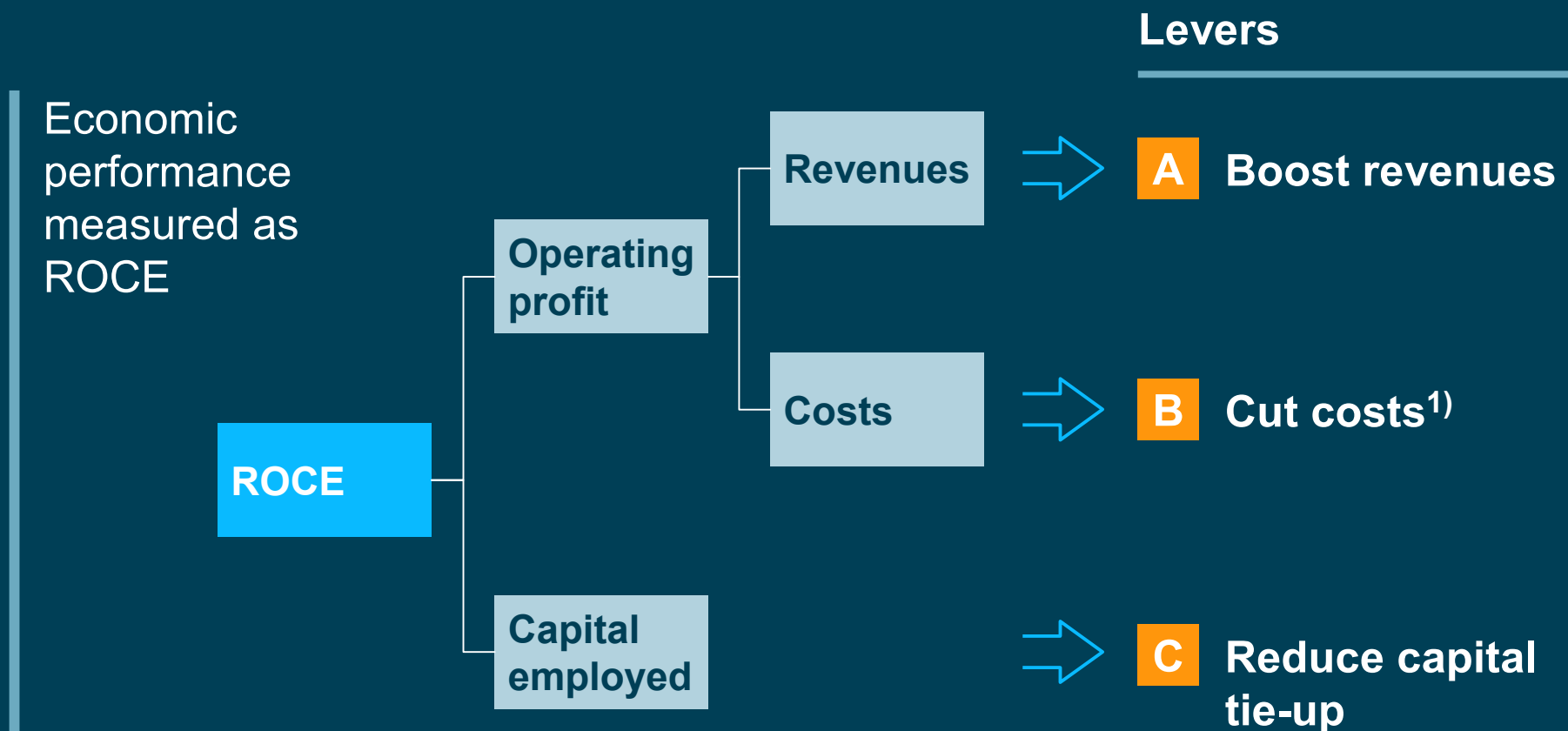
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## **A. Key assumption: Best practice equals optimized economic performance**

# Key assumption: Best practice equals optimized economic performance



1) Same revenue with less cost

# Best practice companies in air logistics make use of three sets of levers

## Details

### **A** Boost revenues

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- Optimize product offer
- Improve product quality
- Increase market penetration
- Launch sales stimulation program
- Redesign revenue management

### **B** Cut costs

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- Minimize handling costs
- Reduce airport/landing/ATC fees
- Increase aircraft utilization
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- Decrease sales/reservation costs
- Use uniform aircraft fleet
- Optimize overhead structures and wages

### **C** Reduce capital tie-up

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- Reduce working capital
- Optimize fleet financing
- Sell off unnecessary assets



## **B. Best practice concerning: Revenue generation and yield**

# Best practice concerning: Revenue generation and yield

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# Lufthansa Cargo has skimmed their customers willingness to pay for time-definite services

## Product offer Lufthansa Cargo

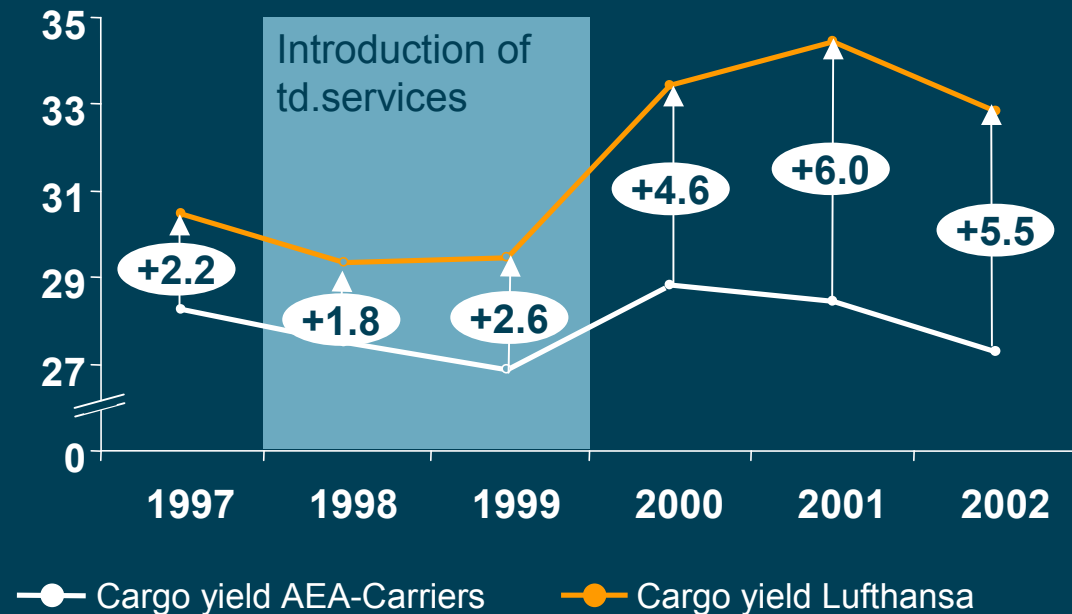
td.services: td.Pro, td.X, td.Flash

### Service packages:

	td.Pro	td.X	td.Flash
Care/td	✓		
Cool/td	✓	✓	✓
Fresh/td	✓	✓	
Safe/td1			✓
Safe/td2	✓	✓	✓
Smooth/td	✓	✓	
Live/td			✓

## Yield development Lufthansa Cargo vs. European carriers

EUR/RTK

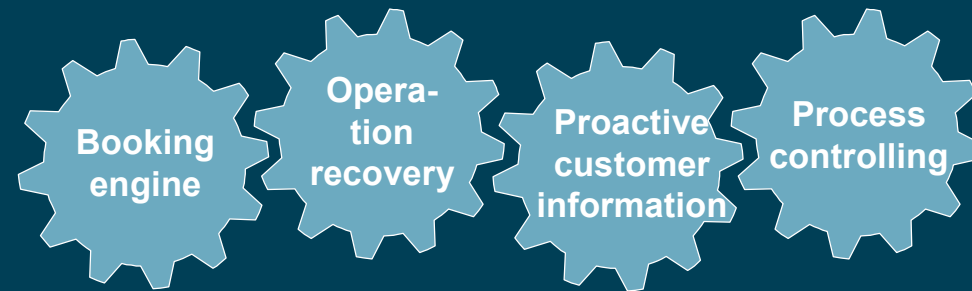


# The yield development was only possible due to the introduction of best-in-class IT systems

## Quality development

- During the first year of the introduction of td.services the **transport quality** was **unsatisfactory**
- **Lufthansa reacted** by introducing a quality assurance program which focused on enforcing the use of **new transport control systems**
- As a result, **quality improved** to very acceptable levels

## New systems introduced 1998/1999



### Booking engine

- Ensures that **all bookings** and re-bookings can be produced

### Operation recovery

- Guarantees **quick reaction** to handling or flight irregularities

### Proactive customer information

- Ensures that **customer** gets **immediately informed** about deviations from the transport commitment

### Process controlling

- Allows continuous **identification** of **sources of error** in the transport chain

# By combining sales teams, Skyteam created the biggest cargo capacity provider in the US

Skyteam Cargo – US sales joint venture



—▶ Capacity marketed by Skyteam Cargo joint venture

- Air France, Delta Air Lines, Korean Air and Alitalia created a sales joint venture with access to the combined cargo capacity from the US
- Joint venture combines sales force, reservation, customer service and revenue management from the US
- Company is governed by a joint Board of Directors
- Joint venture is #1 in terms of cargo capacity out of the US

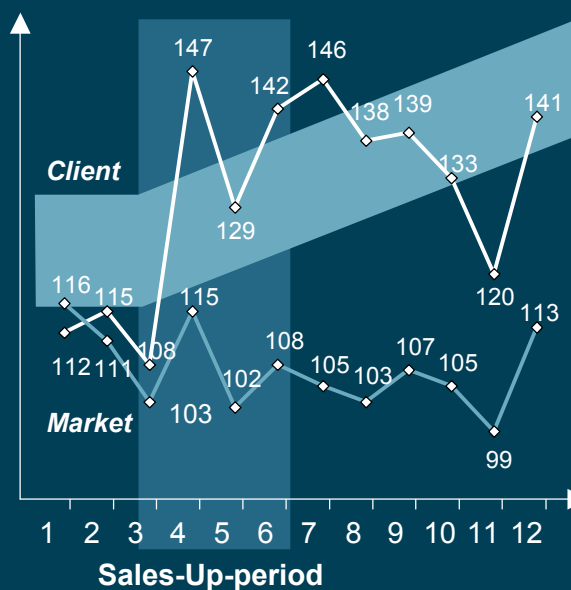
# A European airline achieved sales improvements of 20 to 30% through a sales stimulation program

## Orientation towards upside potentials

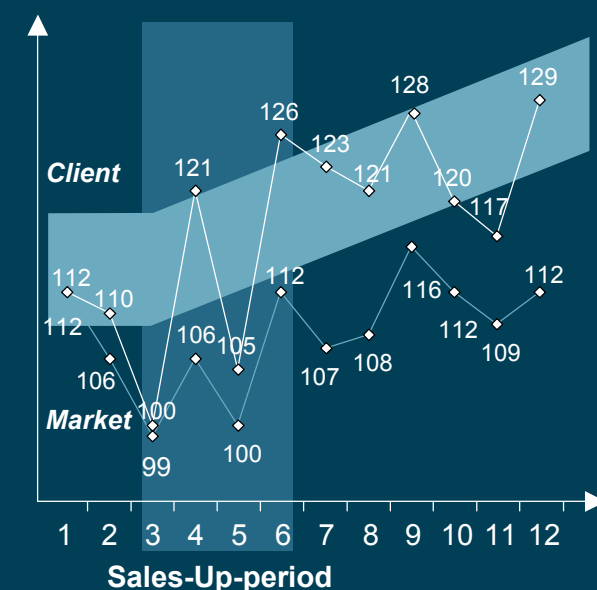
- Stimulate sales by **focusing** on markets with **highest upside potential**
- **Shift time allocation** of sales force
- Achieve **effects during and after** the actual campaign

## Best practice results for European carrier

### Market A



### Market B



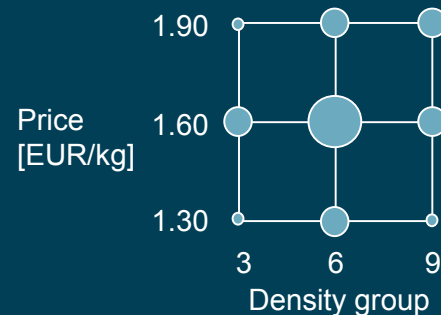
100 = CASS in previous year

# Best practice yield management systems consider the special conditions of the cargo business

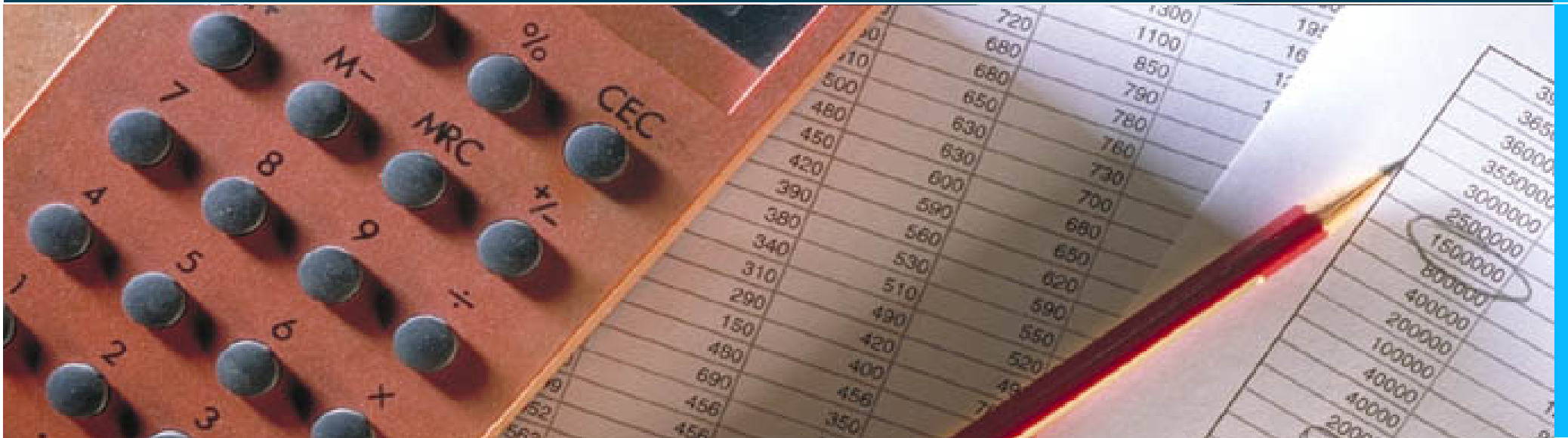
## Challenge

- Capacity is **two-dimensional** (weight and volume)
- At the time of booking the **actual price** is typically **not known** to the booking agent
- **Some customers** have a higher priority and should therefore receive **preferred capacity access**

## Solution/features of best practice yield management system



- **Forecast and optimization logic** are based on **two dimensions**
- **Interface to revenue accounting** is set up
- **Additional database** as a fallback
- For certain clients a **customer bonus** is applied



## C. Best practice concerning: Cost avoidance and control

# Best practice concerning: Cost avoidance and control

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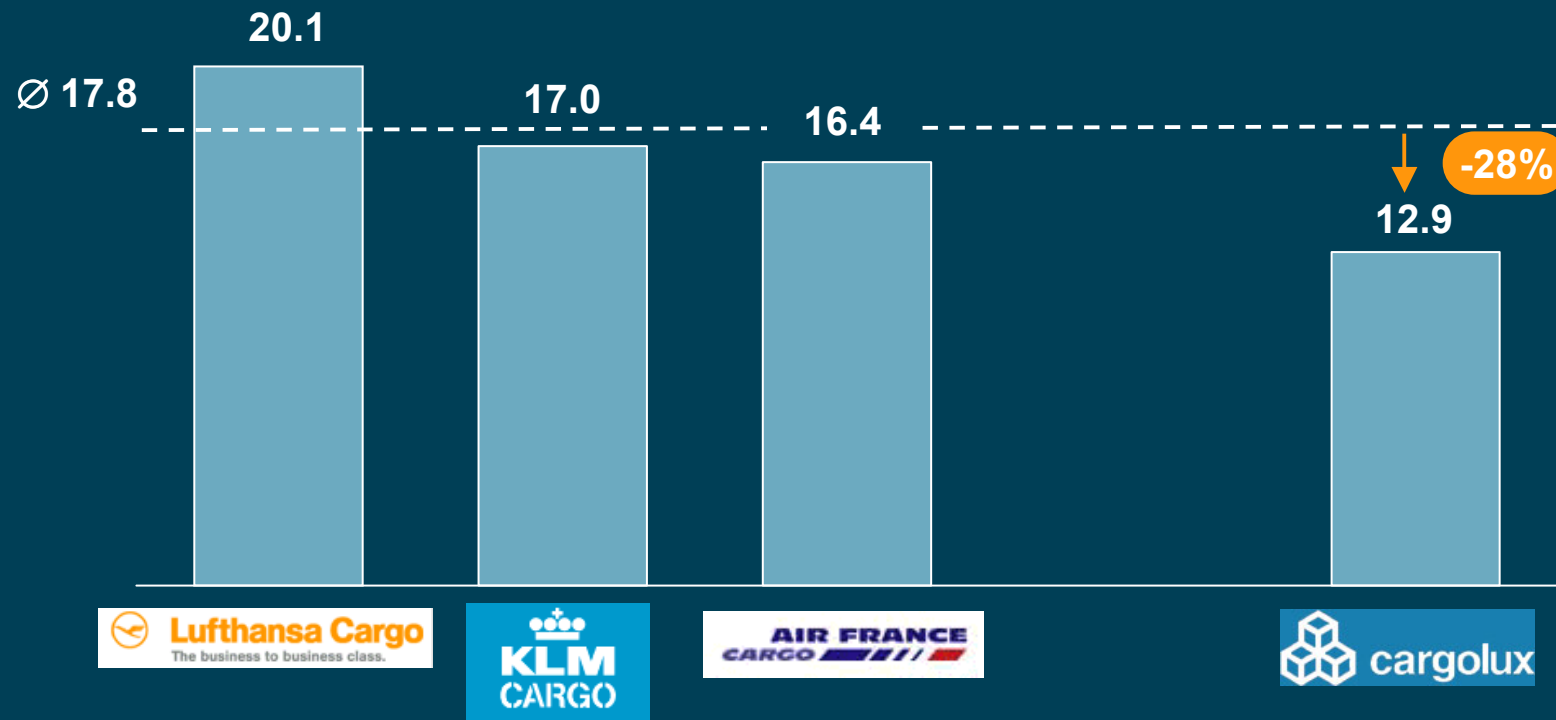
## C Reduce capital tie-up

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- Reduce working capital
- Optimize fleet financing
- Sell off unnecessary assets

# Cargolux realizes a 28%-cost advantage compared to other major European carriers

Cost/ATK for European cargo carriers, 2003 [EUR Cents]



# Explanation: Cargolux applies many of the most important cost levers

Cost lever	In use?	Comment
<b>1</b> Minimal handling costs		<ul style="list-style-type: none"> <li>• Cheap labor cost at LUX airport</li> <li>• Lowest possible product complexity</li> </ul>
<b>2</b> Cheap airport/landing/ATC fees		<ul style="list-style-type: none"> <li>• Hub based in LUX</li> <li>• However, destinations are mostly primary airports</li> </ul>
<b>3</b> High A/C utilization		<ul style="list-style-type: none"> <li>• A/C utilization stands high at 15.3 hours per day</li> </ul>
<b>4</b> Low crew costs (productivity, wages)		<ul style="list-style-type: none"> <li>• Pilot costs at CV are about 40% lower than at, e.g., Air France, Lufthansa or KLM</li> </ul>
<b>5</b> Low sales/reservation costs		<ul style="list-style-type: none"> <li>• Simple product structure</li> <li>• Large share of blocked space</li> </ul>
<b>6</b> Uniform A/C type		<ul style="list-style-type: none"> <li>• Pure 747-400F fleet</li> </ul>
<b>7</b> Lean administration		<ul style="list-style-type: none"> <li>• Lean headquarter at low personnel cost</li> </ul>

# Combination carriers can not fully close the gap, but can save up to 9% within the existing business model

## Levers for cost reduction

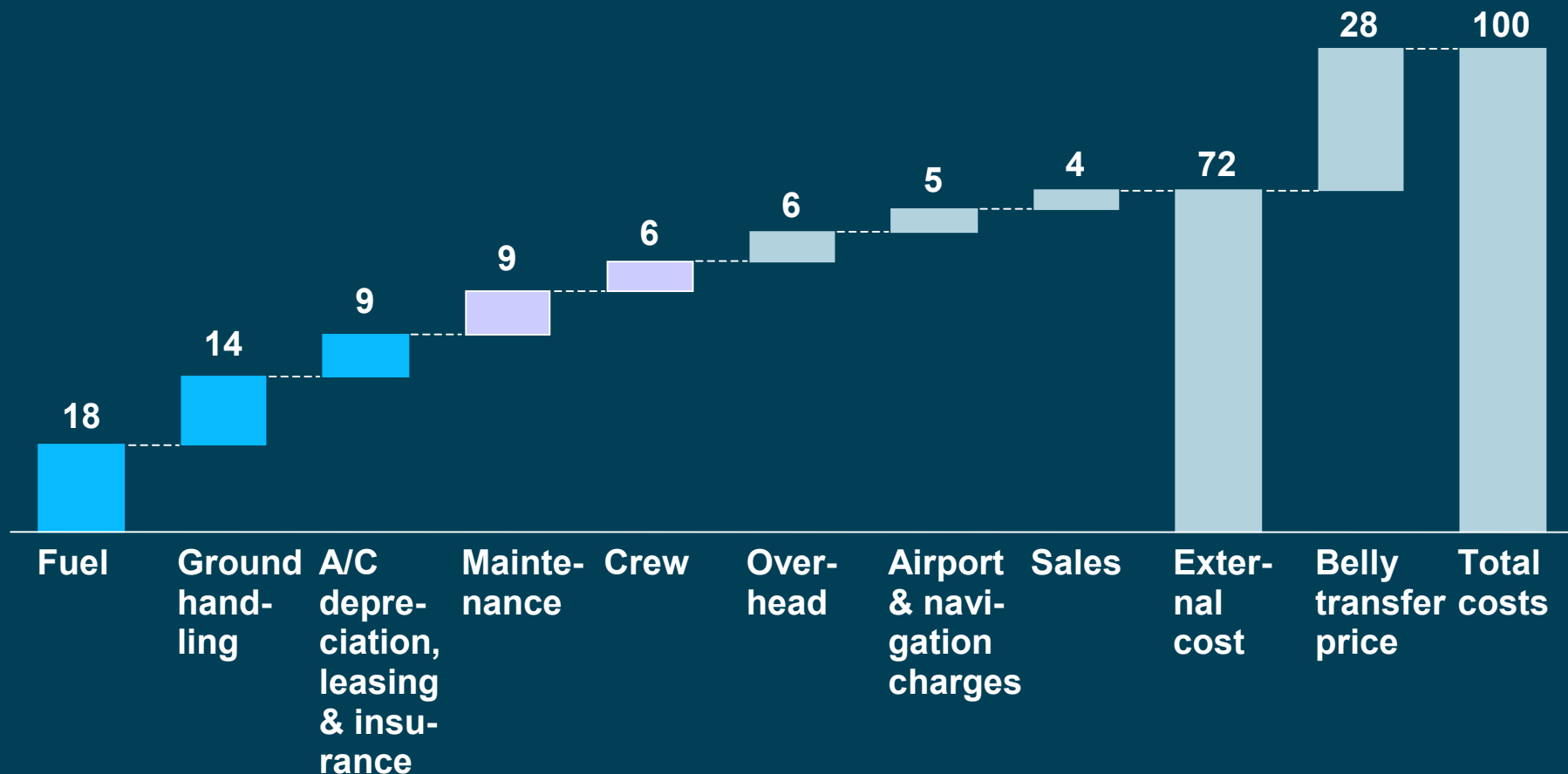
## Typical savings as % of overall costs

<b>1</b>	<b>Minimize handling costs</b> .....	1.1 – 1.9
<b>2</b>	<b>Cheap airport/landing fees</b> .....	0.3 – 0.5
<b>3</b>	<b>High A/C utilization</b> .....	0.0 – 0.4
<b>4</b>	<b>Low crew costs</b> .....	0.1 – 0.9
<b>5</b>	<b>Low sales/reservation costs</b> .....	0.5 – 1.1
<b>6</b>	<b>Uniform A/C type</b> .....	0.0 – 0.4
<b>7</b>	<b>Lean administration</b> .....	0.7 – 1.6
	<b>Renegotiate belly compensation <sup>1)</sup></b> .....	0.0 – 2.3
		<b>2.7 – 9.2</b>

1) No effect for overall group

# Fuel, ground handling and a/c-related costs are the most significant cost positions of cargo carriers

Typical cost breakdown of combination carriers [%]





## **D. Best practice concerning: Reduction of capital tie-up**

# Best practice concerning: Reduction of capital tie-up

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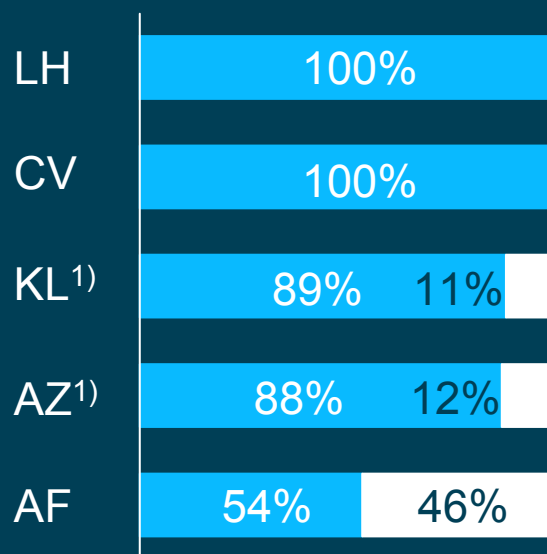
## **C** Reduce capital tie-up

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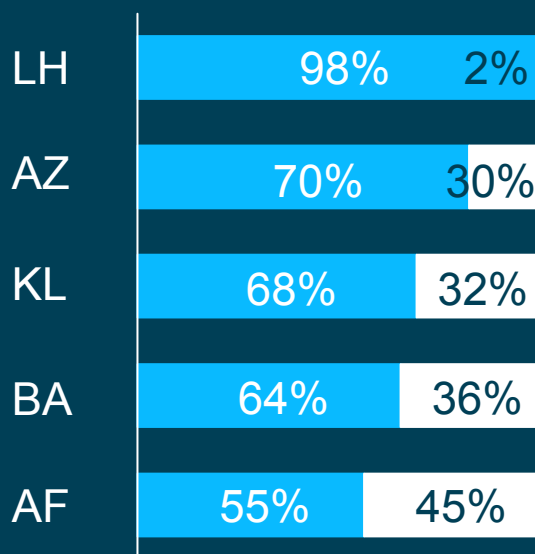
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# Without the exception of AF Cargo, cargo carriers do not optimize their capital tie-up in aircraft assets

## Finance structure of freighter fleets



## Comparison: passenger fleets



## Conclusion

- Higher proportion of owned/financially leased A/C in freighter operations
- Flexibility of operational leases at least partly used by Air France, Alitalia and KLM
- Best practice also depends on timing of purchases/deals

Owned/financial lease
  Operational lease

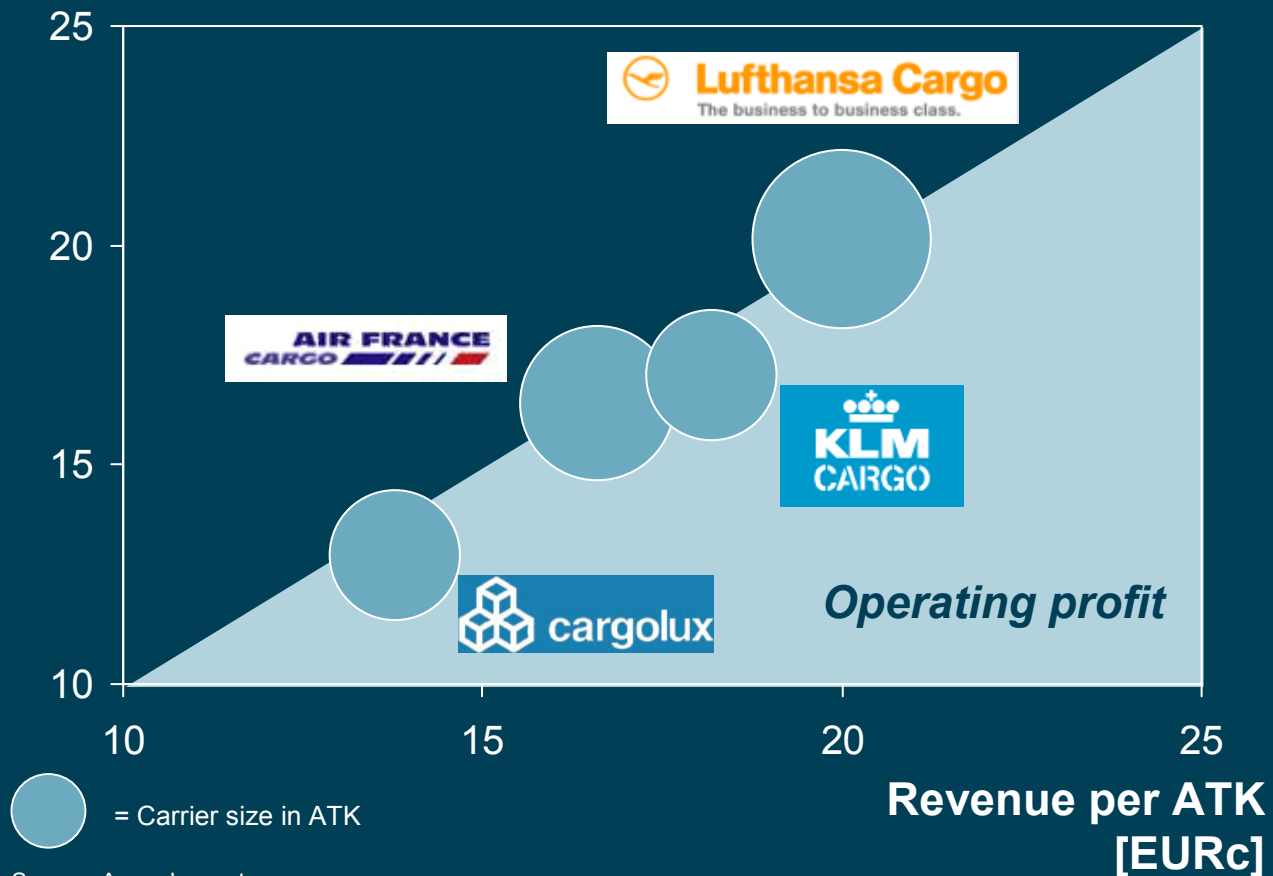
1) Including Combis



## **E. Takeaway/lessons learnt**

# In a nutshell, there is no overall best practice player in the European air cargo industry

Cost per ATK  
[EURc]



- Unit revenues and unit costs are strongly correlated
- From all major European cargo carriers Lufthansa Cargo is best positioned in terms of yield
- Cargolux can rely on a very good cost position

## However, ...

**... by introducing innovations in, e.g., products, quality management and yield management, some carriers manage to stabilize yields better than others**

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**... Cargolux demonstrates that a low cost cargo carrier is feasible – some aspects of the concept should be adopted by combination carriers**

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**... the balance sheet structure of cargo airlines leaves room for improvement**

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**Thank you for your attention!**

**Holger Sindemann**

*Partner*

Roland Berger Strategy Consultants

**[holger\\_sindemann@de.rolandberger.com](mailto:holger_sindemann@de.rolandberger.com)**