

# Study Case Business class concept

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June 2019





# Summary

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## Introduction



This study case is focusing on the modification of the forward lower deck in order to embed a dedicated space for the business class. The afterward lower deck would remain as a cargo hold for freight and luggage.

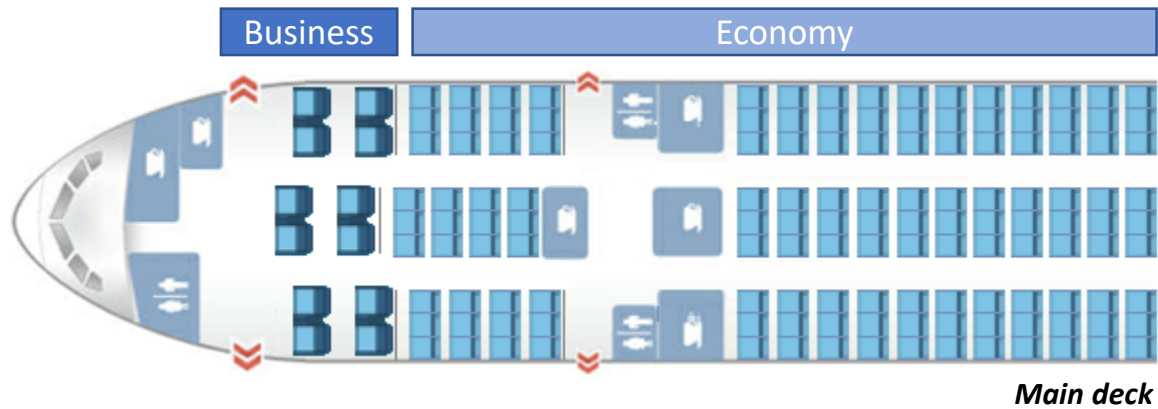
During this modification, the cargo floor is lowered, stairs are created and the forward cargo door is replaced by an EarthBay product. In addition the area is refurbished to create a cabin and a zone for lavatories (with all the necessary supplies like water, waste, air conditioning).

The following is assumed regarding the operator:

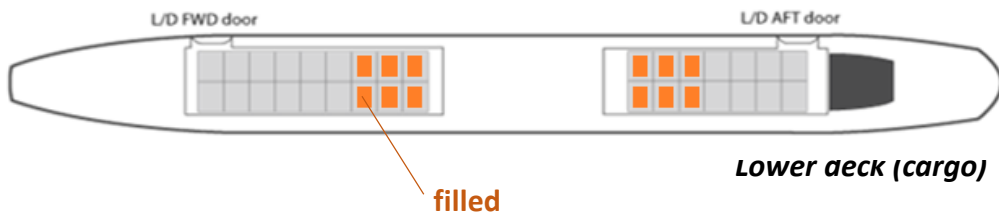
- Wide-body aircrafts operating long-haul flights
- Charter or low-cost market segment
- Freight loading factor of 40% or less on a significant group of destinations



# Baseline

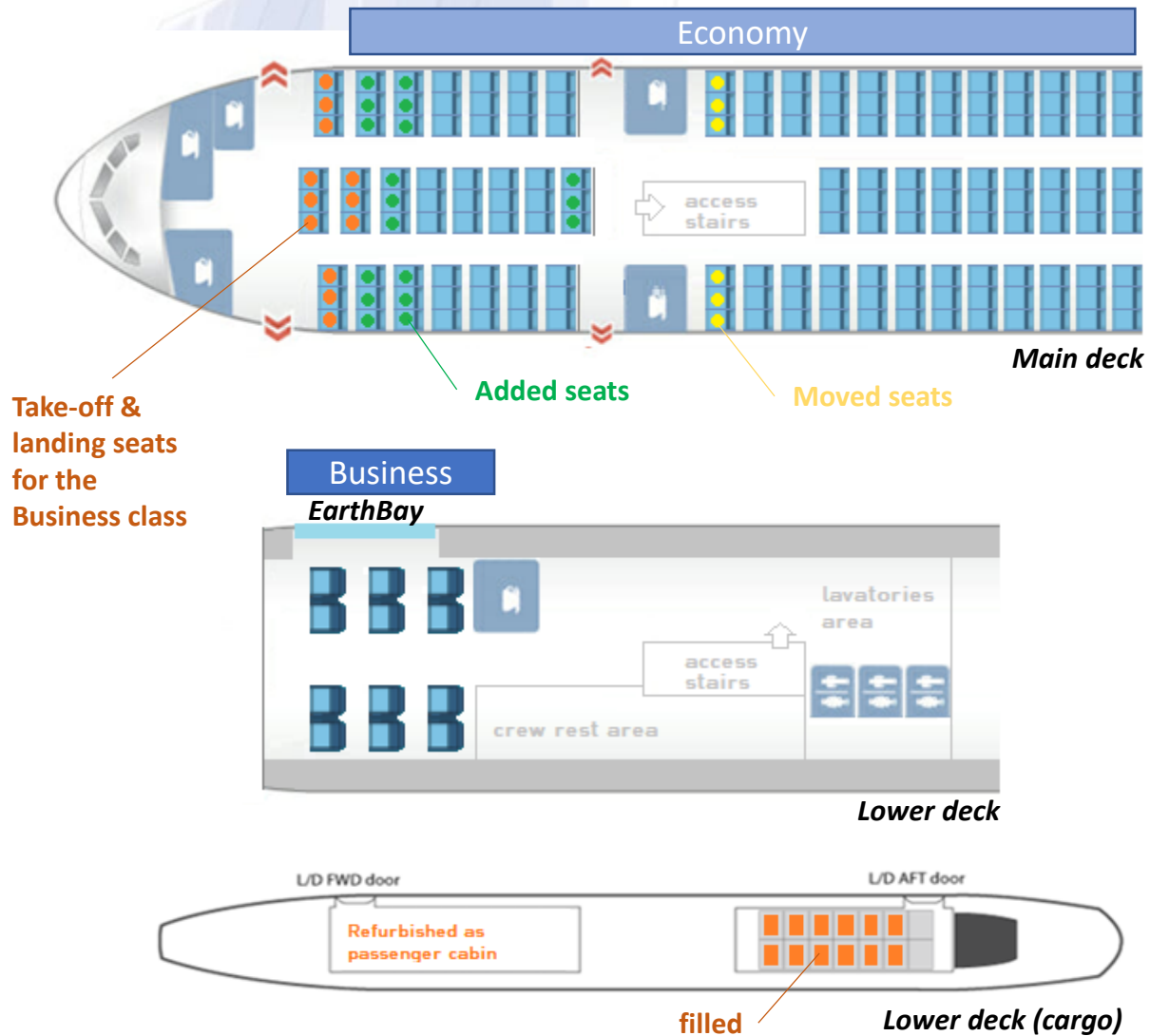


The baseline for this study case is an initial cabin layout composed of 12 Business class and 338 Economy seats on the main deck.



In this study, the operator has a freight load factor of 40%.

# After cabin refurbishment



In this scenario, the passenger capacity is increased from 350 to 368 passengers with the following dispatch on the main deck:

- 12 Take-off & landing seats for business class
- 356 Economy class seats (+18)

Stairs allow access to the lower deck, which is composed of two areas accessible in flight:

- A business class
- A lavatories area (public)

The same quantity of freight would be carried in the afterward cargo compartment.



# Modification cost scenario

Modification steps	Cost (\$)
Move 12 business class seats in lower deck	2.000\$
Remove main deck lavatories (qty 3) and galleys (qty 2)	2.000\$
Move main deck galleys (qty 2)	1.000\$
Install new large galley in new locations on the main deck (qty1)	100.000\$
Install new blocs of 3 economy seats on main deck (qty 10)	50.000€
Create stair case to reach forward cargo hold	300.000\$
Cargo hold adaptation: lowering the floor & moving harnesses, ducting & piping, creation for all necessary supplies like power, water, waste...	700.000\$
Install new lower deck lavatories (qty 3)	300.000\$
Install new lower deck galley (qty 1)	100.000\$
Create new crew rest area	500.000\$
Replace the cargo door by an EarthBay product	500.000\$
<b>TOTAL</b>	<b>2.555.000\$</b>

These costs, given only for information, reflects the modification of an in-service A/C, for example during a heavy maintenance check. It includes a portion of non-recurring costs covering engineering studies.



## Revenues scenario

assumptions	
Extra seats	18
Average occupancy rate	80%
Average income per seat per flight	400\$
Flights per year	700



**+4.000.000\$**  
**per year per A/C**

These revenues, given only for information, reflects the gain compared to the baseline configuration.

This is equivalent to 10M FTK per year.

In the case of a freight load factor above 40%, it would be necessary to compare with the losses of cargo revenues



Thank you



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