

Airbus Innovation Days

Dr Kiran Rao

Executive Vice President Strategy and Marketing

The most
comprehensive
product line



Airbus Product line

Airbus Family

From 100 to 600+ seats

Covering short, medium and long range



A380 Family
From 400 to 600+ seats



A350 XWB
From 280 to 370 seats

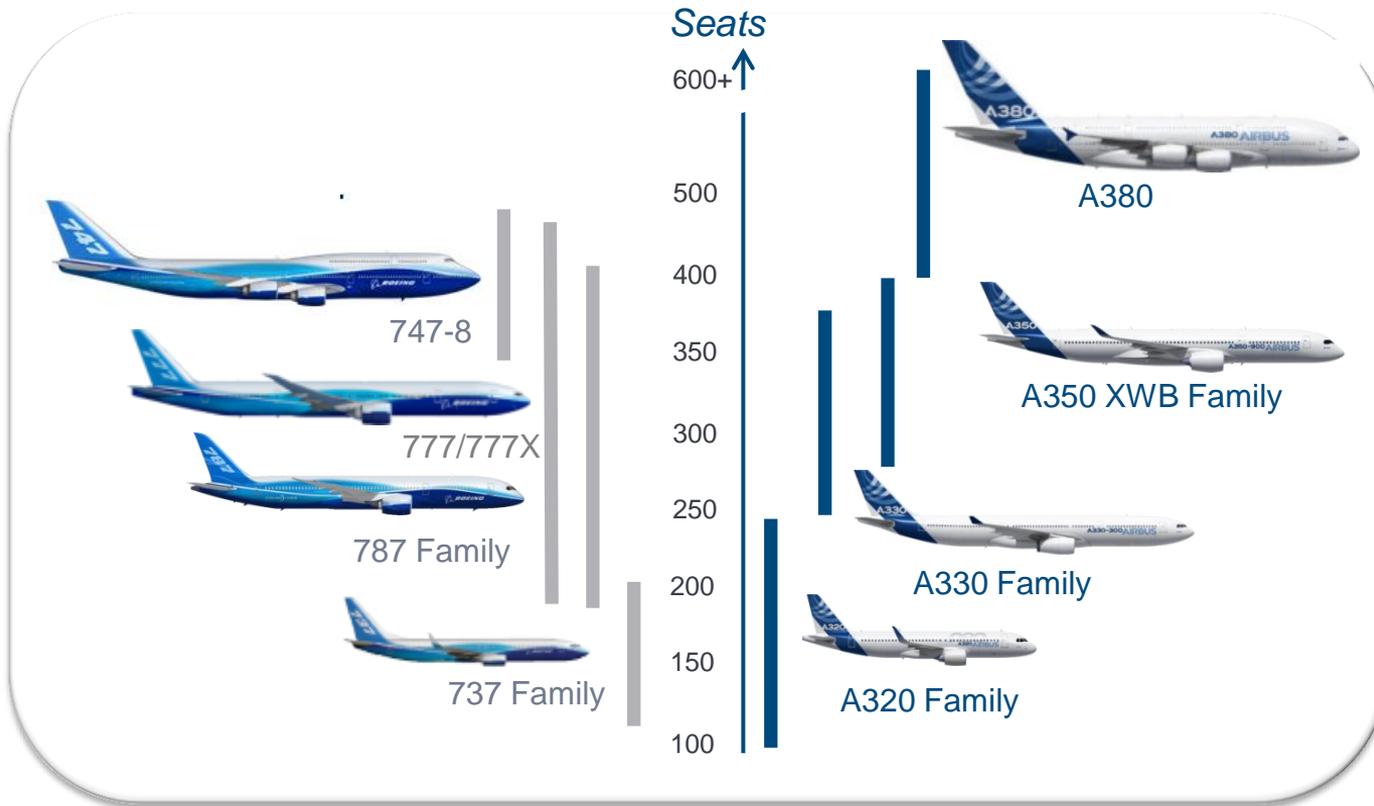


A330 Family
From 250 to 300 seats



A320 Family
From 100 to 240 seats

Airbus vs. Boeing Product line



— Seat capacity (minimum – maximum)

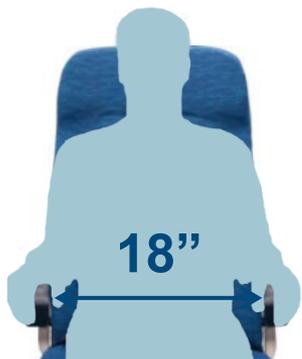
Airbus Family

A complete, far-sighted product line

Airbus Product line, designed for:

Comfort

Airbus products offer superior comfort



Efficiency

Airbus products offer superior efficiency



Profitability

Airbus products offer superior profitability



Airbus Product line

A320 Family

A320 Family, the
leader in the Single
Aisle market



A380 Family
*From 400 to 600+
seats*



A350 XWB
*From 280 to 370
seats*



A330 Family
*From 250 to 300
seats*



A320 Family
*From 100 to 240
seats*

A320neo vs. 737 MAX Family



A320neo Family

Well spaced Family protecting each other's value

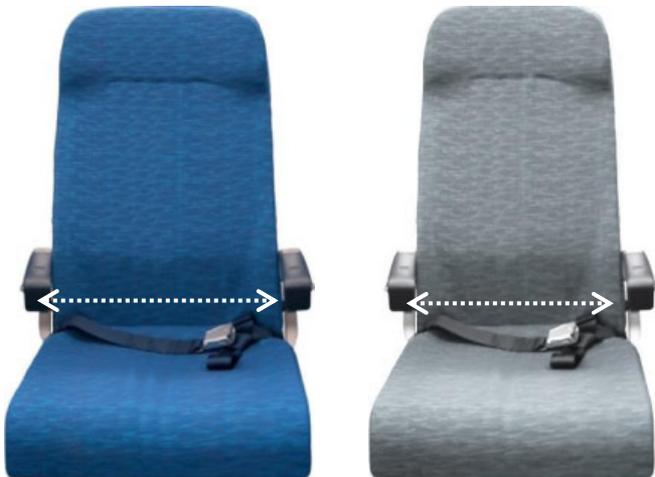
3 sizes cover the market from 140 to 240 seats



Passenger comfort expectations

A320
18"

737
17"



18" wide seats for more Personal Space*

Personal space = seat pitch * seat width

A320

737



4
frames



3
frames



15% more volume for all your belongings



A320neo Cabin

18" wide seats
1" wider than the 737

Widest Single-Aisle cabin
in the sky

New pivoting bins
60% more bags

Increased Cabin Efficiency
Space-Flex
Smart-Lav
Airbus Cabin-Flex

LED Mood lighting
16.7 million colours



A320neo Family vs. 737 MAX cost efficiency

A320neo
18" seat width

vs.

737 MAX 8
17" seat width

Cash Operating
Cost per seat

+5%



A320neo PW Advantage
189 seats

737 MAX 8
197 seats

A321neo
18" seat width

vs.

737 MAX 9
17" seat width

Cash Operating
Cost per seat

+14%



A321neo PW Advantage
240 seats

737 MAX 9
215 seats

Airbus standard economic rules; Comparison at 800nm, \$2/USg, HD Configuration

A320 Family non-stop innovation to enhance airline profitability

Landing Gear and Fuel Pumps

Lower Maintenance costs



Universal IFE platform

Integration of IFE and connectivity



Smart-Lav

Up to +6 seats



Space-Flex V2

Up to +6 seats



A321 High & Hot

35k Thrust



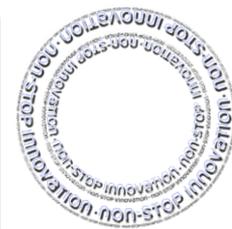
Cabin-Flex

Increasing seat count on A321 to 240



Brake-to-Vacate*

Improve runway occupancy

2014

2015

2016

2017

2018

2019

2020



Lower Maintenance costs

Full LED



15% fuel burn reduction




A320 189 seats
A321 230 seats

Increased Exit Limit



Improved pilot operations

Wifi in Cockpit



Improved low speed performance

SHARP**



4000nm

A321LR



2% further fuel reduction

PW Advantage

*Subject to launch ** Short Airfield Performance

A320 Family innovation to enhance airline profitability

A320 space optimization



Slim-line seats



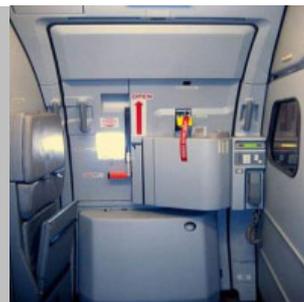
Space-Flex

New rear galley configuration



Smart-Lav

New lavatory design



New door rating

Increased Exit Limit



Airbus Cabin-Flex

A321neo new door configuration

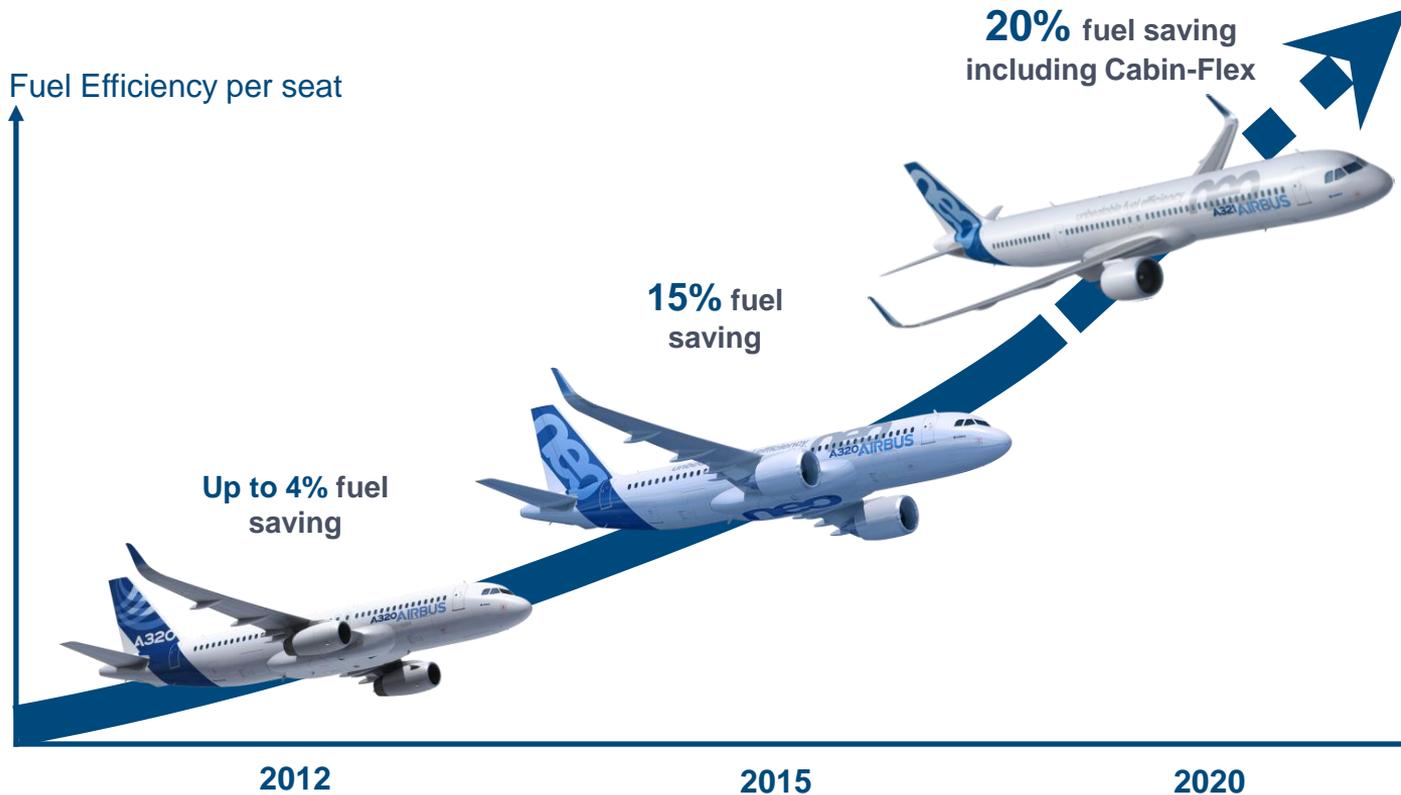
A319: +15 seats

A320: +9 seats

A321neo: +20 seats

Innovation that brings benefits to both network carrier and Low Cost configurations

A320 Strategy - Making the best better



A320 strategy

Non-stop innovation built on proven values with focus on airline profitability

Airbus Product line

Airbus twin aisle Family

Complementary
A330 and A350
Families, the
winning
combination



A380 Family
*From 400 to 600+
seats*



A350 XWB
*From 280 to 370
seats*



A330 Family
*From 250 to 300
seats*



A320 Family
*From 100 to 240
seats*

A330neo vs. 787 Family



787-9

283 seats (9 abreast)



A330-900

287 seats (8 abreast)



787-8

244 seats (9 abreast)



A330-800

257 seats (8 abreast)

A330neo Family

Unbeatable mid size aircraft

Unbeatable comfort & economics

A330: Setting the standards in passenger comfort



A330
18"



787
17"



18" wide seats for more Personal Space*

Personal space = seat pitch * seat width

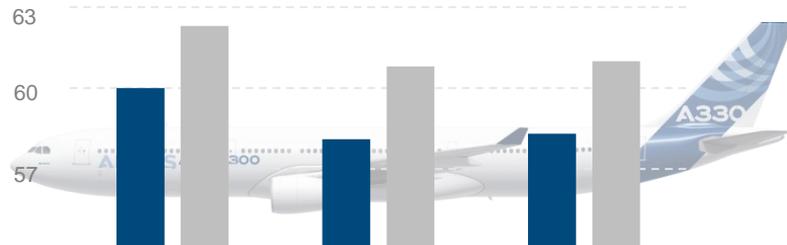
NOISE LEVEL
(dB SIL)



Door 1 - Door 2

Door 2 - Door 3

Door 3 - Door 4



A330 787

A330 is **quieter** than 787

AIRSPACE

New A330neo cabin

A350 XWB style

New bins

New entrance area

Efficiency

Space Flex

Smart Lav

Quietness

3dB quieter than 787

Comfort

1in wider seat than 787

1in wider aisle (8ab)

A330neo



A330neo vs. 787 Family cost efficiency

A330-800

18" seat width

vs. 787-8

17" seat width

Cash Operating Cost per seat Direct Operating Cost per seat



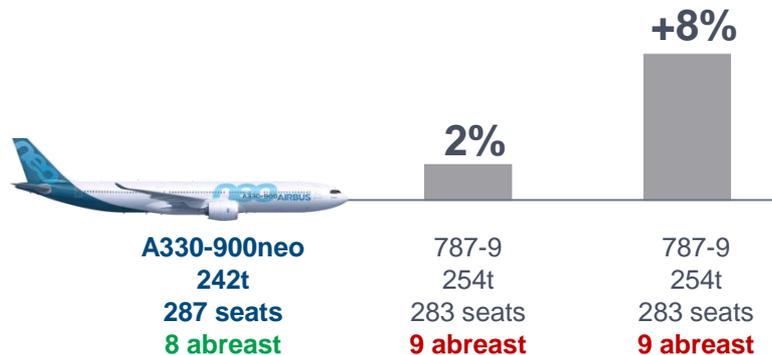
A330-900

18" seat width

vs. 787-9

17" seat width

Cash Operating Cost per seat Direct Operating Cost per seat



Airbus standard economic rules; Comparison at 4000nm, \$2/USg, ; Typical 3-class configuration

A330 Family non-stop innovation to enhance airline profitability

240min ETOPS

More direct routings



RNP AR

Optimised flight paths



FTIS

Flammability reduction



FMS 1A

New FMS release



AP/FD TCAS

Collision avoidance systems



Regional

Lower operating costs and MTOW



Dual HUD

Improved situational awareness



AIRSPACE

More seats, New cabin



2009

2010

2011

2012

2013

2014

2015

2016

2017



Improved SFC/maintenance



New weight variant



Improved traffic awareness



FMS landing system



On-ground navigation and runway overrun prevention



Ground based Landing



Increased range and new cabin features



New engines new sharklets

Upgraded Engines

235t/238t MTOW

ATSAW

FLS

OANS & ROPS

GBAS

242t MTOW

A330neo

A330 Family innovation to enhance airline profitability



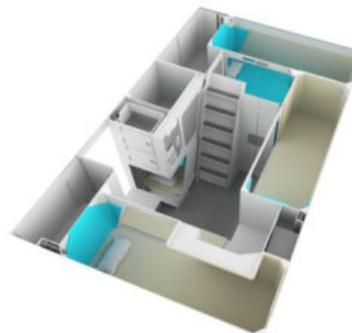
New design lavatory

- Spa package
- More revenue space



Modular Space-Flex

- PRM Lavatories
- Additional 4.5 Trolleys



Optimized Lower Deck Crew Rest

- More ergonomic and comfortable interior for cabin and flight crew
- More revenue space

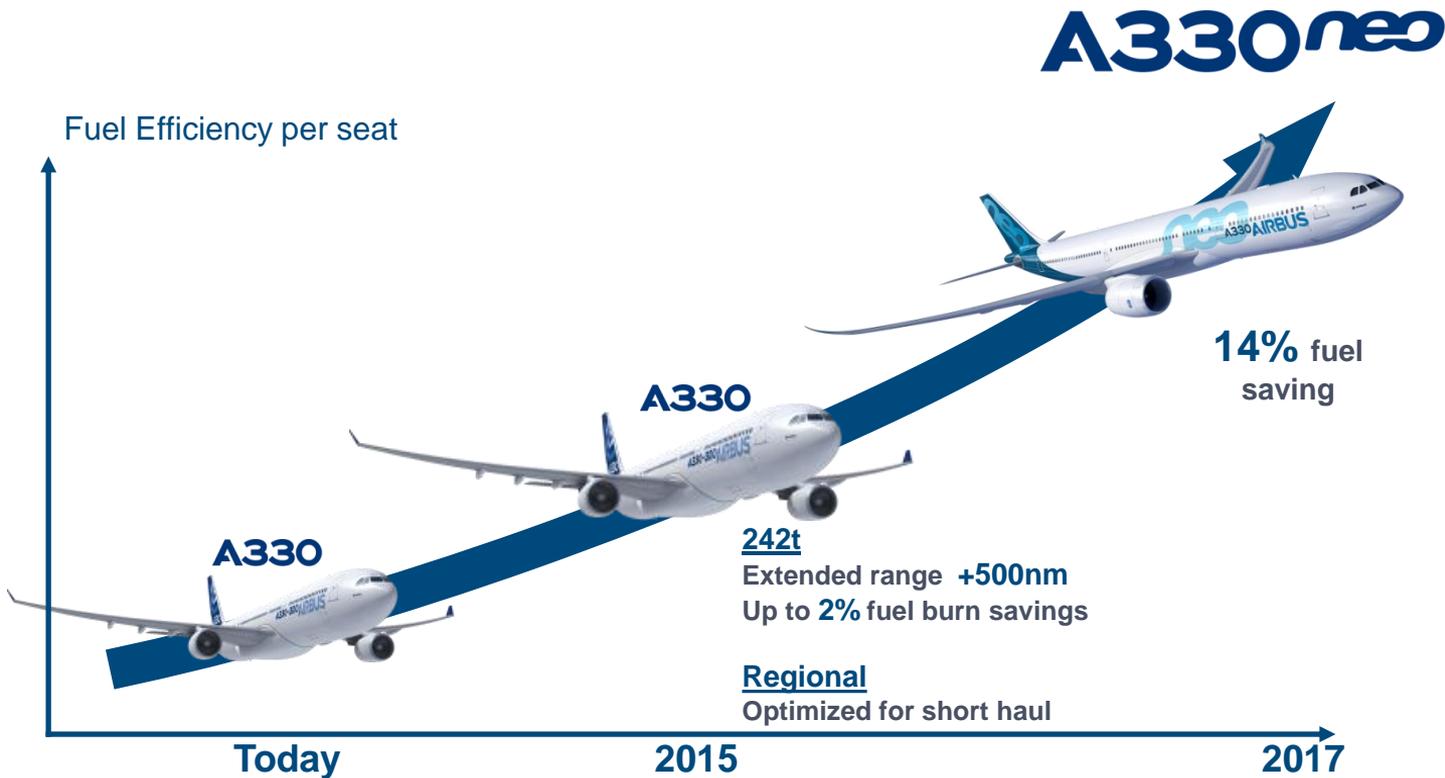
A330neo space optimization



Up to 10 seats
gain without
compromising
comfort

A330 strategy

A well defined product strategy with focus on airline profitability



A350 XWB vs. 787 Family and 777-9

A350 XWB Family

One new generation family vs two different generation families



777-9

398 seats **(10 abreast, 17")**



A350-1000

366 seats **(9 abreast, 18")**



787-10

324 seats **(9 abreast, 17")**



A350-900

325 seats **(9 abreast, 18")**



787-9

283 seats **(9 abreast, 17")**

Passenger comfort expectations



A350 XWB

18"



787/777

17"



18" wide seats for more Personal Space*

Personal space = seat pitch * seat width

A350 XWB



Uncompromised comfort with **9** abreast

AIRSPACE



reddot award
winner



A350 XWB Cabin

Comfort

18" Y-class seat width
Wide panoramic windows

Efficiency

Largest overhead bins on the market
Space-efficient monuments

Technology

4th generation IFE
Unique flat floor
Full LED moodlighting

Well being

Quietest cabin in its class
Optimal cabin environment



A350 XWB Family vs 787 & 777-9 cost efficiency

A350-900

18" seat width

vs. 787

17" seat width

Cash Operating Cost per seat Cash Operating Cost per seat

+10%

+4%



A350-900
325 seats
9 abreast

787-9
283 seats
9 abreast

787-10
324 seats
9 abreast

A350-1000

18" seat width

vs. 777-9

17" seat width

Cash Operating Cost per seat

+7%



A350-1000
366 seats
9 abreast

777-9
398 seats
10 abreast

Airbus standard economic rules; Comparison at 4000nm, \$2/USg, ; Typical 3-class configuration



A350 XWB space optimization



6-trolley galley

Up to +3 seats



ICE rear galley

Up to +6 seats



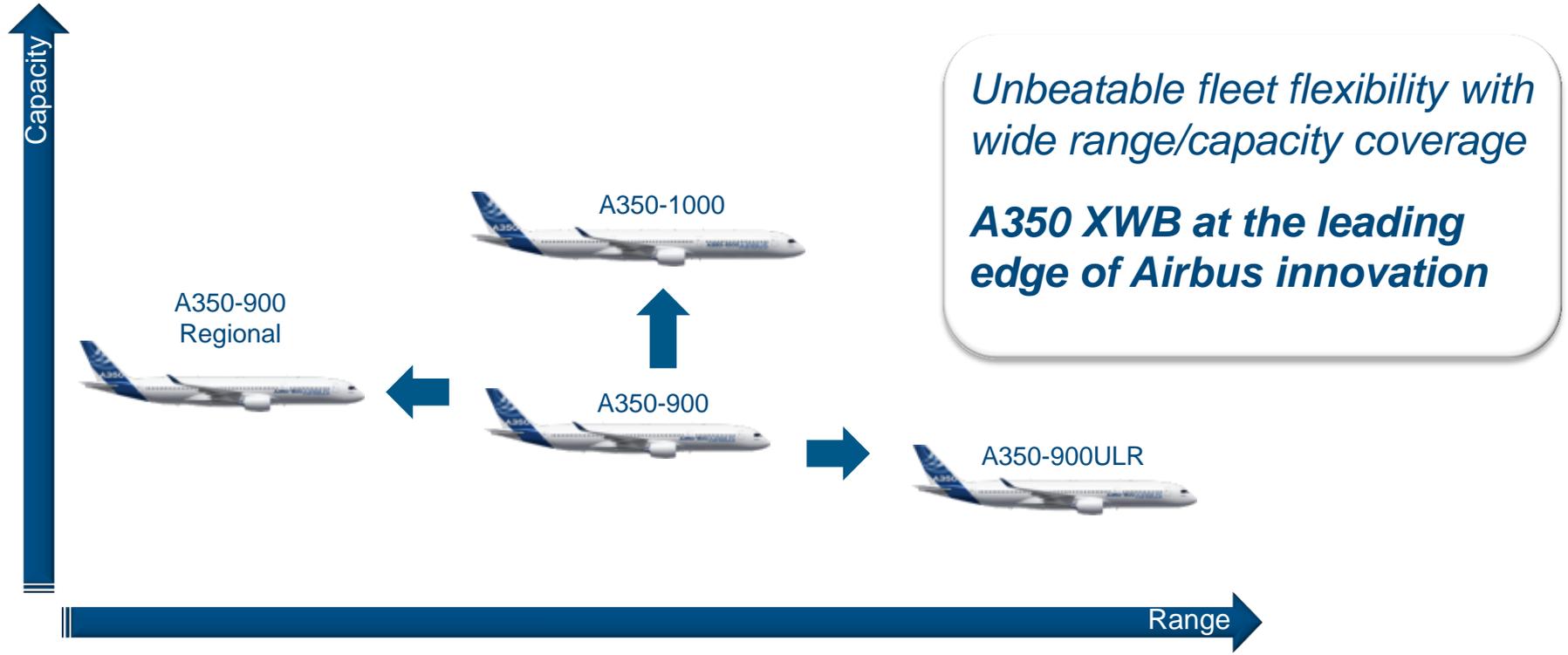
Smart-lavs

Up to +6 seats

**Up to 15 seats
gain without
compromising
comfort**

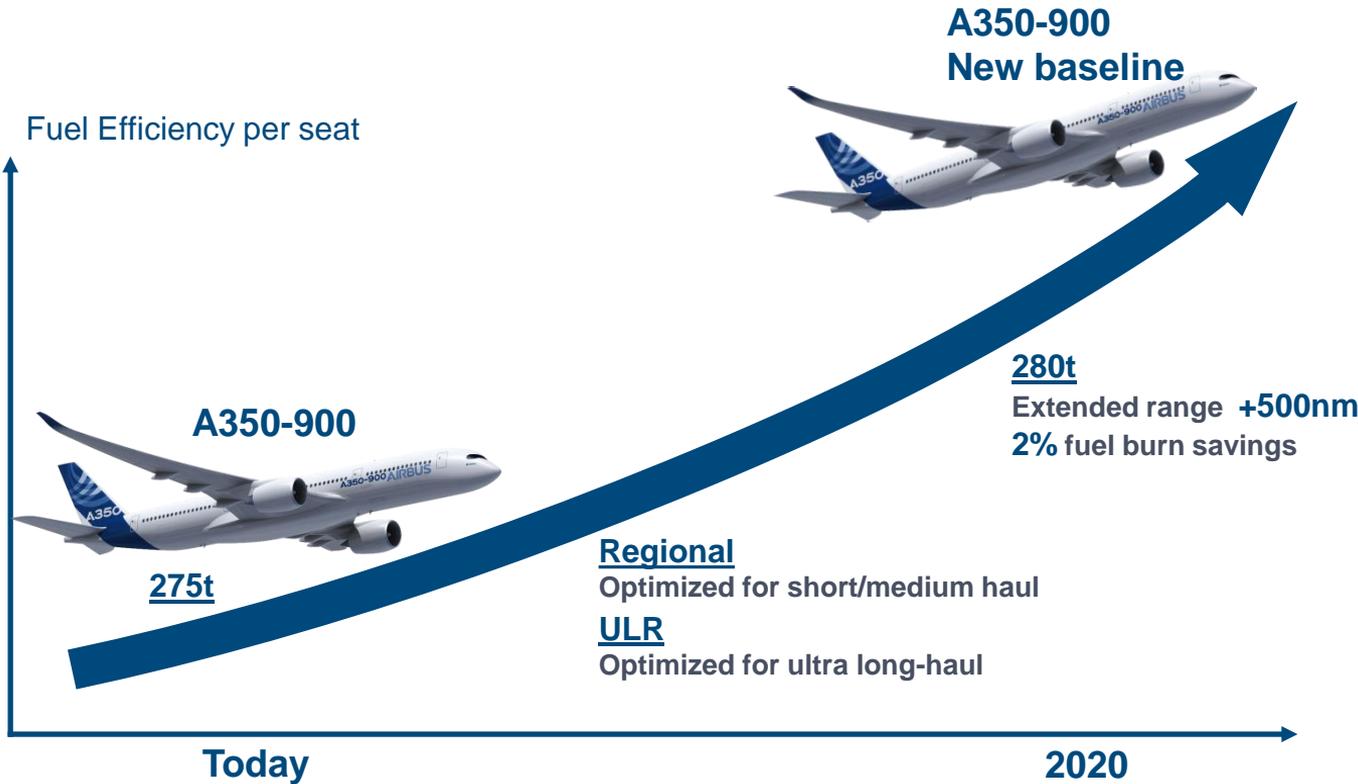


A350 XWB Family designed to maximize airline profitability



A350 XWB strategy

Continuous incremental development turning innovation into higher aircraft value



1% from aerodynamic enabler, 1% from engine enabler

Airbus Product line

A380 Family

Undisputed
Industry flagship



A380 Family
*From 400 to 600+
seats*



A350 XWB
*From 280 to 370
seats*



A330 Family
*From 250 to 300
seats*



A320 Family
*From 100 to 240
seats*

Passenger comfort expectations



A380
18"



777
17"



18" wide seats for more Personal Space*

Personal space = seat pitch * seat width

A380



Etihad Residence



Asiana Economy class



Emirates shower spa



Air France Economy class

A **unique** passenger experience



A380 vs 777-9 cost efficiency

A380 vs. **777-9**
 18" seat width vs. 18" seat width

Cash
 Operating
 Cost per seat

+23%



A380
 544 seats
 11 abreast



777-9
 291 seats
 9 abreast

A380 vs. **777-9**
 18" seat width vs. 17" seat width

Cash
 Operating
 Cost per seat

15%



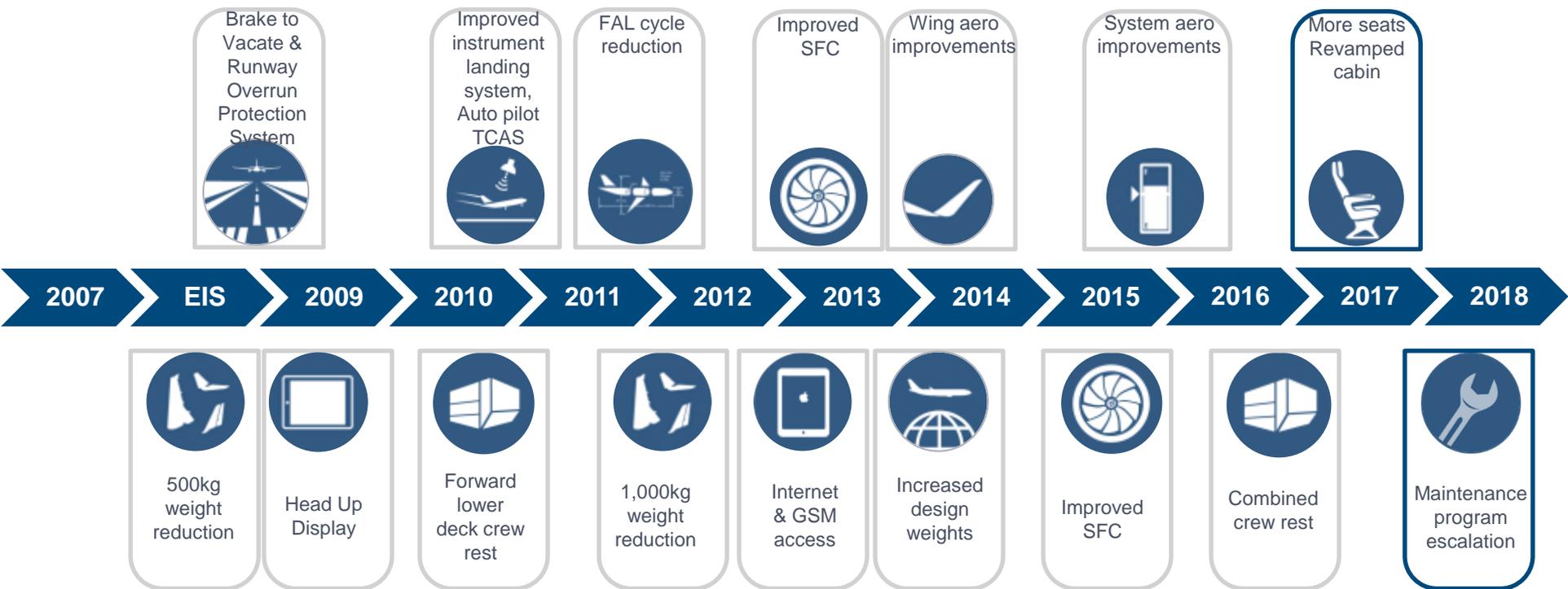
A380
 544 seats
 11 abreast



777-9
 311 seats
 10 abreast

Airbus standard economic rules; Comparison at 4000nm, \$2/USg, ; Typical 4-class configuration

A380 non-stop innovation since entry into service





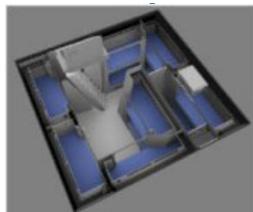
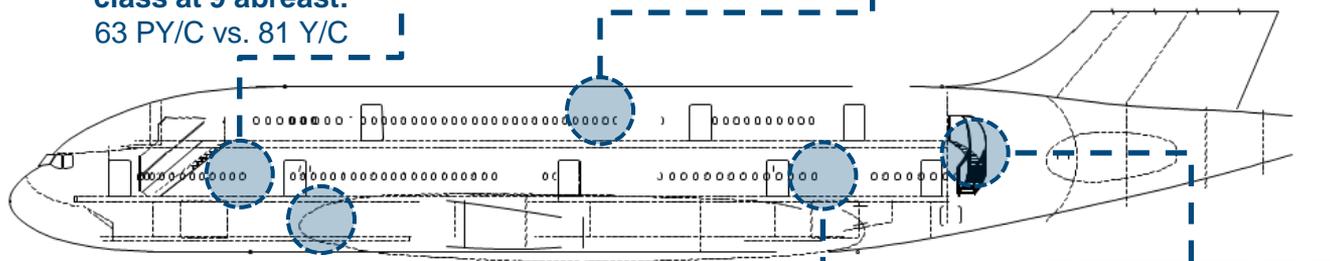
A380 Cabin enablers



Premium economy class at 9 abreast:
63 PY/C vs. 81 Y/C



Upper deck sidewall storage removal:
+10 B/C seats



Combined crew rest compartment: +3 PY/C
+5 Y/C + 1 pallet



Economy class at 11 abreast: +23 Y/C seats



New rear stair*:
+14 Y/C seats

\$23 million in additional revenue per year

* Project development study

NON-STOP INNOVATION DELIVERS...



Undisputed
industry
Flagship



The winning combination
Strong market recognition
of complementary roles



Single aisle
leader

...COMFORT, EFFICIENCY AND PROFITABILITY