



Farnborough International Airshow 2018

**THE
FUTURE
IS BUILT
HERE**

**COMMERCIAL
MARKET
OUTLOOK** 2018 - 2037

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Vice President, Commercial Marketing

July 17, 2018

The CMO is our long-term forecast of global air travel, new airplane demand and commercial services

All jets >30 seats and freighters in commercial service



Services required to support the operation of commercial aviation

Very strong market expected in 2018

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4.3B
passengers carried

+7.0%
RPK growth

3.2%
economic growth

~82%
load factor



\$34B
net profit

+4.0%
FTK growth

Why the CMO?

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Shape

Our product strategy



Guide

Long-range business planning



Inform

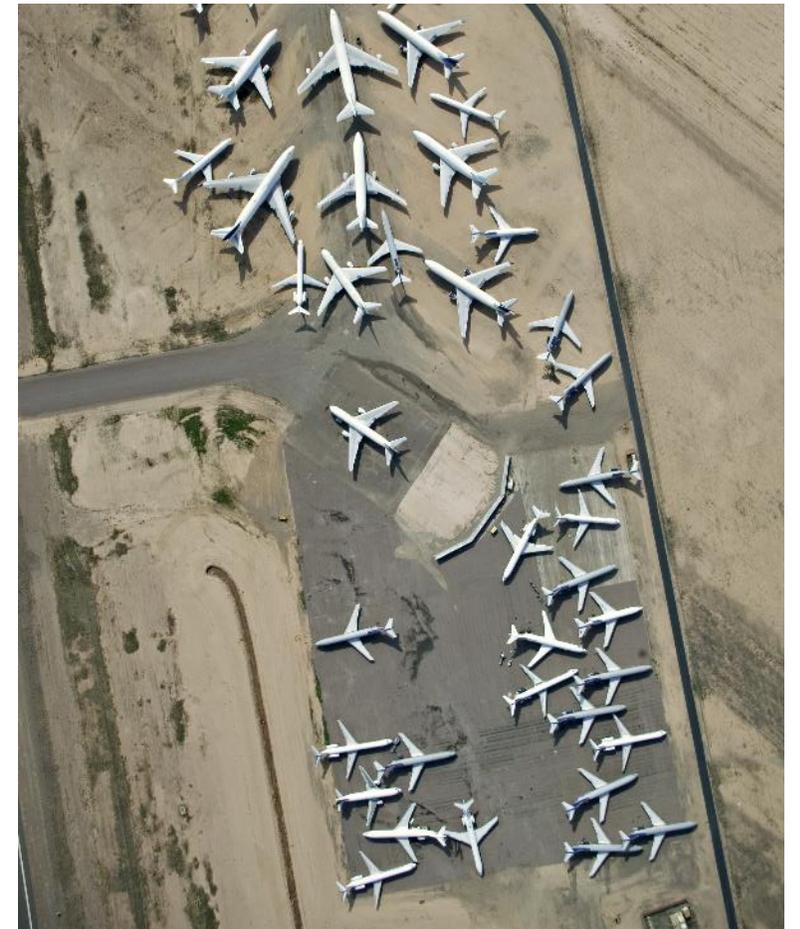
Suppliers and airline customers



Balanced growth



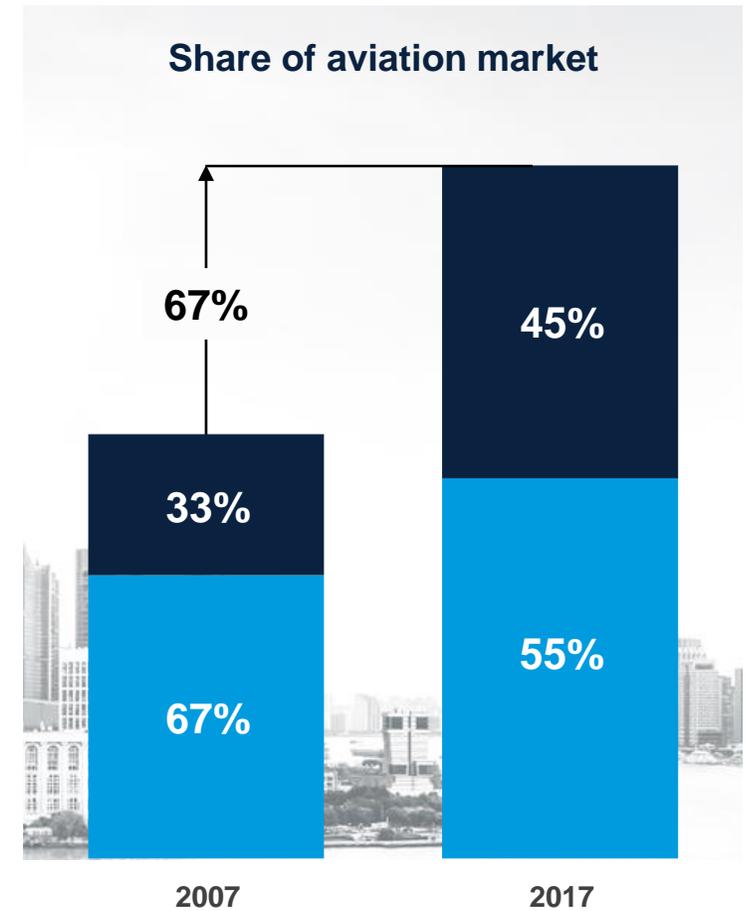
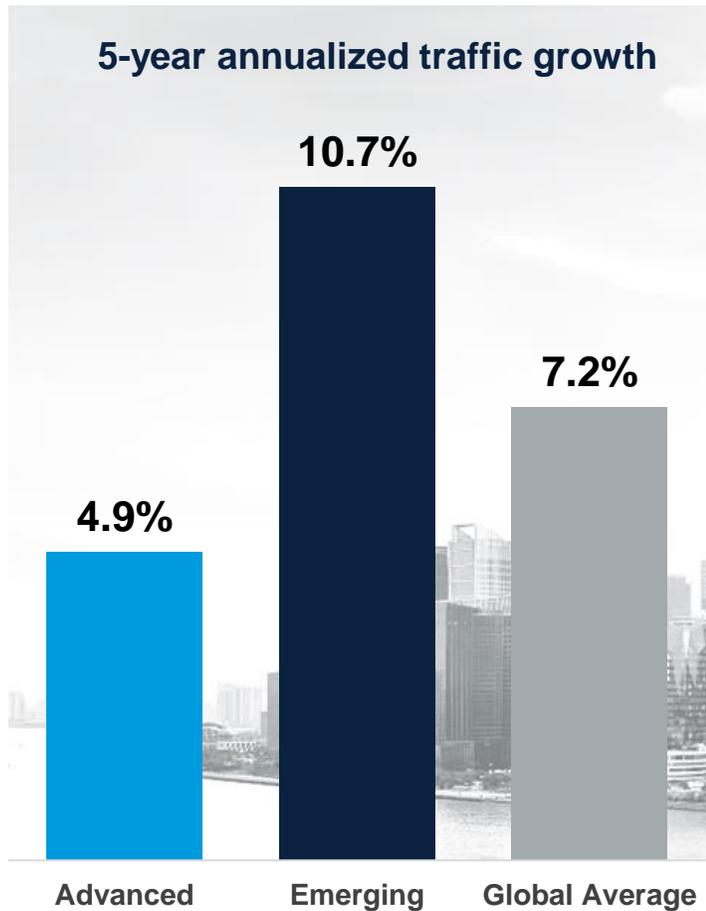
Productivity and innovation



Replacement

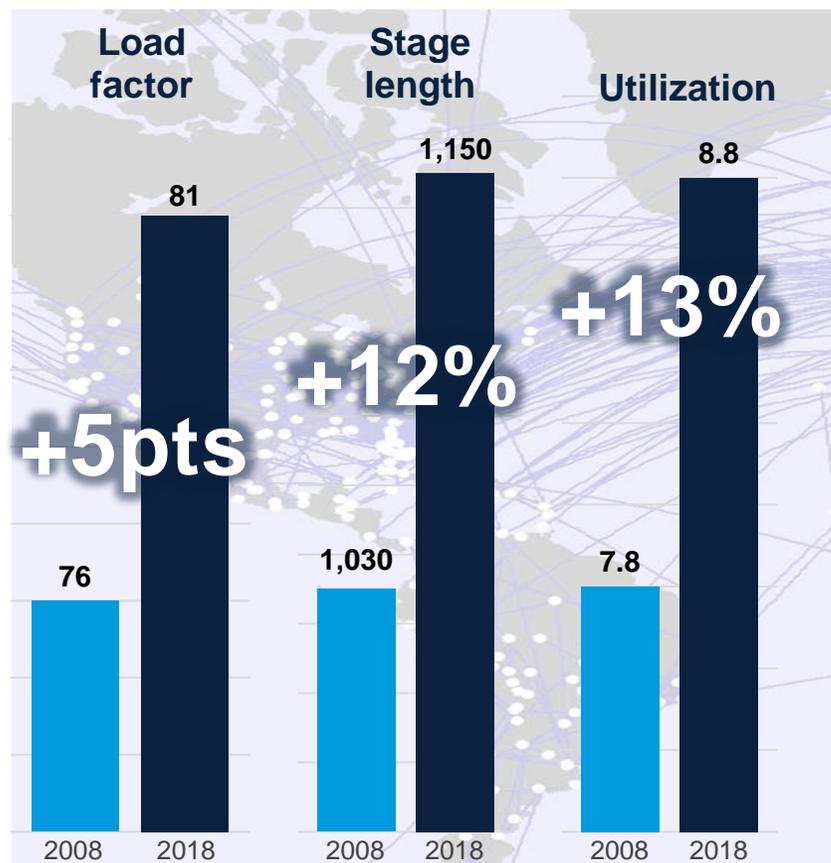
Balanced growth driving market

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Dynamic innovation and productivity improvements

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Stage lengths increasing across market segments

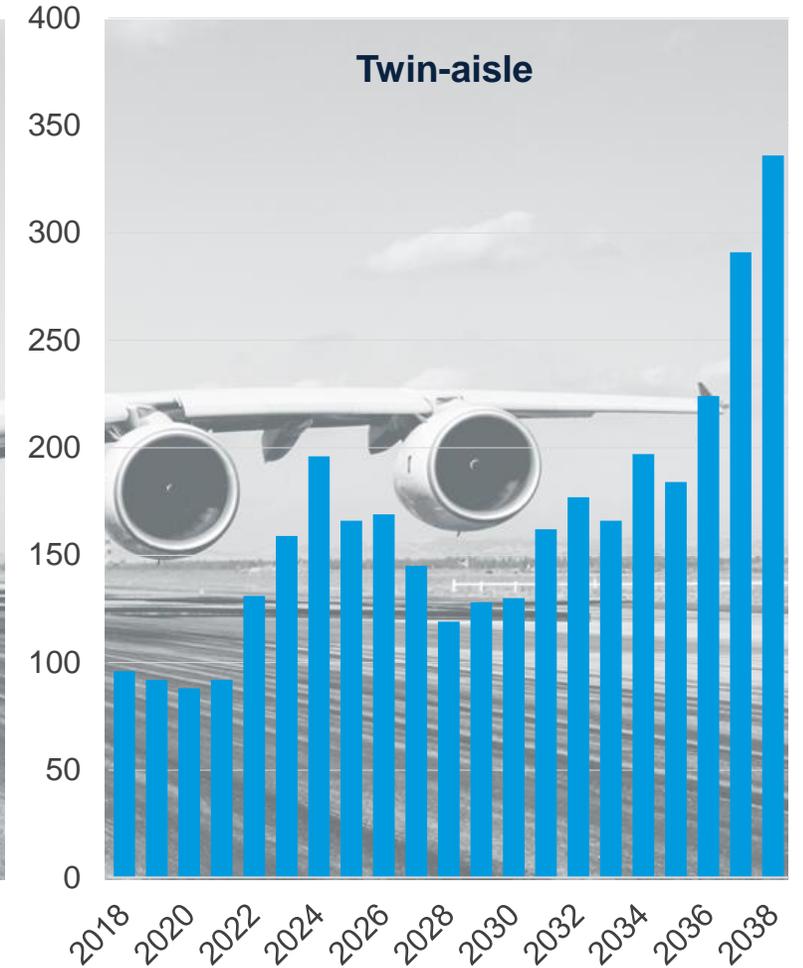
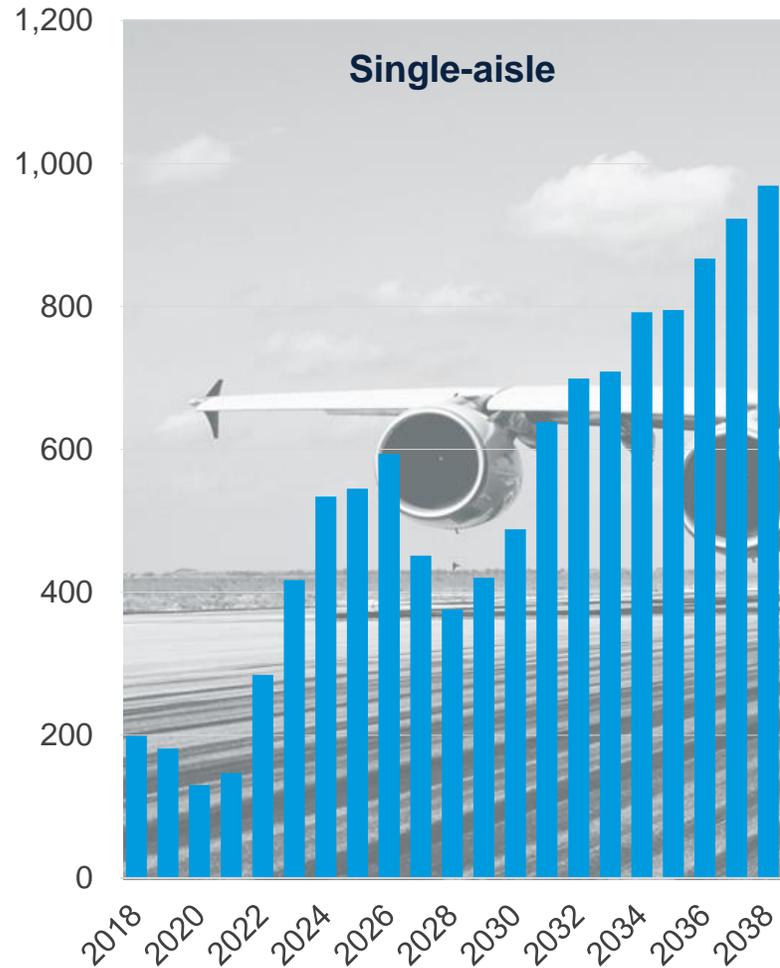
Record productivity stimulates growth

Network expansion accelerating, business models evolving

>2,000
new city pairs in past year

Increasing replacement needs

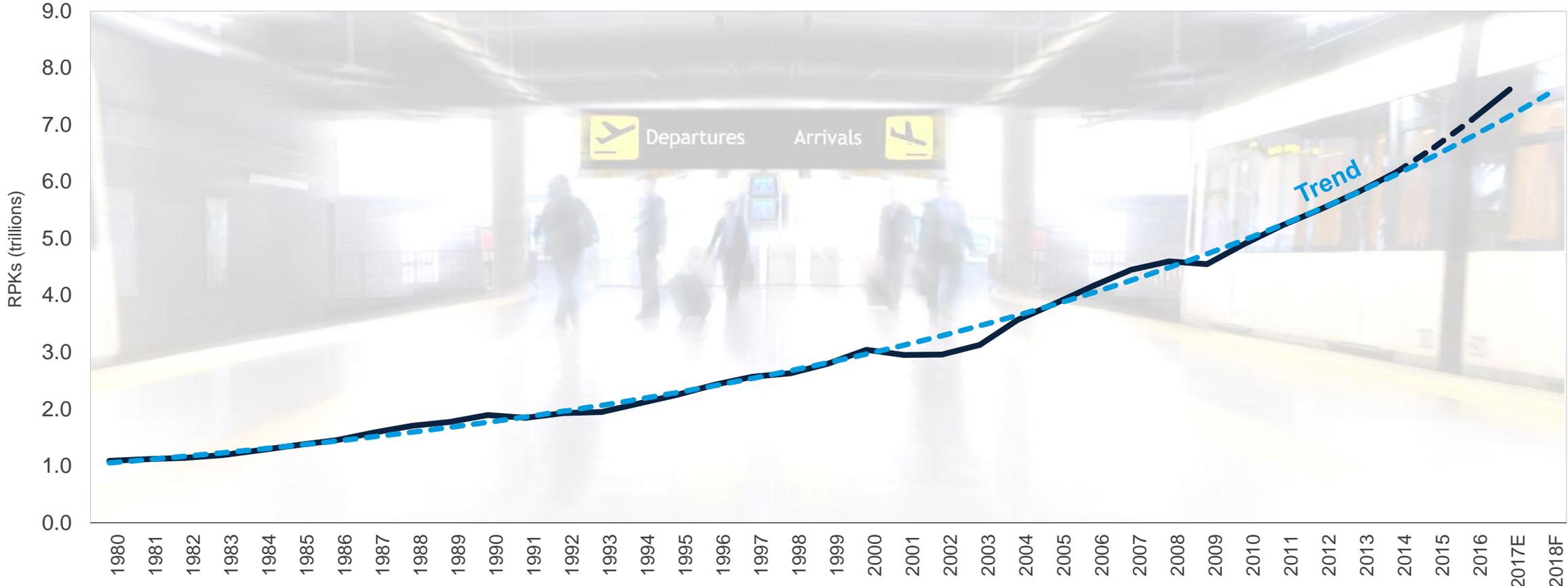
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Passenger and freighter airplanes turning 25 years old
SOURCES: Flightglobal Ascend Online database & BCA Analysis; excludes more than 750 SA and 150 TA airplanes that are older than 25 years

Resilient, growing market expected to continue

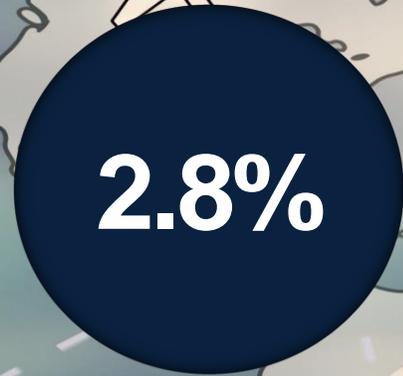
5% long-term growth rate



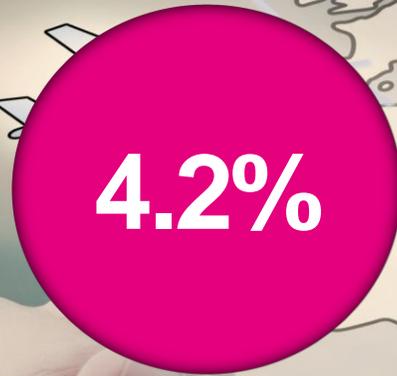
RPKs = Revenue Passenger Kilometers
SOURCE: ICAO scheduled traffic / 2017E/2018F IATA December 2017

20-year forecast: Continued long-term growth

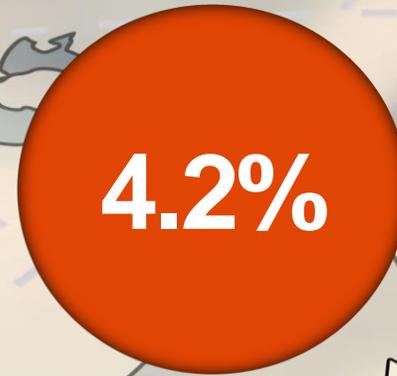
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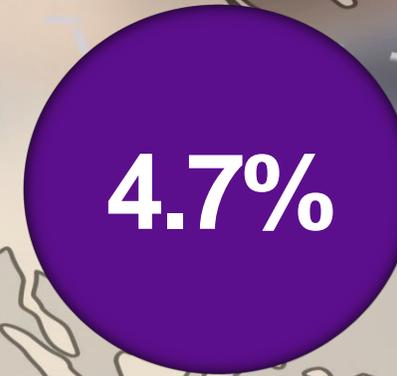
**World
economy
(GDP)**



**Commercial
services
(\$)**



**Cargo
traffic
(RTK)**



**Passenger
traffic
(RPK)**

Average annual growth

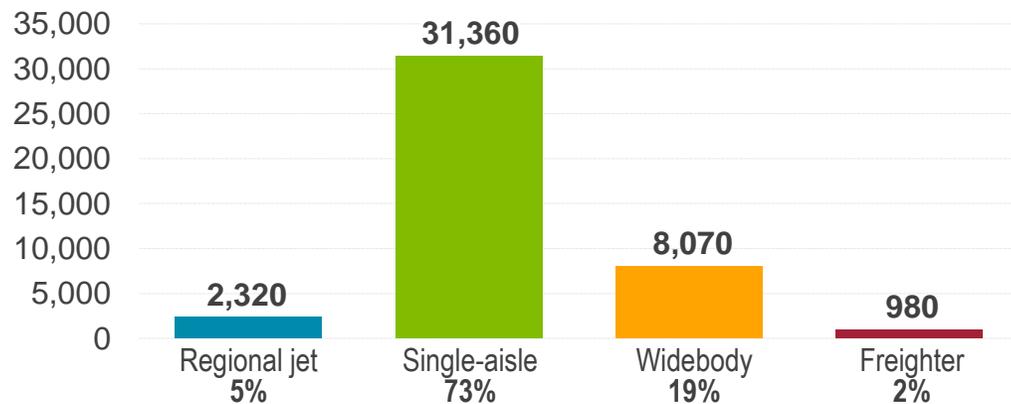
Airlines will need 42,700 new airplanes valued at \$6.3 trillion

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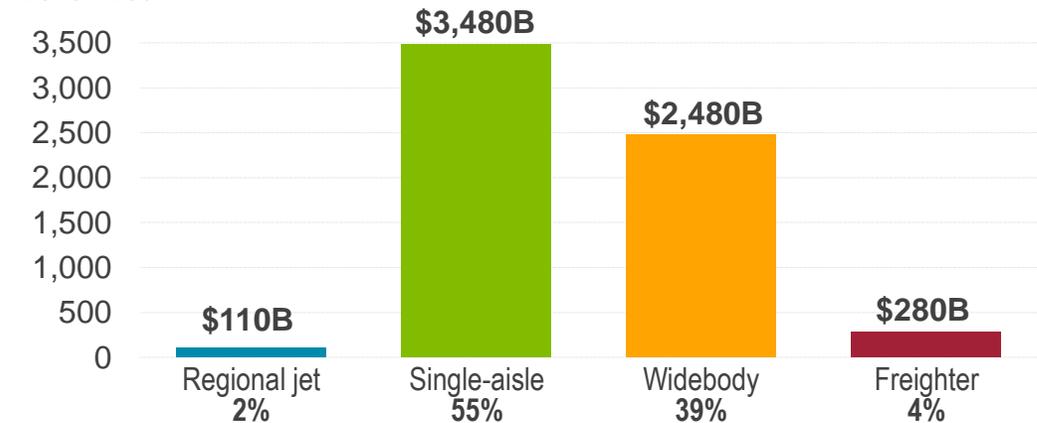
Airplane deliveries: 42,700

2018 - 2037

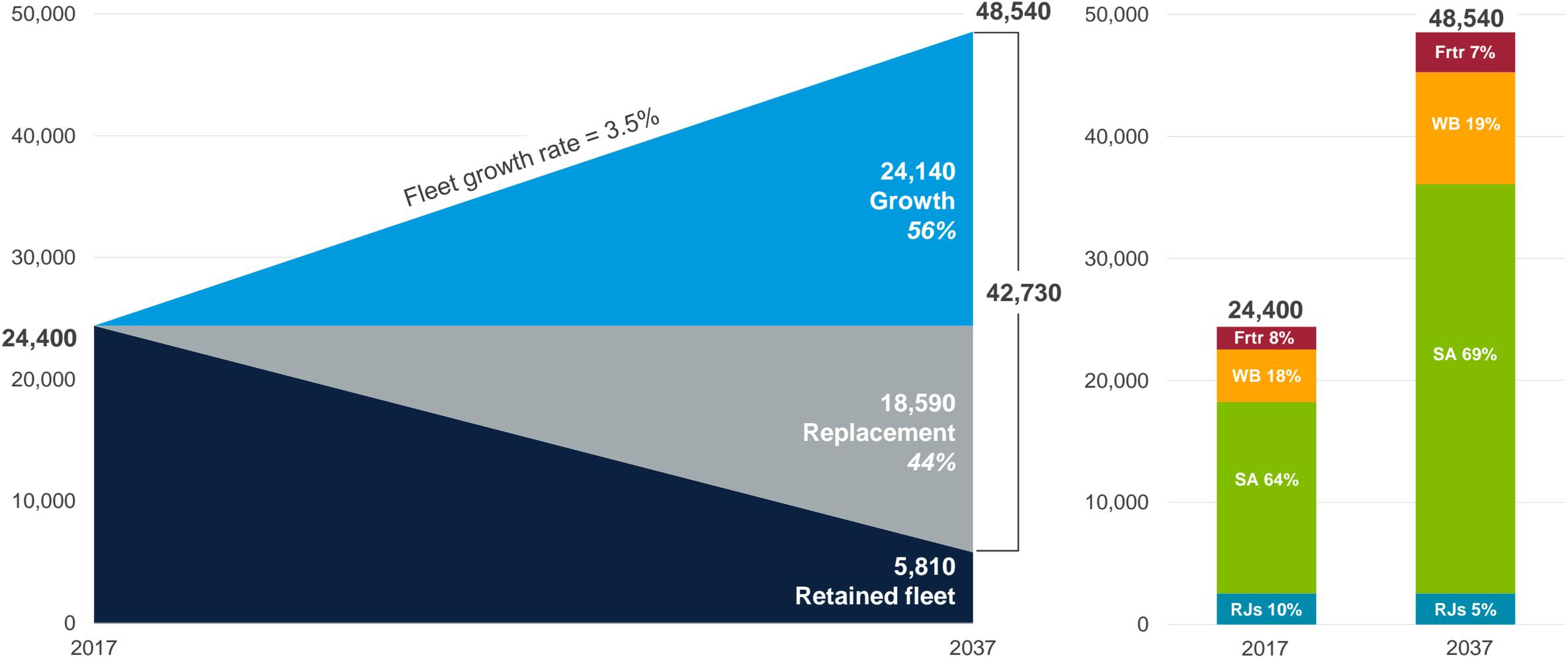


New airplane values: \$6.3T

2018 - 2037



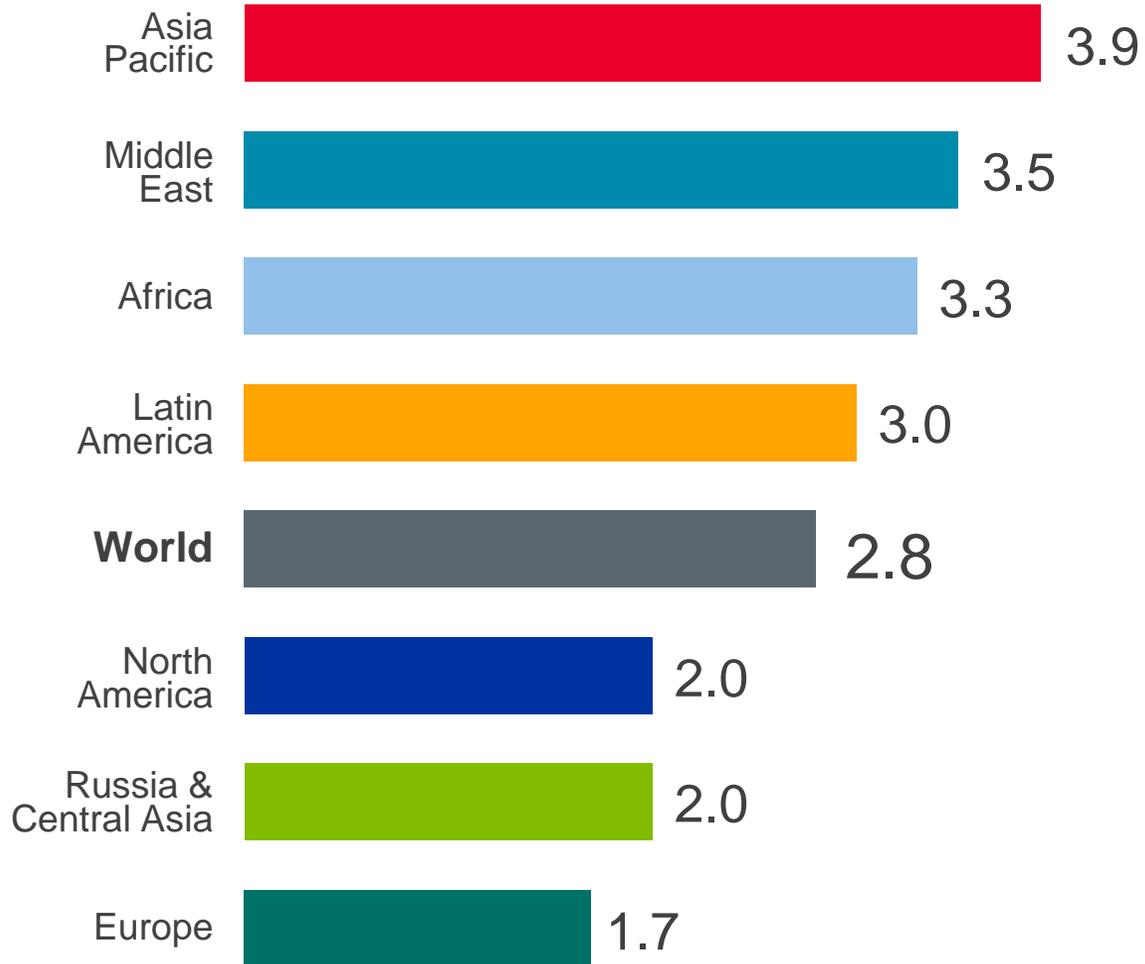
Fleet will double, composition to shift



SOURCE: Fleet Analyzer & Boeing CMO

Emerging markets are driving economic growth

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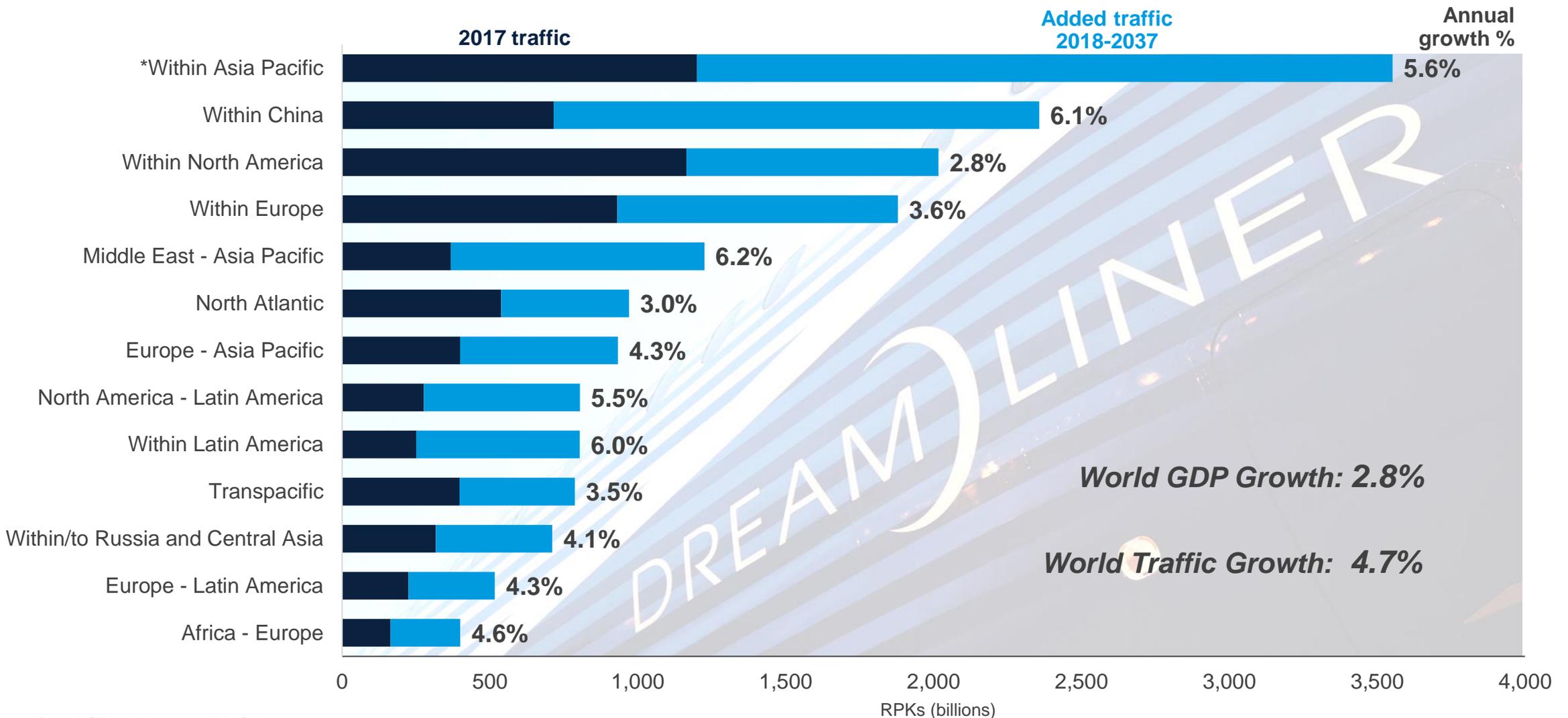


SOURCE: IHS Economics 2017 – 2037 annual GDP growth



Air travel growth varies by market

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*Does NOT include travel within China

Asia Pacific responsible for 40% of future airplane demand

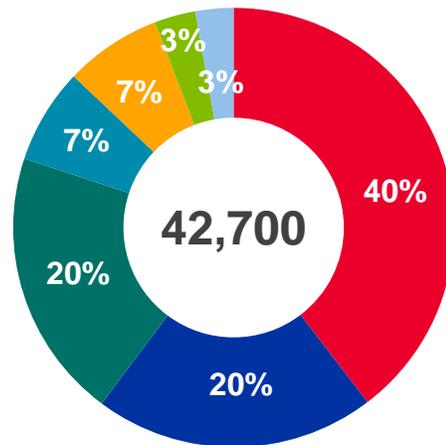
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New airplane deliveries by region

2018 - 2037

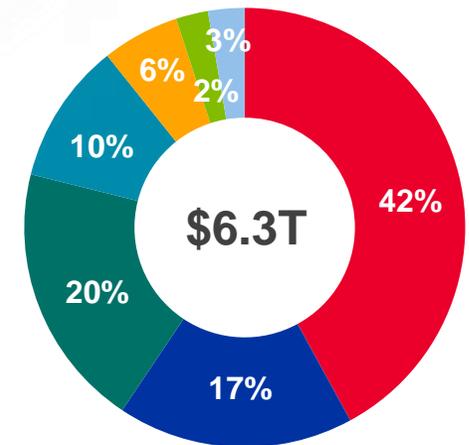
Region	Airplanes
Asia Pacific	16,930
North America	8,800
Europe	8,490
Middle East	2,990
Latin America	3,040
Russia & Central Asia	1,290
Africa	1,190
World Total	42,700



Market values by region

2018 - 2037

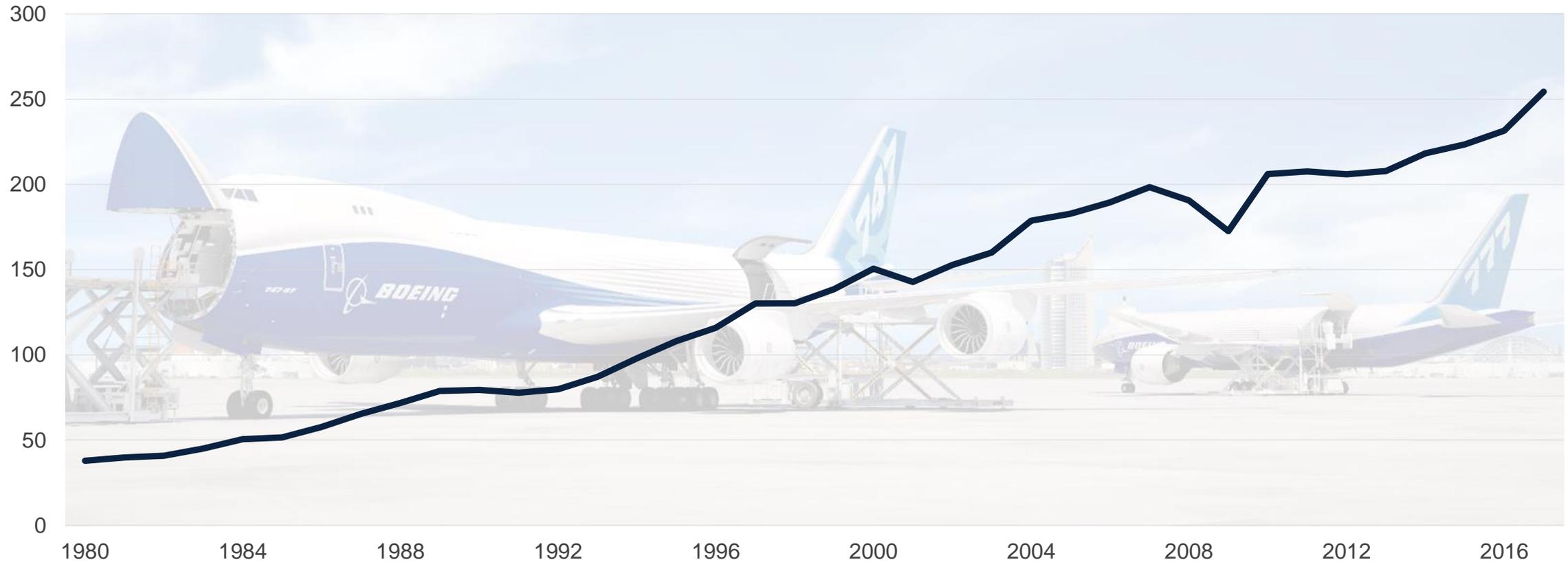
Region	Values
Asia Pacific	\$2,670B
North America	\$1,100B
Europe	\$1,240B
Middle East	\$660B
Latin America	\$360B
Russia & Central Asia	\$150B
Africa	\$170B
World Total	\$6,350B



World air cargo traffic growth back to long-term trend

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RTKs (billions)



RTKs = Revenue Tonne Kilometers

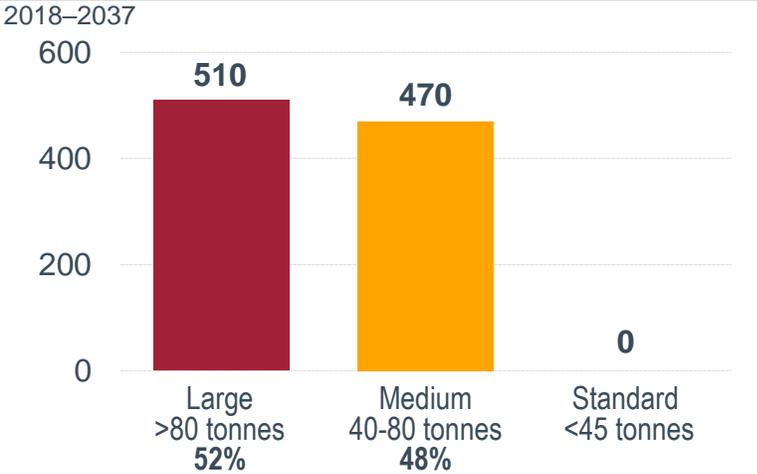
SOURCES: ICAO scheduled traffic / 2017E/2018F IATA December 2017

New freighter deliveries will be led by demand for large widebodies

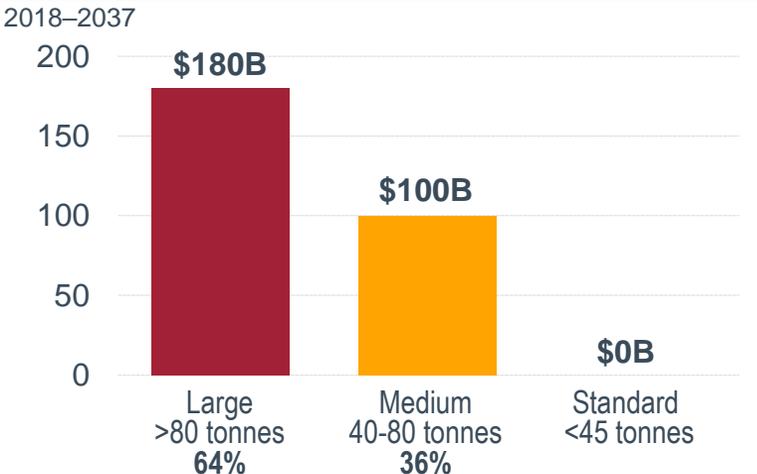
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New freighter deliveries: 980

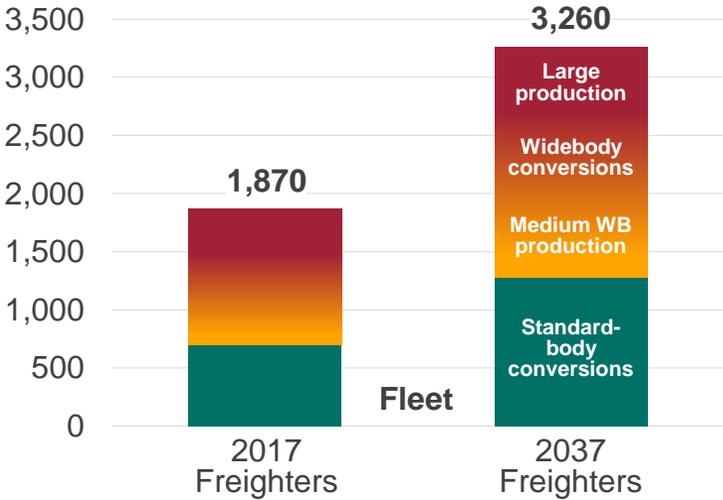
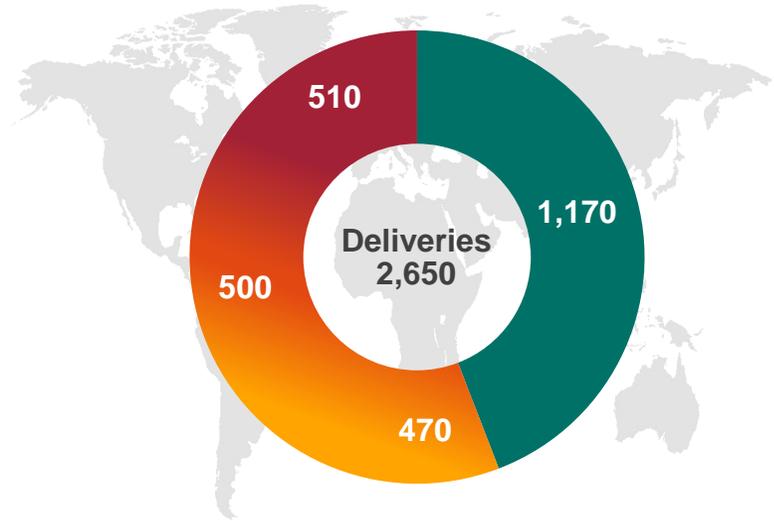


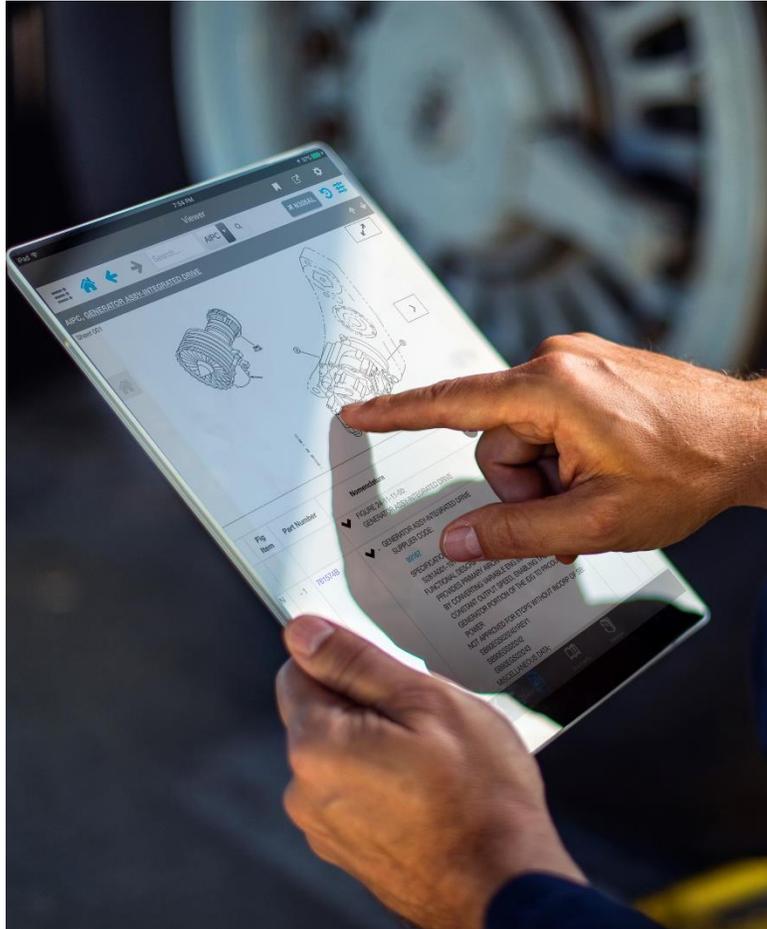
Market value: \$280 billion



Freighter demand – 980 new, 1,670 converted

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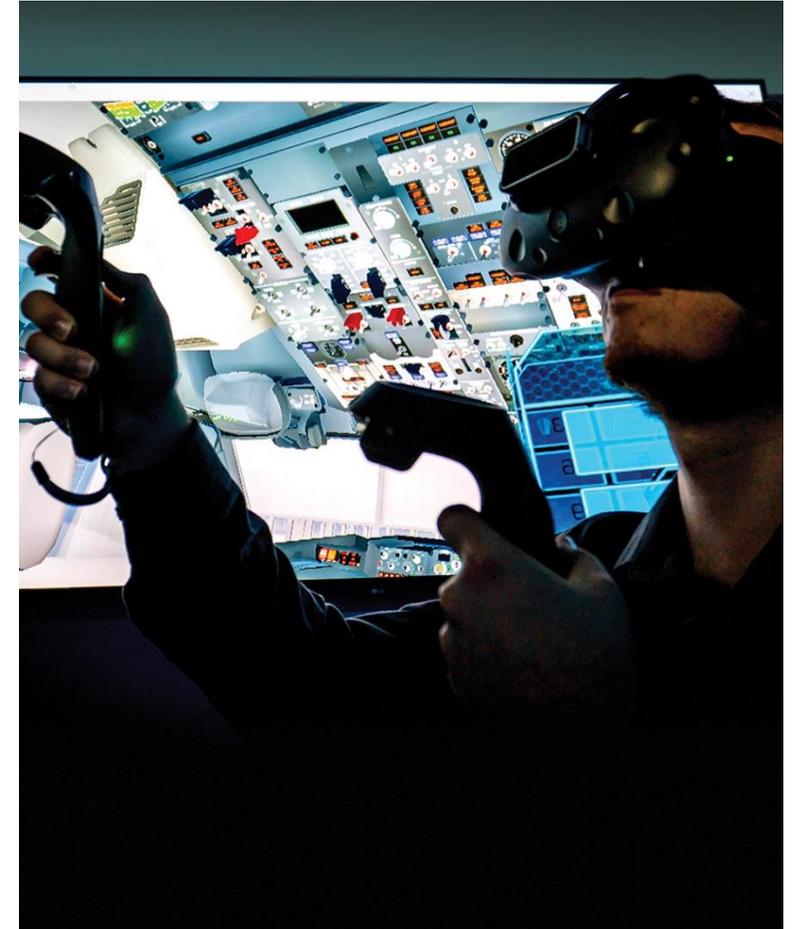




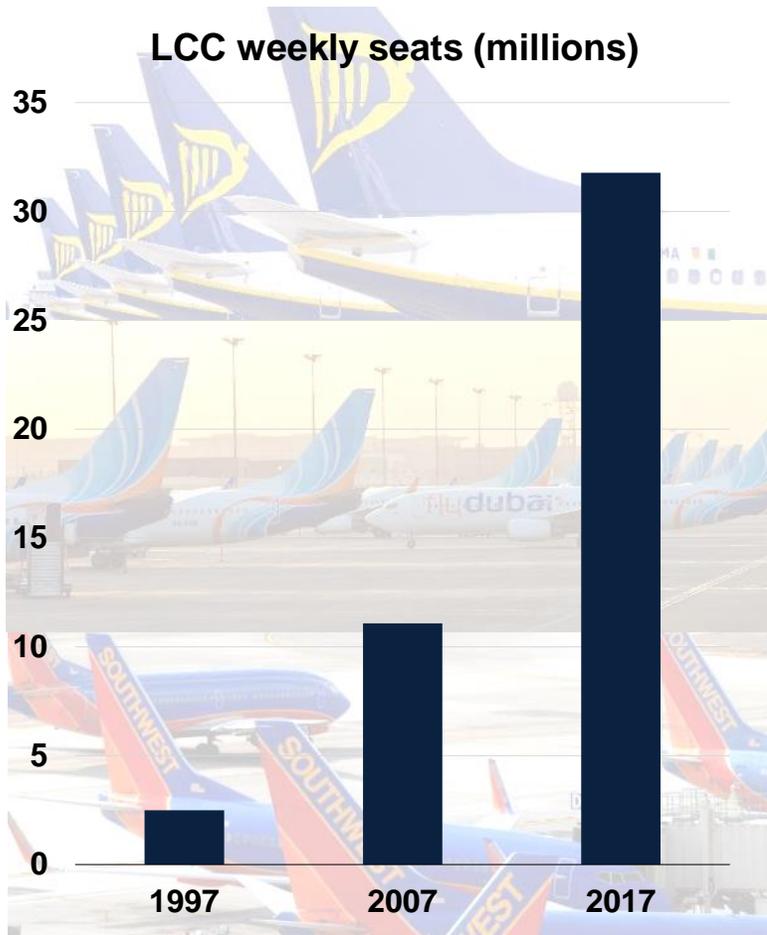
Airline business models



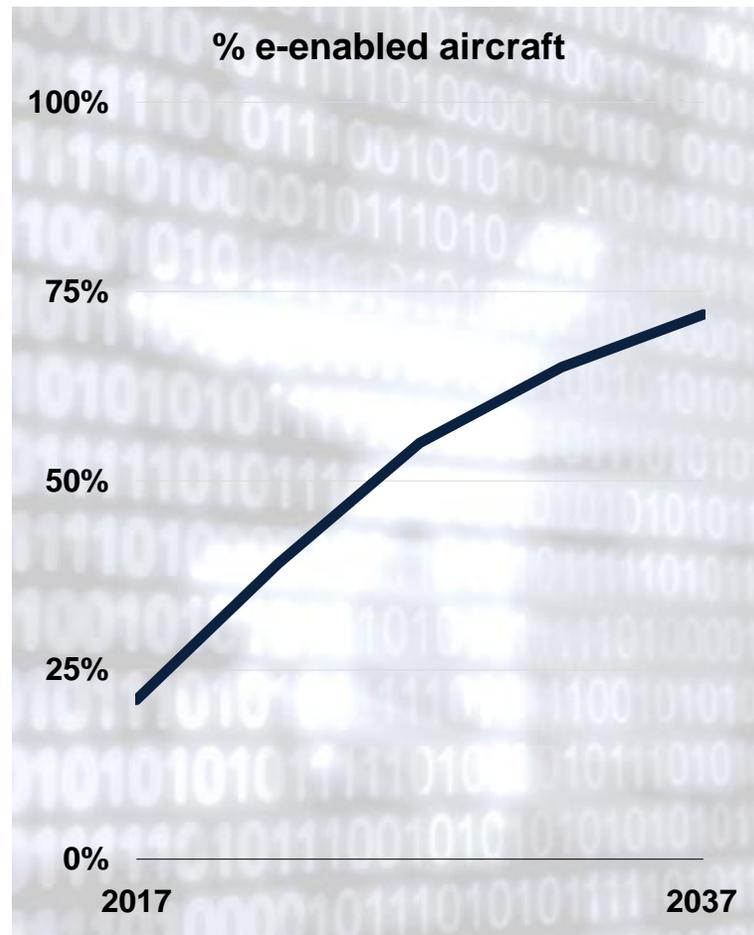
Big data and analytics



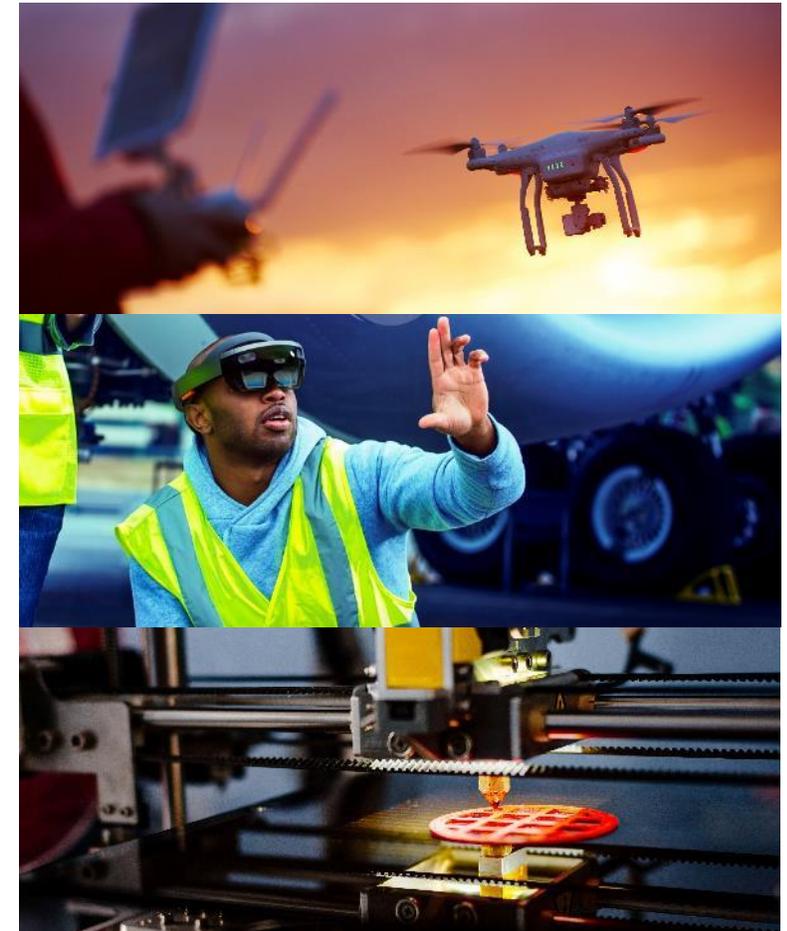
New technologies and innovations



Airline business models



Big data and analytics



New technologies and innovations

Commercial aviation will demand \$8.8 trillion in services over 20 years

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Commercial Aviation Services: \$8.8T

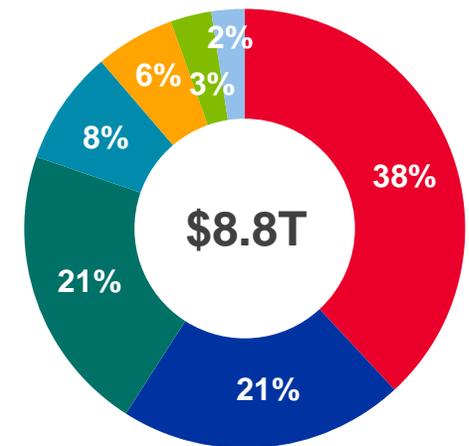
2018 - 2037



Services by Region

2018 - 2037

Region	Services	CAGR
Asia Pacific	3,365	5.1%
North America	1,850	2.9%
Europe	1,875	3.5%
Middle East	745	4.6%
Latin America	515	5.1%
Russia/CA	265	3.2%
Africa	215	5.2%
World Total	\$8,830B	4.2%



Emerging customer needs drive our products and services

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\$15T market for airplanes and services over next 20 years

Single-aisle market is fastest growing

Widebody fleet will more than double

Only Boeing offers a complete family of freighter solutions

Services is a dynamic business with tremendous opportunity for growth

