Unlocking the Potential of Data: Driving Business Growth in the Aviation Industry

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Agenda


Introduction
Analysis
Primary goals
Summary
Areas of growth

Interpreting and Leveraging Data to Drive Strategic Growth for the Company

where is the airline losing the most money?

where they are most profitable?

and

whether should add a Chicago to Atlanta route?

Primary goals

Areas of growth

Initiatives	New Route (ORD-ATL)	More Flights for existing routes	Technology Investment	More Sales Reps	Process Improvement Plan
Decision Variables	0	0	1	1	1
Net Benefit	$275,630	$2,943,234	$824,594	$2,840,045	$1,224,404
Constraints	New Route (ORD-ATL)	More Flights for existing routes	Technology Investment	More Sales Reps	Process Improvement Plan
Total Cost	$10,990,650	$21,826,243	$7,075,000	$13,398,817	$2,925,000

Objective
$4,889,042

Total Cost
$23,398,817

Budget
$25,000,000

NPV, IRR AND PAYBACK OF THE NEW ATLANTA DESTINATIONS

Outlays	Year
(250)	-
100	1
150	2
200	3
250	4
300	5

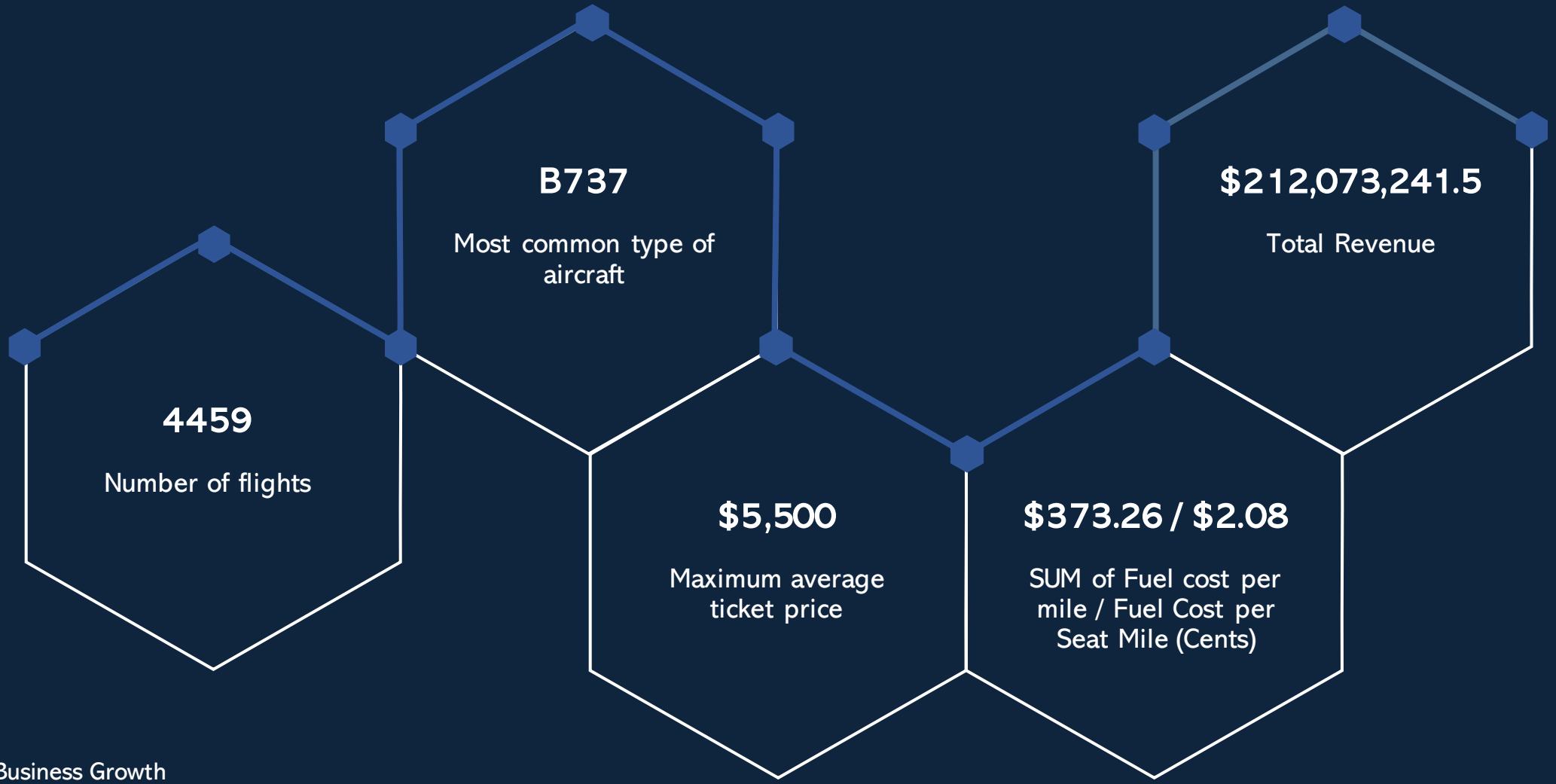
NPV	$0.00
IRR	57%

- IRR is a measure of the profitability of a project or investment
- An IRR that is greater expected to generate a positive net present value
- IRR is often used as a decision-making tool
- Duration, payback is 4 years

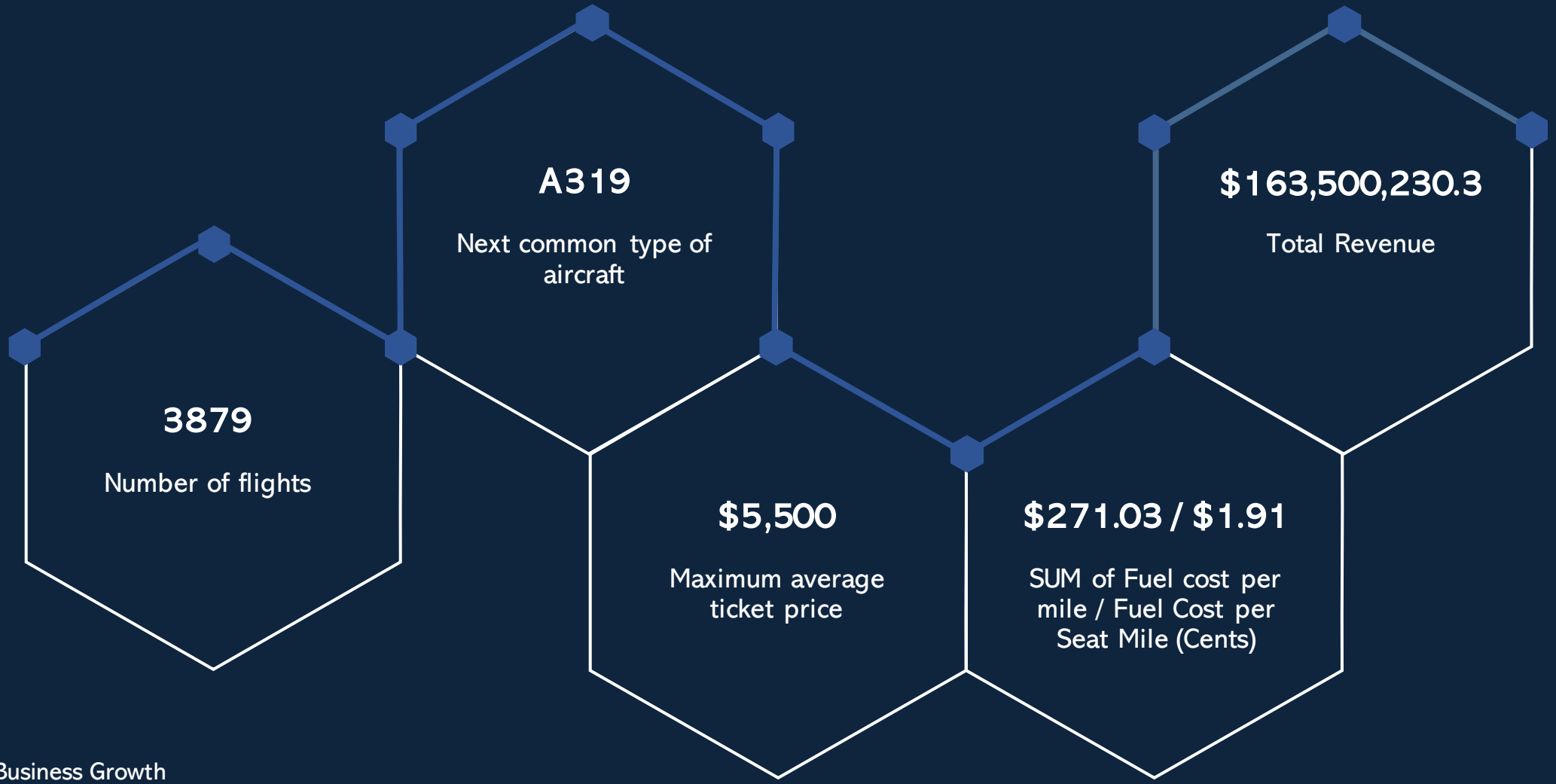
“Business opportunities are like buses. There’s always another one coming.”

Richard Branson

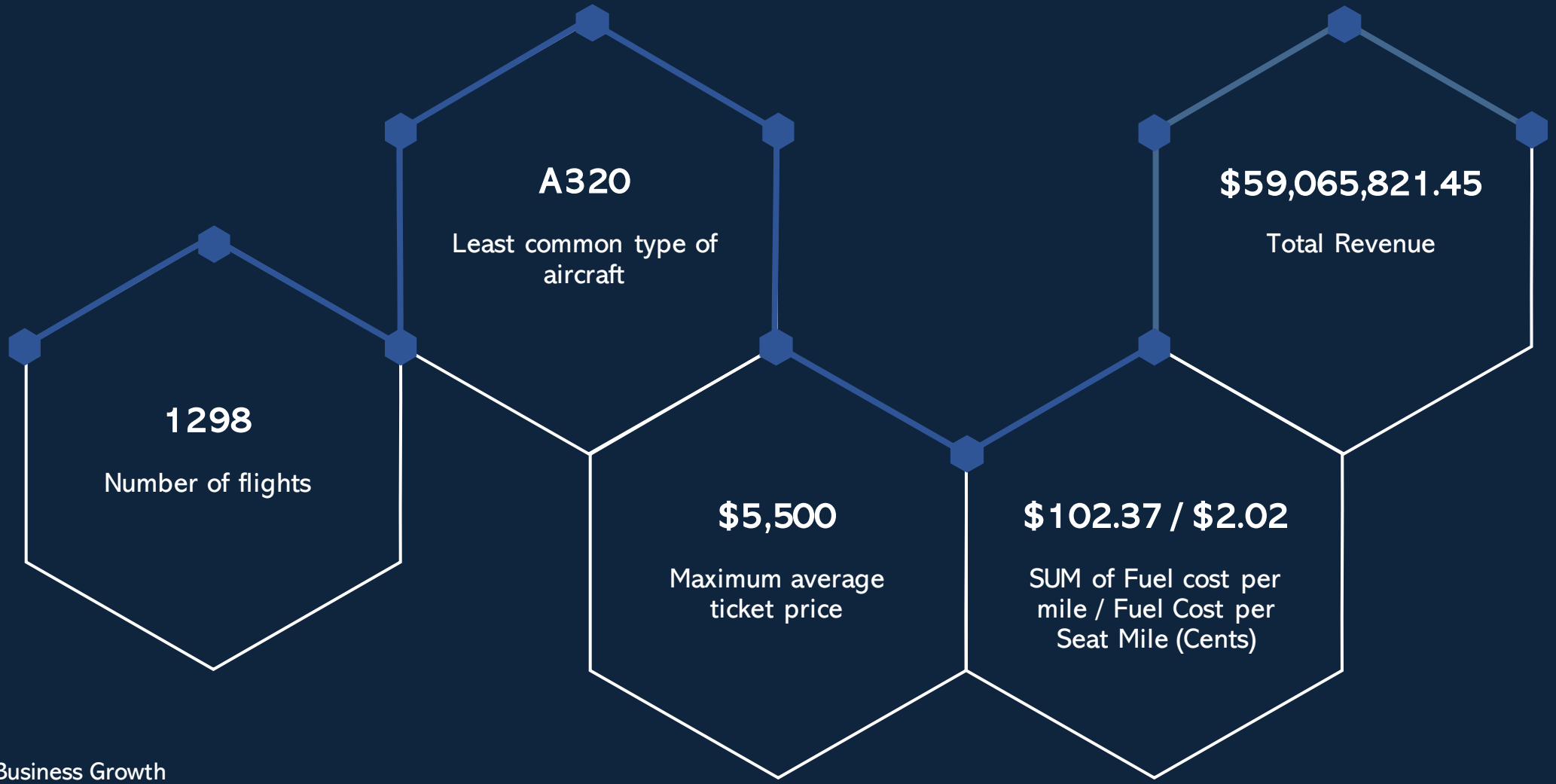
Revenue Analysis of Aircraft B737 Seat Capacity 185

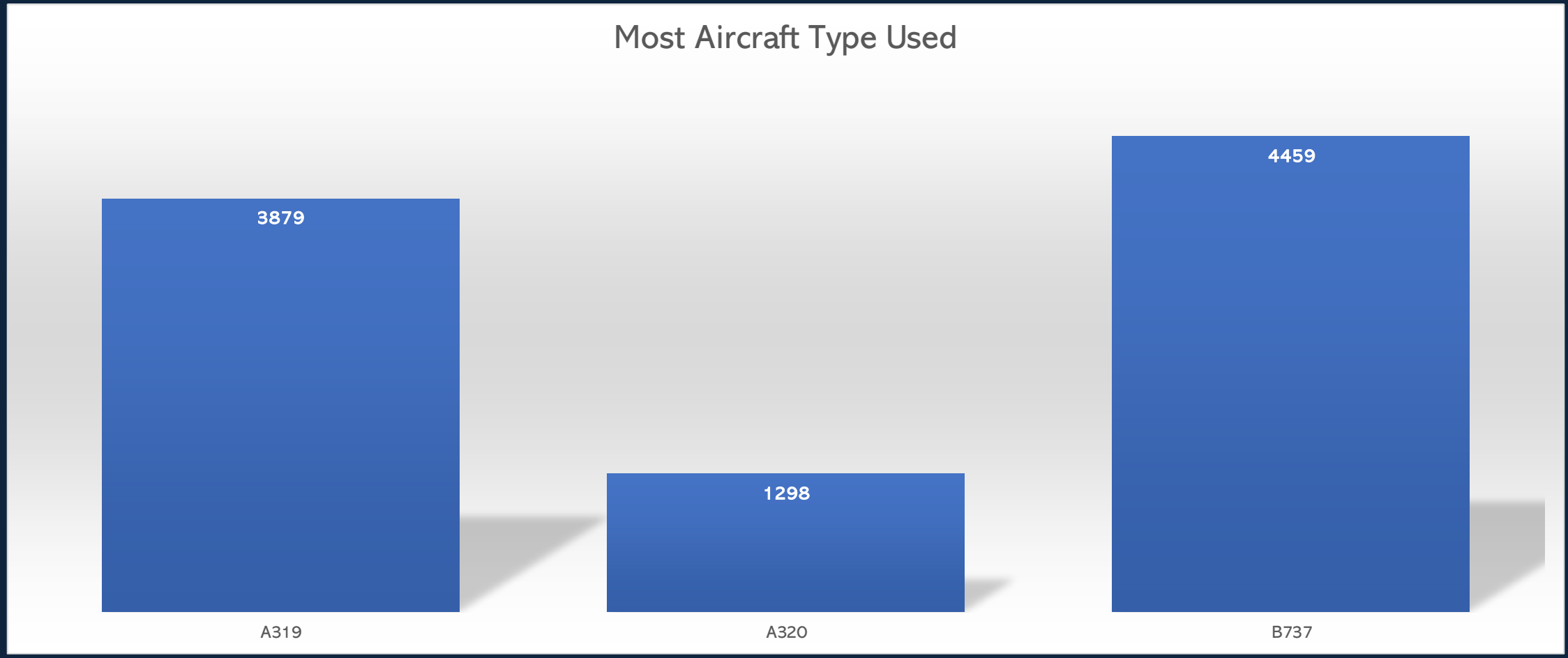


Revenue Analysis of Aircraft A319 Seat Capacity 165



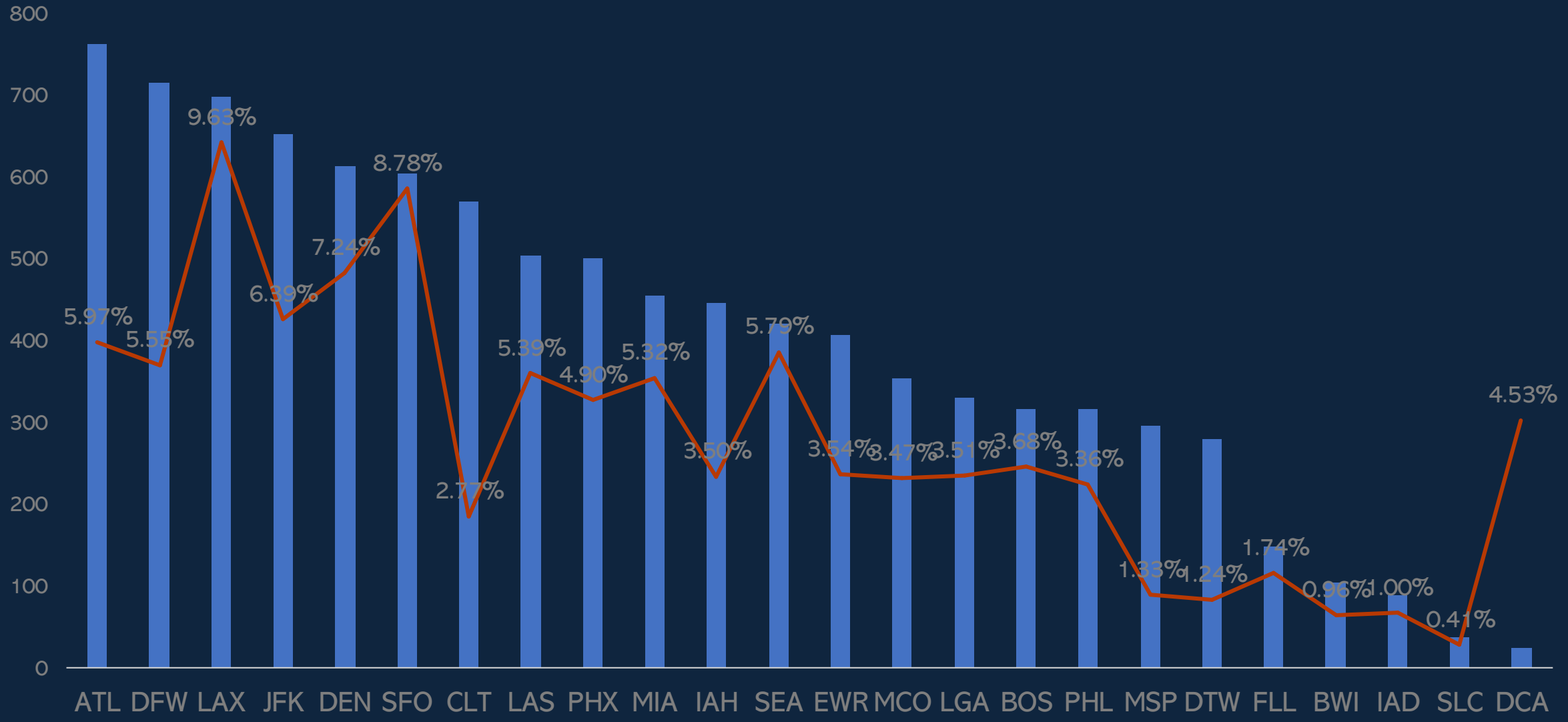
Revenue Analysis of Aircraft A320 Seat Capacity 181




Most Aircraft Type Used
3879
1298
4459
A319
A320
B737

B737 is the highest fuel cost
Highest total revenue by flight are
Flight8202 Flight8279 Flight6243 Flight1819

Revenue and Number of Flights



Revenue and Number of Flights

DESTENATION / Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Grand Total	Revenue %
DCA													24	4.53%
SLC													36	0.41%
IAD													88	1.00%
BWI													104	0.96%
FLL													148	1.74%
DTW													279	1.24%
MSP													295	1.33%
BOS													315	3.68%
PHL													315	3.36%
LGA													330	3.51%
MCO													353	3.47%
EWR													406	3.54%
SEA													421	5.79%
IAH													446	3.50%
MIA													455	5.32%
PHX													500	4.90%
LAS													503	5.39%
CLT													570	2.77%
SFO													604	8.78%
DEN													614	7.24%
JFK													653	6.39%
LAX													699	9.63%
DFW													716	5.55%
ATL													762	5.97%
Grand Total	709	608	695	683	693	958	1013	1025	700	669	989	894	9636	**100.00%**

Simulation of the operation income for the new Atlanta route

Scenario Summary	Current Values:	Baseline	High growth with margin impact	Low Growth with margin impact
Changing Cells:				
Revenue Growth Rate	5.0%	5.0%	8.0%	3.0%
Gross Margin	40.0%	40.0%	45.0%	32.0%
SG&A Expense as % of Ticket Revenue	27.5%	27.5%	30.0%	30.0%
Result Cells:				
Gross profit	$3,597,885	$3,597,885	$4,636,562	$2,623,590
Operating Income	$1,665,023	$1,665,023	$2,221,181	$701,614
year to year growth increase	2.0%	2.0%	2.0%	2.0%

impact of flight-related costs, such as fuel and labor, on profit per flight for the proposed Chicago-to-Atlanta route

INPUT PARAMETERS - ORD TO ATL	
Passengers	170
Miles	510
Revenue per Passenger	$150
Cost per Mile	$40
Total Revenue	$25,500
Total Costs	$20,400
Profit per Flight	**$5,100**

Cost per Mile	PROFIT
$30	$10,200
$32	$9,180
$34	$8,160
$36	$7,140
$38	$6,120
$40	$5,100
$42	$4,080
$44	$3,060
$46	$2,040
$48	$1,020
$50	$0

number of passengers per flight minimum demand is 150 passengers and the maximum demand is 200 passengers

	Passengers					
Costs per Mile	$5,100	**150**	**160**	**170**	**180**	**190**	**200**
	$30	$7,200	$8,700	$10,200	$11,700	$13,200	$14,700
	$32	$6,180	$7,680	$9,180	$10,680	$12,180	$13,680
	$34	$5,160	$6,660	$8,160	$9,660	$11,160	$12,660
	$36	$4,140	$5,640	$7,140	$8,640	$10,140	$11,640
	$38	$3,120	$4,620	$6,120	$7,620	$9,120	$10,620
	$40	$2,100	$3,600	$5,100	$6,600	$8,100	$9,600
	$42	$1,080	$2,580	$4,080	$5,580	$7,080	$8,580
	$44	$60	$1,560	$3,060	$4,560	$6,060	$7,560
	$46	($960)	$540	$2,040	$3,540	$5,040	$6,540
	$48	($1,980)	($480)	$1,020	$2,520	$4,020	$5,520
	$50	($3,000)	($1,500)	$0	$1,500	$3,000	$4,500

outlook on demand over the coming year.

Route	Miles per Flight	Annual Flights Proposed	Total Miles	Min Cost per Mile	Max Cost per Mile	Revenue Per Passenger
ORD-ATL	510	385	196,350	$30	$50	$150

Likelihood bins	Passengers per Flight	Annual Passenger Revenue
0%	150	$8,662,500.00
40%	175	$10,106,250.00
70%	185	$10,683,750.00
90%	135	$7,796,250.00

Simulations of cost per mile, passenger revenue and average annual profit Probability of profit 80% and above

Summary Information	
Average annual profit	$1,343,757
Probability of profit	80%
Establish the route?	

Summary Information	
Average annual profit	$1,350,775
Probability of profit	78%
Establish the route?	

Summary Information	
Average annual profit	$1,283,441
Probability of profit	74%
Establish the route?	

Summary Information	
Average annual profit	$1,461,153
Probability of profit	75%
Establish the route?	

Summary Information	
Average annual profit	$1,569,109
Probability of profit	70%
Establish the route?	

Areas of focus

Process Improvement Plan

Implement a Continuous Improvement Program

Focus on Customer Experience

More Sales Reps

Conduct a Market Analysis

Provide Sales Reps with Effective Training and Resources

Technology Investment

Implement a Comprehensive Customer Relationship Management (CRM) System

Invest in Advanced Analytics and Business Intelligence (BI) Tools

Implement Contactless Technology

How we get there

ROI

- Implement revenue management strategies to maximize the value of each customer and flight. This can include dynamic pricing, upselling, and other tactics that leverage data and analytics to optimize revenue.
- Invest in employee training and development to improve productivity, reduce turnover, and enhance the customer experience. By empowering employees with the knowledge and skills they need to excel, airlines can improve performance and build customer loyalty.
- Leverage technology to automate and streamline processes, reducing costs and increasing efficiency. This can include implementing self-service kiosks, mobile apps, and other digital tools that enable customers to check in, book flights, and manage their travel easily and conveniently.

Innovation

- Invest in research and development, foster a culture of innovation, and collaborate with external partners to drive growth and differentiation.

Summary

- Technology Investment: Leverage technology to streamline operations, improve customer experience, and optimize revenue.
- More Sales Reps: Increase sales and improve customer service by adding more sales reps.
- Process Improvement Plan: Implement process improvement plans to reduce costs and enhance operational efficiency.
- Not Investing in New Routes (ORD-ATL): Instead of investing in new routes, focus on optimizing existing resources and improving the overall quality of services.
- Not Investing in More Flights for Existing Routes: Instead of adding more flights to existing routes, focus on improving the overall quality of services.

By focusing on these areas, airlines can drive growth, improve efficiency, and enhance the overall customer experience.




Thank you

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