

OM 380.17 Bagchi & Gutierrez
Group Report – 3 (worth 2.5 of your course grade)

Case: Southwest Airline in Baltimore

Names of Group Members and Index Numbers

Name (First, Last)	Index Number	Signature
Aditya Chawla	7	Aditya Chawla
Anvesh Karangula	19	Anvesh Karangula
Sanyam Jain	16	Sanyam Jain

***** By signing my name, I am affirming that:**

- **I have read the course syllabus.**
- **I have contributed as expected toward the fulfillment of this assignment.**
- **The work our group is turning in is the work product of our group.**
- **Our group did not get outside help in fulfilling this assignment.**

This report is based on the *Southwest Airline in Baltimore* case. Please read the case carefully and answer the questions that follow on the next page. **Your submission must have this page as the cover page. Please submit on Canvas by the beginning of class on the day the assignment is due.**

(a) Do a ‘labor productivity’ comparison between Northwest and Southwest based on the data in Exhibit 3. Specifically, you are to supply the missing entries in the table below:

Answer (a):

**Labor Productivity Comparison between Northwest and Southwest
(based on Exhibit 3 of HBS case: Southwest Airlines in Baltimore)**

Airline	<u>Revenue</u> RPM	<u>RPM</u> ASM	<u>ASM</u> Employees	<u>Employees</u> Labor Costs	<u>Revenue</u> Labor Cost
Northwest	13.32	0.75	2050409	0.0000158	\$3.23
Southwest	12.97	0.69	1995775	0.000019	\$3.39

**** Note:** (1) The revenue per RPM (yield) (cents) row in case Exhibit 3 needs to be revised. The entry for Northwest should be 13.32 instead of 11.6, and the entry for Southwest should be 12.97 instead of 12.3; (2) An RPM (Revenue Passenger Mile) corresponds to transporting a paying customer for one mile. An ASM (Available Seat Mile) corresponds to one available airline seat for one mile. A flight from Austin to Dallas – a distance of 200 miles – with 100 available seats but only 80 paying customers would correspond to 20,000 ASMs and 16,000 RPMs.

Think of labor productivity as $[\text{Revenue}/\text{Labor Cost}]$ and it follows from the table above that labor productivity is the product of four quantities (those in the middle four columns). This allows us to decompose labor productivity into its four constituent elements.

What insights do you get into the differences between Northwest and Southwest?

Answer (b):

Based on the information in the table provided, it is evident that while Northwest and Southwest airlines have similar Revenue per Passenger Mile (RPM), Southwest airlines demonstrate higher labor productivity which means that Southwest airlines operate with greater efficiency compared to Northwest airlines.

(b) Now do a comparison between Northwest and Southwest concerning ‘flights per aircraft per day’ based on the data in Exhibit 3 of the case. Specifically, you are to supply the missing entries in the table below:

**‘Flights per Aircraft per Day’ Comparison between Northwest and Southwest
(based on Exhibit 3 of HBS case: Southwest Airlines in Baltimore)**

Airline	RPMs [Billions]	RPMs per Aircraft- Mile	Aircraft- Miles [millions]	Fleet	Miles per Aircraft [millions]	Flights per Aircraft	Flights per Aircraft per Day¹
Northwest	74.1	144.7	512.1	410	1.25	921	2.5
Southwest	36.5	92.6	394.17	312	1.26	2260	6.2

¹ Assume 365 days per year

Answer (c):

(c) In 1993, there were two connecting paths through Baltimore (MDW-CLE and CLE-MDW); in 1994, there were twenty (based on case Exhibit 5). Supply the missing entries in the table below:

‘Growth in Cities Served Nonstop from Baltimore and Connecting Paths’

(based on Exhibit 5 of HBS case: Southwest Airlines in Baltimore)

	1993	1994	1995	1997	1999	2001
# Nonstop Destinations	2	5	6	13	22	32
# Connecting Paths	2	20	30	156	462	992