

**Exercise:**  
**Data Skills Comprehensive—“United’s New Destinations”**  
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**Course:** BUS 312  
**Title:** Data Literacy for Business (3 units)

“Data is the new oil.”  
---Clive Humby (1955-)

“What gets measured gets managed.”  
---Peter Drucker (1909-2005)

**Article:**  
Read the following Wall Street Journal article:

Sider, A. (June 7, 2025). The Future of Everything: The Travel Issue --- How United Airlines Picks Its Next Hot Destinations. *Wall Street Journal*.

(remember—just as you did when finding the Library articles—to put double quotes around the title when searching with it in the ProQuest database)

*Note: Reading the article is done before class. Discussing this work will be done in class.*

**Background:**  
This article is about how United Airlines brainstorms, analyzes, and decides on which new destinations (“routes”) to incorporate into its flying schedule. What is so interesting about this article is that it touches on nearly all aspects of our BUS 312 course. The details in the article are relevant even if a student doesn’t work in the airline or transportation industry. Similarly, the details in the article are relevant even if a student doesn’t become a full-time data analyst.

Remember: Our class is titled “Data *Literacy* for Business” (emphasis added).

**Position and Role:**  
Assume that you are part of the “Global Network Planning and Alliances” team at United Airlines. Your title is “Data Analyst”. You report to the Senior Vice-President of this unit: Patrick Quayle. You help VP Quayle with data- and analytics-related issues.

**Goal and Task:**

Your task is to relate the details in this article to what you have learned in this class. This, in turn, helps you help VP Quayle in the decision-making process for possible new routes. To help, I've excerpted selected passages from the article, and then identified some questions for some of the passages. Answer each question with the best knowledge that you have from our course: textbook, WSJ readings, Joy of Data readings, supplemental lectures, team projects, etc. You can also use lower-division courses, upper-division courses, and even general education courses. The idea to structure and support your data- and analytics-related thinking.

### **Specific Questions:**

"Quayle talked with the [Wall Street] Journal about how the airline thinks 10 years ahead to predict the future of travel, poring over government-demand figures and credit-card spending data, while keeping a close watch over Instagram trends and the latest streaming hits."

- Q1a. Of the four types of Business Analytics, which one would generally be used "...to predict the future of travel..."? Why?
- Q1b. Would "...government demand..." data likely be public (i.e., available to everyone at no charge) or private (i.e., available to some at some fee)? Why? Would "credit-card spending" data likely be public or private? Why?
- Q1c. Are "...Instagram trends" publicly available? Why might "...the latest streaming hits" be useful data for United Airlines?

"WSJ: How do you come up with destinations like Ulaanbaatar or Nuuk? What kinds of data are you looking at that convinces you those are places that people actually want to go to? A: This process has evolved. Adding a flight to a London or a Frankfurt is low risk and very easy, because there's so much data and the market is so saturated. When it gets to a place like Greenland or Mongolia, we're looking at what is trending, or we're looking at how do we capture the imagination of the United customer base."

- Q2a. What data do you need to know that "...adding a flight to London or Frankfurt is low risk? What data do you need to know if a market "...is so saturated"?
- Q2b. How do we distinguish between "...looking at what is trending..." and just a short-term bubble?
- Q2c. How do we collect data that "...capture[s] the imagination of the United customer base?

"In a place like Greenland, we're making a bet that people want to go there based on the type of travel we see to other parts of our network that are more exotic, more off the beaten path. In a place like Mongolia, there actually has been air service in the past -- not from a U.S. airline -- but there's been air service in the past from Tokyo to Mongolia, and we can see the traffic demands going there. WSJ: I wouldn't have expected, when the route was announced, that Greenland would suddenly be in the

political conversation. A: Nor did I. We announced it in September. It was an adventure travel, you know, go see this beautiful, untouched part of the earth. And subsequently, politics has come into play. And so it has been in the news a lot. I would just say, people are very interested in Greenland. And I think us having a nonstop flight there just makes it easier for cultures and ideas to exchange in the free flow of information.”

- Q3a. Which statistical measure might we use to evaluate “...type(s) of travel...that are more exotic, more off the beaten path.”? (Hint: Descriptive Statistics)
- Q3b. Can a political decision be incorporated into a Analytical model? If so, how? (Hint: what can we do with categorical or qualitative variables?)
- Q3c. Do you believe the sentence as written: “And I think us having a nonstop flight there just makes it easier for cultures and ideas to exchange in the free flow of information.”? Explain your answer.

“WSJ: Have destinations caught on that you guys are maybe open to places that other U.S. airlines wouldn't consider? Do they try to pitch you? A: Absolutely. Destinations pitch United, because they see the type of content we're adding. But also, our team is very creative. We're looking at what's trending on Instagram. We're looking at where people are searching on United.com. We're looking at top travel trends. We see a spike in interest in Bangkok because of "White Lotus," and so we're capturing that with our new service to Bangkok, starting this October.”

- Q4a. Assume for a moment, that you are a Data Analyst a City that isn't on a United route but would like to be. What data would have and analysis would have done to demonstrate to United that your City could be a valuable new destination?
- Q4b. Would United keep track of “...where people are searching on United.com”?
- Q4c. How might United differentiate between a “...spike in interest in Bangkok because of ‘White Lotus’” and a general trend in Bangkok irrespective of the movie? What data would be needed to do this?

“We have had Bangkok in our long-term plan. We look at, where do we want to be five years from now? Where do we want to be 10 years from now? And we build out a fleet plan to support that. So we are buying aircraft from Boeing and Airbus to support our vision of where we want to be in five and 10 years.”

- Q5a. Has anybody in your team worked on a plan or a task that makes predictions 10 years out? 5 years out? What could go wrong with such long-term planning?
- Q5b. What does a single Boeing commercial plane (latest model) cost? What does a single Airbus commercial plane (latest model) cost? Where is the Boeing headquarters? Where is the Airbus headquarters?

Q5c. What data do we need to determine how many Boeing aircraft to buy and how many Airbus aircraft to buy? Of the four types of Business Analytics, which one helps with specifying the best mix of both planes?

“WSJ: How has picking destinations and planning the network changed in recent years? A: There's really not any new technology or new source of information. But what I would tell you that's quite transformational was our experience during Covid. We had to more or less shut the airline down to just a handful of routes that we were flying and then build it back up. Because the business demand had evaporated, we started experimenting a lot more, and adding things like Dubrovnik [Croatia] or Palma de Mallorca [Spain]. We said, people have not been able to travel for a couple of years. What are destinations that could excite them, that could inspire them and that could motivate them to travel? They did quite well.

That success led us to think, Well, gosh, if the flight to the Azores works, why not add a flight to Faro? Why not add a flight to Madeira? What it taught us is that we should experiment more, and to try to look through the data and figure out, what are the key characteristics of a route that works.”

Q6a. Where are the Azores? Faro? Madeira?

Q6b. The sentence “What it taught us is that we should experiment more, and to try to look through the data and figure out, what are the key characteristics of a route that works.” is interesting. Of the four types of Business Analytics, which one helps with understanding experiments?

Q6c. How would you conduct such an “experiment” at United Airlines?

“WSJ: How do you decide where not to fly? Something that might sound really exciting, but it's just not gonna make the cut. A: We are a publicly traded company, and we're here to make money, and so every flight we add we would like to make a profit on. We added Los Angeles to Singapore. We also added New York/Newark to Bergen, Norway. After 12 months, these flights did not make money, and we canceled the flight. In this role, you cannot be so egotistical or proud that you're unwilling to cancel a flight.”

Q7a. What data do you need to determine a profit? Where does that data come from?

Q7b. How do you determine 1) if you can predict a profit ahead of time or 2) if you just have to try it out and see?

Q7c. Identify at least one lower-division core course (ACCT, ECON, BLAW, BSTAT) or upper-division core course (FIN, MKT, MGT, SOM) where you learned how to make quality decisions. Explain your answer.

“WSJ: I’ve heard you describe network planning as sort of both an art and a science. Where does the science start and the art of it pick up? A: The science starts with the data. We can look at credit-card data. We can look at U.S. Department of Transportation origin-and-destination data. We can look at pricing data. The art aspect of it is, how do I look at that same data and add a lens of creativity and a lens of color and passion that could lead me to broaden the aperture, serve more people and add more destinations? WSJ: Any hints on what regions of the world you’re focused on next? A: I don’t want to give any hints, because the other two big U.S. airlines copy what we do. If I hint at it, they’ll be the first to launch it. I would rather be the first one.

- Q8a. In our class, we definitely used data (“science”). But we also used creativity (“art”). What are two key elements of creativity in Business Analytics? (Hint: What was the “hamburger model” discussed briefly at the beginning of class?)
- Q8b. Why, from a business and strategy perspective, doesn’t Mr. Quayle want to give any hints, at least publicly?
- Q8c. From what you have learned in your business classes so far, what are the advantages to being a “first-mover”, say, to a new destination? Similarly, what you have learned in your business classes so far, what are the advantages to being a “second-mover”, say, to a new destination? What data do you need to determine which strategy United should pursue?