**Research**

For this Research Roundtable, you will share some preliminary limitations and the possible results.

1. State your research topic and purpose.
2. State your research question(s).
3. List and label the variables as independent, dependent, intervening, or moderating.
4. State your hypothesis.
5. Describe the limitations present in your study. Be thorough.
6. Describe what the results would look like if the data supports your hypothesis.
7. Describe what the results would look like if your data does not support your hypothesis.
8. If the data supports your hypothesis, explain what conclusions would you draw and what recommendations would you make.

You submitted the type of data you would collect and what data analysis techniques would be appropriate for your proposed study in week 7 assignment - Data Analysis. Your final Data Analysis Report must be between 400-500 words and include the following:

1. State your variables and hypotheses.
2. Describe in detail what data analysis techniques would be appropriate to apply to your proposed study and justify why they are appropriate.
3. Explain why these are appropriate for your study. Be specific and include the appropriate statistical tests.
4. Refer to the information provided in your readings and resources.

**Management**

Research Project: Final Submission

There's a rumor going around the coffee break room that if you conduct thorough research on the five selected IS topics and submit a scholarly, well-reasoned and composed document, the "powers that be" are certain to promote you into that management position for which you have labored and worked so diligently. If you can produce some critical analyses that will give the upper management folks a clear picture of the bottom line with respect to which IS solutions could greatly benefit the company, you will be certain to receive an offer of a larger office along with a hefty pay raise. This is all part of the career plan that you first developed.

Research the last IS-related solution you chose during Module 3. Following the instructions below, finish writing and editing your research paper, including the fifth IS-related solution, conclusion, abstract, and references.

* Describe how the information systems will benefit your company.
* Provide details and examples of applications and solutions offered by retail vendors.
* Describe the framework for each solution that the internal staff of your company might develop and implement.
* Present an account of the strengths, weaknesses, and cost considerations for those solutions.
* Identify and describe how a solution can provide a competitive advantage, influence strategy, affect organizational performance, and increase operational efficiency.

**Aviation**

Air Traffic Control Entities

You will compare and contrast two different air traffic control entities. Explain with support, your chosen entities and detail how each entity supports air traffic management to include similarities and differences. You may choose any two entities from mentioned, national or international, Hong Kong, London Heathrow UK, Seattle US. Include a properly formatted in-text citation and reference to support your position. The goal is to engage in a collaborative and constructive debate that promotes critical thought and reflection.

Airspace Capacity Challenges

Conduct research and consider airspace capacity challenges currently facing the aviation industry. You will select one specific topic that is leading to an airspace capacity challenge to address in your paper (e.g. unmanned systems operations, an increase in commercial air traffic, etc.). Your paper must include:

* The impact of capacity on the current structure of the national airspace
* An evaluation of the FAA’s National Airspace Systems Plan on current air traffic control systems
* An assessment of the impact of equipment capacity on national airspace system availability
* A proposed recommendation to increase the capacity of the national airspace

Your paper must be 2-3 pages in length, supported by a minimum of three scholarly references, should be grammatically sound, and free of spelling errors. You must include a properly formatted title page, in-text citations where appropriate, and a reference page formatted according to current APA guidelines.

Cooperative Agreements, Code Sharing, and Alliances

Read: <https://www.transportation.gov/policy/aviation-policy/competition-data-analysis/alliance-codeshares> and <https://www.gsa.gov/travel/plan-book/transportation-airfare-rates-pov-rates/airfare-rates-city-pairs-programs/resource-library/code-share-fact-sheet>

Write a one-page (not including cover and reference pages) APA-formatted summary report that answers the question: Can the U.S. domestic market code-sharing and the U.S. foreign airline alliances be considered one in the same? Why or why not?

The Chicago Convention of 1944

Read: <https://www.icao.int/pages/freedomsair.aspx> Select two of the "Freedoms of the Air" stated in the blog,  and write to state why you think they are still viable today in the 21st Century.

1968 - Aircraft Noise Abatement Act

In Week 1, you submitted your selected topic and you will be submitting your research paper in week. Write a paper of 4-5 pages, excluding the cover page, charts, tables, graphs, diagrams, photographs, the reference page, and the appendix, in accordance with APA standards using the current edition. Be able to provide a case/defense answering the question: In the historical context when this topic/legislative action was taken, why was it important at the time, and what long-term impacts did it have on the commercial aviation industry?