## **Industry Analysis**

#### **Overview and Rationale**

As you complete this course and begin your program it is important to have a clear idea of the industry you want to work in and the role you want to prepare for. You have already done some initial research on a role within data analytics. In this assignment, you will research an industry to learn how big data analytics has changed the industry and what place you would like to play, as a data scientist, in the industry.

#### **Course Outcomes**

This assignment is directly linked to the following key learning outcomes from the course syllabus:

- Articulate the value data analytics provides to a business' goals and strategies based with respect to the business' industry.
- Verbalize ethical issues in the field of data analytics with respect to the ethical use of data; the tradeoffs between privacy and utility; and regulation and innovation.

#### **Assignment Summary**

There are two parts to this assignment. In Part 1 you will research and write about the impact Big Data analytics has had on a specific industry. In Part 2, you will present your findings in a presentation to classmates. If this is an online course, you will record yourself making the presentation and post it to the Industry Analysis discussion board.

Begin by selecting one of the industries discussed in this course (i.e., medical, energy, insurance, criminal justice, transportation, etc.) or an industry have an interest in. You are to research the scale, effects, impacts, and disruptions that Big Data analytics have had on the industry.

#### Part 1

Write a paper that demonstrates an understanding of the concepts presented in this course by discussing how a specific industry has been effected by big data analytics and the role you are interested in playing within the industry.

Begin by presenting your findings about this industry and answer the following questions:

- How has data analytics evolved specifically in the industry?
- Are there any ways in which big data has disrupted the industry?
- How do you see analytics changing the industry in the future?

Then provide insights into data analytics within the industry by answering the following questions:

- What are the organizational roles associated with data analytics? Are there any that are unique to the industry?
- What is the current demand for data analytics talent in the industry?

Finally, if you are interested in working within the industry, discuss:

- What makes it your ideal career? What specific role would you like to play? Is there a position you aspire to? Why?
- If this is not an industry you wish to work, explain why. Include a discussion of why the available roles do not interest you.

#### Part 1 Submission Requirements

You will submit a 4-6 page paper that is supported by a minimum of 4 scholarly references. Properly cite all sources you decide to use for your analysis using APA citation rules.

#### Part 2

Display your findings in a visually appealing and data rich presentation to your classmate. You may choose a preferred presentation method such as:

- Excel charts (pie chart, bar chart, histogram, etc.)
- PowerPoint slides
- Infographics
- Prezi Presentation

Additional tools for data visualization can be found in <u>The 38 best tools for data</u> <u>visualization</u> article at Creative Bloq.

#### **Submission Requirements**

You will submit a presentation that is supported by a minimum of 4 scholarly references. Properly cite all sources you decide to use for your analysis using APA citation rules.

# Rubrics

## Part 1

Category	Exceeds Standards	Meets Standards	Approaching Standards	Below Standards
<b>The Industry</b> ALY6000-CO4	Provides a description of the relationship between the industry and big data that connects industry needs to data analytics in a cohesive and insightful way	Provides a detailed and clear description of the relationship between the industry and big data that connects the needs of the industry to big data analytics	Provides a description of the relationship between the industry and big data, but the description is incomplete, generic or vague. Does connect the needs of the industry to the big data analytics but is not specific to the industry.	Provides a description of the relationship between the industry and big data, but does not make a direction connection between the needs of the industry and the use of big data analytics.
<b>Data Analytics in the Industry</b> ALY6000-CO3	Provides insights into data analytics with compelling support by research. Insights demonstrates astute understanding of the industry	Provides well-developed insights into data analytics within the industry that are specific and supported by research	Provides insights into data analytics within the industry that are specific, but only ancillary support is given	Provides speculative insights in to data analytics with in the industry. No support is provided.
<b>Personal</b> <b>Application</b> ALY6000-CO3	Uses the data they've collected and knowledge of themselves to support their discussion of career choice in a compelling way	Uses the data they've collected and knowledge of themselves to support their discussion of career choice.	Uses knowledge of themselves and the data they've collected to support their discussion of career choice, but did not focus on a specific role as a career	Uses knowledge of themselves to support their career choice, but did not connect this to the data or the chosen industry.
Research	Expertly incorporates ample scholarly resources that reflect depth and breadth of research	Effectively incorporates sufficient scholarly resources that reflect depth and breadth of research	Incorporates scholarly resources but does so ineffectively or the resources do not reflect a depth and breadth of research	Incorporates insufficient scholarly resources to suggest a depth of research. Use of resources is awkward.
Writing and Format	Assignment follows normal conventions of grammar and	Assignment work follows normal conventions of	Minimal errors in spelling, and grammar, and/or other	Frequent errors in spelling, grammar, and/or other

Category	Exceeds Standards	Meets Standards	Approaching Standards	Below Standards
	spelling and appropriate conventions of style and format that engages the reader	grammar and spelling and has been carefully proofread. Appropriate conventions of style and format are used consistently.	writing conventions. Some transitions are choppy but not difficult to follow.	writing conventions that distract the reader. Transitions are choppy and difficult to follow. Limited connection to the topic.

## Part 2

Category	Exceeds Standard	Meets Standards	Approaching Standards	Below Standards
<b>Content</b> ALY6000-CO3	Content of the presentation explicitly reflects the findings of the report. Expertly uses data points and research references shared in the report.	Content of the presentation accurately reflects the findings of the report through use of common data points and references.	Content of the presentation reflect the findings in the report, but does not identify specific data or research found in the report	Content of the presentation is generic and not specifically found in the report. Does not use specific data points or references for data visualizations
Data Visualizations ALY6000-CO5	Accurately visualizes data in an innovative and compelling way that tells a story.	Accurately and creatively visualizes data in a useful way that tells a story.	Visualizes data in a useful way but visualizations may not be creative, or may have errors.	Data visualizations are actuate, but not visually appealing and hinder the story being told.
Research	Expertly incorporates ample scholarly resources that reflect depth and breadth of research	Effectively incorporates sufficient scholarly resources that reflect depth and breadth of research	Incorporates scholarly resources but does so ineffectively or the resources do not reflect a depth and breadth of research	Incorporates insufficient scholarly resources to suggest a depth of research. Use of resources is awkward.
Presentation	Narration uses all elements of speech to engross the audience	Narration or delivery is clear and concise with variation in volume and inflection, holds	Narration or delivery is clear and concise, holds attention, and emphasizes key points.	Narration or delivery is clear and concise, emphasizes key points.

Category	Exceeds Standard	Meets Standards	Approaching Standards	Below Standards
		attention, and emphasize key points.		