Learning Guide Unit 6

Site: <u>University of the People</u>

Course: CS 3440-01 Big Data - AY2025-T3

Book: Learning Guide Unit 6

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Description

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Overview

UNIT 6: Using big data in business

Topics

- Organizational use of big data
- Business decisions based on big data

Learning Objectives

By the end of this Unit, you will be able to:

- 1. Summarize ways of using big data in business.
- 2. Explain the use of big data in making fundamental business decisions

Tasks

- Peer assess Unit 5 Written Assignment
- Read the Learning Guide and Reading Assignments
- Participate in the Discussion Assignment (post, comment, and rate in the Discussion Forum)
- Make entries to the Learning Journal
- Take and submit the Self-Quiz
- Take and submit the Graded Quiz

Introduction



Everywhere we go today, we are faced with instances or applications where users are capturing our data at an alarming rate. Big companies like Amazon, Facebook, Instagram, Twitter, and Google all mine data from our online interactions, which feeds their big data repositories. They use this data in their everyday businesses to help develop products or promotions for their users and often sell this data to third-party vendors for marketing promotional use. So, businesses benefit from the use of this data in their strategic planning to target customers based on their likes and patterns noted in this big data.

Organizations use big data to help drive company initiatives and design new products or services their customers desire. They analyze the collected data to look for trends in usage or product reviews and evaluations. Some organizations sell their data to third-party data vendors, who in turn offer it for sale to other organizations so they may

benefit from the details contained within. As organizations continue to strive to be leaders in their industries, more big data can play a role in making that a reality.

Routinely organizations use outside data sources to aid in their business decision process, and one of those sources is big data captured by other organizations. They use this data in connection with the data they have captured from their customers in the development of business processes, and organizational market strategies to aid in customer acquisition or improvement to current marketing campaigns.

In this unit, you will better understand the role big data plays in today's business environment. You will learn how businesses use big data to develop their strategic mission and its role in their operational business decisions. You will learn the importance of big data use in businesses' daily operations. You will get insight into how companies use big data to address operational issues, and the impact it has on those issues.

Reading Assignment

Read through the following to better understand issues surrounding the use of big data in business and how they can get value from the collection, storage, and reporting of this data.

Note to students: To access the LIRN resources, you must log in to Moodle and access the Library and Information Resource Network (LIRN) located under the Resources link on the Home page. Click on the Alphabetical View tab at the top of the page and scroll down to the database where JSTOR is located. Copy and paste the title of the resource, into the search bar. A link to the resource will appear. If you have any problems, please contact library@uopeople.edu.

Hughes-Cromwick, E., & Coronado, J. (2019). <u>The value of US government data to US business decisions.</u> *The Journal of Economic Perspectives, 33*(1), 131–146. https://www.jstor.org/stable/26566980

• This article discusses how organizations can understand the value of government big data for business decision-making.

Mikalef, P., Pappas, I., Krogstie, J., & Pavlou, P. A. (2019). <u>Big data and business analytics: A research agenda for realizing business value.</u> *Information and Management 57*(1). https://www.researchgate.net/profile/Patrick-Mikalef/publication/337543997_Big_data_and_business_analytics_A_research_agenda_for_realizing_business_value/links/5fd33aaf299bf188d4(data-and-business-analytics-A-research-agenda-for-realizing-business-value.pdf

• This article discusses ways businesses can get value from their big data collection and analysis.

Video Resources:

Marr, B. (2019, March 29). How do you use big data in business by Bernard Marr [Video]_YouTube. https://www.youtube.com/watch?v=-zRJZt12li4

• This video explains how organizations can use big data in making business decisions.

Shifu Digital. (2021, August 27). <u>Top 10 ways businesses are taking advantage of big data [Video].</u> YouTube. https://www.youtube.com/watch? v=EpS3uyYg4vk

• This video describes the top ten things businesses can do with big data to succeed.

Wiley Certifications. (2017, October 25). <u>Big data 101: Integrating big data in organizations [Video]</u>, YouTube. https://www.youtube.com/watch?v=mr5igqPCzkk

• This video discusses how organizations can integrate big data into their organizations.

Discussion Assignment

Big data is often used in business to help top executives develop marketing plans, organizational policies and business strategies.

• Discuss four different ways businesses can use big data. How does using big data help in the four ways you selected?

Your Discussion should be a minimum of 200 words in length and not more than 300 words. Please include a word count. Following the APA standard, use references and in-text citations for the textbook and other sources.

Use APA citations and references for the textbook and any other sources; you should use at least 1 APA citation and reference, but you can use more if needed. Refer to the <u>UoPeople APA Tutorials in the LRC</u> for help with APA citations. You are required to post an initial response to the question/issue presented in the Forum and then respond to at least 3 of your classmates' initial posts. You should also respond to anyone who has responded to you. Don't forget to rate the postings of your classmates according to the Rating Guidelines. Review the Discussion Forum rating guidelines to see how your classmates will be rating your post.

After posting an appropriate, meaningful, and helpful response to your three classmates, you must rate their posts on a scale of 0 (unsatisfactory) to 10 (excellent).

- **10** (A) Excellent, substantial, relevant, insightful, enriching, and stimulating contribution to the discussion. Also, uses external resources to support the position where required and/or applicable.
- 8 9 (B) Good, quite substantial, and insightful, but missing minor details which would have otherwise characterized it as an excellent response.
- 6 7 (C) Satisfactory insight and relevance, but required some more information and effort to have warranted a better rating.
- 4 5 (D) Limited insight and relevance of the material; more effort and reflection needed to have warranted a satisfactory grading.
- **0 3 (F)** Unsatisfactory insight/relevance or failure to answer the question, reflecting a poor or limited understanding of the subject matter and/or the guidelines of the question.

The rating scores are anonymous; therefore, do NOT mention in your remarks the separate rating score you will give the peer. The instructor is the only person who knows which score matches the comment given to a peer. Some classmates may worry that some peers will not provide a fair rating or be unable to provide accurate corrections for grammar or other errors. It is the instructor's responsibility to ensure fairness and accuracy.

Learning Journal

• Evaluate two ways that businesses can add value to their organizations using big data. Discuss the benefits of each way. Also explain how it can promote their business, and how it affects their business decisions.

The Learning Journal entry should be a minimum of 400 words and not more than 750 words. Use APA citations and references if you use ideas from the readings or other sources.

The rubric detailing how you will be graded for this assignment can be found within the unit's assignment on the main course page.

Self-Quiz

The Self-Quiz gives you an opportunity to self-assess your knowledge of what you have learned so far.

The results of the Self-Quiz do not count towards your final grade. However, the quiz is an important part of the University's learning process and it is expected that you will take it to ensure understanding of the materials presented. Reviewing and analyzing your results will help you perform better on future Graded Quizzes and the Final Exam.

Please access the Self-Quiz on the main course homepage; it is listed inside the Unit.

Graded Quiz

The Graded Quiz will test your knowledge of all the materials learned thus far. The results of the quiz will count towards your final grade.

Please access the Graded Quiz on the main course homepage; it will be listed inside the Unit. After you click on it, the quiz's introduction will inform you of any time or attempt limits in place.

Good luck!

Checklist

- Peer assess Unit 5 Written Assignment
- Read the Learning Guide and Reading Assignments
- Participate in the Discussion Assignment (post, comment, and rate in the Discussion Forum)
- Complete and submit the Written Assignment
- Make entries to the Learning Journal
- Take the Self-Quiz
- Take the Graded Quiz