Big Data Analytics

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COURSE DESCRIPTION

Organizations are increasingly relying on fact-based decision-making and Business Analytics to achieve and sustain a competitive advantage. This course traces the evolution of analytics, and provides insight into how companies can transform themselves into analytical competitors. It also emphasizes the critical role that technology, humans, and business processes play in conferring a distinctive organizational capability that enables firms to harness the enormous potential of data.

LEARNING OBJECTIVES

Upon successful completion of the course, students will be able to:

- Appreciate the variety of concepts and issues involved in business analytics.
- Understand how analytics can provide a distinctive capability.
- Appreciate how analytics can be used for internal as well as external processes.
- Understand how technology, humans, and organizational processes interact with an analytics capability to give organizations a competitive edge.
- Perform simple analysis using a data visualization tool.
- Understand how to do some basic Machine Learning
- Understand how Machine Learning and Artificial Intelligence are transforming businesses

COURSE MATERIALS

Materials for this course may be purchased from the following site:
https://hbsp.harvard.edu/import/766946

The course pack contains a PDF of the following text that we will be following:
HBR Guide to Data Analytics Basics for Managers, Harvard Business Review, 2018

Software: Students may download a copy of Tableau from the following site:
https://www.tableau.com/academic/students

Machine Learning: We will use Anaconda and a tool called Orange for data mining. The software packages may be downloaded from:

https://www.anaconda.com/products/individual (Download this first)
https://orange.biolab.si/

Additional Materials: Slides and other materials used in the class will be available on Canvas.

GRADING

20% Attendance

20% Class Participation

20% Tableau Assignment (will be discussed in class)

20% Machine Learning Assignment (will be discussed in class)

20% Group case presentation

100%

Your grade will depend on how well you perform relative to others in class.

This course will involve active participation in class. That is why it is important to attend every class and to arrive on time. You are expected to have read the entire textbook before the formal class sessions begin.

GROUP CASE PRESENTATIONS

You and your group members will work on a case that has been assigned to you. Details will be provided in class.

CHEATING

Ethical behavior is necessary for success in the business world. Your actions have consequences, so kindly refrain from any form of academic dishonesty.