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Excel to MySQL Analytics Techniques for Business Course Syllabus

Course Description

In this course, students will learn best practices for how to use data analytics to make any company more competitive and more profitable. Students will be able to recognize the most critical business metrics and distinguish them from mere data, and get a clear picture of the vital but different roles business analysts, business data analysts, and data scientists each play in various types of companies. Finally, students will be able to use a checklist provided in the course to score any company on how effectively it is embracing big data culture. Digital companies like Amazon, Uber and Airbnb are transforming entire industries through their creative use of big data. Students will understand why these companies are so disruptive and how they use data-analytics techniques to outcompete traditional companies.

Corresponds with: Coursera Content Dated **Beginner Specialization**: No experience needed **Commitment**: 4 weeks, 3-5 hours per week **Subtitles**: English, Chinese (Simplified)

Learning Objectives

Upon completion of the course, students will understand:

- Concepts involved with data analytics, business metrics, and distinguishing profitable data
- How to frame business challenges as data questions
- Concepts and mathematical methods behind the most powerful and universal metrics used by Data Scientists to evaluate the uncertainty-reduction predictive models
- Communicating business-relevant implication of data analysis, as well as how to streamline individual analyses and highlight their implications efficiently using visualizations in Tableau
- Relational databases, and how they are used in business analysis, as well as how to use entity-relationship diagrams to display the structure of the data held within them
- How to use data analyses to recommend a method for improving a company's profits
- Elicit information about important variables relevant to data analyses
- Draw upon MySQL Database skills to extract relevant data from a real estate database
- Implement data analysis in Excel to identify the best opportunities for the company to increase revenue and maximize profits, while managing new risks
- Create a Tableau dashboard to show Watershed executives the results of a sensitivity analysis
- Articulate a significant and innovative business process change for a company based on individual data analysis

Course Format

Excel to MySQL: Analytics techniques for Business is a self-paced, online course delivered through the website Coursera. The site to access the coursework is <u>coursera.org</u>. Coursework is delivered through videos, tutorials, and assignments. No textbooks are required for the course. There are 20 hours of video with approximately 22 assignment hours in this course, as well as 34 quizzes and 5 peer-reviewed assignments.

Course Completion Requirements

Excel to MySQL coursework is due within 90 days from the assignment date. The course hours listed at the top of the syllabus reflect the time it would take to click through the slides and do not account for taking notes or the end of module tests. You must complete all five modules within the course. Successful completion of a module is marked after you review the lesson videos and score 80% or higher on the end of module tests.

Support

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- For Technical support, contact: <u>https://learner.coursera.help/hc/en-us</u>
- For course content-related support, contact: <u>https://www.coursera.org/about/contact</u>
- For program support, please contact your IVMF advisor or 020 Installation Coordinator

Schedule Outline

- Week 1: Business Metrics for Data-Driven Companies
- Week 2: Working in the Business Data Analytics Marketplace
- Week 3: Going Deeper into Business Metrics
- Week 4: Applying Business Metrics to a Business Case Study

Course Outline

Topic 1: Excel to MySQL: Analytics Techniques for Business

- 1.1 Business Metrics for Data Driven Companies
- 1.2 Mastering Data Analysis in Excel
- 1.3 Data Visualization and Communication with Tableau
- 1.4 Managing Big Data with MySQL
- 1.5 Capstone: Increasing Real Estate Management Profits: Harnessing Data Analytics