MiM 2020-2021 Period 3
1 credit

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Business Analytics 2 (BAN2)

Introduction

Business decision making involves the analysis of available information, frequently presented in the form of quantitative data. In this course, we use simple and complex techniques to illustrate how the analysis of quantitative data enlightens managerial decision making. The cases discussed cover various aspects of the business activity, such as pricing, customer relationship management, competitor analysis, investment analysis, expert systems, operations or sales forecasting.

Objectives

In this course, the student is expected to get experience in business-oriented quantitative analysis and familiarity with the elementary techniques of data analysis. The course takes advantage of technical notes, cases, assignments and in-class simulations to present a range of situations which illustrate how the quantitative analysis contributes to describe and predict economic behavior.

Competences

Basic Competences
- CB6. Possess and understand knowledge that provides a basis or opportunity to be original in the development and / or application of ideas, often in a research context.
- CB7. The students know how to apply the knowledge acquired and their ability to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their area of study
- CB8. The students can integrate knowledge and face the complexity of formulating judgments based on information that, being incomplete or limited, includes reflections on social and ethical responsibilities linked to the application of their knowledge and judgments.
- CB9. Students know how to communicate their conclusions and the knowledge and ultimate

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reasons that support them to specialized and non-specialized audiences in a clear and unambiguous way.
- CB10. Students possess the learning skills that allow them to continue studying in a way that will be largely self-directed or autonomous.

General Competences
- CG3 - Critically evaluate the information and the context of a business situation to reach its own conclusions for making prudential decisions. (Critical thinking)
- CG5 - Apply proven ethical criteria in making business decisions, respecting the intrinsic dignity of each person and the achievement of the common good. (Integrity)
- CG6 - Develop a proactive and open mindset to organizational change in order to design and promote process improvement initiatives and facilitate one's ability to adapt to new organizational cultures. (Innovative spirit).

Specific Competences
- CE01 - Identify the relevant data to diagnose a business problem and generate sensible decision alternatives.
- CE02 - Develop communication skills in a business context following the classic scheme of logos, ethos and pathos, to structure a solid and convincing discourse, accompanied by body language and using effective stories and images ("storytelling").
- CE03 - Analyze and design optimized customer-oriented operations and logistics systems, according to the principles and applicability of the Lean philosophy (eliminate what does not add value).
- CE06 - Model the impact of the global macroeconomic and microeconomic environment of each industry on activities specific business ventures in order to develop action plans to adapt to these environments in a context of uncertainty.

Content

The main topics covered by this course are:
- Time series forecasting
- Classification
- Churn modeling
- Recommendation systems
- Text and data mining
- Model building

Evaluation

The evaluation is based on:
- Class participation (40%)

- Team assignments (60%)

The IESE Business School's Honor Code and Learning Partnership apply to all activities in this course. For individual assignments, unless explicitly stated, you should not interact with anyone else. For deliverables to be done in teams you should interact only with the members of your team.