

UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Data-Driven Organizations and Management

2324-2-F9102Q005

Learning objectives

The course aims to build a practical understanding of digitalisation and the digital transformation of organisations. In particular, the course will focus on the data science process and required resources, agile methods for developing data-driven business solutions, strategic, organisational, and competitive approaches to analytics and strategies for data-driven value creation and data-driven sustainability management creation in the context of various industries.

Contents

Big data and artificial intelligence are key drivers for the digital transformation of organisations and today's societies. Thus, the first module introduces the perspective on digitalisation and business transformation throughout the program – how to create value with big data and artificial intelligence. We investigate value creation approaches of "analytical leaders" and will elaborate on how organisations can create and maintain competitive advantages with big data and artificial intelligence. In so doing, we will not only present proven and successful big data and artificial intelligence applications from the industries and business functions of the participants but also teach how to create data-driven innovations that create actual customer value using agile innovation approaches.

After the module, participants:

- have understood how big data and artificial intelligence shape the digital transformation of organisations.
- Can analyse and evaluate the implications of this transformation for their industry/organisation.
- Can develop strategies for data-driven value creation and impact evaluation and are familiar with proven use cases for their domain.
- Know which organisational and technical resources are required for competing on analytics.

Detailed program

Strategies, business Problem Formulation and Data Collection
Business Models, Data management and sustainability
Exploratory Data Analysis
Data-driven sustainability management (intentionality, measurability, additionality)
Data Governance, Ethics, and Privacy
Building and Managing a Data-Driven Team

Prerequisites

Fairly good skills in learning, writing and speaking, and a general knowledge of economic processes. Elements of management.

Teaching methods

Lectures, case discussions, guest speakers and simulations (Data Driven impact evaluation and ESG intelligence)

Assessment methods

In class simulations, written exam (short essays) and in-class participation.

Textbooks and Reading Materials

Reading package made available on Moodle platform.

Semester

First Semester

Teaching language

English

Sustainable Development Goals

QUALITY EDUCATION | DECENT WORK AND ECONOMIC GROWTH | INDUSTRY, INNOVATION AND INFRASTRUCTURE | SUSTAINABLE CITIES AND COMMUNITIES | RESPONSIBLE CONSUMPTION AND PRODUCTION