

Bachelor Degree in Business Administration and Management and Business Transformation

Course: Digital data mapping for agile marketing

Subject: Marketing and Sales

Credits: 6 ECTS

Program: Bachelor

Modality: On-Site

Year: Third

Semester: Second

Academic Year: 2026-2027

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- **Presentation**

Reducing dimensionality and mapping data in the marketing area is essential to optimize processes in a business that takes the road to sustainable transformation. Techniques that allow to analyze and represent spatial data of high dimensionality significantly, including techniques associated with geographic information systems (GIS) will be presented in this subject. Factorial models, multidimensional scaling techniques, correspondence analysis and use of GIS in applied market research environments will help the student be able to undertake the most agile and sustainable marketing plan.

- **Learning outcome of the degree**

- RAT1 - The graduate will be able to recognize the tasks of the different functional areas within a company or organization, taking into account previous theoretical learning about business structures.
- RAT3 - The graduate will be able to identify economic, environmental, political, sociological and technological factors at the local, national and international levels and their impact on organizations through research-based learning in business environments.
- RAT6 - The graduate will be able to understand the different data analysis techniques used to assess the feasibility of a business project.
- RAT9 - The student will be able to provide clear and precise explanations of any knowledge/information, both orally and in writing, in Catalan, Spanish and a third language, particularly English.
- RAT10 - The student will be able to apply digital technologies (at the right time) in his/her field of expertise.
- RAT12 - The graduate will be able to develop both traditional and digital marketing and promotional projects in a business environment.
- RAT16 - The graduate will be able to understand the economic-financial information of business entities and institutions in relation to their environment.
- RAT18 - The student will be able to provide innovative, creative and entrepreneurial solutions in professional situations.
- RAT19 - The student will be able to evaluate the sustainability and social impact of the proposals presented, with ethical, environmental and professional responsibility.
- RAT20 - The student will be able to apply the gender perspective in the professional tasks.
- RAT24 – After completing the degree, the student will be able to design projects for IT services and systems in all business fields.

- **Learning outcomes of the subjects**

- RAM1 – The student will be able to determine an appropriate pricing policy consistent with a company strategy and market reality.

- RAM2 – The student will be able to accurately design a sales network for proper management, direction and remuneration in a written project.
- RAM3 – The student will be able to design digital marketing content in a professional way, through simulation exercises in computer environments.
- RAM6 – The student will be able to integrate in a solvent way the key functions that make up the business activity of the company in a project to perform in a group.
- RAM7 – The student will be able to correctly apply marketing and sales strategies and techniques depending on different areas of activity and circumstances of the environment and market by conducting a case study.
- RAM8 – The student will be able to properly use technological tools to promote the business and optimize sales by learning different sales software.

• Contents

1. The Briefing and the Design of a Research Study

- 1.1. The Briefing as a Strategic Starting Point
- 1.2. Defining Problems and Research Objectives
- 1.3. Hypotheses, Variables, and Methodological Design
- 1.4. Audience Segmentation and Sampling
- 1.5. Validation of Instruments and Execution Timelines

2. Qualitative Research for *Agile Marketing*

- 2.1. Qualitative Techniques
- 2.2. Insight Mapping and Pattern Coding
- 2.3. Emotional and Customer Narrative Analysis

3. Quantitative and Experimental Research

- 3.1. Digital Surveys: Design, Scales, Pretesting, and Validation
- 3.2. Use of Tools like Google Forms, Typeform, and Qualtrics
- 3.3. A/B Experiments and Multivariate Testing
- 3.4. Basic Statistical Techniques for Decision Making
- 3.5. Data Visualization to Communicate Results

4. The Importance of Data in *Inbound Marketing Strategy*

- 4.1. Principles of Inbound Marketing
- 4.2. The Role of Data in Content Segmentation and Automation
- 4.3. Behavior Tracking: Cookies, Tags, Forms, Tracking Scripts
- 4.4. Personalization of the Customer Experience Based on Data
- 4.5. Key Metrics in Inbound: CAC, MQL, SQL, LTV

5. *Consumer Agile Insights* for Organizational Development

- 5.1. What Are “Agile Insights” and Why Are They Key for Innovation?
- 5.2. Continuous Real-Time Consumer Data Collection

- 5.3. Designing Dashboards for Agile Decision-Making
- 5.4. Applying Insights in Product Development, CX, and Campaigns
- 5.5. Agile KPIs: Response Speed, Testing, and Scaling

6. Trends in Market Research

- 6.1. Automation and Research Platforms
- 6.2. Artificial Intelligence and Predictive Analytics
- 6.3. Big Data and Small Data: When and How to Use Each
- 6.4. Data Visualization and Data Storytelling
- 6.5. Ethics and Privacy in Data Management (GDPR, Consent, Transparency)

7. Audience Analysis and Digital Metrics

- 7.1. Demographic, Geographic, Psychographic, and Behavioral
- 7.2. Dynamic Segmentation and Lookalike Audiences
- 7.3. Tools: Meta Ads Manager, Google Analytics 4, SimilarWeb
- 7.4. Introduction to Digital Analytics: Purpose, Source, and Metrics Interpretation
- 7.5. Key Web Metrics: Visits, Bounce Rate, Duration, Conversion
- 7.6. Social Media Metrics: Reach, Engagement, CTR
- 7.7. Multichannel Analysis: Attribution and Funnels
- 7.8. Data-Driven Decision Making: Iteration, Hypothesis, and Optimization

• Methodology

Learning outcomes developed	Teaching methodology	Training activities
Knowledge	Master class	Teacher's presentations
	Instructional sessions	Student's presentations
	Tutoring	Meetings for the resolution of doubts
	Learning based on readings	Reading and analysis of documents
Skill	Learning based on projects	Problem solving
	Learning based on audio-visual	Audiovisual analysis
	Case-based learning	Search and processing of information. Problem solving
Competence	Project-based work	Reporting Submissions of reports or papers

- **Evaluation**

Evaluation system	Weight
Continuous evaluation: exercises, problems, reporting, papers, case studies	40 %
Mid-term exam	20 %
Final exam	40 %

The regulations include the obligation of 75% attendance.

- Absences are divided into two categories: justified and unexcused. Excused absences are those that can be demonstrated with a proof. All other absences are considered unjustified absences.
- The supporting documents must be delivered within a maximum period of 7 days to the teaching staff and clearly include the student's personal data as well as the date and time in which student did not attend to a class.

Continuous assessment

The final grade for the subject is calculated based on the weighting of three evaluation blocks, divided into evaluable activities:

A. Midterm exam: 20%

B. Exercises, problems, preparation of reports, assignments, presentations: 40%

1. Four evaluable activities: 5% each
2. A group assignment or report: 10%
3. A group presentation: 10%

C. Final exam: 40%

These three blocks will only be weighted if the final exam grade is equal to or greater than 4.0. If the final exam grade is less than 4.0, the subject cannot be passed.

In the event that the subject is failed and, in turn, the final exam grade is less than 5.0, the student can recover the final exam with an additional test. If the weighted grade for the activities in section B is less than 5, this is also recoverable. With the result obtained, the final grade for the subject will be calculated according to the previous criteria.

Students who do not attend evaluative activities with a weight greater than 50% will receive an overall course grade of "Not presented."

Single Evaluation

The single evaluation consists of a single exam that is equivalent to 100% of the course grade. The exam, and therefore the subject, is passed with a grade of 5 out of 10 in this final test. In case of obtaining a grade lower than 5.0, the student has the right to a make-up exam.

To benefit from the single evaluation, it is necessary to send a written request to the coordination during the first 15 business days of the course.

The regulations establish a mandatory attendance requirement of 75%.

Regular attendance at in-person teaching activities is a fundamental academic requirement for the proper acquisition of the competencies and learning outcomes of the course. In this regard, a minimum attendance of 75% of the total scheduled sessions is mandatory.

Failure to meet this minimum attendance percentage will result in the loss of the right to sit the final exam for the course. Consequently, the student will be graded as a fail, with no possibility of reassessment or second-chance opportunities, in accordance with the University's current academic regulations.

1. Absences are divided into two categories: justified and unjustified. Justified absences are those that can be supported by documentation. All other absences are considered unjustified.
2. Supporting documents must be submitted to the teaching staff within a maximum period of 7 days, and must clearly include the student's personal details, as well as the date and time during which attendance at class was prevented.

• Bibliography

- Barbrook-Johnson, P., & Penn, A. S. (2022). Systems Mapping: How to build and use causal models of systems (p. 186). Springer Nature.
- Timmermans, S., & Tavory, I. (2022). Data analysis in qualitative research: Theorizing with abductive analysis. University of Chicago Press.
- Wang, X. (2023). Next-generation sequencing data analysis. CRC Press.
- Hu, X. (2023). Dynamic Data-Driven Simulation: Real-Time Data for Dynamic System Analysis and Prediction. World Scientific.
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