



centro adscrito a:



UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH

ANALYTICS FROM THE INDUSTRY AND CUSTOMER PERSPECTIVE TEACHING GUIDE 2024-25

GENERAL DETAILS

Name:	ANALYTICS FROM THE INDUSTRY AND CUSTOMER PERSPECTIVE
Code:	801508
Academic Year:	2024-25
Degree:	Master's Program in Business Administration and management
No. of credits (ECTS):	5
Location in the curriculum:	2nd quarter
Department:	Financial management, management control and accounting
Department Manager:	Dr. Alfonso Bárcena
Last revision date:	July 2024
Lecturer in Charge:	Dra. Magda Cayon

1 GENERAL DESCRIPTION

The subject area takes a tour of the evolution of the different Management analysis systems that have been and are being used in organisations.

The perspective of the subject is essentially strategic, promoting analysis and reflection on the part of the student on what are the advantages and disadvantages of the different methods and Management analysis systems and the decisions they can make as managers of organisations, through their use.

The company's strategic vision must be controlled and evaluated through the most suitable Control tools according to the type of business, the definition of the strategic plan, the business model and the key success factors.

The evaluation of the results of the Management analysis will allow the student to make the pertinent decisions to change the strategy or reformulate it, redefining it totally or partially and later redesigning the same tools and control indicators.

2 OBJECTIVES

The development of the subject has, fundamentally, the following purposes:

- Provide students with a managerial vision of Management analysis systems and their evolution over the last few years.
- Develop in students the ability to link the company's strategic plan with the results obtained from its implementation, designing a previously agreed suitable system.
- Provide students with knowledge and tools to analyse the results of the management analysis system.
- Train students to redefine a strategic plan and/or a management analysis system based on the analysis of the results.
- Provide students with criteria for making decisions that affect business strategy and the different heads of organizations.
- Present the students with guidelines and recommendations to communicate the results to the members of the organization, working as a team with people linked to management, deciding the most appropriate control model, the measurement of the results and the pertinent corrective measures.
- In short, provide students with the ability to design and direct the implementation of a Management analysis system in an organization.

3 LEARNING OUTCOMES

- Critically analyse business performance figures in relation to the sector and the market, including the use of emerging mass management technologies (Big Data and Business Analytics)
- Develop organisational capabilities that drive innovation and prepare the entire company for transformation processes.
- Identify emerging trends and technologies that will have the greatest impact on the business model and that may constitute significant advantages.
- Resolve situations of risk, uncertainty and conflict of interest, through the simulation of real cases.

4 CONTENTS

UNIT 1. EVOLUTION OF MANAGEMENT ANALYSIS SYSTEMS IN ORGANIZATIONS

Learning specific outcome:

Once this subject is brought to light in class and worked on, students will be able to:

- Assess the importance of having a management analysis system for decision-making.
- Distinguish between different management analysis systems, their utilities and the difficulties of their implementation.
- Distinguish between cost accounting and management analysis.
- Analyse strategic decisions through basic control tools.
- Define the decisions that can be taken depending on the management analysis system used.
- Distinguish the pros and cons of the different management analysis systems.

Contents:

- 1.1. Historical evolution of management analysis systems.
- 1.2. From the pyramid of ratios to the Balanced Scorecard.
- 1.3. Cost systems and management analysis systems.
- 1.4. Strategy and management analysis.

UNIT 2. MANAGEMENT ANALYSIS SYSTEMS BASED ON ECONOMIC AND FINANCIAL PARAMETERS

Learning specific outcome

After completing this part of the content of the subject area, the participant will be able to:

- Identify and apply the different management analysis systems based on financial and economic indicators.
- Link strategy and decision making with the results of the management analysis system.
- Analyse the effects of decisions on control tools.
- Determine the best financial indicators based on the strategic plan.
- Defend using a management analysis system to make a specific decision.

Contents

- 2.1. The pyramid of ratios and management analysis.
- 2.2. Analysis of the strategy with the pyramid of ratios.
- 2.3. Economic levers and financial levers.
- 2.2. The limitations of finance and accounting in decision making.

UNIT 3. VALUE CREATION AND MANAGEMENT ANALYSIS

Learning specific outcome:

After working on this topic, the participant will be able to:

- Identify and distinguish the different measures of value generation.
- Determine whether a company creates value.
- Quantify the value created by the company during a certain time horizon.
- Analyse the sustainability of value creation.
- Make decisions to ensure future value generation.

Contents:

- 3.1. Generating value: Profitability vs. cost of resources.
- 3.2. ROI/ ROE /ROA /ROCE.
- 3.3. EVA (Economic Value Added).
- 3.4. What is the best indicator?

UNIT 4. BALANCED SCORECARD

Learning specific outcome:

At the end of the presentation, the debate and the cases of application of the contents of this theme, the students will be able to:

- Design a strategic map.
- Identify critical aspects in the achievement and implementation of the strategic plan.
- Design financial and non-financial management analysis indicators relating them to each other.
- Analyse causes and effects of the different critical factors in the success or failure of the implementation of the strategy.
- Discuss the interpretation of causes and effects and the interrelationships between indicators.
- System feedback.

Contents:

- 4.1. The four pillars of the Balanced Scorecard.
- 4.2. The strategic map.
- 4.3. Scorecard KPIs.
- 4.4. Financial and non-financial indicators
- 4.5. Feedback from the control system.
- 4.6. Remuneration policies linked to the Balanced Scorecard.

UNIT 5. THE VALUATION OF COMPANIES AS A MANAGEMENT ANALYSIS TOOL

Learning specific outcome:

At the end of this topic, students will be able to:

- Choose the most suitable business valuation system for each organization.
- Identify and correctly interpret the incidence of the components that determine a company's value.

Contents:

- 5.1. Decision-making results in the value of the company.
- 5.2. Different business valuation systems.
- 5.3. Link the assessment system to the situation of the organization.
- 5.4. The inverter reading.

5 TEACHING AND LEARNING METHODOLOGY

The subject is organised so that the student can obtain knowledge of the different topics, put it into practice, and develop a participatory, proactive and critical attitude towards them.

The subject's methodology is eminently practical, so it is essential to attend the face-to-face sessions in order to take advantage of and pass the subject area.

For each of the topics, all the study material that the participant will have to prepare is provided in advance, following the session guide provided and the teacher's instructions. For each topic, the teacher performs a part of the theoretical session summary of the material –approximately 20% of the time of each session- to later work on cases, exercises, individually and in groups.

The face-to-face activities that will be carried out through:

- Presentation by the lecturer of the theoretical contents of the different themes of the subject area.
- Discussion of contents.
- Group realisation of cases (previously prepared outside the classroom by the students).
- Discussion of the cases.
- Feedback and conclusions of the cases.

6 ASSESSMENT

In accordance with the Bologna Plan, the model rewards the constant and continuous effort of the student body. For the 2020-21 academic year, 60% of the grade for the subject area is obtained from the continuous evaluation of the supervised activities and the remaining 40% from the face-to-face final exam. There is one sitting for the final exam.

The final mark for the subject area (FM) will be calculated from the following formula:

- **FM = Final Exam Mark x 40% + Continuous Assessment Mark x 60%**
- Minimum mark of the final exam to calculate the FM will be 40 points out of 100.
- The subject area is passed with a FM equal to or greater than 50 points out of 100.

Type of activity	Description	% Continuous assessment	
Deliveries:			20%
Case study	Group work session 6	100%	
Test:			40%
Mid-term exam	Test to be taken after each session	100%	
Final exam			40%
	Final exam	100%	

7 BIBLIOGRAPHY

6.1 BASIC BIBLIOGRAPHY

Robert S. Kaplan and David P. Norton. Balanced Scorecard. Harvard Business School Press. 2000.

Richard A. Brealey, Stewart C. Myers, Franklin Allen. Principles of Corporate Finance. Mc Graw Hill. 2019.

6.2 COMPLEMENTARY BIBLIOGRAPHY

Osterwalder, A, and Pigneur, Y. Business Model Generation.. Deusto 2011.