Business Data Science for You Challenge!

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Agenda

- Who I am
- Game Rules
- Business Challenge
- Evaluation Criteria

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Who am I – Maria Picciotti

AI-LOG

Over 10 years of experience in complex **digital transformation programs, SAP S/4HANA implementation projects, business process redesign, and redefinition of the target operating model,** both in **Italy** and **international contexts.** Specialized in the **manufacturing, services, utilities, and telecommunications sectors.**

Working Experience

Manager - AI-LOG
Manager - PwC
Senior Associate - PwC
Analyst Consultant - Capgemini

Education

Massachusetts Institute of Technology
Data Science & Machine Learning, Making Data-Driven Decisions
Università di Pisa
Executive Master in Finanza e Controllo di Gestione (Fgc)
Università Ca' Foscari Venezia
Laurea Magistrale in Direzione Aziendale
Università degli Studi "Gabriele d'Annunzio"
Laurea in Economia Aziendale

Contact info:
maria.picciotti@ai-log.it

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Who am I – Nicola Galli

pte.

7 years of experience in HR, gained both in consulting and manufacturing companies, I recently graduated in **Career Coaching.** I currently working at PTE Group, where my focus is on recruitment, training, and career development within the organization.

Working Experience

People & Culture Advisor – PTE Consulting
HR Generalist – Sofinter
Recruiter – ManpowerGroup
Career Support – Provincia di Lecco

Education

Escuela Europea de Coaching
Diploma in Career Coaching

Università degli Studi di Milano - Bicocca
Master in Risorse Umane
Laurea in Sociologia

Contact info:
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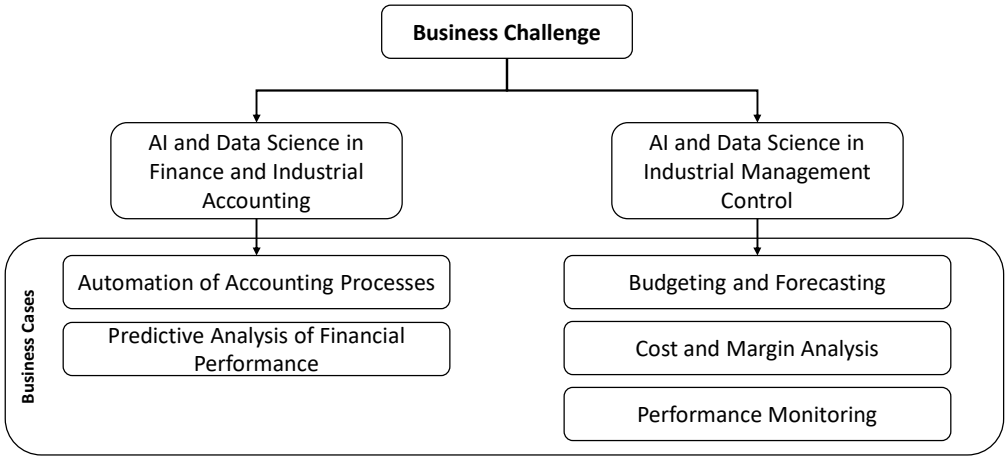
Business Challenge

Business Challenge consists of two cases:
Note: The team has to choose only one of the suggested topics



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Business Challenge

AI and Data Science in Finance and Industrial Accounting – Business Cases

Business Case 1: Automation of Accounting Processes:

Issue Details:
In the pharmaceutical industry, AI and Data Science are used to automate accounting processes such as general ledger management, invoice processing, and bank reconciliation. Advanced algorithms can categorize transactions, flag discrepancies, and even assist in compliance reporting by ensuring that all financial documentation adheres to regulatory standards;

Example Application:
A pharmaceutical company may implement robotic process automation (RPA) to handle routine tasks like invoice approvals, which allows financial teams to focus on strategic decision-making rather than manual entry;

Business Case 2: Predictive Analysis of Financial Performance:

Issue Details:
Predictive analytics plays a crucial role in the automotive industry, where it is employed to forecast financial performance by analyzing sales data, production costs, and market trends. By utilizing historical data and machine learning models, manufacturers can predict cash flows, budget needs, production planning and procurements more accurately;

Example Application:
An automotive manufacturer might use predictive analytics to assess the impact of economic conditions on car sales, helping them adjust production and financial planning and manage inventory effectively;

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Business Challenge

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AI and Data Science in Industrial Management Control – Business Cases

Business Case 3: Budgeting and Forecasting:

Issue Details:
In the industrial manufacturing sector, AI and Data Science enhance the accuracy of budgeting and forecasting by analyzing large datasets, including historical production data, labor costs, and supply chain fluctuations. This allows organizations to create more precise financial forecasts that reflect real-time operational conditions;

Example Application:
A manufacturing company might implement advanced analytics to develop budgets that account for seasonal fluctuations in demand, thus optimizing resource allocation and production planning;

Business Case 4: Cost and Margin Analysis:

Issue Details:
In the fashion industry, Data Science is employed to analyze production costs and improve margins. By utilizing analytics tools, companies can track expenses related to materials, labor, and logistics, identifying areas where costs can be reduced without compromising quality;

Example Application:
A fashion brand may use data analysis to evaluate the cost-effectiveness of different suppliers and production processes, enabling them to choose options that maximize profit margins;

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Business Challenge

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AI and Data Science in Industrial Management Control – Business Cases

Business Case 5: Performance Monitoring:

Issue Details:
Real-time performance monitoring in the large-scale retail (GDO) sector is facilitated by AI-driven dashboards that track key performance indicators (KPIs). These dashboards utilize Data Science to integrate data from various sources, providing a comprehensive view of sales performance, inventory levels, and customer behavior;

Example Application:
A retail chain might deploy AI-powered dashboards to monitor sales in real-time, allowing managers to respond swiftly to trends, such as adjusting pricing strategies or reallocating stock to meet customer demand.

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Game Rules

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1. Team

The team should be composed from 4 to 5 attendees. Each team should nominate a Team Leader (as speaker)

3. Executive summary

1. Scope & Approach
2. Overview of technical Solution
3. Technical details

5. Challenge

1. Team presentation with detailed ownership of each team member
2. Executive Summary
3. Mock-up

Start

Finish

2. Subscribe

Team data: name, logo, team leader, attendees and selected business case

4. Mock-up

Participants will have full autonomy in presenting their proposing applications. The key requirement is to utilize AI and Data Science

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Business Challenge

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Expected Deliverables | Executive Summary & Mock-Ups :

PowerPoint Presentation: A complete PowerPoint presentation based on the outlined structure

Dashboard Mock-Ups: Visual representations of proposed dashboards, KPI's and reports

Technical Architecture Diagram: A visual diagram of the proposed solution architecture

Implementation Timeline Document: A detailed document outlining the timeline and phases of implementation

Event Calendar:

Date and Time	Activity	Mode
17 October 2024 12:15 – 13:00	Presentation of the Business Challenge for the 2024-2025 academic year	Online
08 November 2024 09:00 – 10:00	Project status meetings and calls with individual groups	Online
06 December 2024 All day	Day of project presentations and award ceremony	On-site event

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Evaluation Criteria

Evaluation Item	Detailed Explanation	Max Weighted Score
Solution Consistency & Feasibility	Level of coverage of business requirements and technical solution feasibility	15
Team involvement	Team member ownership and tasks performed by each ones	10
Executive summary	Quality of documentation, public speaking and fit to scope	25
Originality	Level of originality and creativity of the solution	10
Technical solution	Details of technological tools & solution	10
Mock-up	Presentation of POC and working model (demo) in order to show the coverage of business case	30
	Total	100

For all the topics, a System mock-up and an Executive Summary document are required to present the project.

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