Budget: **Project** Course Recommender System **Operations & Training**

	TARGET BUDGET	ACTUAL/FINAL SPEND	UNDER/OVER
	$ 154.936,00	$ -	$ 154.936,00

MILESTONES & TASKS	EMPLOYEE	HOURS	RATE	UNITS	$/UNIT(S)	TRAVEL	EQUIPMENT / SPACE	FIXED	MISC.	TOTAL OTHER	BUDGET	ACTUAL	UNDER/OVER
Milestone 1: Establish course recommender system plan													
Task 1: Hire Data Science and Data Engineer	Human Resources Specialist	80	$ 40,00			$ -	$ -	$ -	$ -	$ -	$ 3.200,00		$ (3.200,00)
Task 2: Align project with business needs, requirement and constraints	Data Science and Machine Learning	20	$ 65,00			$ -	$ -	$ -	$ -	$ -	$ 1.300,00		$ (1.300,00)
Task 3: Selection and data wrangling (pre-processing and transformation)	Data Science and Machine Learning	28	$ 65,00			$ -	$ -	$ -	$ -	$ -	$ 1.820,00		$ (1.820,00)
										Total	$ 6.320,00	$ -	
Milestone 2: Analyze course recommender system													
Task 1: Understanding data for accurate prediction	Data Science and Machine Learning	28	$ 65,00			$ -	$ -	$ -	$ -	$ -	$ 1.820,00		$ (1.820,00)
Task 2: Leverage exploratory data analysis (data mining)	Data Science and Machine Learning	56	$ 65,00			$ -	$ -	$ -	$ -	$ -	$ 3.640,00		$ (3.640,00)
										Total	$ 5.460,00	$ -	
Milestone 3: Construct course recommender system													
Task 1: Construct and evaluate model	Data Science and Machine Learning	20	$ 50,00			$ -	$ -	$ -	$ -	$ -	$ 1.000,00		$ (1.000,00)
Task 2: Source Cloud for Architectural	IT Director	8	$ 130,00			$ -	$ -	$ -	$ -	$ -	$ 1.040,00		$ (1.040,00)
Task 3: Calculate Project Cost and Benefit	Financial Analyst	16	$ 30,00			$ -	$ -	$ -	$ -	$ -	$ 480,00		$ (480,00)
										Total	$ 2.040,00	$ -	
Milestone 4: Execute course recommender system													
Task 1: Presentation	Data Science and Machine Learning	12	$ 65,00			$ -	$ -	$ -	$ -	$ -	$ 780,00		$ (780,00)
Task 2: Start Execute	Data Science and Machine Learning	20	$ 65,00			$ -	$ -	$ -	$ -	$ -	$ 1.300,00		$ (1.300,00)
										Total	$ 2.080,00	$ -	
Milestone 5: Select and install software and equipment													
Task 1: Supervise setup of course recommender system	API Specialist	20	$ 40,00			$ -	$ -	$ -	$ -	$ -	$ 800,00		$ (800,00)
Task 2: Maintain course recommender system	Data Science and Machine Learning	20	$ 65,00			$ -	$ -	$ -	$ -	$ -	$ 1.300,00		$ (1.300,00)
Task 3: Supervise vendor installation of the equipment	IT Director	20	$ 130,00			$ -	$ -	$ -	$ -	$ -	$ 2.600,00		$ (2.600,00)
Task 4: Establish internal security protocols for equipment	Data Governance Manager	8	$ 45,00			$ -	$ -	$ -	$ -	$ -	$ 360,00		$ (360,00)
Task 5: Launch course recommender system	IT Director	12	$ 130,00			$ -	$ -	$ 7.700,00	$ 300,00	$ 8.000,00	$ 9.560,00		$ (9.560,00)
										Total	$ 14.620,00	$ -	
Milestone 6: Promote course recommender system as to assist user in their study journey.													
Task 1: Banner add on social media	Marketing Promotion Manager	20	$ 45,00			$ -	$ -	$ 8.000,00		$ 8.000,00	$ 8.900,00		$ (8.900,00)
Task 2: 3 press pieces published in relevant print and online publications	Marketing Promotion Manager	20	$ 45,00			$ -	$ -	$ 2.500,00	$ 3.000,00	$ 5.500,00	$ 6.400,00		$ (6.400,00)
										Total	$ 15.300,00	$ -	
Milestone 7: Establish and experiment platform - software													
Task 1: Implement A/B Testing	Data Science and Machine Learning	56	$ 65,00			$ -	$ 3.000,00	$ 10.000,00	$ -	$ 13.000,00	$ 16.640,00		$ (16.640,00)
Task 2: Apply Multiarmed Bandit and Bayesian Optimization	Data Science and Machine Learning	56	$ 65,00			$ -	$ -	$ -	$ 2.000,00	$ 2.000,00	$ 5.640,00		$ (5.640,00)
										Total	$ 22.280,00	$ -	
Milestone 8: Marketing and TV Ads Campaign													
Task 1: Marketing Ads	Marketing Promotion Manager	56	$ 45,00			$ -	$ -	$ 10.500,00	$ 2.000,00	$ 12.500,00	$ 15.020,00		$ (15.020,00)
Task 2: TV Ads	Marketing Promotion Manager	56	$ 45,00			$ -	$ -	$ 25.000,00	$ -	$ 25.000,00	$ 27.520,00		$ (27.520,00)
										Total	$ 42.540,00	$ -	
Milestone 9: Actively and meaningfully engage the user to generate buy-in and project support.													
Task 1: 3 live YouTube focused on transit talks	Product Manager	28	$ 47,00			$ -	$ -	$ 6.000,00	$ 3.000,00	$ 9.000,00	$ 10.316,00		$ (10.316,00)
Task 2: 75% of Users surveyed before launch	Product Manager	20	$ 47,00			$ -	$ -	$ 10.000,00	$ -	$ 10.000,00	$ 10.940,00		$ (10.940,00)
Task 3: 70% of top users participate in user outreach program	Product Manager	20	$ 47,00			$ -	$ -	$ 17.500,00	$ 1.000,00	$ 18.500,00	$ 19.440,00		$ (19.440,00)
										Total	$ 40.696,00	$ -	
Reserve buffer											$ 3.600,00		
TOTAL											**$ 154.936,00**	**$ -**	