

Group 12
The Application of Artificial Intelligence
through Integrating Machine Learning and Game Theory

In this paper you will investigate the application of artificial intelligence (AI) for a marketing scenario by writing an eight-page paper reflecting the following topics:

1. Please come-up with a **real-world marketing scenario** between **two competitors** in that scenario. Then you will consider **six possible marketing strategies**. **Three strategies are considered by one competitor**. **The other three strategies are considered by the second competitor**. Each strategy that a competitor plays has a payoff as the consequence with respect to the corresponding strategy by the opposing competitor. The marketing scenario should be extensively explained in 2 pages. **Please provide sources to back your marketing scenario as the main concern**. You need to look into articles or sites for real-world marketing scenarios that are the center of concerns or problems. Please cite and reference accordingly. **(2 pages at minimum)**
2. Please explain the complexity intersection of Artificial Intelligence (AI) and Marketing, focusing on its **challenges** and **implications** corresponding to the marketing scenario above. **Please provide sources to back your contents**. In this case you need to cite and reference. **(2 pages at minimum)**
3. Please **elaborate the marketing scenario through the following matrix**. **First re-explain the marketing scenario in one or two paragraphs**. **Then explain the marketing strategy execution through the following matrix**. **You need to make sure you elaborate the setup in such a way that conflict of interest between two possible competitors are at minimum**. **(2 pages at minimum)**

24, 24	42, 65	0, 42
30, 0	19, 19	15, 42
42, 0	65, 0	8, 8

4. Please provide a conclusion of the way that this AI-implementation may be successful. Please reflect on possible implications. **Please provide sources to back your contents**. In this case you need to cite and reference. **(2 pages at minimum)**

Notes:

- This paper is basically the proposal paper. So please make sure you find a real-world marketing scenario as the main concern. You will get the opportunity to implement this on your second project with the involvement of both graduate and undergraduate students in groups as further instructions are provided for the second project.

- Each paragraph cannot be less than 4 sentences and 4 lines; and also each paragraph cannot go beyond one page.
- Each sentence that is written based on a source, the corresponding sentence needs to be cited. Its reference is placed at the end of the paper. A template is provided to be used.
- Use the APA 7 template.
- Assignments are checked for copied works. Please stay original in your paper.
- **Performance Scale will be used to grade the paper.**