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### **MGSC 310: Final Project Outline**

The project conducted by myself, Tiffany Le, and my partner, Ryan Shihabi, will further investigate the mass adoption of machine learning and AI [Artificial Intelligence] in the technology industry and others. Our analysis plans to provide answers and insights to assist a company in deciding whether entering utilizing this technology is worth the risk or not.

#### **Research Focus**

The portion that I will undergo an analysis and research on is a recommendation system on “How can companies strategically structure their machine learning and artificial intelligence products, taking into account current market trends and best practices for the development of these tools?” This question attempts to dive deeper into understanding the influence of machine learning and artificial intelligence and its popularity with the public.

#### **Data and Variables**

To address the inquiry on optimal structuring of machine learning/artificial intelligence (ML/AI) products, analysis will rely on the "[Artificial Intelligence Tools 2023](#)" dataset curated by "MUHAMMAD TALHA AWAN." This dataset encompasses key variables: AI Tool Name, Description, Free/Paid/Other, Useable For, Charges, Review, Tool Link, and Major Category. The investigation will specifically leverage Free/Paid/Other, Useable For, Charges, Review, and Major Category to derive insights. The goal is to formulate recommendations for a new company, not featured in the dataset, on structuring their product, considering factors such as pricing model, usability, reviews, and alignment with the major category, based on the intended usage and product category of the company.

#### **Recommendation System**

Utilizing the datasets, our strategy involves constructing a K-Nearest Neighbors Model to establish a recommendation system. This system aims to guide product structuring decisions for companies by considering the intended usage and product category preferences they desire. Through this recommendation system, we are able to ensure the optimal allocation of company resources in fields conducive to growth is paramount.

In conclusion, our collaborative effort aims to contribute actionable insights that empower companies to navigate the risks and gains of machine learning and AI adoption.