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Course: Machine Learning with Python

The History and Tools of Machine Learning

Task: Write about 200 words to answer the question: "how is machine learning used in this environment, and what does it do that humans can't (or would be too time intensive)?"

Article: *How big MNCs uses machine learning or Artificial Intelligence to grow their business -* [*McDonald's*](#)

McDonald's, as the world's largest fast-food chain, serves millions of customers daily, generating vast amounts of data.

- **Problem:** *To stay competitive, the company has integrated machine learning and AI to optimize customer experience and increase sales. Manually analyzing such a massive volume of data would be nearly impossible, but machine learning automates this process, providing real-time insights and personalized recommendations.*

- **Background Play:** *As the largest fast-food chain in the world, serving close to 70 million people daily, it's clear that it generates a lot of data. One key application is McDonald's dynamic digital menus, which use AI to adjust based on factors like time of day, weather, and customer preferences. For example, on a hot day, the menu may prioritize cold beverages, while breakfast items are highlighted in the morning. This data-driven approach has led to increased sales, as seen in Canada's 3% revenue growth.*

- **Hypothesis:** *If McDonald's continues to leverage AI and machine learning for real-time data analysis, then it will further enhance customer experience, optimize sales strategies, and increase revenue by providing personalized recommendations, dynamic digital menus, and efficient service options.*

- **Solution:** *Through AI-driven automation, McDonald's optimizes decision-making, enhances customer engagement, and drives revenue growth—far beyond what human analysis could achieve in a reasonable timeframe.*