



AI & DATA-DRIVEN STARBUCKS – DEEP BREW

Presented by:

*Manav Jawrani (19)
Bhavya Kurup (33)
Doulat Lalwani (34)
Samartha Rayguru (59)*

Overview

- *Introduction*
- *How Starbucks creates value out of data and AI*
- *The Roadmap of Deep Brew*
- *Challenges and Limitations*
- *What does the data-driven future of Starbucks look like?*



Introduction

- AI Innovation at Starbucks
- Key Initiatives
- Deep Brew Overview
- Data Transformation Timeline
- Business Impact



How Starbucks creates value out of data and AI



Coffee brand executives realized that using data analytics to maximize their customer lifetime value (average purchase price per customer per visit, number of visits per customer per year, and average customer lifetime) was going to be the key to achieving unbeatable competitive advantage.



- Personalized recommendations
- Innovation and new product offerings
- Opening new store locations



The Roadmap of Deep Brew



01

Initiation and Response to Market Changes:

- Triggered by McDonald's acquisition of Dynamic Yield.
- Strategic move to bring reinforcement learning and ML to fast food.
- Prompted Starbucks to explore and integrate machine learning into their business.



02

Strategic Deployment Amidst Market Dynamics:

- Response to fast-moving market changes.
- Deep Brew identified as a perfect solution.
- Recognition of the new trends.



03

COVID-19 Era Customization:

- Deep Brew's pivotal role during the COVID-19 pandemic.
- Customization of drive-thru recommendations.
- Consideration of factors like time of day, traffic volume, and day of the week.



04

Integration into Starbucks Recommendation System:

- Deep Brew integrated into the recommendation system.
- Personalization of recommendations at drive-thrus across various stores.

Challenges and Limitations

While the use of AI and data-driven technology has many benefits, there are also several challenges and limitations that Starbucks must consider. One challenge is the potential for bias in the algorithms used by Deep Brew. This can lead to unintended consequences and unfair treatment of certain groups of customers. Additionally, there is the risk of data breaches and privacy concerns when collecting and using customer data.

Another limitation is the need for human oversight and intervention. While AI can process vast amounts of data quickly, it still lacks the ability to make complex decisions and judgments that require human intuition and empathy. As such, Starbucks must strike a balance between relying on AI for efficiency and personalization while also maintaining a human touch in its operations.

One of the challenges for the brand would be to provide consistent experience at scale across all its stores globally. Cultures differ widely across regions, and some customers may prefer a socially distant experience. The tools and systems might not work as intended due to technology adoption issues. How can they effectively scale the “Deep Brew” outcomes across the world while providing some level of consistency and incorporating the local context? Hopefully, local AI teams can translate the mission into delightful experiences driven by analytics. Starbucks could be the “data company” that can lead by example across the industry!

What does the data-driven future of Starbucks look like?



As part of its digital flywheel initiative, Deep Brew has been a huge success for Starbucks. The company has grown its customer base to nearly 18 million by the end of 2019, which led to same-store sales growth of 6% in the United States.



In addition to the numbers gains, the AI platform has clearly helped create a self-sustaining coffee brand that is a data company. The more data Starbucks collects, the better it is able to make business decisions to grow.



Starbucks employees and partners can devote more time to what matters most to them – coffee and the customers – thanks to an AI-driven sidekick. As a result of operating world-class technology, the coffee chain has also been able to attract some of the best talent in technology, stealing away candidates who aspired to work for tech giants.



THANK YOU