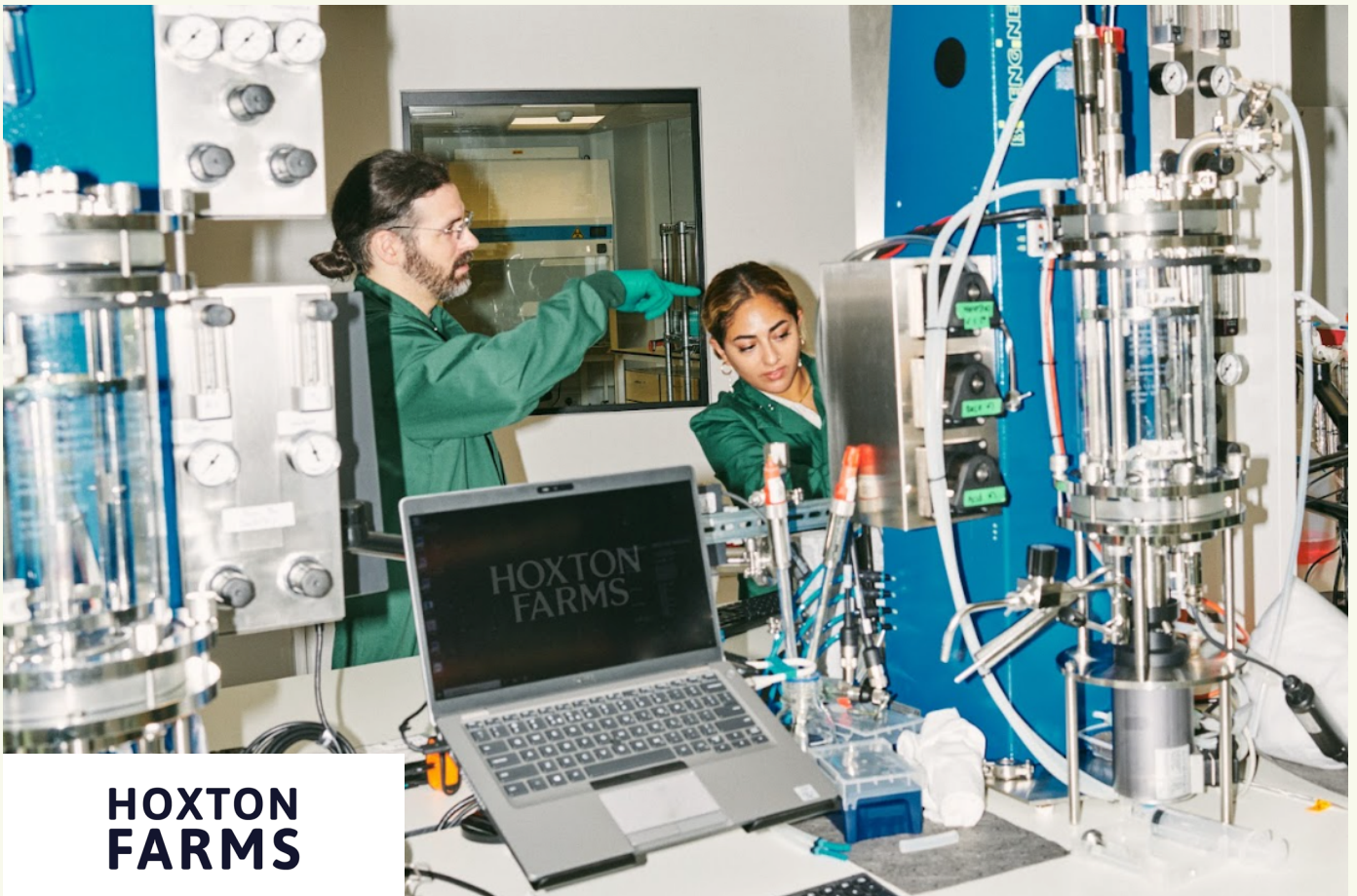




Case Study

Creating a sustainable future by applying machine learning to cultivated fat R&D

Hoxton Farms



**HOXTON
FARMS**



Improve data capture and data analysis to accelerate cell line development and unlock a scalable, cost-effective bioprocess at Hoxton Farms

Based in London, Hoxton Farms crafts cruelty-free, sustainable fats to combine with plant protein to create delicious meat alternatives. Combining cell biology and mathematical modeling, Hoxton Farms is focused on making ingredients for products that look, cook, and taste just as good as the real thing, if not even better.

Company Profile

Industry

Food and Beverage

Corporate HQ

London, England

↑ Improved data quality

Standardized data capture and automated analysis gives scientists accurate R&D data with powerful insights.

Cross-functional analysis

Hoxton Farms implemented Benchling across all of their R&D teams – unifying processes for data analysis and enabling more general machine learning models to be built.

↑ Increased efficiency

Scientists report spending less time on data entry and more time on meaningful work, such as running experiments and analyzing data to gather insights.

Challenges

Achieving cost effectiveness at scale

Before using Benchling, The biggest challenge Hoxton Farms faced was driving down the cost for their cell culture processes, including increasing yield and reducing media costs. At the same time, they wanted to scale production to meet the nutritional needs of entire populations — not just a few people.

Managing massive amounts of data

Hoxton Farms wanted consistent, non-siloed data sets that run across multiple experiments, with the ability to track reagents, cell lineages and assay results over time.

Reducing time wasted on manual, ad hoc data entry

Scientists at Hoxton Farms were previously spending a disproportionate amount of time on data entry, limiting time spent on research.

Outcomes

Standardization improves machine learning modeling

Hoxton Farms collects a huge amount of data — and now they have a way to put it to use. Using machine learning, the team analyzes the data and generates new experiments to use in the lab. With Benchling, data is automatically captured, making it easier for team members to view, analyze, and share results.

A scientifically-aware platform boosts scientist efficiency

Scientist efficiency is important to Hoxton Farms. With Benchling, scientists no longer need to toggle between multiple systems to do their jobs, saving time and costs. Hoxton Farmers can reduce the amount of time that they're spending on data entry and analysis, and focus on designing and running experiments. The team at Hoxton Farms has built over 200 Insights dashboards which give scientists instant access to data that would have previously taken hours to collate without Benchling.

Custom implementation results in better data management

Benchling is now the central source of truth for not only storing data, but also how Hoxton Farms thinks about analyzing data. In particular, having the ability to customize schemas and configure Benchling to their unique organization has been a game changer. While Hoxton Farms has their own internal data structures, Benchling makes it possible to implement these with structured data.

“Data plays a fundamental role for Hoxton Farms, so structuring it well is crucial. We need data sets that are consistent and that aren’t confined to individual experiments, but rather run across experiments so we can iterate quickly and optimize our processes.”



Ed Steele
Co-Founder
Hoxton Farms