HOW A GLOBAL RETAILER BUILT DATA SCIENCE CAPABILITIES WITHOUT ANY DATA SCIENTISTS

SPARK BEYOND

SparkBeyond is the decision intelligence platform of top consulting firms and enterprise companies. Its Discovery Platform catalyzes the analytics transformation with AI automation.

Existing analyst teams can now find signals across multiple data sources, uncover hidden insights in complex data, and build predictive models with no code nor heavy lifting. It enables a massive acceleration of the analytics process, produces better performing models with lasting accuracy, and boosts transparency and collaboration across the organization.

THE GOAL

Empower the existing analytics team with robust and intuitive data-science capabilities

Many companies have a team of analysts who are well-placed for driving business insight (BI). Yet in order to ensure the success of an analytics project, data science expertise are required.

AI analytics can help your existing teams build this capability in a no-code environment.

Analytics teams already have the business domain knowledge, analytic mindset and the ability to prepare and access data sets.

Here's how a global retailer equipped their analytics team with AI to find answers hidden in large, complex and disconnected data sets, massively reducing time to value.

TOP CHALLENGES
FOR ANALYTICS TEAMS

INADEQUATE TOOLS

- Requires extensive coding skills
- Involves significant manual effort to connect disparate datasets

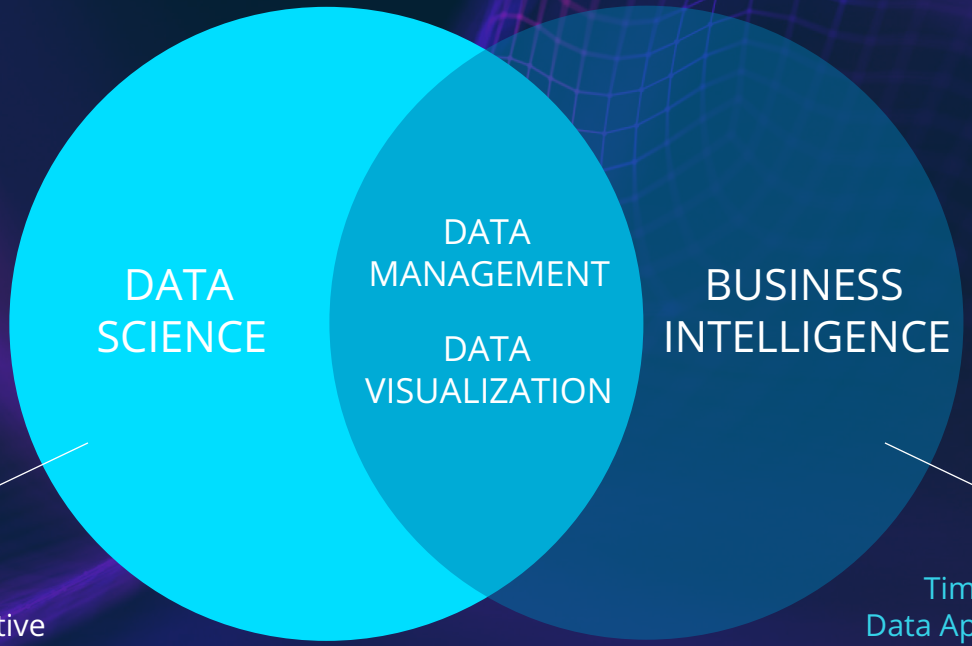
LIMITED EXPERTISE

- Identifying and validating high ROI use cases
- Steep learning curve to effective project execution

INEFFICIENT APPROACH

- Lack of involvement of the right experts at the right moments
- Delay in time-to-value

DATA SCIENCE VS. BUSINESS INTELLIGENCE



Time focus: Future
Data Approach: Explorative
Deliverable: Statistical Models
Automation: Low
Data Types: Unstructured/Structured
Business Driver: Planning
Business Value: Hypothesis Testing

Time focus: Historic
Data Approach: Descriptive
Deliverable: Reports, Ad-hoc views
Automation: High
Data Types: Structured
Business Driver: Decision Support
Business Value: Trend Identification

HOW TO EVALUATE
EACH BUSINESS CASE

BUSINESS VALUE
What would be the impact to the company by solving this problem?

URGENCY
How quickly does it need to be solved?

DATA QUALITY
What available data can be used?

COMPLEXITY
How difficult is the specific use case to solve?

PLANNING

Scoping and selecting the best business case accelerates the time to value

Working in partnership with McKinsey & Co, the retailer had already identified a number of high ROI business problems it wanted to solve.

Each use case was then evaluated using SparkBeyond's methodology, and the best one was selected to launch AI analytics across their business.

LAUNCHING AI ANALYTICS

Insights, AutoML, and how to gauge success

USE CASE: Discover drivers of basket size in order to increase sales

COMPLEXITY: High

Given the substantial effects of Covid-19 on customer behaviour, the retailer was unable to explore this complex use case without the support of the platform.

With so many potential drivers that would influence the size of a customer basket, the traditional top-down approach to analytics would take too long and leave too many questions unanswered.

ANALYTIC OUTPUT:

INSIGHTS OR A PREDICTIVE MODEL?

The company wanted to uncover answers and insights that they could take action on, rather than build a predictive ML model.

EXPANDING EXPERTISE
WITH AI ANALYTICS

REDUCED TIME-TO-VALUE

The analytics team used the platform's contextual lookups to connect data sets with a few clicks and no code.

INSIGHT DISCOVERY AT SCALE

The team quickly identified strong signals with the platform's functional search tree, surfacing the most important features and product categories.

BOOSTED COLLABORATION WITH SME

By identifying patterns within the product types and quantities of items, as well as identifying the unequal influence of category items on basket value, the team was able to recommend targeted actions to the business.

UNDER THE HOOD

Making sense of all that data

The structure and size of the clients data meant that to perform any analytics on this use case would usually require someone to undertake time-consuming and difficult SQL table joins.

The data featured "wide" datasets with many columns, thousands of products across thousands of stores. With the added complexity of the depth of data, tens of gigabytes (hundreds of millions of rows of data) would be computationally difficult to perform.

RESULTS

Empowering analysts to do data science: introduce rich, adaptive insights to business processes company-wide

Armed with successful results, the retailer built three work-streams off the back of the Pilot Project:

- Go deeper on the category-focused analysis
- Go wider on the basket analysis: leveraging external datasets, evaluating pricing elasticity, geospatial and more
- Validate and begin new use cases

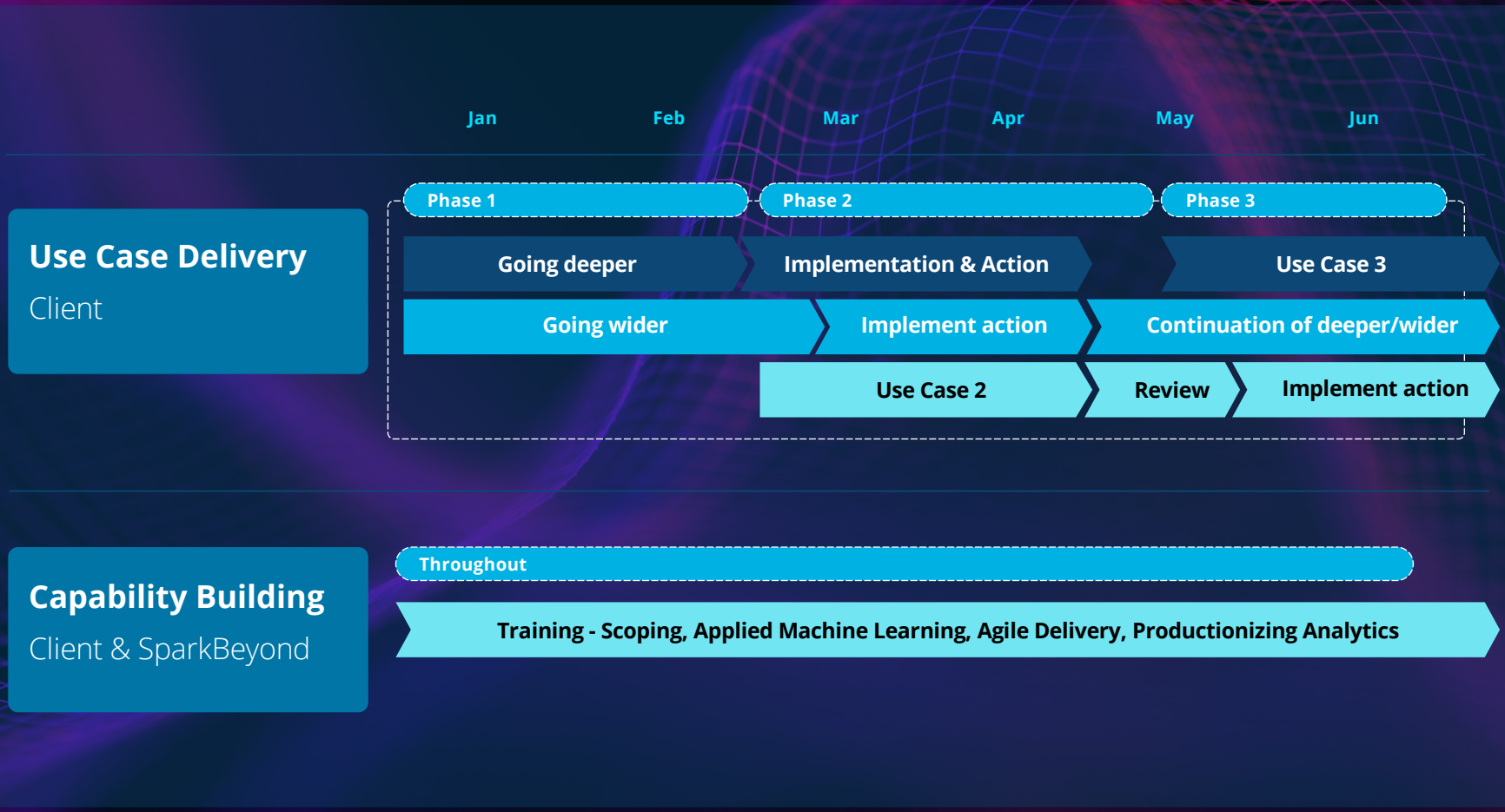
In order to reduce operational burdens while enabling flexible scaling, the retailer used SparkBeyond's managed service package, whereby SparkBeyond hosts the platform and prediction server.

SENIOR STAKEHOLDERS

I've always had the belief that this insight was true, but I've never been able to prove it. Now I can work with our merchandise team to take immediate action on this."

Although we have great insights here, it's clear that we can dig deeper into this. This is impressive, scarily so."

BUILDING DATA SCIENCE CAPABILITIES WITH SPARKBEYOND



SparkBeyond is on a mission to deepen and accelerate the human ability to solve complex problems on a global scale, combining breakthrough technology with human excellence in order to make better sense of operational, financial and social realities.

Global industry leaders and top consulting firms leverage SparkBeyond's technology to extract novel insights out of data, develop new knowledge, and orchestrate solutions for their most pressing problems, driving lasting impact across a broad range of challenges.

INTERESTED IN LEARNING MORE?

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