



How data & analytics is transforming ABInBev and how to get started

James Gillespie, Europe Data Director

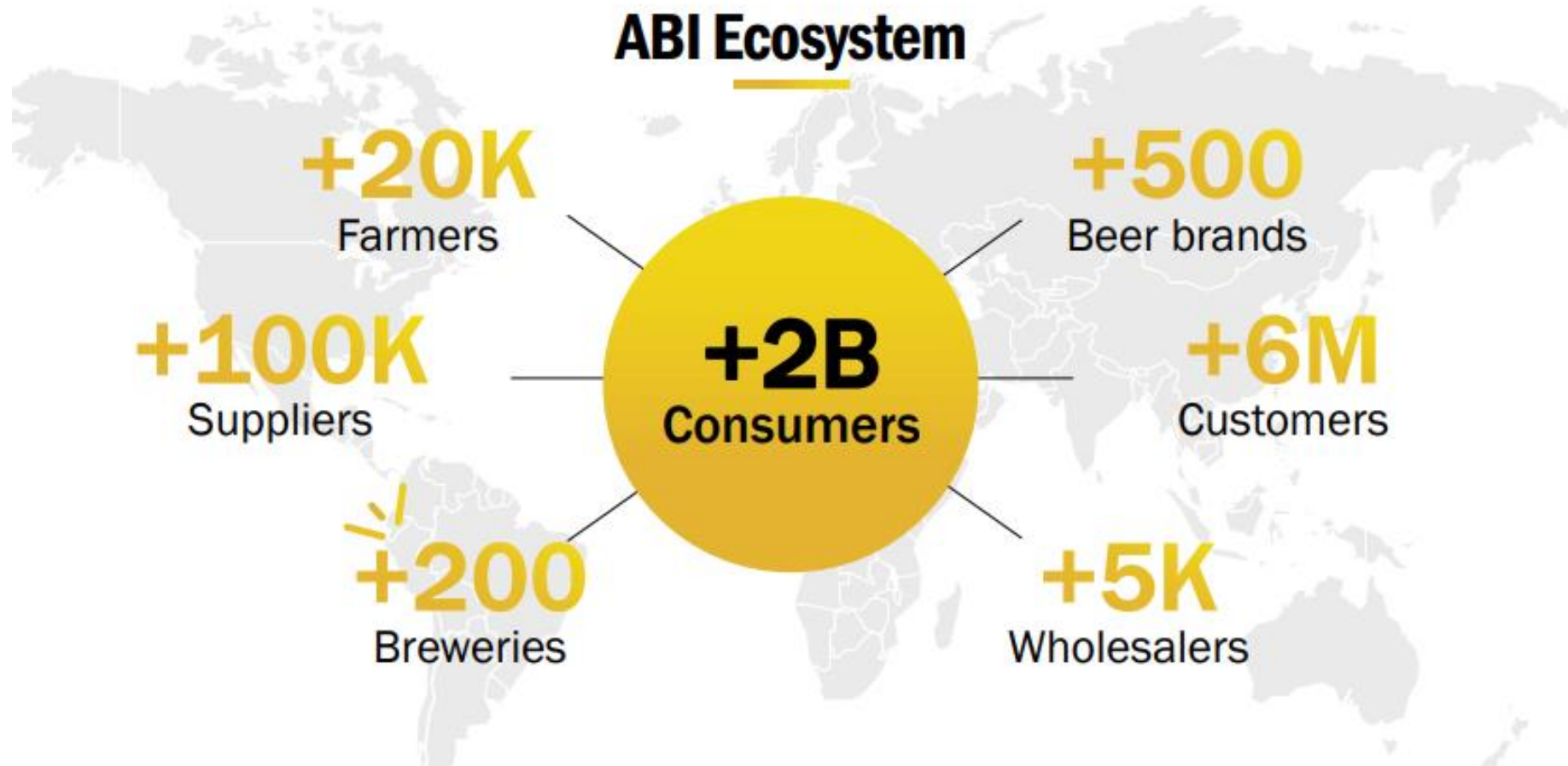
27 Jan 2023



From hundreds of years of brewing tradition
and intense mergers and acquisition activity...

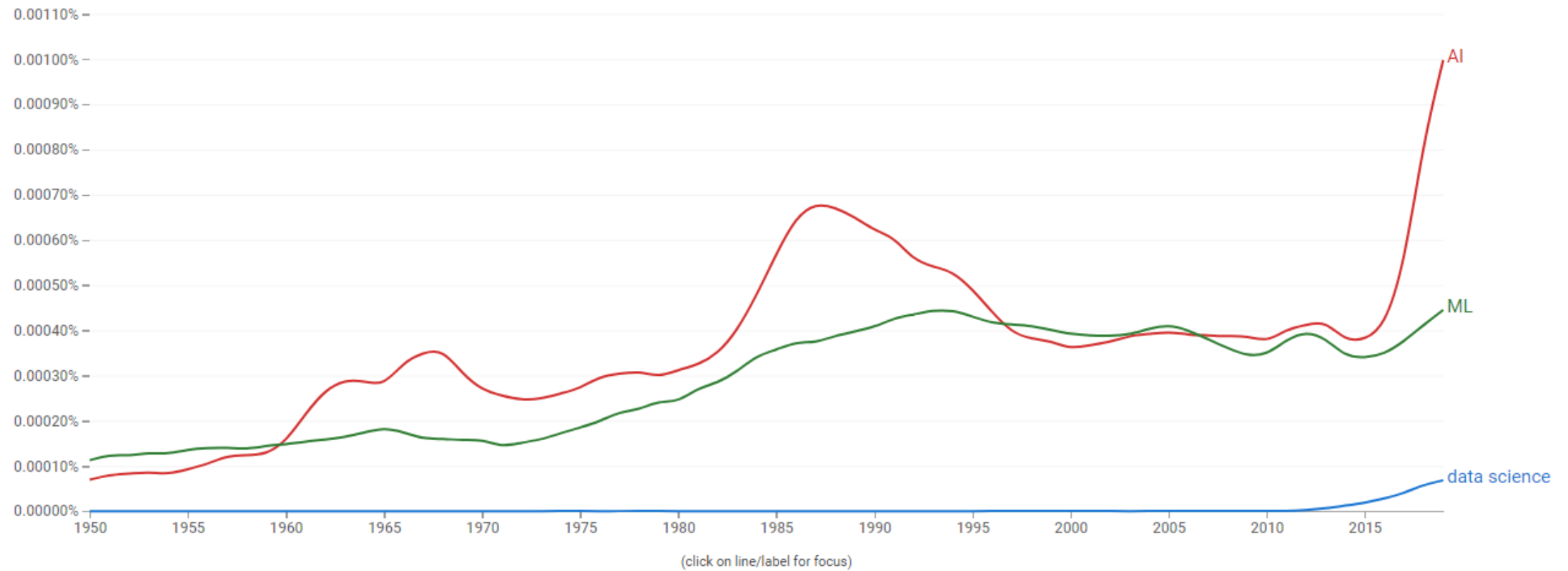


To a digitally-enabled platform,
connecting 2B consumers to customers and suppliers...



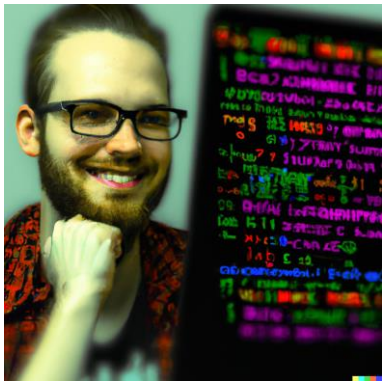
In the meantime, “~~software~~ machine learning is eating the world”*

During the 2010s digital companies show how they drive value through data and analytics. Interest in Data Science, AI and ML spikes from 2012.**



But there's a problem...

Focus on One Set of Skills



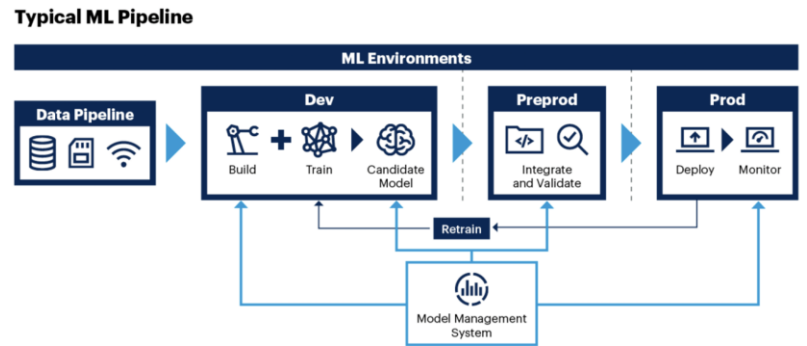
Isolated Modelling Exercise



Low Adoption

~50%**
Models to Production

In reality, ML is one part of the workflow, you need an entire set of tech, processes and capabilities...



Source: Gartner



**What are your main
challenges in scaling data
science products?**

**One way to solve
the problem...**

An end to end process...

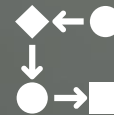
Ideate



Setup



Iterate & Test



Scale Up In Production

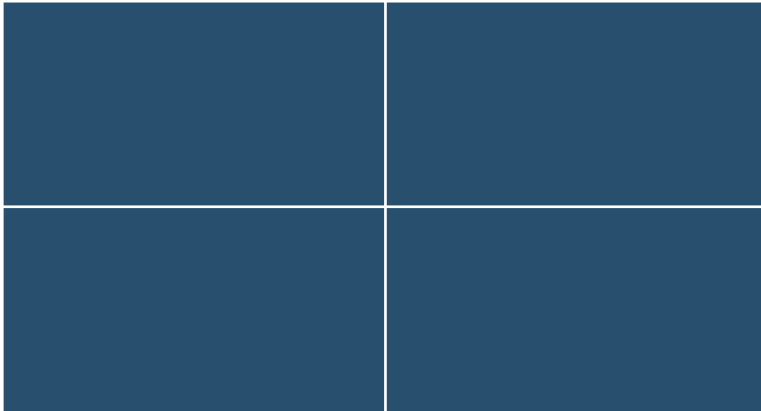


Adopt & Improve



1. Ideate: Start small and focus on value and feasibility...

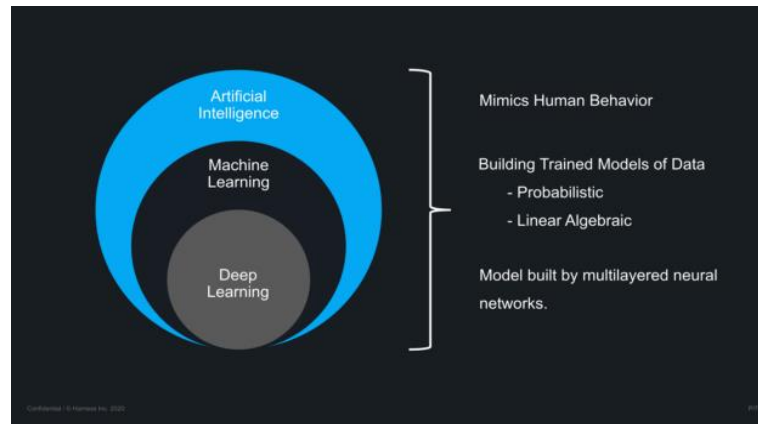
Impact & Value



Do you know the potential size of the opportunity?

- Forecasting future sales, to pricing strategy, to cost-saving opportunities and more...

Frame the Problem



Is it a problem that ML can solve?

- Repetitive but changing, low cost of error, scalable..

Complexity & Growth Path



Is it a problem that people want solving and can solve?

- Data requirements, stakeholder buy-in, simplicity

2. Setup a small and nimble team with the right tools...



Balance Your Team



Do you have the right skills in your team?

- Data Scientists are important, but consider data engineers, infrastructure engineers, and product owners.

To Iterate Quickly



Do you have a mechanism to manage rapid iteration?

- Agile practices are widespread, adapt them and implement. Track work and productivity. Iterate around tests.

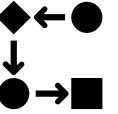
With the Right Tools



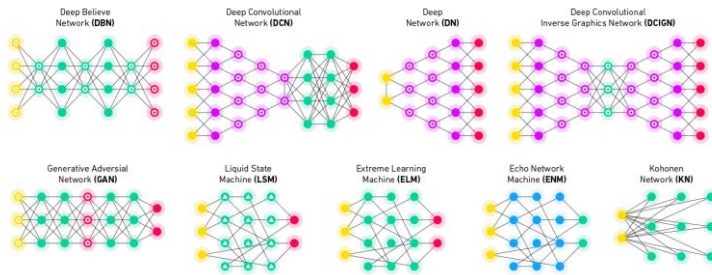
How will you move fast but scale later?

- Move fast, consider sandbox environments where the tech is replicated in prod.

3. Iterate and Test: With a clear focus on validation...



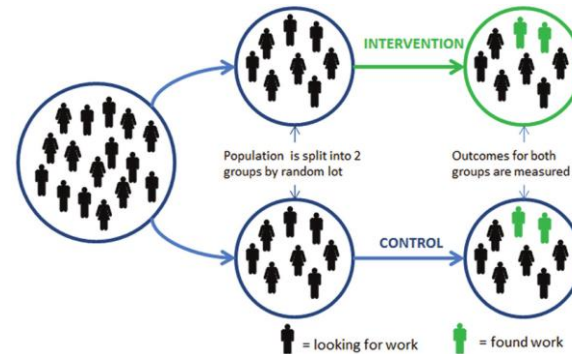
The Right Approach



Consider the right models for the job:

- Think broadly. Test multiple models.

Measure



Know how you will measure value and develop a hypothesis driven methodology:

- A/B, cross-validation, backtesting, Randomized Control Trials (RCT).

Keep an Eye on Data Quality



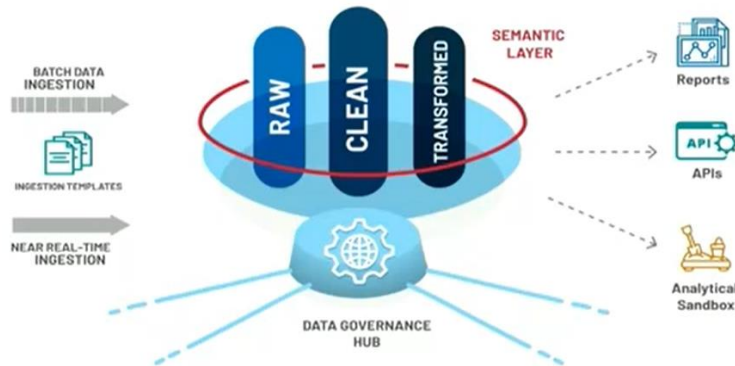
Ensure you have basic controls on data quality and model health.

- Think broadly. Test multiple models.

4. Scale: When you have proven value, prepare to scale



Platform Ready for Prod



Do you have a platform that can support you at scale?

- Consider the platform features required to support your capability.

Processes Ready for Prod



Do you know how to operate and support models in production?

- Make sure IaC and CI/CD are in place and teams know how to use them.

Keep an Eye on Data Quality!



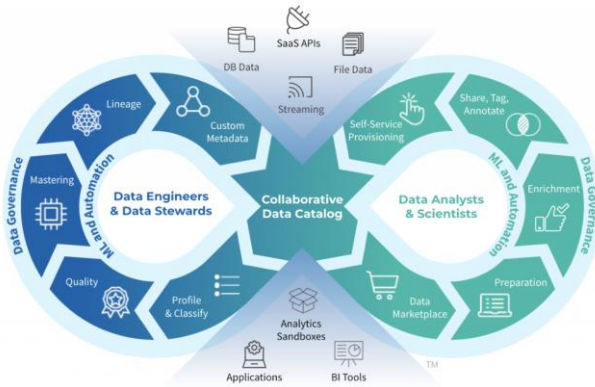
How will you track data quality before it stops your business?

- Develop monitoring and observability because bad data breaks models

5. Drive business adoption and continuous improvement



Monitor & Support in Prod



Know how you will monitor and support data quality, model health and uptime in production:

- DataOps teams and capabilities can help.

User Engagement & Feedback



User engagement and feedback is a soft skill.:

- Building engagement, driving adoption and taking feedback takes time.

Continuous Iteration



If you ask for feedback, use it:

- Prepare to invest for the long term. Keep models and products relevant.

Poll

Where do you see the fastest return on data science products for your business in 2023?

**How did it work
in practice?**

Algorithmically driven sales in our e-commerce operations...

Why



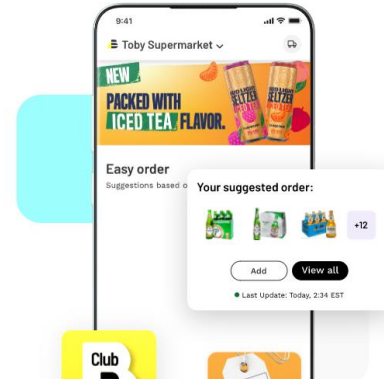
Make it simpler to decide which products to buy and generate more win-win scenarios on BEES, our e-commerce and SAAS platform

What

Personalized experience

Smarter shopping generates more value. Customers benefit from personalized recommendations based on their shopping behavior.

- Easy orders
- Targeted promotions
- New products recommendation



Result



80% of our customers every month make purchases influenced by our algorithms

Orders influenced by algorithms are, on average, 3% larger than others

Step by Step

- External benchmarking



- Small team of external expertise, data engineers and software engineering



- Focus model development and



- Integrated production environment for data ingestion, model deployment



- Technical and Business KPIs monitored



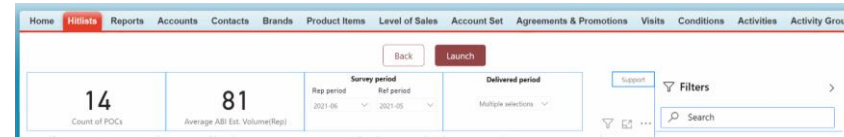
Driving increased sell-in and retail execution in our field sales...

Why



Missing algorithmically driven execution in field teams, strong NR opportunity to improve distribution and new product launches across the region

What



Integrated intelligent distribution recommendations for on and off trade embedded in sales applications

Result



2X Strike Rate vs. Normal Operation
Automated distribution recommendations + NR increase

Step by Step

- Field sales inputs and volume gaps analysis using internal/external data



- Lead, Data scientist, Data engineer



- Iterate simple model and leverage the power of AutoML



- Integrated production environment for data ingestion, model deployment



- Monitor business impact and P&L output



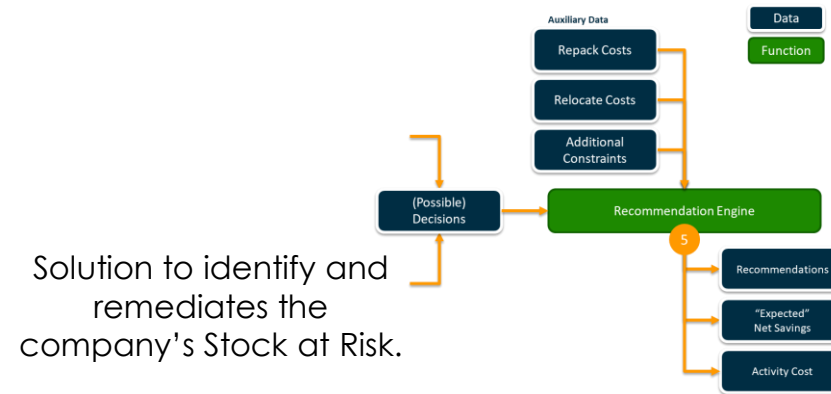
And saving on our bottom line with improved inventory management...

Why



Obsolete stocks causing issues: aim to take the optimal actions with optimal timing and reduce losses.

What



Result



Remediate millions of dollars of losses. Support repack and resell initiatives.

Step by Step

- P&L analysis and underlying drivers



- Data scientist and data engineers



- Test and learn and select best fit model.



- Integrated production environment for data ingestion, model deployment



- Focus on business adoption and adherence to recommendations



Q&A

Feedback