

HOW TO USE MACHINE LEARNING FOR DEMAND PLANNING

Tips for Success

45%

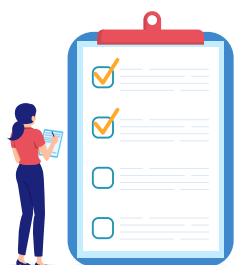
More than 45% of businesses are already using machine learning to augment demand forecasting

Demand planning is a great match for machine learning! With some careful preparation, you'll be ready for success.



1 SET SPECIFIC BUSINESS OBJECTIVES AT THE START

Having a solid charter of what you want to accomplish and why is essential before charging down the machine learning path.



3 REMEMBER THE FOUR DIMENSIONS OF DATA

To get real results from machine learning you'll need to have the right data – be sure to consider all four dimensions:

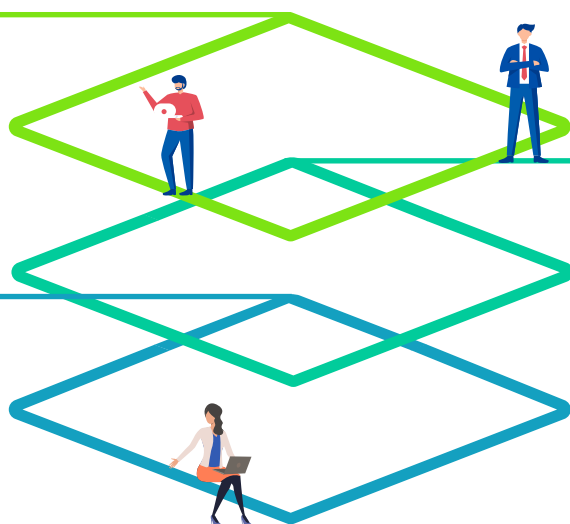
- Data Volume
- Data Quality
- Data Granularity
- Data Variety



2 START SIMPLE AND LAYER IN COMPLEXITY

1. Apply the right technology to "small data" to create a baseline adaptive model for probability forecasting using historical demand history

3. Look for additional correlations using external data such as weather, indicators, POS, social media, search, IoT, etc.



2. Further improve baseline probability forecast by applying machine learning technology on existing historical data for:

- Trade Promotion
- Media Event Effect
- New Product Introduction

4 PLAN TO OPERATIONALIZE YOUR MACHINE LEARNING SOLUTION

Instead of building a machine learning solution to tackle a one-off business challenge, consider long-term sustainability and plan to operationalize your results for continued success.



5 CHOOSE SELF-ADAPTING MODELS

To achieve the stability and adaptability required for operational use, it's important to use models that are self-adaptive and do not require continuous tuning by experts.



6 A CONNECTED SOLUTION IS KEY

Incorporate your self-adaptive models into an integrated business solution, with models updated automatically on a frequent basis to react to changes in the business.

87%

87% of CEOs say they're investing in AI initiatives in 2019

50-90%

Machine learning automation can reduce planner workload by 50-90%



7 GET READY TO AUTOMATE!

Machine learning automation enables planners to do less manipulating models and spreadsheets and more value-add, strategic work. As your business changes over time, you'll have new questions to answer, so be sure you understand the skills and resources you'll need for success before kicking off your project.

Hungry for More?

Check out these important points every supply chain organization should consider before diving into a machine learning project.



eBook: Six Tips for Success Using Machine Learning for Demand Planning

Sources:
 Current Use Cases for Machine Learning in Supply Chain Planning Solutions. 19 May 2018 ID: G00349854. Analyst: Tim Payne
 Laying the Foundation for Artificial Intelligence and Machine Learning: A Gartner Trend Insight Report. 20 September 2018 ID: G00373110. Analyst(s): Carlton Sapp
 EY 2019 AI study https://www.ey.com/en_gl/news/2019/05/ey-study-reveals-us-ceos-and-business-leaders-are-ai-optimists-but-see-china-as-obstacle-to-ai-advancement-in-the-us