DATA SCIENCE ACCELERATOR

GET A CUSTOMIZED PLAN THAT ACCELERATES YOUR JOURNEY TO DATA SCIENCE IMPLEMENTATION

WHAT IS IT?

To succeed with data science, you need a plan that starts with your business goals.

In our Data Science Accelerator, we assess your business objectives and available data; develop, test, and train machine learning models; and outline a plan for how you can achieve long-term success with data science.

OUR APPROACH

STEP 1: IDENTIFY USE CASES & BUSINESS REASONS FOR DATA SCIENCE

In order for data science to be successful, you need to be sure you're using data science to solve real problems. This is why we start by getting to know your business and your goals. Then we identify the use cases for data science that will return the most value. During this process we:

- Interview stakeholders to discuss business goals and how data science could help achieve these goals.
- Identify the use cases and targets for machine learning and advanced analytics.

STEP 2: GATHER, ASSESS, AND PREPARE DATA

After we have identified the business reasons and use cases for data science, we determine if you have the data needed to support data science and prepare the data for machine learning models. During this step we:

- Determine if your data is relevant and of sufficient quality to build out a model.
- Perform Exploratory Data Analysis (EDA) to profile data and get insights on quality and better understand informativeness, predictive quality, and appropriate "N". This will include:
  - A statistical summary of your data
  - Initial analysis to determine what features will have the most predictive power or informativeness of targets
  - Recommendations on sample size for training and testing data

Analytics8

- Provide guidance so you can adjust your data, select new data, or identify additional relevant sources to enable proper training and testing.
- Collaborate with you and provide some data cleansing, such as removing nulls, imputing averages, or turning categorical data into numerical data to ensure results are not faulty or skewed.

STEP 3: DEVELOP MODELS AND PROOF OF CONCEPT (POC)

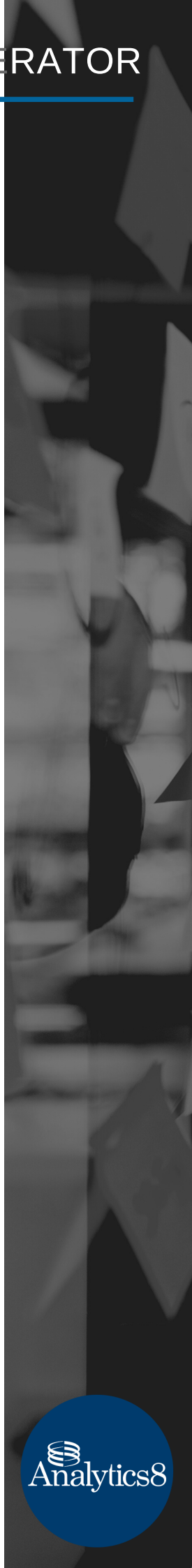
Next we develop statistical or machine learning models based on the identified use cases and targets. We also:

- Determine what features to include in the models.
- Train, test and validate models against new data.
- Score and select the best model based on accuracy and/or time tests.
- Integrate results of model analysis in your existing reporting platform/ BI tools.
- Provide actual and interpretable results from the implementation of a model against new data for predictions and/or other advanced analysis per the established goals and objectives.

STEP 4: PROVIDE DATA SCIENCE IMPLEMENTATION PLAN

At the end of the Data Science Accelerator, we summarize all of our findings into a data science implementation plan that includes:

- Interviews and interview feedback
- EDA Summary
- Explanation of POC results and insights about relationship between features and targets
- A review of other potential data science use cases
- A tools and capabilities assessment and recommendations including:
  - Current state
  - Analytics maturity analysis
  - Architecture modernization analysis
  - Future state goals
- Plan to remediate gaps and capitalize on opportunities for successful implementation of other use-cases and/or operationalization of data science.



TIMING

Every client is unique, but the Data Science Accelerator usually takes 3-4 weeks. The day you get your plan, you can start executing on it!

WHAT YOU GET > MORE DETAILS

Summary of interviews and documentation of business goals and use cases

- A concise summary of your business objectives and a list of realistic and achievable use cases that will help to meet those goals.
- Factual assessment of where you have strengths and identification of opportunities for improvement toward successful long-term data science.

Exploratory Data Analysis report and summary

- Charts and tables showing basic statistical evaluation of your data.
- Explanation of informativeness of certain features, as well as potential for influence of a target.
- Identification of sample size.
- Identification of data that may need to be cleansed or enhanced.

POC summary and analysis

- Summary of process by which data was selected for training, testing and evaluation.
- Visual representation of the different models and how they score against each other (ultimately leading to selection of the best one for implementation).
- Visual representation of the results of selected model against new data.
- Summary of the results of the POC.

Recommendations

- Remediation steps to ensure successful and sustainable data science work in the future.
- Additional recommendations on data architecture modernization, data enhancements, and other potential use cases.

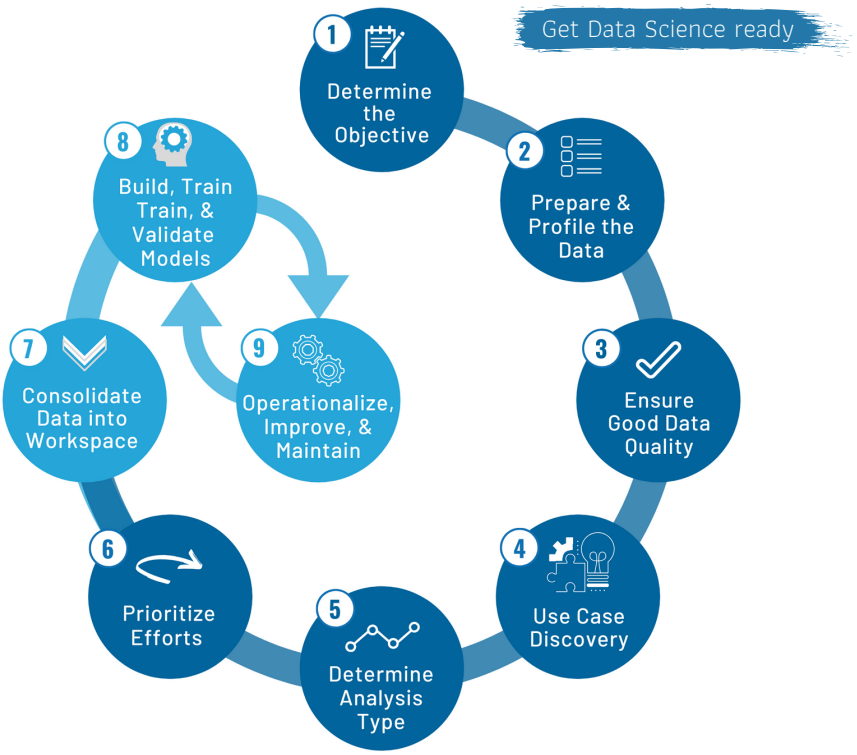
Next steps

- Tips on where you should start.

OUR ETHICAL DATA SCIENCE APPROACH

While there's no doubt data science can bring huge benefits, it can also result in quick failure without the proper planning and preparation. Before starting any data science project, we always assess your readiness and guide you away from costly processes and tools that won't bring value. We also build models that reduce or eliminate human bias, and make sure you understand the ramifications of machine learning-based decisions.

OUR STEPS FOR A DATA SCIENCE PROJECT



WHAT MAKES ANALYTICS8 DIFFERENT

Experience with the Entire Data and Analytics Lifecycle

Trusted Advisors with 15+ Years Experience

Ruthlessly Efficient, Bringing Fast Time-to-Value

No BS Philosophy- Real Advice, Driving Real Results