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Sales forecasting
Deloitte Analytics Approach

The growing world of data

Data has undoubtedly become the fuel for competitive advantage in the 21st century.
Nowadays we generate and collect enormous volumes of data and we are able to give machines the appropriate input for them to learn and predict outcomes by using algorithms to interpret raw data.

Why sales forecasting

Sales forecasting allows companies to spot potential issues or risks and design appropriate corrective actions to mitigate them.

SALES PLANNING

Sales forecasting helps sales managers planning their future activities, providing each of them with a business plan for managing their territory. Forecasting is the tool that helps them identifing the necessary customers to meet their targets.

DEMAND PLANNING

The sales forecast is the best way to get a good estimate of the product demand. Sales teams are in the front line of business forecasting and best positioned to gather information about anticipated demand

INVENTORY CONTROLS

The more accurate the sales forecast, the better prepared your company will be to manage its inventory, avoiding both overstock and stock-out situations. Stable inventory also means better management of your production

FINANCIAL PLANNING

Anticipating sales gives managers the information they need to predict revenue and profit. Having good forecasting information gives a company the ability to explore possibilities to rise both revenue and net income

INTERNAL CONTROLS

Having an insight on the projected production rates gives the possibility to have a better control of the internal operations. By anticipating future sales, managers can make decisions about hiring, marketing and expansion

CONTINUOS IMPROVEMENT

Continuous improvement is a goal of many if not all businesses. By forecasting sales and continually revising processes to increase accuracy, companies can improve all aspects of their business performance

GAIN INSIGHTS

Accurate sales forecasting can help you tracking data and gaining insights into areas where improvements can be made. Furthermore, it can help understanding the customers' behaviour in order to increase conversion rates

MARKETING BENEFITS

Sales forecasting gives marketing an important look at future sales. This offers the opportunity to schedule promotions if sales are expected to be too weak
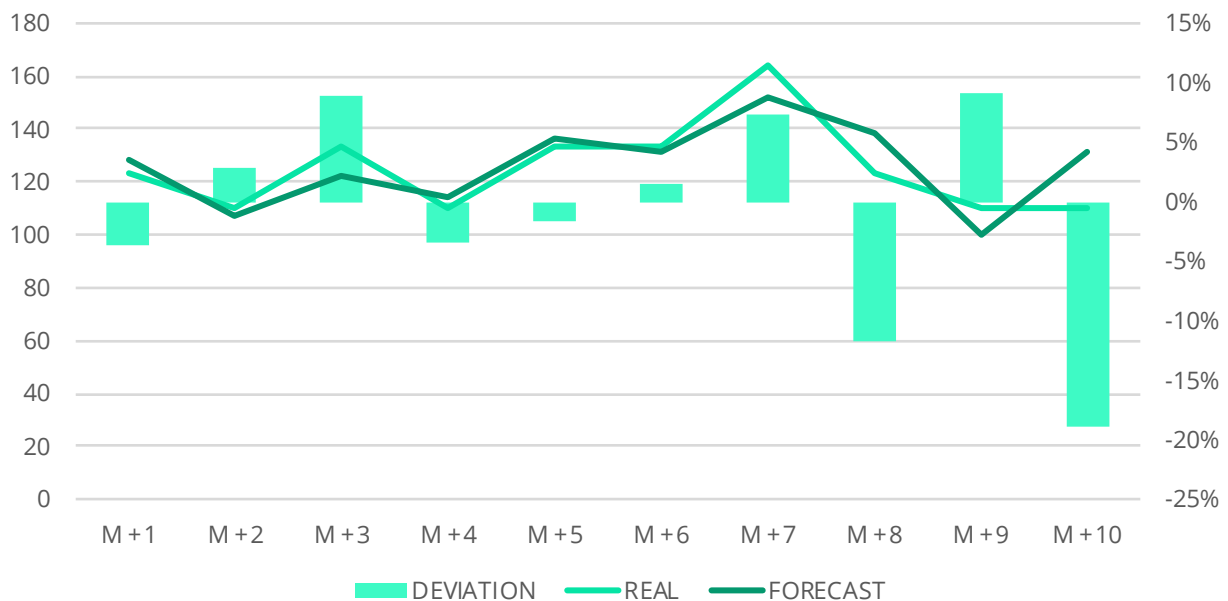
Principles for a great Sales Forecast

USE EXTERNAL DATA

Robust predictions benefit from having high quality and easily accessible data. These data can be enriched with external sources that can contribute improving the quality of the predictions. Depending on the product of the company, different kinds of external data could be used. Below are some examples of open external data:
- income-age geographical distribution
- blogs or social networks
- articles
- macro-economic factors
- sector indexes

INVOLVE BUSINESS EXPERTS

Sales forecasting is not a one-time activity, but an ongoing process that affects every aspect of the sales pipeline. Therefore, it is important not only to make predictions based on the numbers on hand but also to pair these numbers with qualitative information in order to get a more realistic view of the business. This can be achieved with appropriate communication and collaboration between the business and the team involved in the construction of the forecasting model.

Chart legend: DEVIATION — REAL — FORECAST. X-axis: M+1 through M+10. Left Y-axis: 0 to 180. Right Y-axis: -25% to 15%.
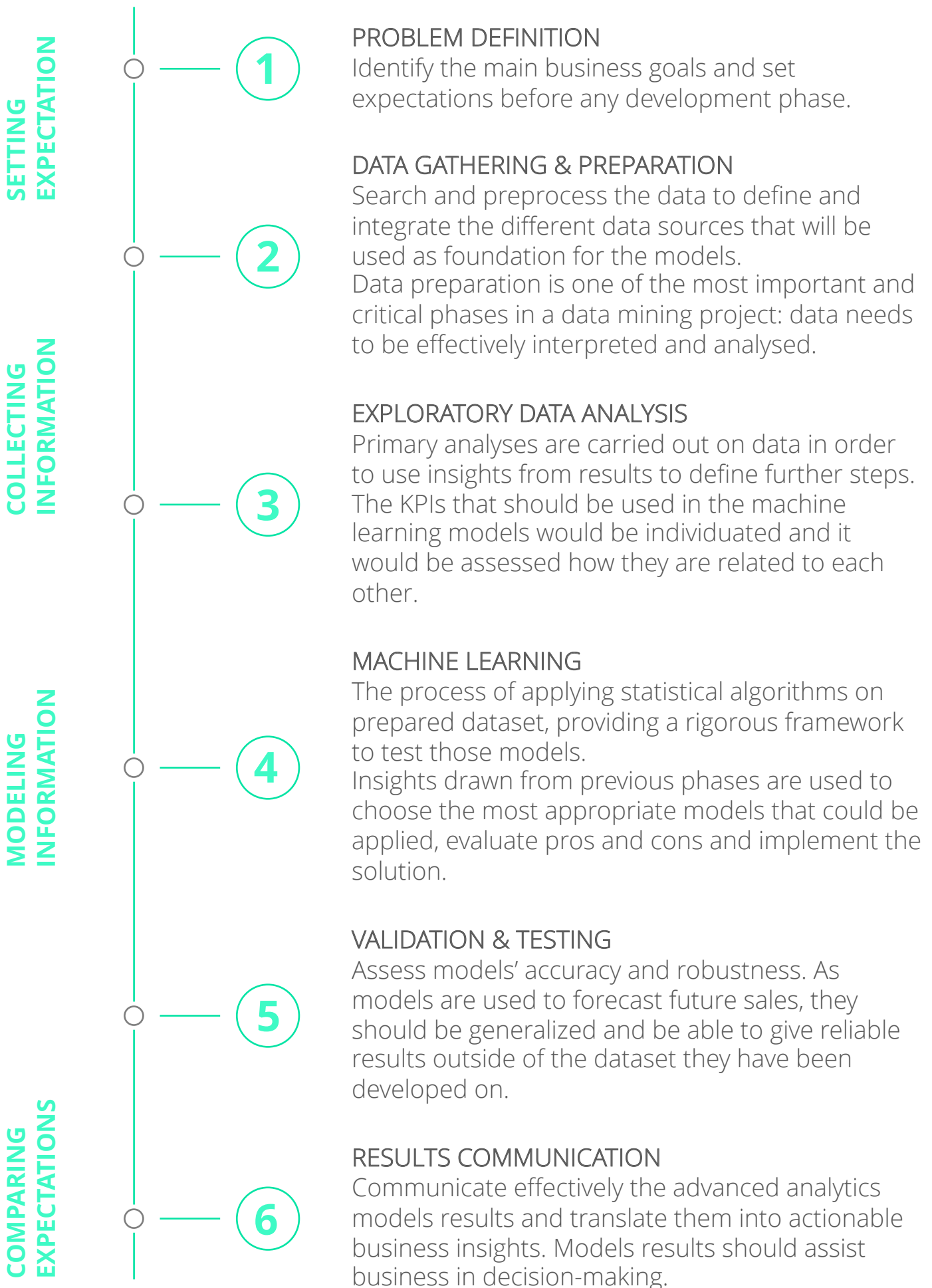
DEFINE CLEAR NEEDS

The key phase in creating a sales forecasting solution is the understanding and the definition of the business needs: this allows to delimit the perimeter of what is requested, what can be achieved and how it can be achieved. Business knowledge is essential to define the most appropriate analytics tool.

BE FLEXIBLE TO CHANGE

It is impossible to use a single model that will ensure the track of the exact terms, time, and context of every sale. Instead, companies should focus on developing a process that can be managed, re-evaluated, and modified as conditions change.

SETTING EXPECTATION

COLLECTING INFORMATION

MODELING INFORMATION

COMPARING EXPECTATIONS

1

2

3

4

5

6

PROBLEM DEFINITION
Identify the main business goals and set expectations before any development phase.

DATA GATHERING & PREPARATION
Search and preprocess the data to define and integrate the different data sources that will be used as foundation for the models.
Data preparation is one of the most important and critical phases in a data mining project: data needs to be effectively interpreted and analysed.

EXPLORATORY DATA ANALYSIS
Primary analyses are carried out on data in order to use insights from results to define further steps. The KPIs that should be used in the machine learning models would be individuated and it would be assessed how they are related to each other.

MACHINE LEARNING
The process of applying statistical algorithms on prepared dataset, providing a rigorous framework to test those models.
Insights drawn from previous phases are used to choose the most appropriate models that could be applied, evaluate pros and cons and implement the solution.

VALIDATION & TESTING
Assess models' accuracy and robustness. As models are used to forecast future sales, they should be generalized and be able to give reliable results outside of the dataset they have been developed on.

RESULTS COMMUNICATION
Communicate effectively the advanced analytics models results and translate them into actionable business insights. Models results should assist business in decision-making.

Deloitte Analytics
possible enhancements

Having a sales predictive model is the first step towards creating a data-driven company. Alongside the predictive model, it is advisable to adopt a series of tools to support decisional business processes.

MONITORING TOOL

Building dashboards that visualize predicted results and comparisons with previous years is a key tool for business users interested in monitoring the actual performance of the company.
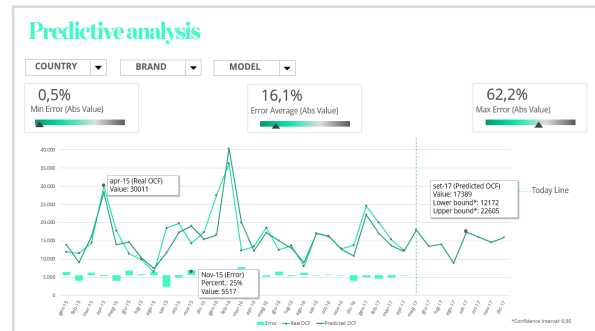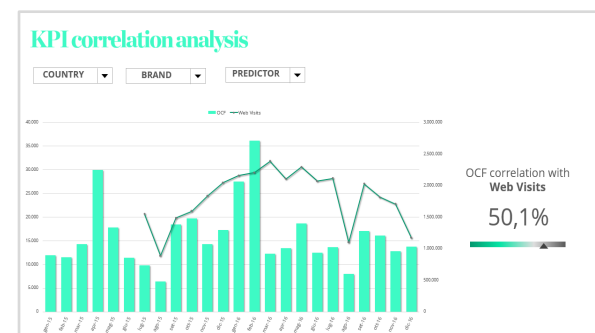

KPIs REPORTING

It is important to create a tool that gives users the possibility to analyze KPIs and detect misalignments or deviation from expected values or targets (e.g.: early-warning, alerts, traffic light charts...).
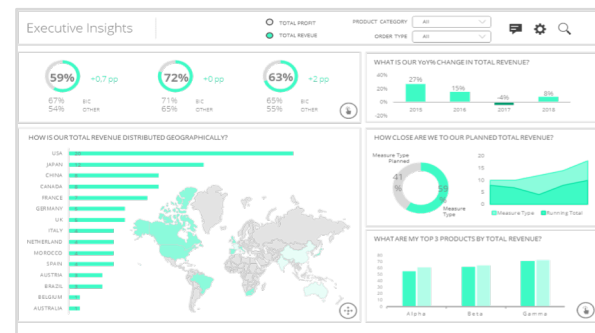

PRESCRIPTIVE ANALYSIS

Prescriptive Analytics extends beyond predictive analytics by specifying both the actions necessary to achieve predicted outcomes and the interrelated effects of each decision. This kind of analysis is able to answer questions such as "what do we need to do to achieve a specific forecast?"

TOOLS FOR DEVELOPING AND REPORTING SALES FORECASTING

Deloitte Analytics has a vast knowledge of technical tools for data management, data modelling and reporting in Sales Forecasting.

Access to relevant data-driven insights is a necessity not only to formulate an effective business strategy, but also to monitor its execution.
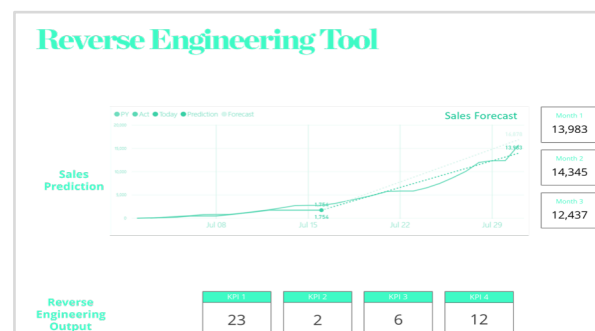
Contacts

Alfredo Maria Garibaldi
Partner | *Analytics Country Leader*
agaribaldi@deloitte.it

Daniele Pier Giorgio Bobba
Partner
dbobba@deloitte.it

Marco Leani
Partner
mleani@deloitte.it

Alberto Ferrario
Director
alferrario@deloitte.it

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Our national team of over 200 professionals has proven experience in structuring, managing, and delivering Enterprise Information Management strategies and implementation services. Through the collective experience of local practice and leveraging assets and best practices of our global WW Deloitte Analytics team, we have serve our customers with a broad array of toolkits, accelerators, models, leading-edge practices, diagnostics, and governance approaches to accelerate and improve the quality of EIM projects and ensure a focus on value creation.