# Covid-19 response, leveraging Data Science

There are major business challenges linked to the spread of the Covid-19 around the world, some known and some still unknown, but a global recession is almost guaranteed.

- ► In this context, senior leaders require **drastic changes** in the way the business is run and operations face **significant budget cuts** on all fronts.
- Organizations must act and decide fast, while being focused both on short- and long-term needs.

Data science solutions to respond to the Covid-19 crisis with Advanced Analytics & modeling

#### **BUSINESS STRENGTH**

PRESERVE REVENUE

Realign marketing & sales efforts for new business needs

Benchmarks & measurement to maximize e-comm sales

Predictive model to forecast market and category bounce back

Al modeling to predict demand & ensure Supply Chain resilience

#### **FINANCIAL HEALTH**

MODEL P&L & CASH FLOW

Algorithm to predict bottom line under budget realignment

Modeling to forecast cash flows

Simulate business model scenarios to respond with agility post-crisis

Battle plan & war gaming for acceleration as markets open up

### **BRAND SALIENCE**

**ENSURE LONG-TERM RESILIENCE** 

Model impact of key actions on brand equity and salience

Customer centric analytics focused on high-value customers

Predict budget change impacts on baseline & customer lifetime value

## Areas where data science can make a strong impact

**DURING** 

RECOVERY phase

BACK TO NORMAL

FORECAST ECONOMIC REBOUND

- ▶ Model impact of Covid-19 on global / local economy Identifying the best new leading indicators from even small data (e.g., electrical consumption, manufacturing indexes, air pollution, web listening, etc.), impact on current macro-economic indicators
- Economic recovery forecast Al-based scenarios of market predictions (learning from APAC recovery, previous recessions, industry-specific experiences) expert-based scenarios (intelligence reports, U/V shape scenario testing)
- ▶ Time-To-Market strategy Define triggers for marketing reactivation, value of not going dark, competitive war-gaming, plan to accelerate back into market

ADAPT BUSINESS STRATEGY

- ➤ Marketing Crisis Playbook Benchmark & best practices from past crisis
- (2008 and others)
- ➤ Strategy for e-commerce ROI library / Deep Dives to support/monitor B&M to e-comm shift
- ▶ **Budget change optimization tools** ROIdriven budget changes & portfolio optimization
- ▶ Understand new rules of the game Analytics for new purchase behaviors, price & promo sensitivity, new distribution channels and new media landscape
- Customer lifetime value analysis Activation scores to re-engage with loyal customers
- Budget reforecast & acceleration plan Scenario forecasting, financial stress test
- ▶ Global arbitration Transversal allocation tool across market, brands, media & channels

EXECUTE & TRANSFORM

- ➤ **Media & promo strategy** Short term sales forecast & ROI, baseline evolution & brand equity monitoring to support long term
- ➤ **Supply chain optimization** Demand forecasting & speed to fulfillment
- ► Fraud detection Online payments, compliance
- Micro budget arbitration Benchmark of ROIs, budget allocation across lines of business & media channels, battle plans, "what if" scenarios
- ▶ Data-driven supply chain Al-based demand forecasts (SKU/POS level), optimization of supply chain under constraints to reduce shortages, obsoletes & returns
- ▶ **Operations Excellence** Agile data governance & business processes to anchor decision-making to data & analytics insights