Anticipating the COVID-19 pandemic recovery using the Fear Reaction Index (FRIX©)

Our unique AI algorithm combined with our proprietary BASON© prediction poll is able to identify the key indicators that are driving the COVID-19 induced fear in the markets and provide insight into their subsequent recovery. The goal is to help you stay ahead of the curve.

The supply shock that hit the economy due to COVID-19 is turning into a huge demand shock that is pushing the global economy into a depression. The demand shock is primarily driven by **enormous uncertainty** in the economy. People are unsure of what will happen with their jobs, whether the virus will rebound in autumn before a vaccine can be found, and the quarantine itself is affecting their psychological well-being.

One of our **basic needs** is endangered**: security**. Security over our lives, over our families, and over our jobs. Whenever a basic need like security is endangered **people react emotionally, often irrationally and change their preferences** and patterns of behavior.

Our company has **mastered ways to uncover those preferences and figure out what the people will do**. We used our BASON© predictive survey to uncover a similar sentiment and **successfully predicting Brexit and Trump in 2016**. We are using it now to figure out how people feel during the quarantine, how their behavior will change as the economy re-opens, and approximate how this will impact their spending in the next year.

The economy will undergo huge changes during the long recovery. With our **Fear Reaction Index (FRIX©)** we want to help our clients **stay ahead of the curve** by telling them what awaits them, how to adapt to changing consumer preferences, and how to mitigate uncertainty.

Fear Reaction Index (FRIX) April 2020

1. How does it work?

The FRIX is a **forward-looking indicator**. It reports an **anticipated change of consumer demand through peoples' expected patterns of behavior**. For example, we can figure out how many people will, even after the lockdown measures have been lifted, change their travel plans, stop visiting concerts or sports events, how they will change their shopping behavior, etc.

Additionally we **track unemployment, business and consumer sentiment, and uncertainty indicators** across industries telling us how many people have either lost their jobs or are working in endangered occupations. This obviously affects their buying decisions as well given that all decisions on the purchases of non-essential products and services are being postponed.

It is impossible to predict how long the will uncertainty last, nor when the vaccine will be available. However we **can accurately predict how many people are being affected and how this will impact their demand** during the entire crisis & recovery period.
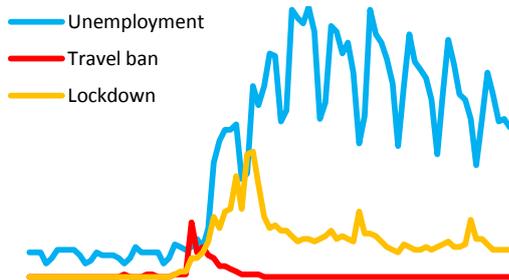

Figure: Worldwide Google searches for "Unemployment", "Travel ban", and "Lockdown".

2. Highlights from the sentiment network survey

From our sentiment surveys we will present some of the most interesting findings on

The FRIX© consists of three components:

(1) **Emotional and irrational reactions** that people have regarding the shutdowns and how this changes their behavior
(2) **Key leading economic indicators** (unemployment and spending expectations, oil and stock prices, policy uncertainty, etc.) and government response strategies
(3) **Virus spread estimates and total death toll prediction**
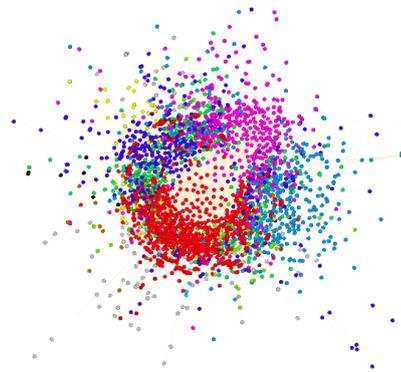

Figure: Using new network metrics for calculating the strength of belief similarities between individuals, we can sample populations for social stability using more psychologically realistic measures than ever before.

business and consumer sentiment and consumer reactions across the countries of interest. For example we can see **severe negative sentiment among both consumers and businesses** in April 2020:

Will your country experience a recession?

N=6300

13.1% — Unlikely or very unlikely
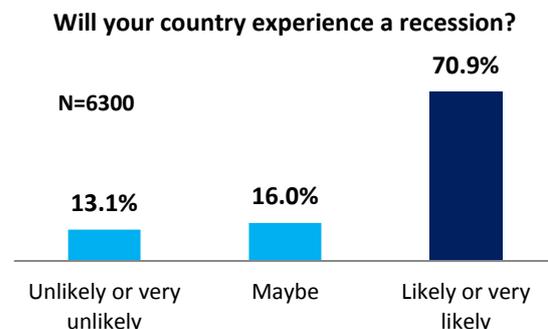16.0% — Maybe
70.9% — Likely or very likely

Figure: Business & consumer sentiment overall

3. Our death toll predictions

In addition to tracking sentiment and economic indicators we are also making our own COVID-19 death toll predictions.

We fit an asymptotic regression curve to the number of deaths as a function of time instead of a simple exponential curve. We predict a total of **33,000 deaths in Italy**, **28,000 in Spain, 37,000 in the UK, 9,000 in Germany and Canada, and about 90,000 in the United States.**
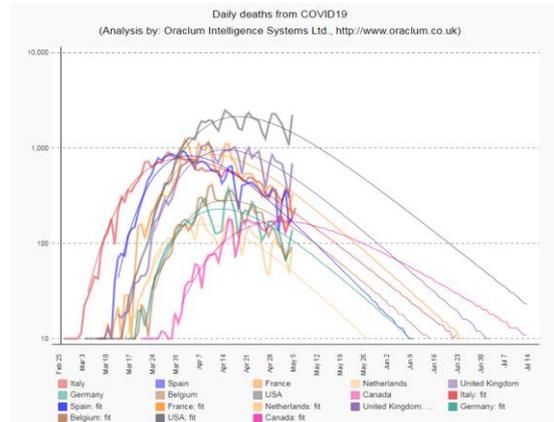

Figure: Prediction of COVID-19 total death toll for selected EU countries and the United States.

4. Subscription packages

The **Basic package** includes dashboard access to the full dataset which can be used as an input for the client's own models, plus a prediction for where it is likely to be over the next 12 months (not shown here). It also includes a detailed analysis of our death toll predictions.

The **Full package** adds the predictions for all economic indicators (markets, consumer & business expectations, unemployment, debts and deficits, etc.) and a detailed overview of our monthly survey results tracking sentiment to figure out people's behavior.

Users gain **access via our dashboard** and also have an option of downloading the report.

The **Custom package** gives the client an option to field their own survey with our regular monthly BASON network survey. The price of the package depends on the number of questions and total sample size.

	Basic	Full	Custom
FRIX data & prediction for the next 12 months	Yes	Yes	Yes
Death toll predictions	Yes	Yes	Yes
Full predictions of major econ indicators		Yes	Yes
Survey results		Yes	Yes
Field your own survey			Yes
Price (per month)	**490 € p/m**	**1490 € p/m**	**From 4950€* p/survey**
Annual subscription (first report is free + discount)	**5,100€** **(save 15%)**	**15,250€** **(save 17.5%)**	

*Price includes a 10 question survey for a sample of 800 users in a selected area.
An annual subscription is charged immediately and offers the stipulated discounts.

Contact vuk@oraclum.co.uk
Oraclum Intelligence Systems Ltd. www.oraclum.co.uk
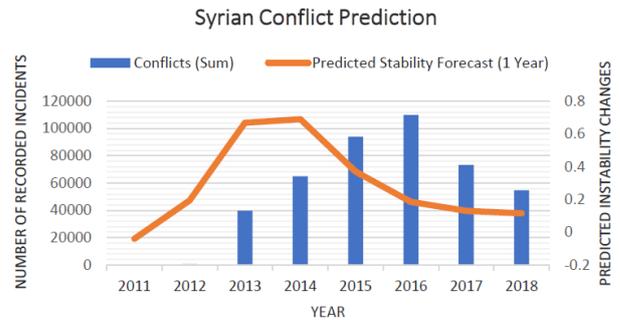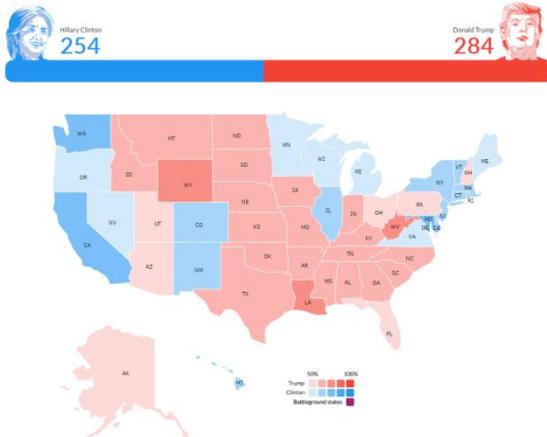
Our expertise and previous results

Oraclum is **run by three PhDs** in political economy (**Oxford**), physics (**Princeton**), and computer science (**Singapore**).
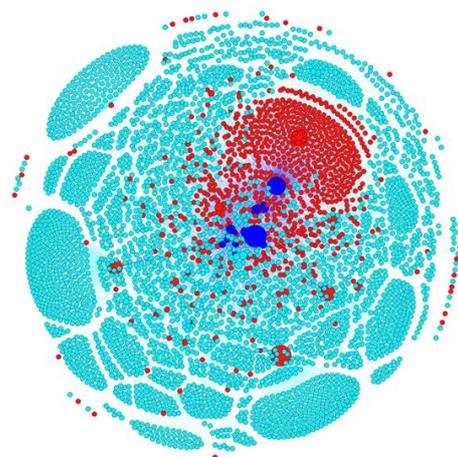We have an Olympic-level team with experience from:

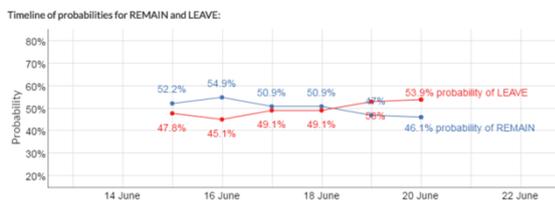We will use a combination of all of these proven methods to make the FRIX© prediction.

For the Trump prediction we called all the **key swing states within a 1% margin**! (including PA, FL, NC, OH, VA, IA, and CO).

For Brexit our best method estimated **51.3% FOR LEAVE** (the actual outcome was 51.9%)

Predicting the **conflict in Syria one year in advance:**

Syrian Conflict Prediction

Using network analysis to **predict the spread of banking crisis contagion**: