COVID-19: Understanding markets through context
What's changed since the last pandemic? (H1N1 in 2009)

Source: World Bank

Number of people using social media platforms, 2004 to 2009

Source: Statista and TNW (2019)
What's changed since the last pandemic? (H1N1 in 2009)

Source: World Bank
~3 million news articles created daily

Shared billions of times directly or indirectly

A significant portion curated and opinionated.
Shouldn’t we try to understand how it’s influencing our customers?

@Migacore we think so...
The Hypothesis

Facts: Agencies & Governments

News Publication

Consumer Opinion

Consumer Action

The coverage and translation of facts drives consumer opinion.

Leading indicator to understand recovery scenarios?

Airline/Industry data already available, but perhaps a little reactive?
News Coverage by Region
\(~30,000\) News Articles per day

Country Specific
Tracking the top 5 news outlets per country (where possible)

To understand how a demographic is being influenced
The Metrics

**Contextual Information**


How **internal media** views [Country] in relation to Covid.

Number of **Factual Announcements** per [Country].

e.g. Travel Advisories, Policy Changes

**Volumetric Information**

Articles/mentions in relation to [totals, weighted towards more popular ones]

Easy to parse / access Industry Data via a unified interface.

Topic co-occurrence with Covid-19, to better understand themes of public discourse.
An Example

Market Specific Daily Travel Intent Volumes and Internal News Sentiment Scores [East Asia]

Given, we are in the depths of a crisis, it may be hard to see how news sentiments (polarity and subjectivity) could play a part, however as different markets unfold, we will be able to build a recovery pattern.
Dashboards

- Americas
- Asia
- Europe and Middle East

Please enquire about more regions, data or different aggregations.

Dashboards are provided as is and are updated or changed regularly to include more information, improve accuracy via methodology improvements. We may bring these dashboards offline as required to manage bandwidth and costs. You must reference migacore.com when sharing these dashboards.
As a quick plug (more in Appendix)

3 minute presentation on why we started this company. (It’s because of scenarios like today).

@Migacore we make you more money by generate contextual signals that feed into your existing systems [RM, Advertising, Network Planning], to alert, augment and automate actions.

We work with forward thinking companies like: Lufthansa Group, Singapore Airlines, IAG and Etihad.
Thanks!

Any questions?

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Appendix
How does Migacore work?
Forecast Augmentation

Migacore Forecast Augmentation System

Airline Revenue and Pricing System
Airline Booking Data

Airline Forecaster Output

Secure FTP Server

Migacore Baseline Forecast*
Enhanced baseline forecast leveraging long running trends and seasonal influences.
* if required

Migacore Detect User Interface
View / Manage / Update Influences through our simple user interface

Airline Booking Data

Migacore Signal API for Price Elasticity and Demand
We currently support:
- PROS
- Accelya AirRM
- Amadeus Altea, and;
- custom/in-house RM systems

Manual input from RM team into system

Customized automated inputs* into RM system.
* Signal as Model features or Forecast

Contextual Signals

Signal Amplitude
Signal Shape

Demand / Pax
Fare Class / Bid Price

Private and Confidential 15
Without Context, Forecasting is Broken

Peak period forecasting is heavily influenced by *things* that shift and change often.

Causing significant forecasting *inaccuracy* and RM overhead, leading to *inefficient* airline capacity utilisation.
Case Study - LHG

Use Contextual Event Signals to reduce LHG Demand Forecasting Errors

Using the baseline forecasts from LHG with the Migacore Signal Augmentation + Baseline Migacore Forecaster

120-90 day forward looking

Measurement overall forecast accuracy and signal days vs non-signal days (MAD, MAPE, RMSE)

"Catching Signals": Augment predictive Revenue Management models with contextual data - AMLD EPFL 2020