

# Rapid response to the COVID-19 crisis

Virtual convention  
June 18 2020

Jan van der Oord  
Jos van Iwaarden

KEARNEY



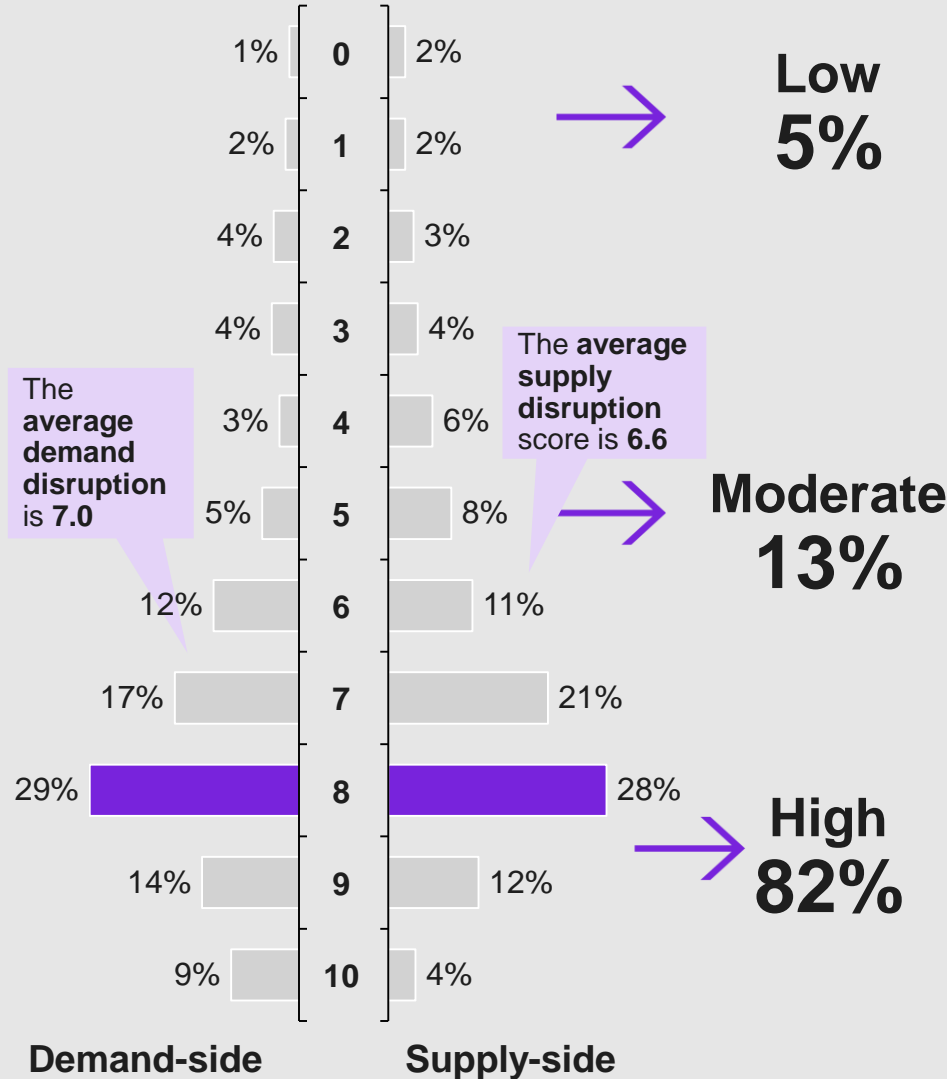
# Making your supply chain more resilient

## Matching Demand & Supply in 2nd half 2020

In collaboration with WEF, our team has surveyed and interviewed nearly 400 senior executives across multiple regions and industries.

Over 80% of survey respondents indicate that COVID-19 has significantly disrupted supply chain operations

How significantly is COVID-19 disrupting your operations?  
n=369

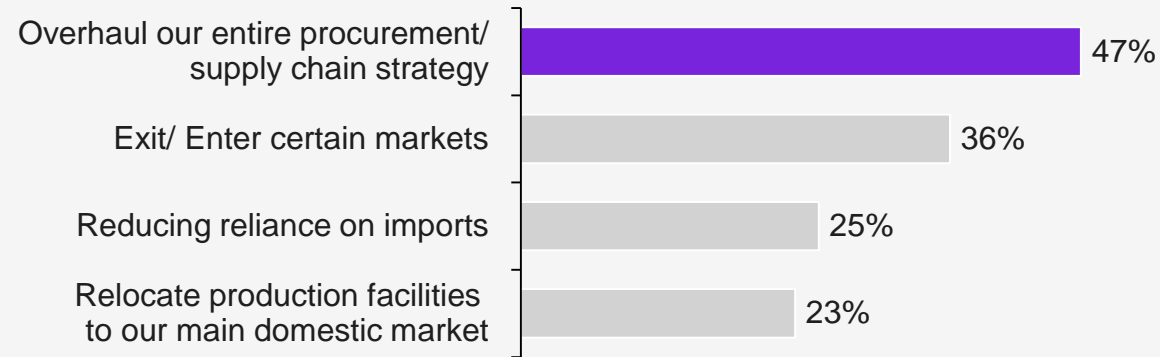


Selected survey statistics

- **Employee care is top priority** (e.g. provision of PPE or mental health advice)
- **Supporting suppliers and customers feature heavily** in initial responses
- **99%** supporting national efforts to deal with **the impact of COVID-19 on society**
- **44%** adapting distribution methods to **ensure supply chain continuity**
- **47%** indicate need to **overhaul manufacturing and supply network** to increase future resilience
- **40%** will place greater future focus on **risk management**
- **20%** of companies exploring **permanent work from home solutions**

# Operations leaders have a clear perspective on how supply chain set-ups must be changed to make them more resilient

What additional actions do you expect to take in the medium term to increase supply chain resilience?



Operations Leader Survey  
n=369

“We will definitely look at further **shortening** and having **less complex** supply chains. However a certain regional spread is required to ensure resilience”

*VP Supply Chain Strategy,  
Industrial company*

**Complexity reduction**

“I plan to further de-leverage our **risk of single source** suppliers. It is extra effort and extra costs, but certainly it is worth having multiple suppliers qualified”

*Head of Procurement,  
Healthcare company*

**Dual Sourcing**

“One of the lessons learned is the importance of **operating shorter, regional supply chains** oriented closer to the point of demand.”

*VP Global Supply Chain  
Operations, Industrial  
company*

**Localizing**

The pandemic exposed vulnerabilities in the supply chain, leading to a heightened call to action from the C-suite to prepare for future shocks and turbulences

Non-Exhaustive



**Pandemic**

**Supply / Geography:** shifts, export restrictions, supplier failures  
**Manufacturing:** raw material shortages



**Natural Disaster**

**T&L:** transport disruptions  
**Manufacturing:** shortages, equipment failures, power outages



**Trade War**

**Supply / Geography:** material cost increase, supply uncertainties



**Economic Boom**

**T&L:** transport disruptions, employee shortages/strikes  
**Manufacturing:** supply shortages, lost sales opportunities



**Economic Crash**

**Supply:** supplier bankruptcy  
**Planning:** customer bankruptcy



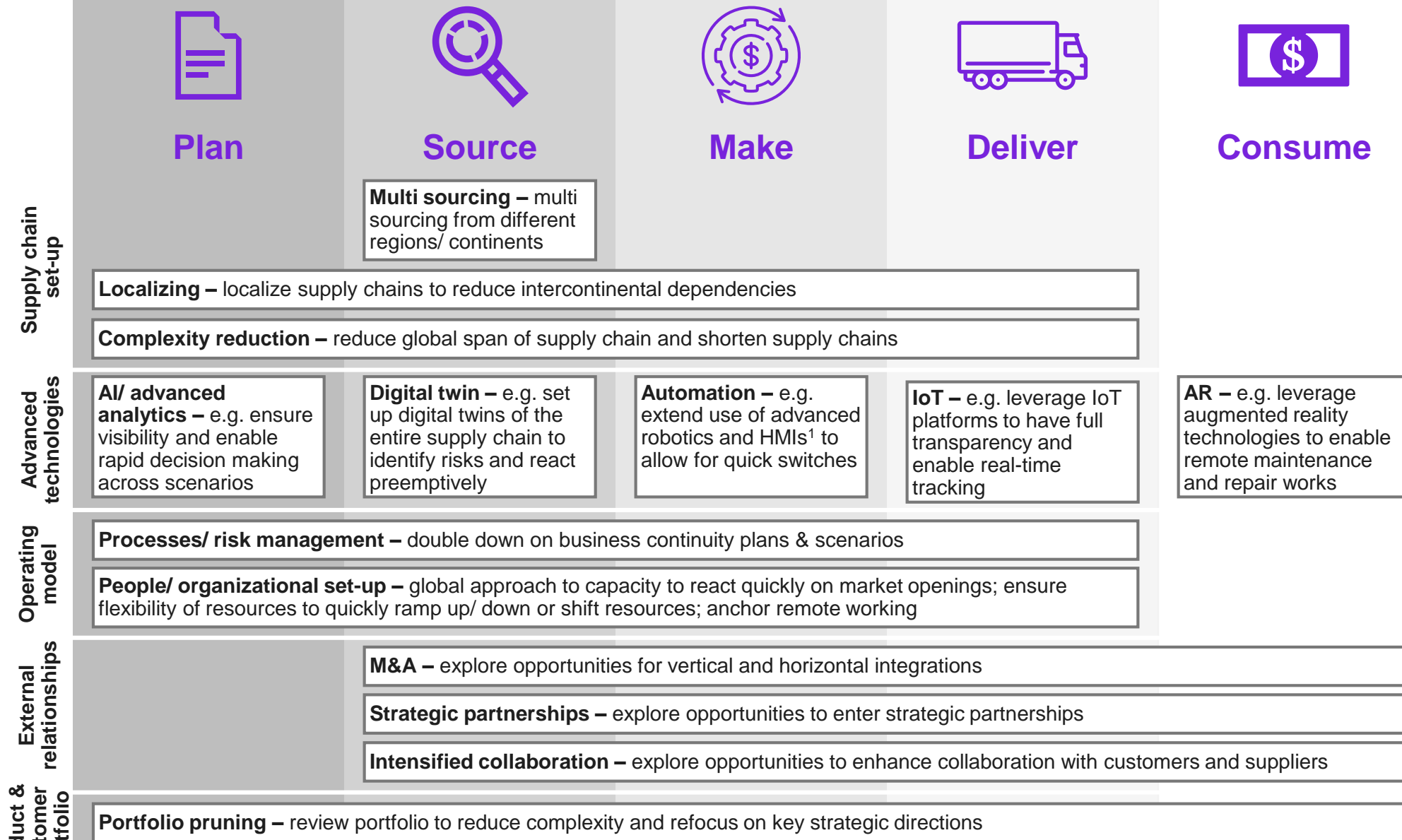
**Political Unrest or Conflict**

**Supply:** materials shortage, cost fluctuations  
**T&L:** transport disruptions

**Business leaders see five key areas to pivot supply chains from cost to risk competitiveness.**

**Kearney's Resilience Stress Test<sup>SM</sup>** evaluates business across 8 dimensions that identifies options for CxO's in allocating capital and designing the supply chain transformation

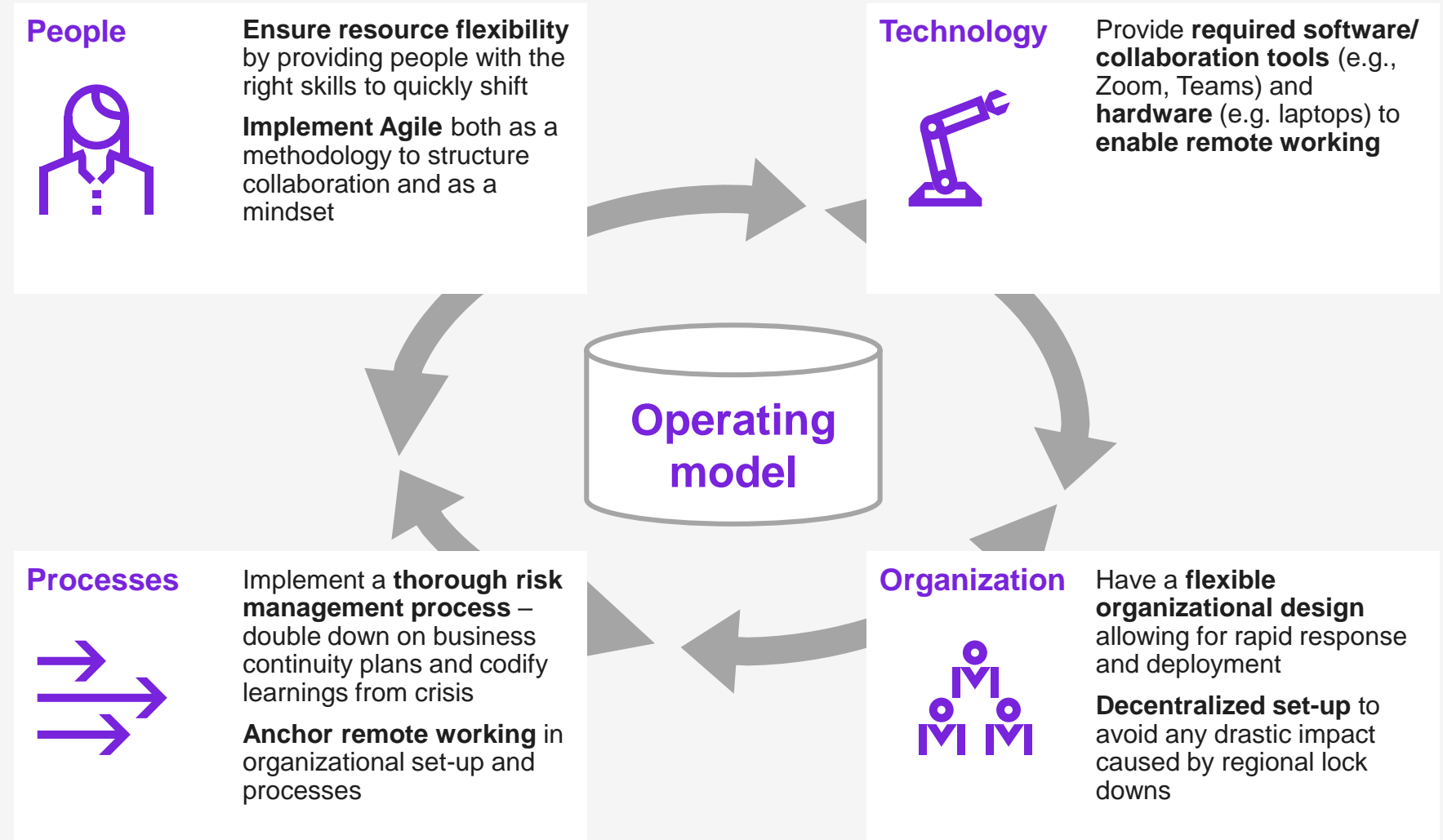
**Dominant COVID-19 response themes across the value chain**



1. Human Machine Interfaces  
Source: Kearney, WEF, COVID-19 impact survey

# COVID-19 will change our ways of working which makes changes to the operating model inevitable.

## Key considerations for future operating models



### Operating model

Changes to the operating model must cover all four dimensions to ensure smooth implementation  
 The people dimension often gets neglected

Making your supply chain more resilient

# Matching Demand & Supply in 2<sup>nd</sup> half 2020



Demand side risk mitigation must involve constantly monitoring and responding to changes in customer demand, consumer behavior and evolving external trends

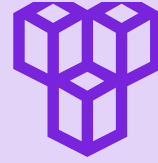
## Demand Side Risk and Mitigation



**Supplier Base**  
(primary, secondary, ...)



**Contract Manufacturing**



**Inventory**



**Logistics**



**Customer**



**Consumer**

### Mitigation Strategies

- **Move inventory among channels** - physical to digital
- **Aggregate all relevant internal data** into a centralized dashboard and monitor obsessively
- **Develop “sensing” capabilities** to observe evolution in external factors
- **Pay for expedited shipping** to maintain customer goodwill
- **Build a ‘pivoting’ supply chain** that can respond to changes in external conditions

1

Irregular inventory depletion by channel

2

Low visibility into abrupt shifts in customer demand / consumer channel preferences

3

Regular transportation unable to meet exigencies

4

Inability to effectively communicate demand-side fluctuations upstream

# Supply side risk mitigation must focus on contract manufacturers, global supplier base and inventory across the supply chain

## Supply Side Risk and Mitigation



**Supplier Base**  
(primary, secondary, ...)



**Contract Manufacturing**



**Inventory**



**Logistics**



**Customer**



**Consumer**

1

Severe 'near-term' labor shortages leading to missing production targets

2

Bankruptcy risk for small suppliers

3

All manufacturing capacity localized in affected geographies

4

Rapid inventory depletion

## Mitigation Strategies

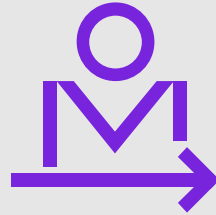
- **Check supplier health** including primary, secondary and tertiary suppliers
- **Secure alternate suppliers / contract manufacturers** even if at a premium
- **Consider near-shoring** for contract manufacturing
- **Re-examine manufacturing strategies** like just-in-time and virtual warehousing
- **Raise inventory** and elevate safety stock levels by at least 10%

We listen to data from thousands of suppliers and customers to sense risks that harm your business continuity.

## Target identification

# 1

List down your key / TOP suppliers, information channels, and customers



## Article extraction

# 2

Identify COVID related articles involving your targets across 1000s of digital publications / sources



## Natural language processing

# 3

Unstructured to structured  
Feature engineering  
Entity Extraction  
Sentiment extraction using NLP tools

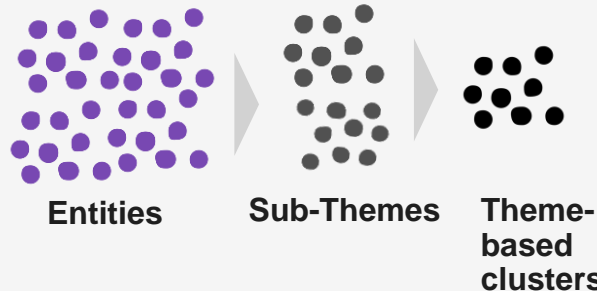


## Sentiment analytics engine

## Theme based segmentation

# 4

Segmentation technique is used to obtain theme cluster insights (operations, supply, financial health, technology, etc.)

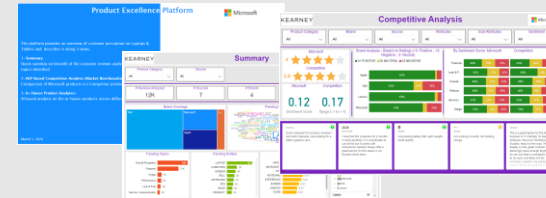


## Showcase user friendly dashboard

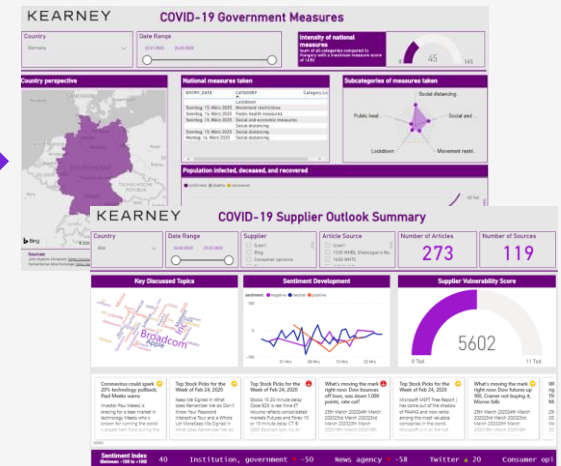
# 5

Showcase high level insights

- Supplier Summary
- Sentiments based on themes
- In house analytics
- AI based impactful mentions



## Output: Early Warning Cockpit



# Our proven workflow links state-of-the art data management, advanced analytics, and visualization.

Available tools allows to make faster and better planning decisions in production and logistics, provide analytical capabilities to define the optimal value chain.

## Optimization workflow



### Data management

- Connect data sources** (ERP) & manual data inputs
- Clean and process data** to match data quality and model needs
- Build baseline** for model validation and benefit cases



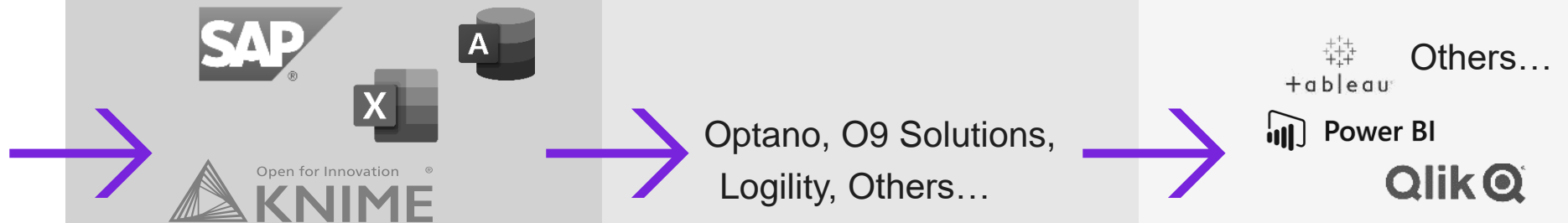
### Analytics model

- Formulate goals, degrees of freedoms, and restrictions** of optimization
- Customize model** based on business needs
- Initialize and run large-scale models** (millions variables/constraints) with leading-edge commercial or custom solvers



### Output visualization

- Create **intuitive visualizations** to explore highly granular model outputs for baseline and benefit validation
- Conduct **“What if” analyses** to assess model sensitivities
- Use detailed model reporting to **assess benefit cases** and scope initiatives



# Thank you

**Jan van der Oord**  
Partner, Amsterdam  
[jan.vanderoord@Kearney.com](mailto:jan.vanderoord@Kearney.com)

**Jos van Iwaarden**  
Principal, Amsterdam  
[Jos.Van.Iwaarden@kearney.com](mailto:Jos.Van.Iwaarden@kearney.com)

## Stay connected with Kearney



This document is exclusively intended for selected client employees. Distribution, quotations and duplications – even in the form of extracts – for third parties is only permitted upon prior written consent of Kearney.

Kearney used the text and charts compiled in this report in a presentation; they do not represent a complete documentation of the presentation.

# KEARNEY

