



# DANONE

**Optimization of raw materials** and packaging in the food industry

## // CONTEXT & SCOPE

Founded **in 1919** FTE: **104,843**  Revenue: €25.29 billions in 2019 Industry: Agrifood



The project began in January 2020 with a call for project proposals by Danone in **collaboration** with Microsoft's "AI Factory For Agrifood". The aim of this program was to respond to the **challenges** in agriculture, logistics and supply chain management, such as **waste reduction**.

Since then, Flowlity has **worked with** Danone to optimise raw material and packaging **stocks**: **two key elements** in the food sector supply chain. The **solution** has allowed the agrifood leader **to optimize** its stock levels (min and max) and offers **recommendations** for replenishment and consumption forecasts.

2

#### // The project

The project covered **27 products** at a Danone Nutricia pilot facility in Haps, **the Netherlands**.

Integrated with SAP software, Flowlity **retrieved** all past orders and inventory **history** over a **two-year** period. After a **thorough** analysis of this data, the teams were able to compare past stock **forecasts** with those that Flowlity's algorithms would have proposed:



For a 3-month horizon, Flowlity forecasts were approximately

79% × 30%

for Danone forecasts before the implementation of the solution



For a 6-month horizon, Flowlity's forecasts were

**67%** " 12%

for Danone's own previous forecasts.

#### // Implementation

01

02

03

04

# Day 1

**Kick-off** and organisation of **workshops** to define the project scope, use case and data integration.

## + 2 Months

**Continuous data** integration from SAP. Our algorithms are trained using these data sets.

# + 3 Months

Access to the **application** and **recommendations** calculated by Flowlity's AI. Users **share** their planning and feedback on the application.

4

# + 6 Months

Application implemented and used **daily** by the procurement team.



# SIX MONTHS LATER, FOLLOWING INTEGRATION WITH THE EXISTING IT ENVIRONMENT

**The solution is fully operational** and deployed for the existing planning team. Flowlity **supports** the planners and allows them to **dynamically** adjust the company's safety stock and replenishments.

It allows replenishments to be digitalised and automated and enables a **better level** of service by **reducing** the risk of shortages.

- Many other results are expected, including:
  - reduction in stocks with a simulation over 6 months

#### 28% to -40% reduction in inventory

over 1 year



By deploying Flowlity, we predict a 28-40% reduction in overall inventory levels

> > > > > over 12 mois > > > > >

5

**Synchronization** with suppliers

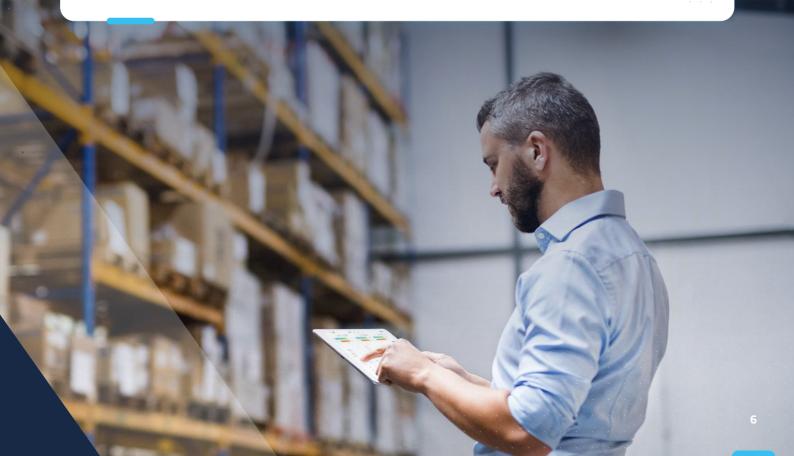
#### // The next steps?



To make the client's **digitalisation** and inventory **reduction goals** a reality, Flowlity is now in the **synchronization** phase with the group's suppliers, including DS Smith, Dutch State Mines and Ardagh Group.



The **objective** is to integrate suppliers' data **without ever compromising the confidentiality** of the information belonging to the different parties. This visibility allows Danone and its suppliers to receive **improved** recommendations. Suppliers can track past and incoming orders in **real time**, obtain sales **forecasts** for all Danone products covered by the project and anticipate potential shortages.



#### // The next steps?

#### The results:

The result: a further reduction in inventory of around

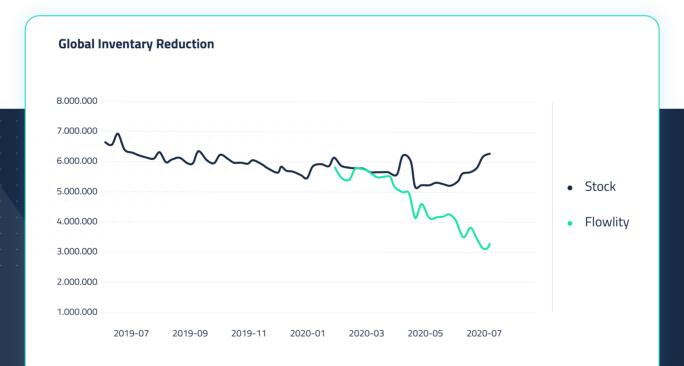
# -12.40% 👵

(see graph below) for Danone

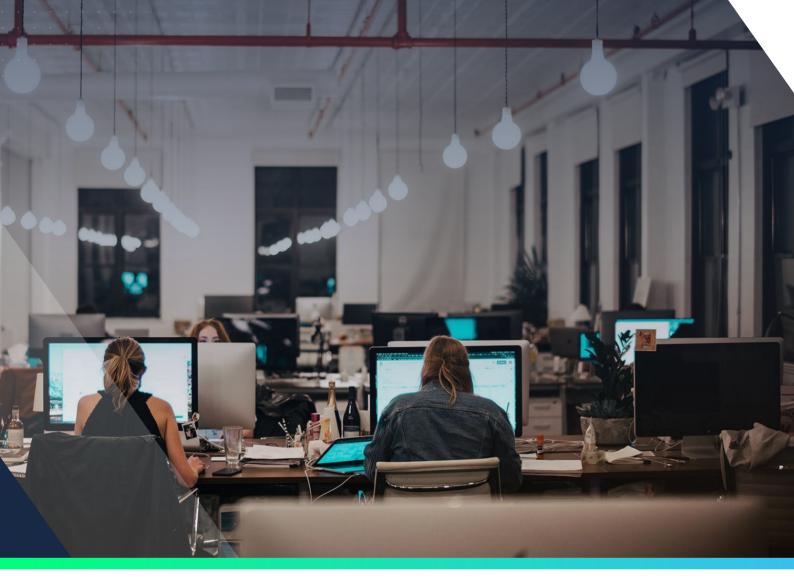
# And a reduction in finished goods inventory of around

-30% to -60% J

for its suppliers.



#### // About flowlity



**Poor inventory management** accounts for billions in losses as a result of overstocks and product shortages. In today's ever-expanding **supply chains**, **inventory optimization** is more **complex** than ever and remains a difficult challenge to solve on a company-wide basis. As part of a long supply chain, how is it possible to **gain visibility** while maintaining data **confidentiality**?

#### // About flowlity



Responding to this need, Flowlity aspires to be an **intelligent trusted third party** between the company, its suppliers and its customers, providing **each** party with **optimal** inventory recommendations while ensuring **data confidentiality**.



By combining **artificial intelligence and our supply chain expertise**, Flowlity has been helping **leading** companies, such as Danone, La Redoute, Plansee, Saint Gobain and Cartier, to plan and forecast their inventories since 2018.



#### // Supply Chain

# Simplified

As a simple and robust SaaS planning **solution**, Flowlity provides proactive **alerts** to **help** you anticipate any issues **before** they occur.

# Synchronized

Flowlity **synchronizes** your company with your direct suppliers and customers, acting as an intelligent **trusted** third party, providing **complete** visibility without having to share your data.

# Reinvented

Flowlity has **reinvented** classic inventory optimization algorithms by exploiting the full **power** of Artificial Intelligence and its trusted third party approach. Our algorithms allow you to identify shortages or overstocks to make your company increasingly more **reactive** and **agile**.



For more information, please visit our website www.flowlity.com



Or write to us at hello@flowlity.com