Case Study

Consumer Products

Demand Driven World™
AMSTERDAM 2019

Survive, Adapt and Thrive in the VUCA World

OCTOBER 10 & 11

Thibaut d'Herouville, VP Group Industrial Supply Chain, will share Michelin's DDMRP implementation results to date across a number of facilities.

MICHELIN

Demand Driven Journey in Michelin

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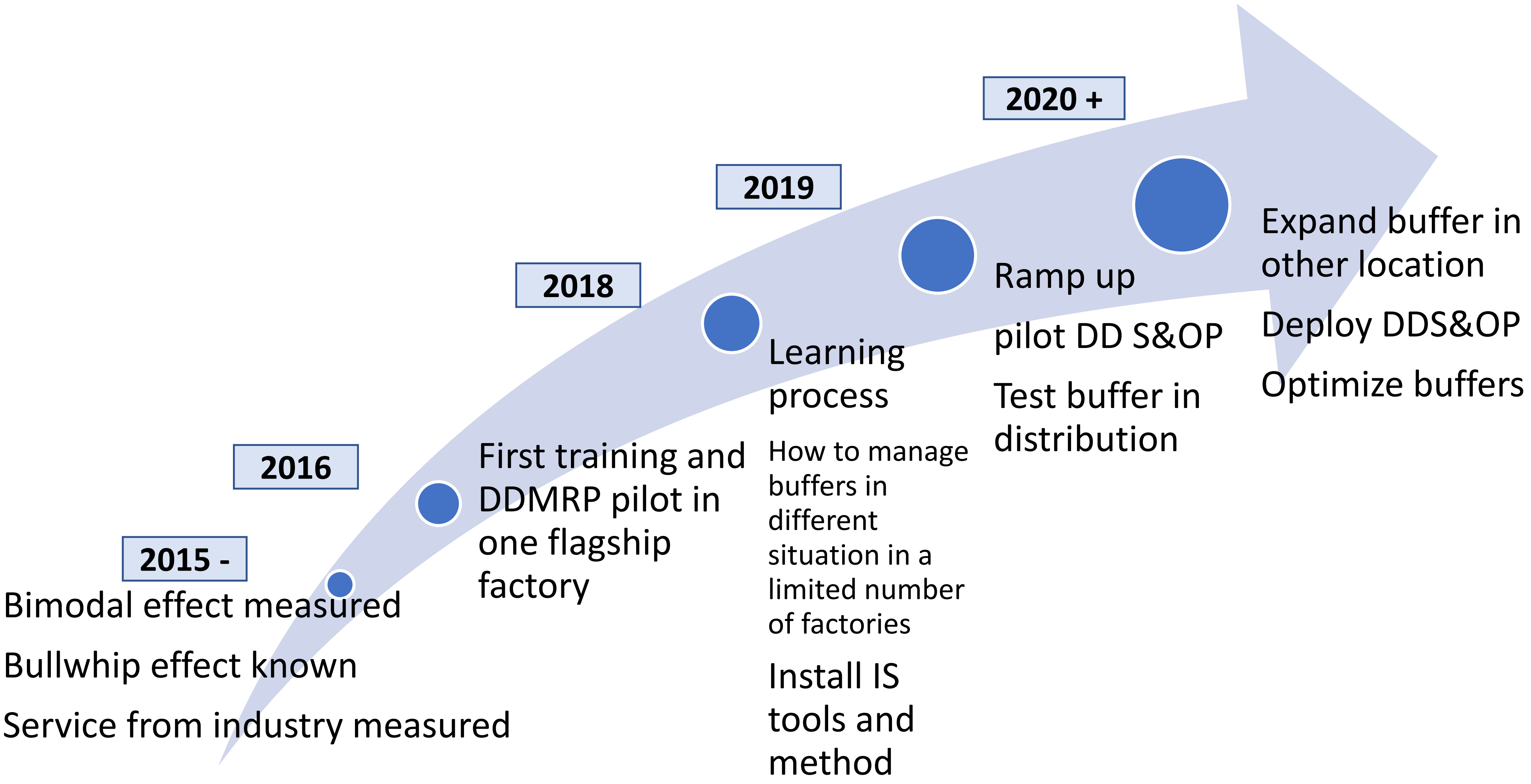
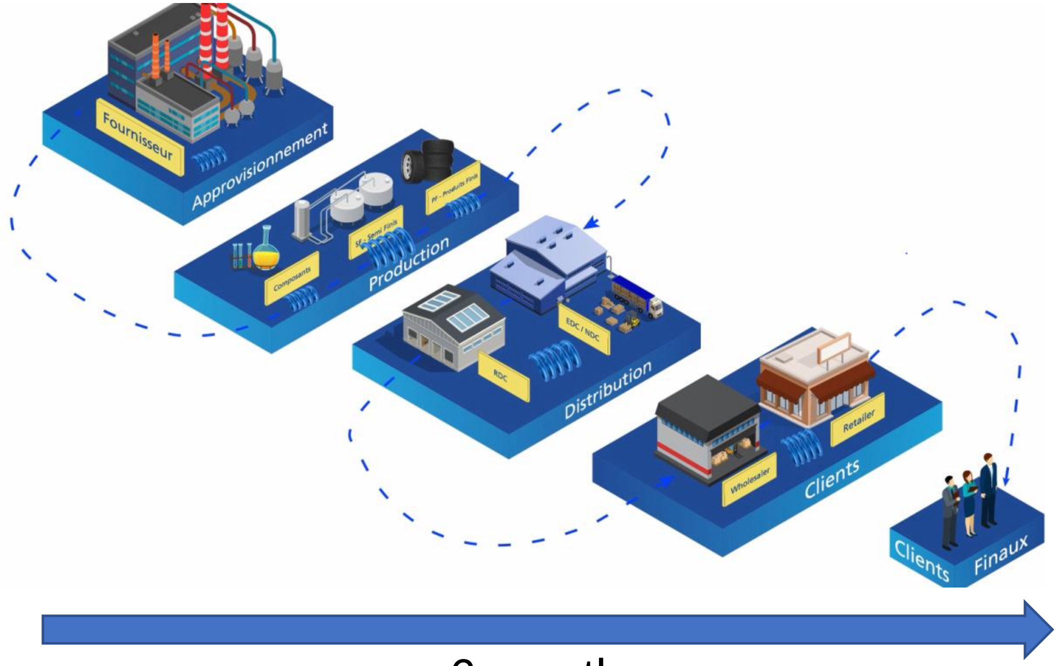
MICHELIN Key figures For Supply Chain

- 4 billions € Inventory value
- 1.9 billions € Logistics costs
- 3.5 millions m2 Warehouses
- 20% of the tires crossing one ocean
- 120 industrial activities

OUR DEMAND DRIVEN ROAD MAP



GLOBAL SUPPLY CHAIN **OVERVIEW**



6 months

\ **8 levels (300 Sites) and 6 months of E2E leadtime**

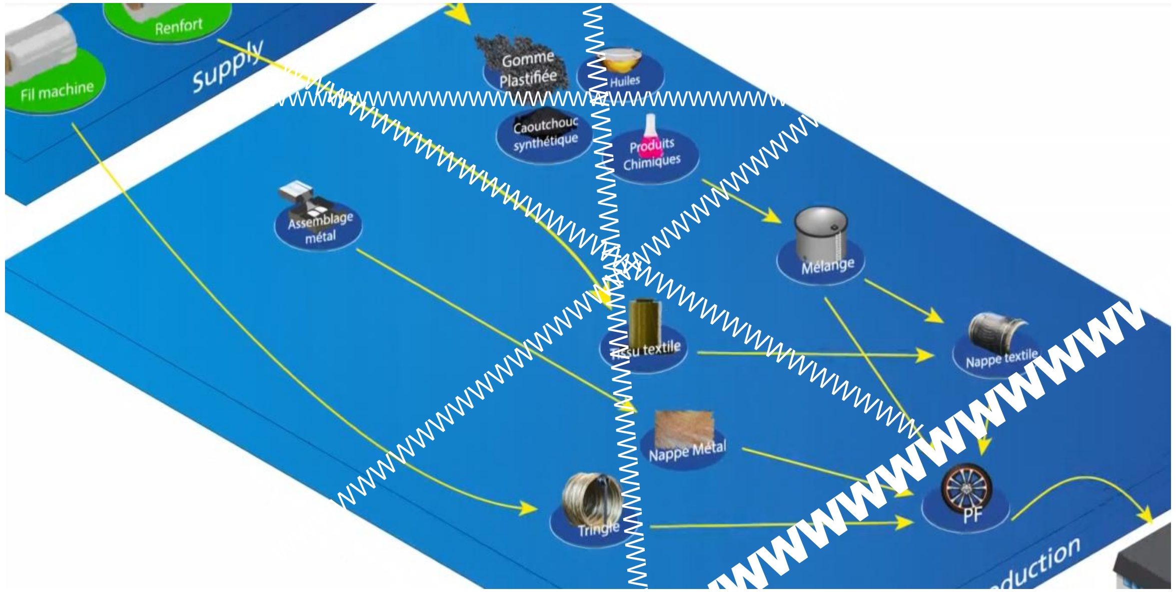
INDUSTRIAL SUPPLY CHAIN **CONSTRAINTS**

\ 8 levels and 6 months of Leadtime

\ Integrated worldwide SC for 120 undustrial activities

- but different Supply Chains, Finish product , mixing synthetic rubber, natural rubber, metallic reinforcement, textile reinforcement
- Huge number of point to point flows

INDUSTRIAL SUPPLY CHAIN **CONSTRAINTS**

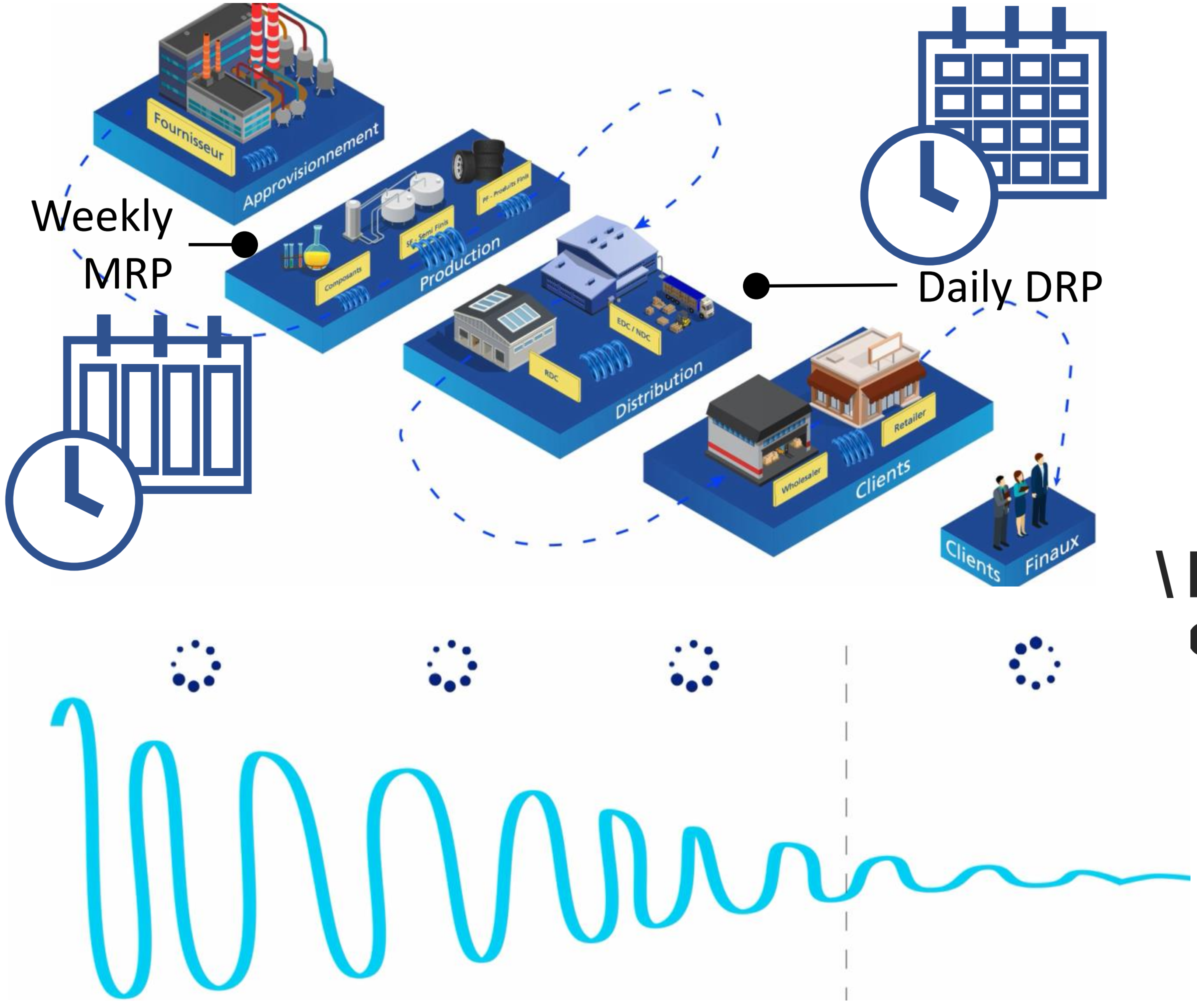


\ Integrated worldwide SC for 120 activities

\ 8 levels and 6 months of Leadtime

\ Historical silos

INDUSTRIAL SUPPLY CHAIN **CONSTRAINTS**



\ **Integrated worldwide SC for 120 activities**

\ **8 levels and 6 months of Leadtime**

\ **Historical silos**

\ **bullwhip effect due to activities coupled through DRP/MRP technics**

– activities very different in term of flexibility

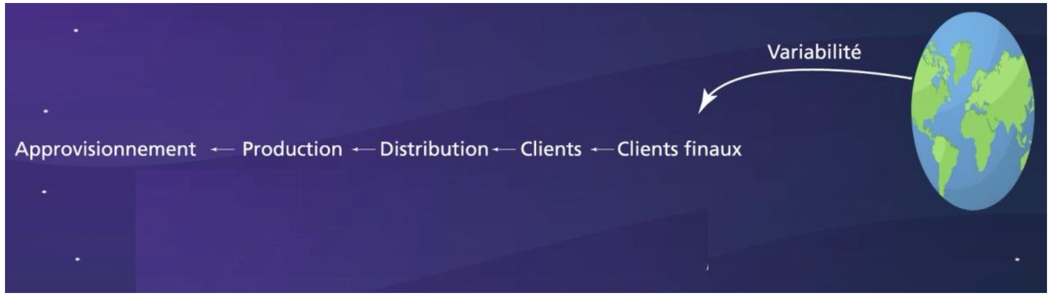
– From very short to long lead time

– Multi steps, multi levels organization

INDUSTRIAL SUPPLY CHAIN **CHALLENGES**

1. **Increasing numbers of reference (long tail)**

INDUSTRIAL SUPPLY CHAIN **CHALLENGES**



1. Increasing numbers of reference (long tail)

2. **Forecast accuracy still a challenge**

KEY PRINCIPLES FOR INDUSTRIAL ACTIVITIES

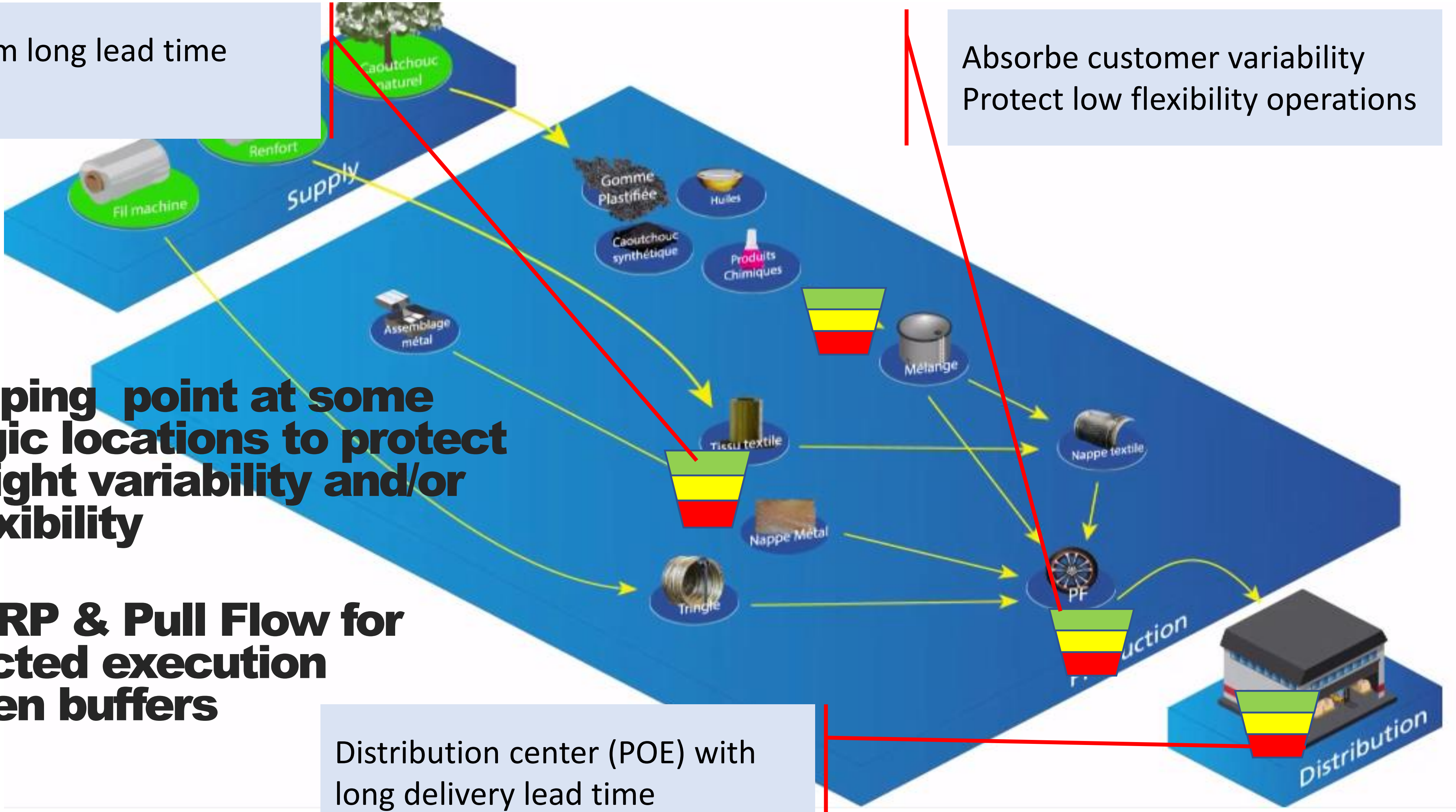
\ **Better knowledge of the customer and plant empowerment**

- Business intimacy
- Customer at the heart of decision process
- Direct contact with sales organisation whenever possible

KEY PRINCIPLES FOR INDUSTRIAL ACTIVITIES

Protect from long lead time supply ?

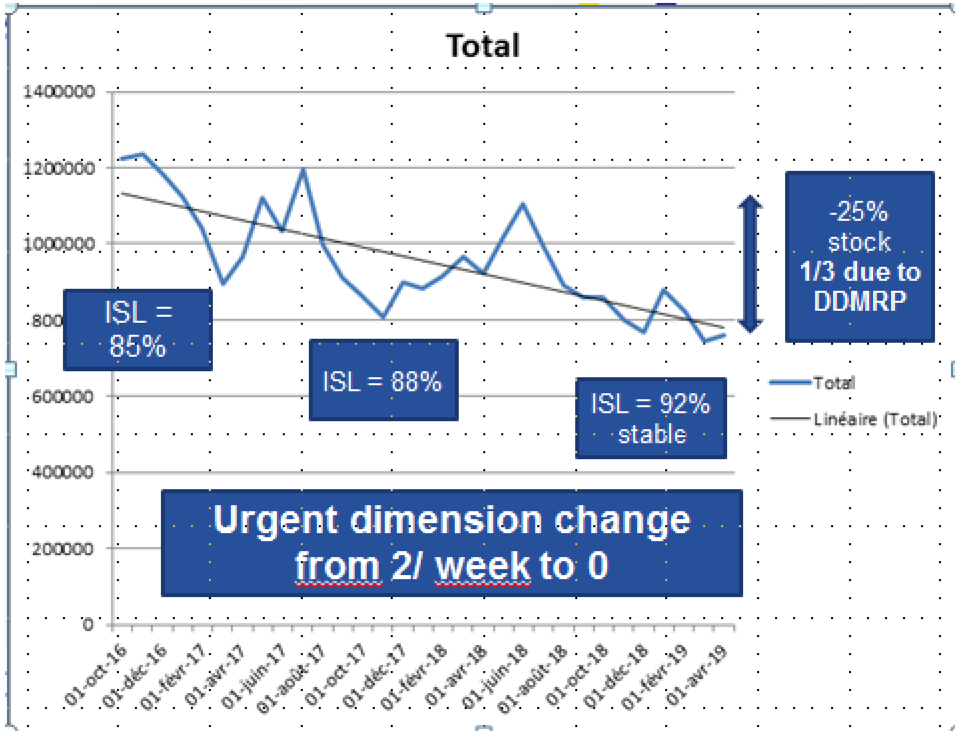
Absorbe customer variability
Protect low flexibility operations

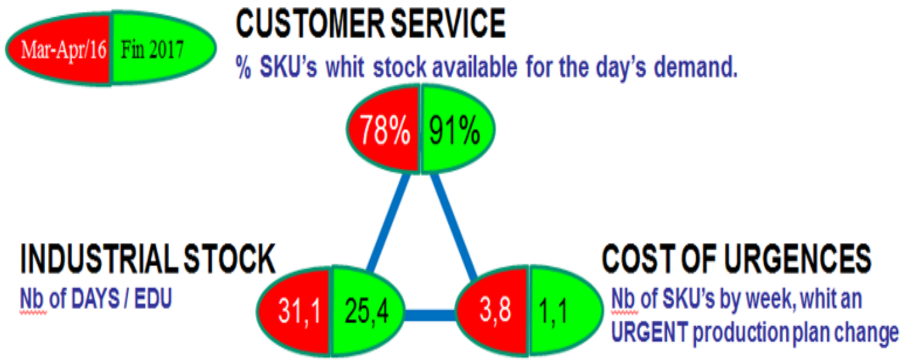


- Declouping point at some strategic locations to protect from hight variability and/or low flexibility
- DRP/MRP & Pull Flow for connected execution between buffers

Distribution center (POE) with long delivery lead time

RESULTS (25 SITES DEPLOYED ; 45 BY MID 2020)





\ **15 % (from 5 to 40%) reduction of stock managed with buffers**

\ **10 % service increase**

\ **Emergency divided by 3 to 4 (smoothed signal and lean organisation)**

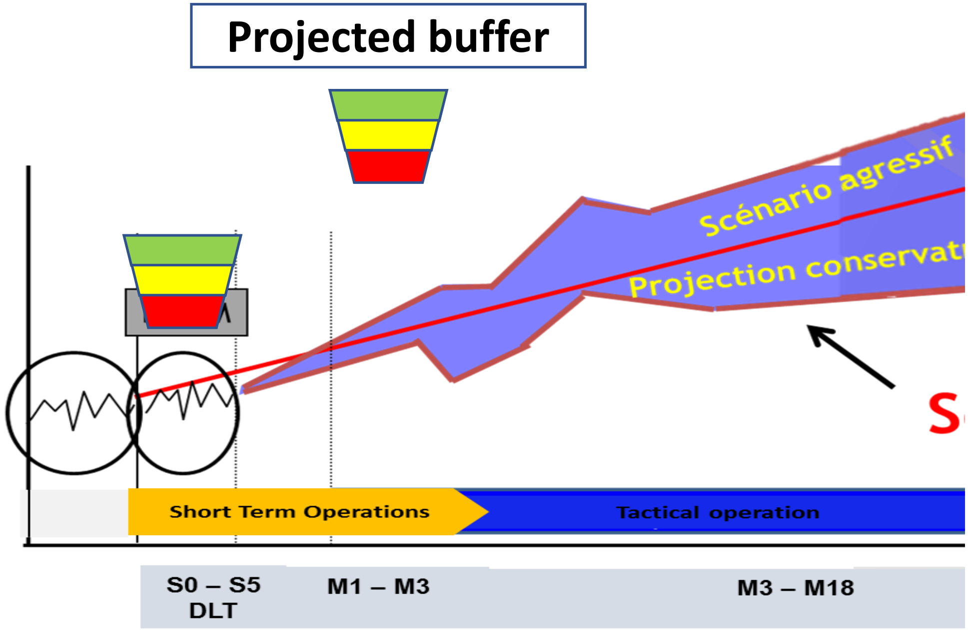
WHAT PLANNERS LIKE

What they like	What they don't like
• A very clear view of very short term customer real needs	• Need longer view than just DLT
• Much lower variability of signal	• Lack of system integration
• Inventory norms well adapted for each skus	
• Global reduction of inventory	
• Higher level of autonomy and empowerment	

WHY MOVING A STEP FORWARD TO DD SUPPLY REVIEW (DD S&OP) ?

\ Current issues

- Need for a longer view than DLT (tooling, capacity adjustment, inventory target, …)
- Bullwhipp effect is still a significant issue after DLT with traditionnal method
- Very difficult to adjust short term operationnal with tactical view



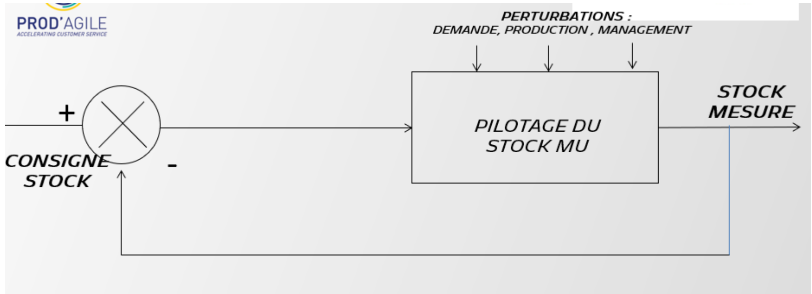
Potential solution currently tested

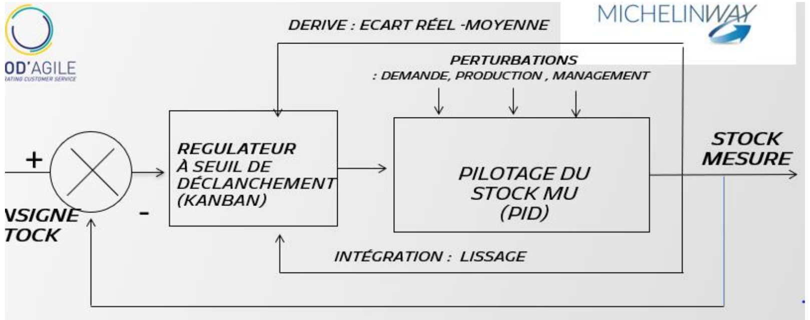
- 3 horizons instead of 2 : DLT, M1 to M3 , M4 to M18
- Tactical review done in each factory using buffer projection then consolidated
- Regional analysis before business line S&OP

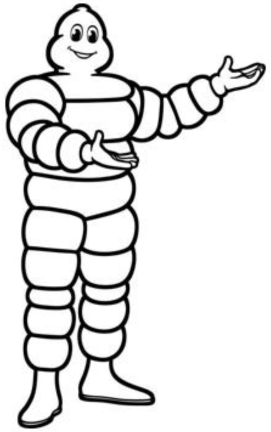
WHY WE WILL NOT STOP WHERE WE ARE

\ So far , so good : it works

\ Method adapted to non linear systems





\ We have been  for more than 100 years we will not be 

KEYS LEARNING & CHALLENGE

\ Change, change , change, ……

\ Education, training

\ Support from plant manager (get a champion asap) and top management

\ IS integration

\ Forecast are still needed but we can spend less time to build them

\ First results can be fast


THANK YOU
QUESTIONS ?
MICHELIN
A BETTER WAY FORWARD

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