



Swiss Association for Quality



Introduction aux principes
Demand Driven



MRP et flux tiré

- La méthodologie prépondérante, au cœur des systèmes ERP, est MRP
- Enoncée dans les années 60-70, cette méthodologie n'a pas évolué, alors que le monde a profondément changé
- Les méthodologies de flux tiré (Toyota, Lean, TOC...) ont apporté des bénéfices mais sont limitées dans leur déploiement par faute de standardisation et d'intégration aux systèmes d'information

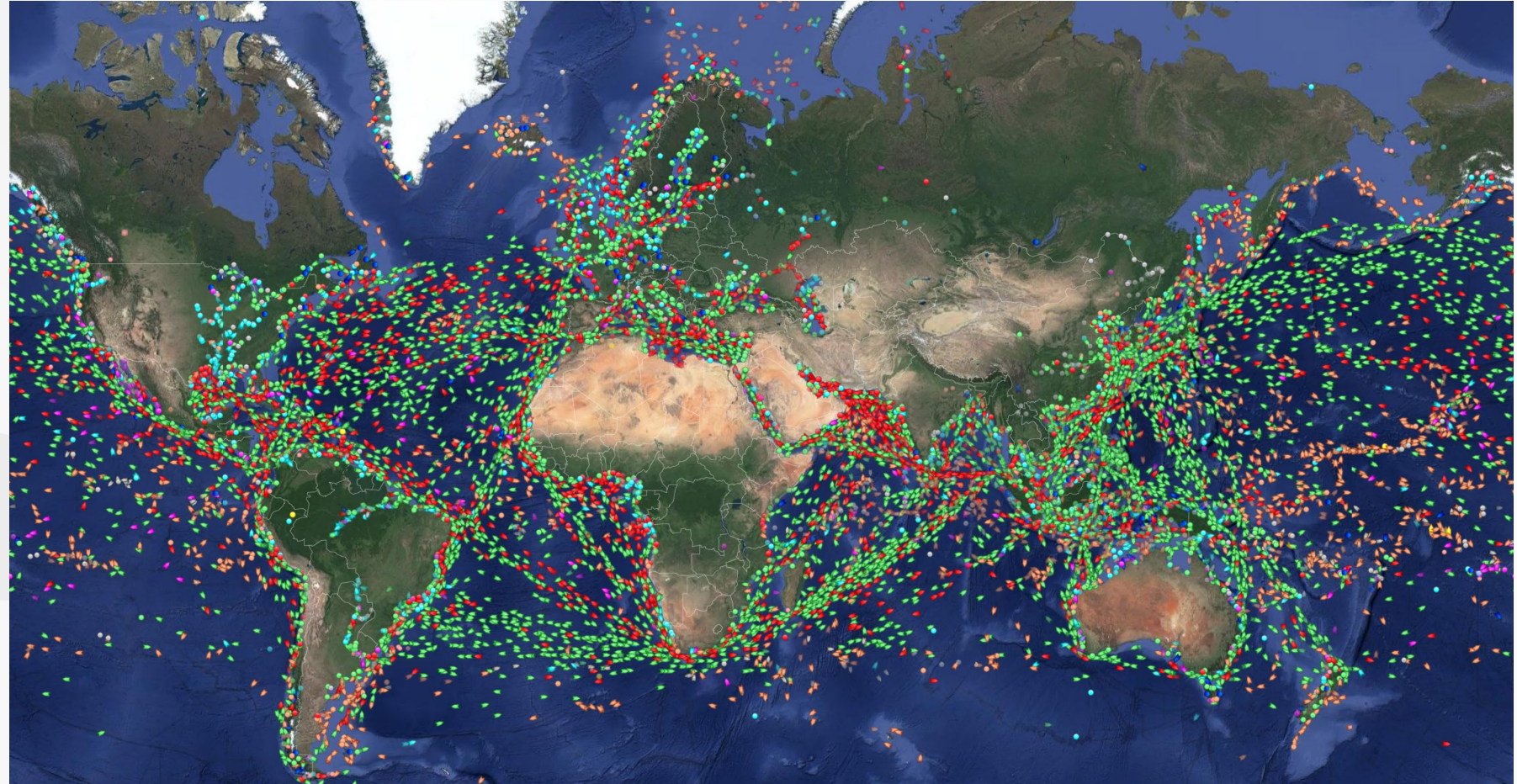


Le monde a changé – portefeuilles produits





Le monde a changé – complexité des supply chains





Le besoin de développer agilité et résilience

Volatile



Complex



Uncertain



Ambiguous





Etre moins sensibles à la fiabilité des prévisions



FORECAST DRIVEN PLANNING

Current MRP systems use a forecast driven model.

+ Planned orders create supply orders in anticipation of need.

+ Forecast error associated with planned orders results in inventory misalignments and higher expediting expenses.



CONSUMPTION DRIVEN PLANNING

DDMRP improves demand signal accuracy by shifting to a consumption driven model.

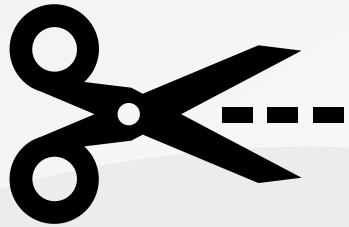
+ Only actual demand within a relevant range impact the planning equation.

+ True consumption gives a near perfect demand signal — what will be sold and when.



Le modèle opératoire piloté par la demande (DDOM)

Tire partie des bonnes pratiques du Lean, de la TOC et de MRP



Points de découplage



Points de contrôle



Buffers opérationnels



Cadencement sur la demande réelle



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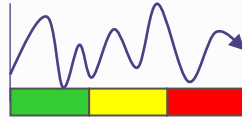


Mécanismes

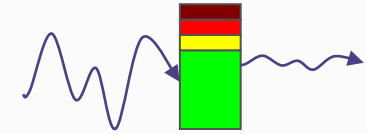
Stocks dynamiques



Buffers de temps



Buffers de capacité



Goulots

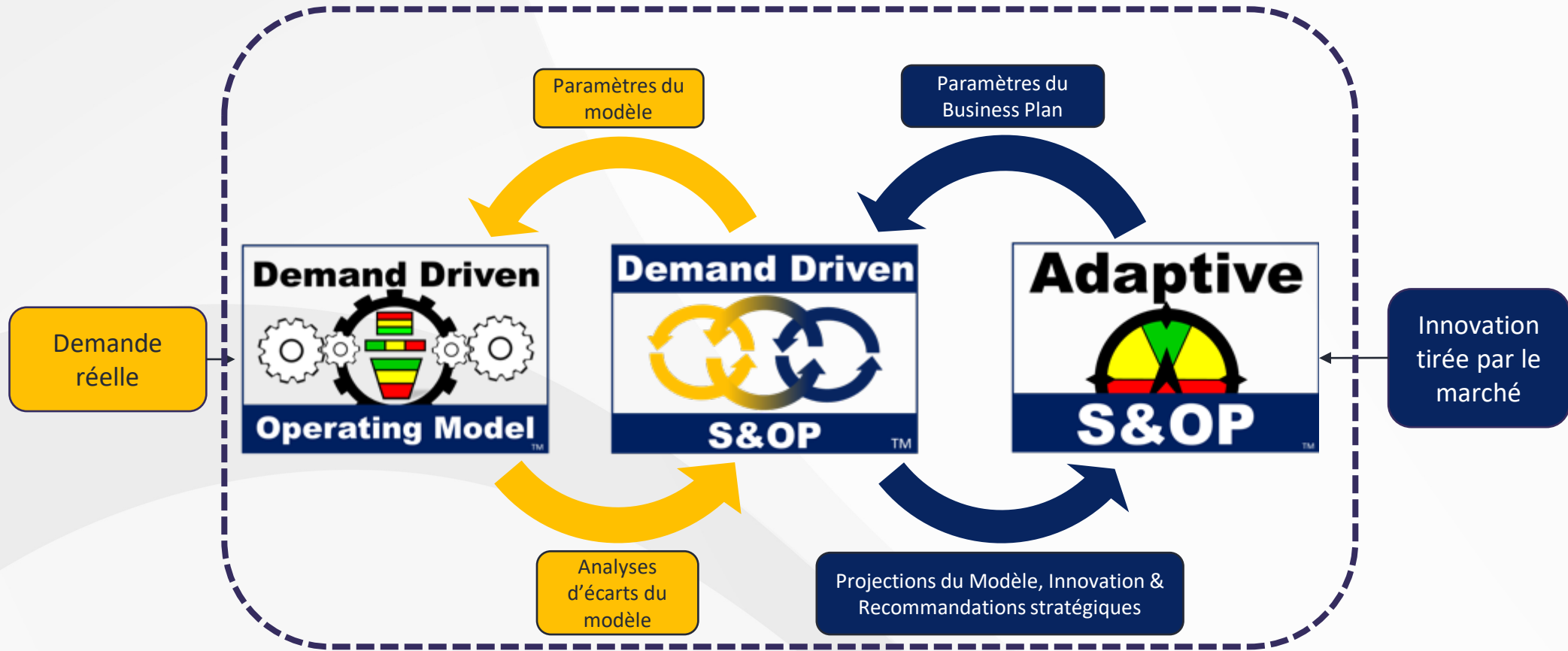


Points de contrôle





Le modèle d'Entreprise Adaptative Pilotée par la Demande (DDAE)



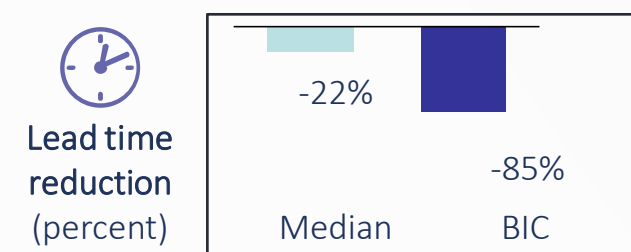
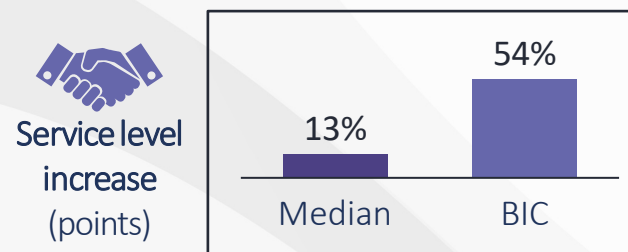
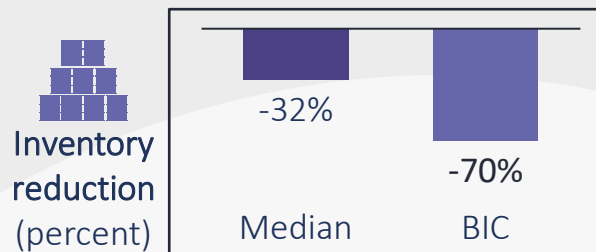
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Les composantes de l'approche Demand Driven

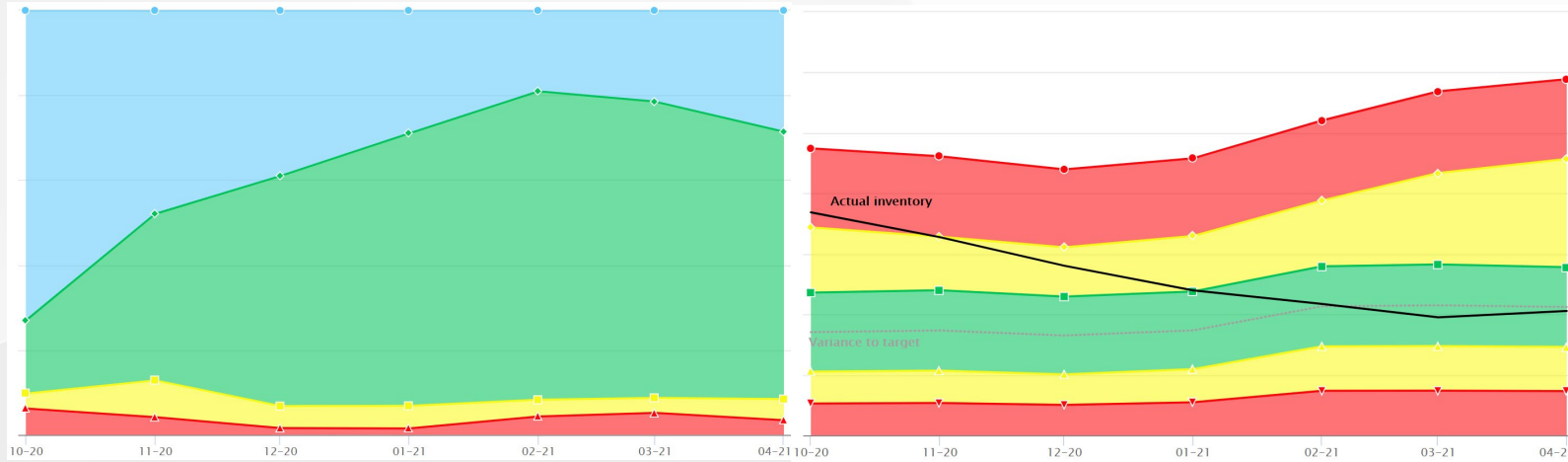
- ❖ Mise en cohérence de bonnes pratiques issues des flux tirés et de MRP
- ❖ Une méthodologie complète, formalisée, end to end
- ❖ Des formations pour faciliter et accélérer l'adoption
- ❖ Des logiciels pour une intégration facile et pérenne

❖ Des résultats démontrés

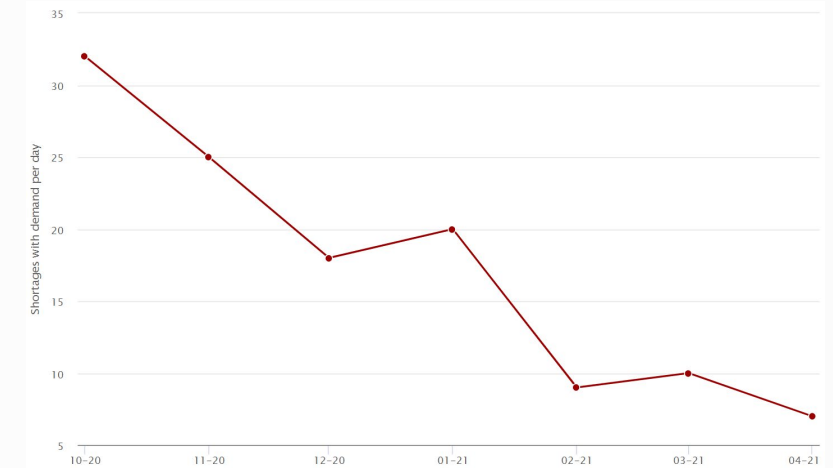


BIC – Best in Class Source: CAMELOT project experience, Demand Driven Institute, FAPICS

Santé des stocks



Ruptures



Travail par exception, pilotage visuel



PLANNING PRIORITIES

CRITICAL	5	HIGH	9	HIGH (NB)	2	MEDIUM	32	LOW	20	OTDS	8
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EXECUTION ALERTS

Current Inventory

CRITICAL	3	HIGH	3
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Projected Stock Out

CRITICAL	18	HIGH	12	MEDIUM	13
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Material Synchronization

CRITICAL	11	HIGH	7
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Lead Time Managed

HIGH	4
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Location: FR011 / STR_F Resource: HGM-A Buffer Manager: (Not assigned) Total Hours Today: 48.0 hours on 2 resource(s)

Scheduler last run 15 hours ago (Stale)

Yet to be Received

Early	Green	Yellow	Red	Late
1 Orders/27.6 hour(s)	0 Orders/0.0 hour(s)	0 Orders/0.0 hour(s)		1 Orders/27.6 hour(s)
50752 f * f * 27.6 hour(s)				46977 f * f * 27.6 hour(s)

Received

Early	Green	Yellow	Red	Late
20 Orders/554.7 hour(s)	1 Orders/27.9 hour(s)	2 Orders/55.8 hour(s)		2 Orders/55.4 hour(s)
55880 f * f * 27.6 hour(s) 55378 f * f * 27.6 hour(s) 47008 f * f * 27.9 hour(s) 46997 f * f * 27.9 hour(s) 48151 f * f * 27.9 hour(s) 48148 f * f * 27.9 hour(s) 48152 f * f * [EXPEDITE], 27.9 hour(s) 46981 f * f * 27.6 hour(s) 46984 f * f * 27.6 hour(s) 48348 f * f * 27.6 hour(s) 46979 f * f * 27.6 hour(s) 46975 f * f * 27.6 hour(s) 50730 f * f * 27.6 hour(s) 46005 f * f * 27.9 hour(s)	48140 f * f * 27.9 hour(s)	45994 f * f * 27.9 hour(s) 48139 f * f * 27.9 hour(s)		46976 f * f * 27.6 hour(s) 20185 f * f * 27.9 hour(s)



Exemple d'industries

Industrial



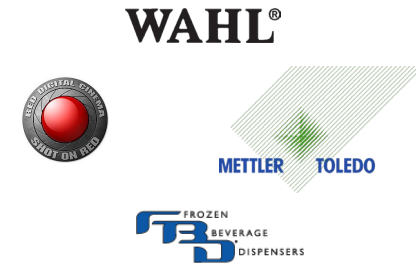
Automotive



Aerospace



Electronics



Food & Bev



Consumer



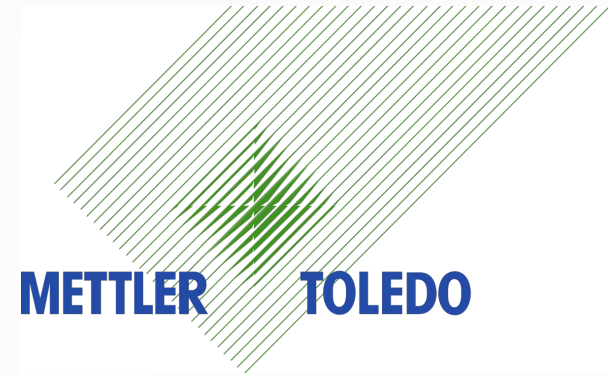
Healthcare



Packaging



Mettler Toledo



- Global roll out, Asia / Europe / US, 18 plants and 3 regional hubs, in 18 months, remotely
- <https://demanddriventech.com/webinar/mettler-toledo-case-study-2/>
- +5 points on service level on average
- Lower inventories and better balanced