SAMES KREMLIN

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SAMES KREMLIN
Demand Driven Journey

Demand Driven Supply Chain Professional
November 2020

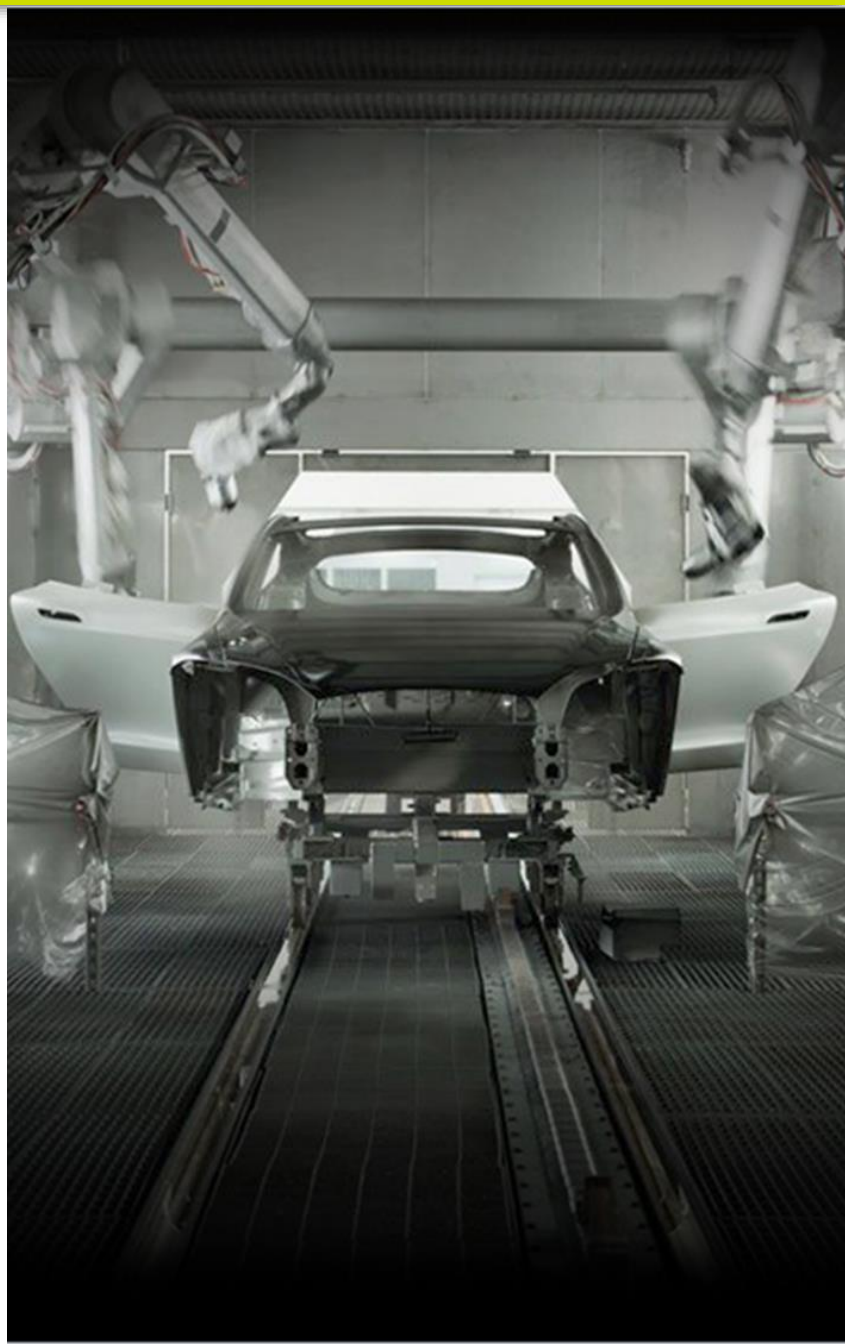
Demand Driven Supply Chain PROFESSIONAL™

Demand Driven INSTITUTE™

Apply your skills

Agenda

1. Sames Kremlin organization
2. Initial implementation
    1. Stains Factory Pilot
    2. Meylan Factory Pilot
3. Sustain, expand and overcome
    1. Stains Factory deployment
    2. Meylan Factory deployment
    3. Distribution deployment : USA and China
4. Improvement once the implementation was stabilized
5. Biggest lessons learned



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Sames Kremlin organization

Apply your skills

SK is part of EXEL Industries group

- EXEL Industries
  - A WORLD LEADER IN PRECISION SPRAYING SOLUTIONS

AGRICULTURAL PRECISION SPRAYERS

SUGAR BEET HARVESTERS

GARDEN SPRAYING AND WATERING

INDUSTRIAL PRECISION SPRAYING SOLUTIONS

"Spray the right dose in the right place at the right time

SAMES KREMLIN provides industrial solutions for production increase, quality improvement, material & cost savings

Supporting the industrial process from assembly, protection against the environment to finish by beautifying manufactured products

SAMES KREMLIN has 6 ranges of products (manual guns, automatic and robotic applicators, a wide range of pumps & machines for fluid handling, dosing, mixing & dispensing)

AIRSPRAY and AIRMIX range : highest spraying quality

SAMES KREMLIN

Airspray

Paint gun manufacturer since 1925, we produce the best paint finishes

FPro
Manual Pistol
MTS + spare – high runner

A35
Automatic Pistol
ATO + spare – med runner

CYCLOMIX™ Micro
Mixing System
MTO – low runner

Airspray pump
Pump System
MTS – high runner

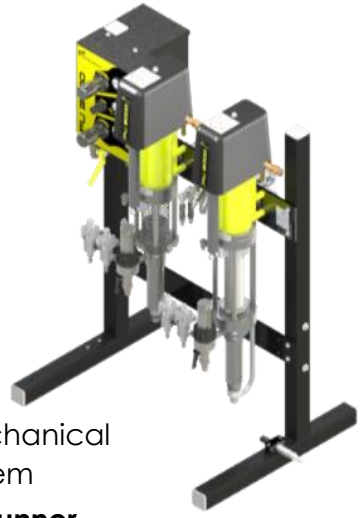
Airmix®

Airmix® creator in 1975, the perfect equilibrium between quality of finishing and productivity

Xcite™
Manual Pistol
MTS + spare – high runner

AVX
Automatic Pistol
MTS + spare – high runner

AIRMIX® pump
Pump system
MTS – high runner



PU 3000
Electromechanical mixing system
ATO – low runner

AIRLESS and REXSON range : spraying high viscosity

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Airless

Airless premium for demanding painters in difficult applications

SFlow
Manual Pistol
MTS + spare – high runner

ASI24 & ASI40
ASI 40GT & ASI40GTV
Automatic Pistol
ATO + spare – med runner

AS 22
Airless Gun
Automatic Pistol
ATO + spare – med runner

Airless pump
Pump system
ATO – med runner

Rexson Dispense

Extrude beyond what is possible, deposit with pinpoint precision

Heated / Cold
Manual Extruder

Heated / Cold
Automatic Extruder

MTO – low runner

Volurex
Automatic doser

Quattro pump
Pump System

REXSON pump
Pump Systems

BOOSTER
System 2K

ELECTROSTATIQUE LIQUID and POWDER range : spraying with better performance

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Electrostatic

The control of electrostatics for quality and performance extreme precision

NANOGUN
Manual Pistol

PPH 308
Automatic Sprayer

PPH 707 EXT

PPH 707 SB

ACCUBELL 709 EVO

MTO/ATO – low runner

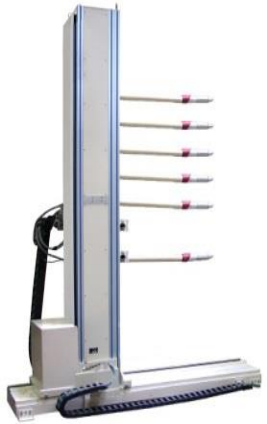
Powder Coating

Creator of high productivity in powder coating since 1960

Auto Mach-Jet
Automatic Projector

e-Jet2
Manual Equipment

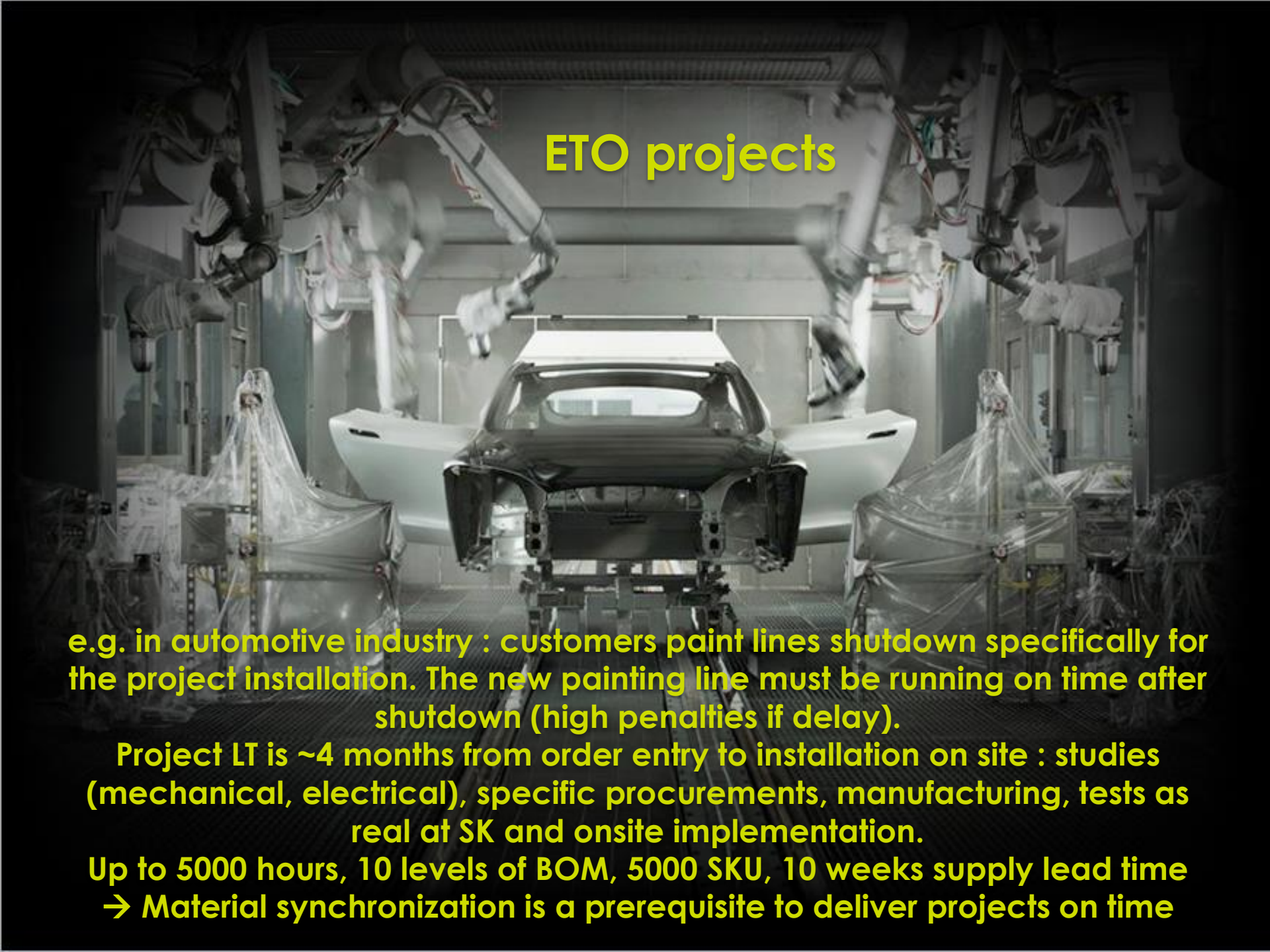
INOBELL
Robotic Projector



RFV2000
Assembly

FCR/SLR
Control Cabinet

MTO/ATO – low runner



ETO projects

e.g. in automotive industry : customers paint lines shutdown specifically for the project installation. The new painting line must be running on time after shutdown (high penalties if delay).

Project LT is ~4 months from order entry to installation on site : studies (mechanical, electrical), specific procurements, manufacturing, tests as real at SK and onsite implementation.

Up to 5000 hours, 10 levels of BOM, 5000 SKU, 10 weeks supply lead time

→ Material synchronization is a prerequisite to deliver projects on time

Our main markets

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Automotive

Wood

Industry

Transport

Agriculture

Construction

Consumer Goods

SK manage very diverse SC environments

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170 M€ | **800** Pers. | **2** Plants | **17** Subsidaries

- Worldwide suppliers : Lead Time up to 1 year
- Manufacturing : 2 plants in France (Stains and Meylan)

From ETO to MTS environments
MLT : from 2 days to 3 months
BOM : from 1 to 10 levels
Customer LT : less than 1w for 80% of the orders

- Worldwide distribution : air freight & sea freight

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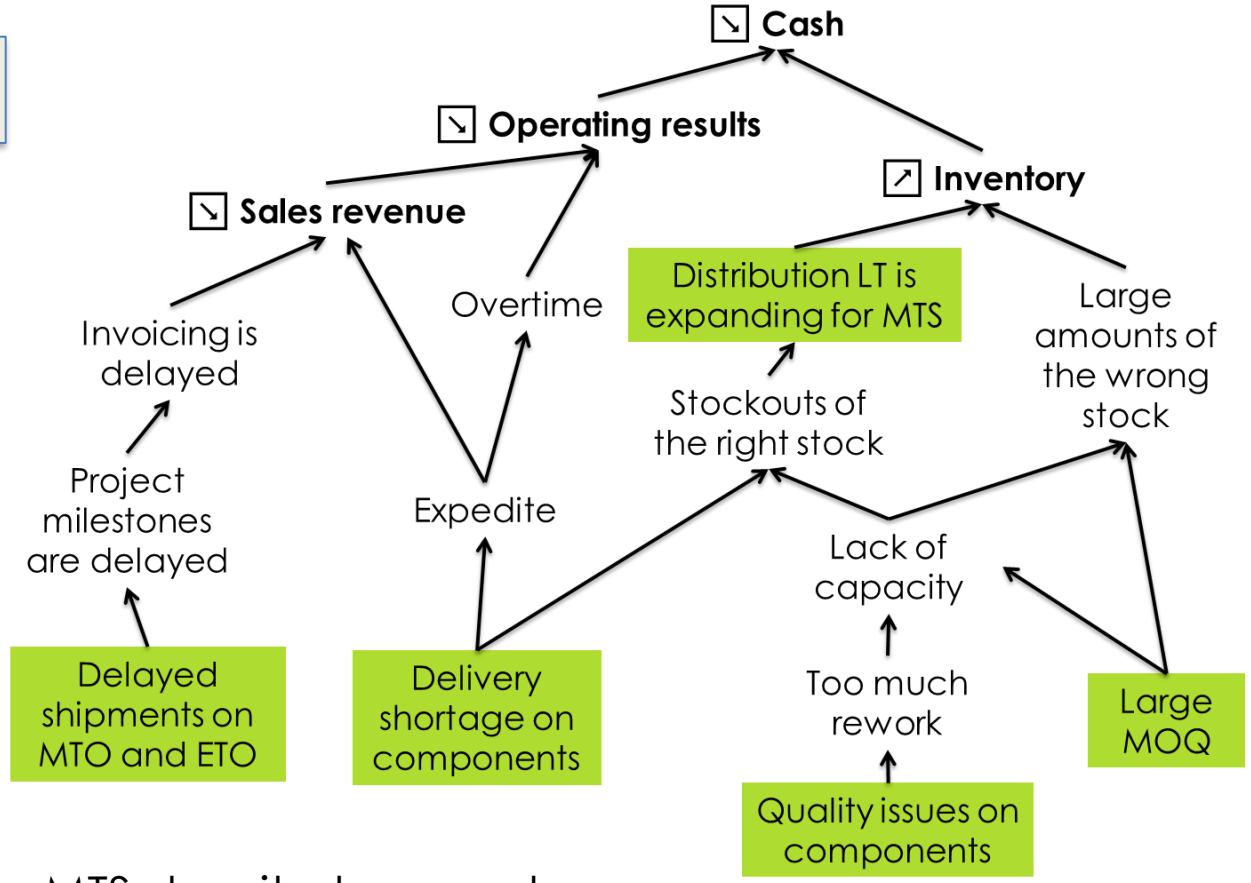
Initial implementation

Apply your skills

SAMES KREMLIN symptoms before DDMRP

Less than 60% OTIF!

Too much stress for the team for low customer service…



… too many stockouts for MTS despite too much inventory (…obsolescence)…

… too much WIP : production started an assembly but couldn't complete it due to shortages on components…

… extra time (…costs) for ETO to deliver on time despite project delays…

… loss of confidence from our customers

DDMRP pilot : OTIF as a primary objective for MTS

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Before DDMRP pilot, planning and execution on that scope were done with a mix of MRP (80% forecast accuracy) and Kanban. Still service level was low. After DDP training and lectures, DDMRP was considered as a potential solution

2014 **June 2015** **November 2015**

Demand Driven Planner *1

DD BRIX FACTORY *10

Pilot 75 SKU
1.5% stock

Selection of the pilot based on Stains objectives :

- **increase MTS availability**
- **decrease stock value**
- **include all areas of the plant (machining + assembly) and main constraint (sub-contracting)**

Pilot : Automatic pistol

- **2 MTS finished goods**
- **1 spare part**
- **all the SKUs from their BOMs**

STAINS

Secure availability for customers (internal and external)

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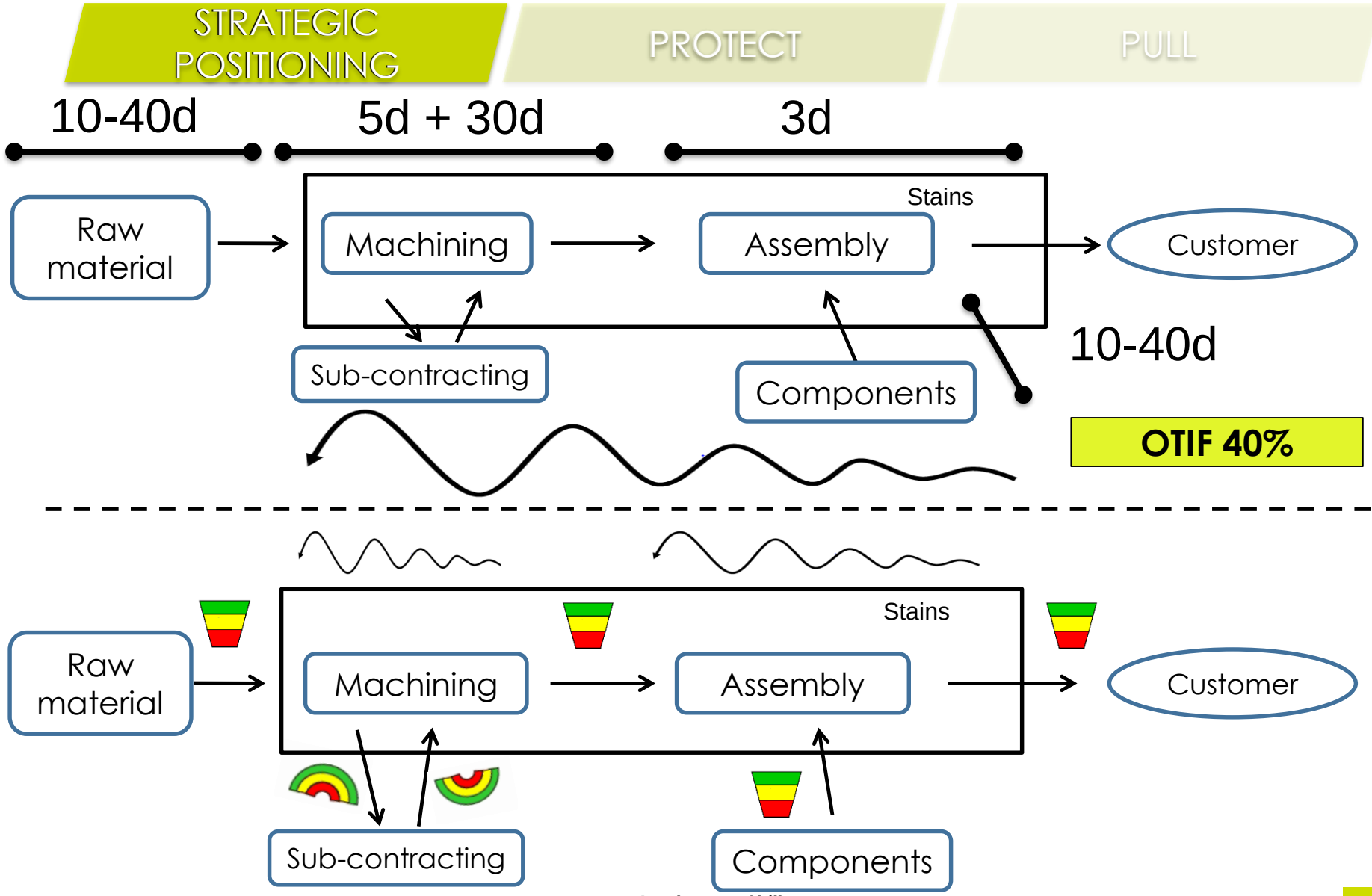

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Buffer levels and adjustments : go live with “as is” data

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STRATEGIC POSITIONING | PROTECT | PULL

- Initial parameters were used to make DDMRP simulations.
  - MOQ, LT : from ERP
  - ADU :
    - Components : 12 months history (stable)
    - Assemblies : 2 months history (more reactive)

- DAF : suppliers’ summer shutdowns

- Based on these initial simulations, the pilot go-live was validated

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Net flow and execution : priority based on color

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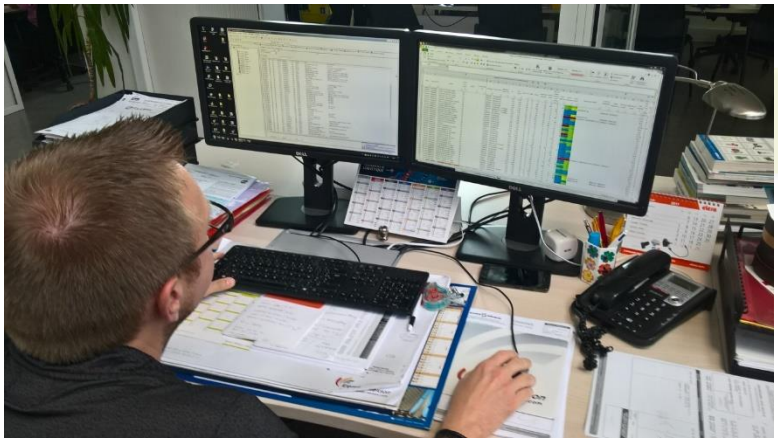

PROTECT

PULL

Daily planning based on Netflow equation

Daily priority for the workshop → replenishment of FG buffers and maximize availability

Multi-skilling and flexibility → **Customer Lead Time**

Apply your Ski...

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Pilot : results after 6 months → let's deploy in Stains !

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10-40d | 5d + 30d | 3d

STRATEGIC POSITIONING | PROTECT | PULL

Raw material → Machining → Assembly → Customer

Stains

Sub-contracting

Components

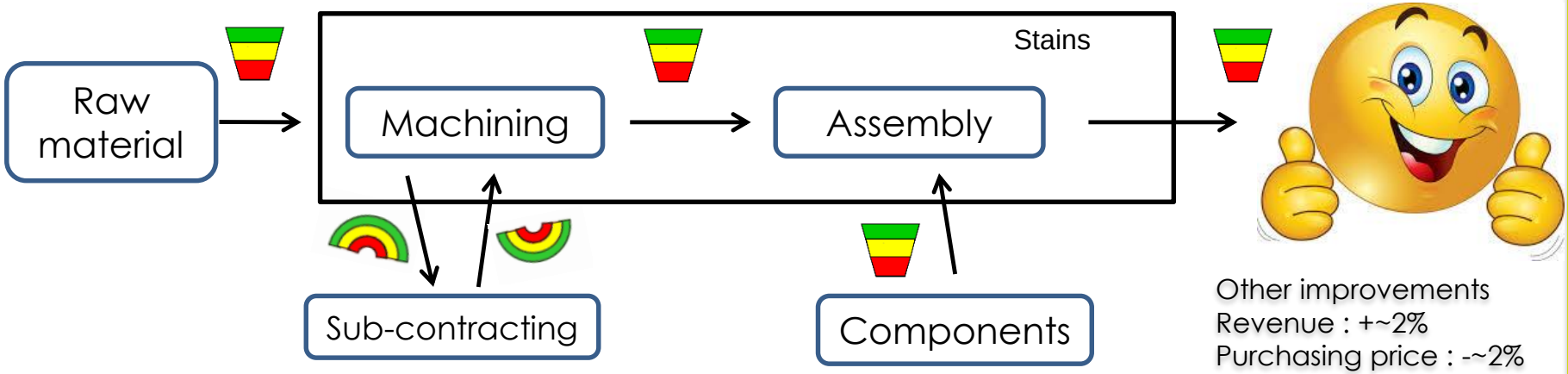
10-40d

Stock

OTIF 40%

Stock: -27%

OTIF 80%



Other improvements
Revenue : +~2%
Purchasing price : -~2%
Quality loss : -~25%

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DDMRP pilot : OTD a primary objective for MTS/ETO

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- Before DDMRP pilot, Meylan was facing low OTD. As Stains and Meylan former companies merged, DDMRP was considered as a potential solution for Meylan

June 2016 — Oct. 2016 — February 2017

Demand Driven Leader *2

Demand Driven Planner *2

DD BRIX FACTORY *40

Pilot
60 SKU

Selection of the pilot based on Meylan objectives :

- **increase On Time Delivery (common parts for spare and ETO)**
- **decrease stock value**
- **protect availability of high runners and mitigate risks (business is secured during pilot as workers are highly skilled and dedicated)**

Pilot : valves

- **finished goods from one production cell (~10 FG)**
- **all the SKUs from their BOM**

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Secure availability for both spare parts and MTO/ETO

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STRATEGIC POSITIONING | PROTECT | PULL

28-77d | 5d | 1d

Components

Non-packaged Valves *15

Suppliers → QC at entrance → Components → Assembly → Non-packaged Valves *15 → Internal customers

Assembly ⇄ Sub-contracting

Non-packaged Valves *15 → Packaged Valves *1 → External customers

MEYLAN

Buffer levels and adjustments : simulations → no go-live

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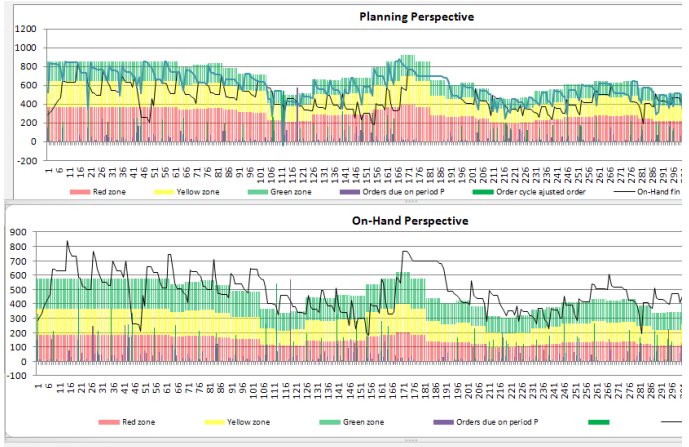
STRATEGIC POSITIONING | PROTECT | PULL

- Initial parameters (3 months historical consumption for ADU, lead time and MOQ from ERP) were used to make DDMRP simulations



- → One big issue raised : the theoretical average stock on hand was 30% higher than actual stock. **Simulations were not acceptable** as, even to secure service level, stocks couldn't increase
- → Before go-live of the pilot, the parameters had to be changed so that simulations could be validated

MEYLAN

Buffer levels and adjustments : negotiation → go live

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STRATEGIC POSITIONING | PROTECT | PULL

- Involvement of the suppliers to negotiate new lead time and MOQ
  - Some suppliers could reduce both MOQ and lead time
    - Eg. They had implemented Kanban loops (MOQ reduced to Kanban quantity and products were available)
    - Eg. MOQ was reduced to packaging size (117 pces!) which helped to smooth the supplier production
  - Some suppliers couldn't reduce MOQ (set up constrains) but could reduced lead time
  - Some suppliers didn't want to change MOQ and LT (fear of change)

- Internally, MOQ was drastically reduced from a week to a half day, or a maximum of a day

MEYLAN

Net flow and execution : priority based on color

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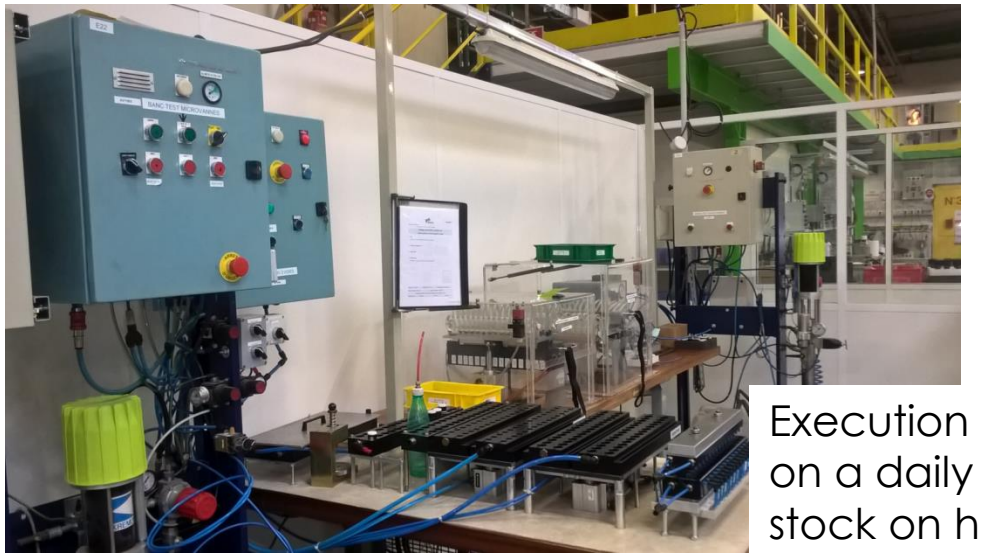
STRATEGIC POSITIONING | PROTECT | PULL

	A	B		E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Approvisionneur	SKU		ADU	TOR	TOY	TOG	On Order	On Hand	Sales Order Demar	Available Flow	Available Flow Position	% Buffer Penetration	On Hand Position	Current OH Buffer Status	Action à réaliser
3	LA-GRECA	900007653	POINTEAU	2	69	161	211	163	23	27	159	3 - Y	75%	4 - R	14%	Relancer + Commander
4	LASORSA	900007383	PISTON M	1	36	84	134	-	109	27	82	3 - Y	61%	1 - B	130%	Commander
5	VOLTZ	900010594	CORPS DE	2	35	80	380	150	36	30	156	2 - G	41%	2 - G	45%	-
6	VOLTZ	900010660	POINTEAU	2	42	98	148	-	168	30	138	2 - G	93%	1 - B	171%	-
7	LASORSA	900014599	TEMOIN D	1	23	53	553	-	485	-	485	2 - G	88%	1 - B	915%	-
8	SERRANO	900014727	POINTEAU	2	42	98										
9	LASORSA	910016428	VANNE PI	1	8	15										
10	LASORSA	910021569	NANOVAN	0	12	29										
11	LASORSA	1508516-V2	MICROVA	0	4	8										
12	LASORSA	1507375	MICROVA	26	192	375										
13	LASORSA	910019884	MICROVA	0	2	3										
14	SERRANO	900009008	PISTON NA	29	653	1 523										
15	PRIMAT	900011014	RESSORT D	8	159	371										
16	SERRANO	900009033	PISTON M	37	960	2 240										

Every morning, a 5minutes meeting was organized with the planners to look at netflow and to launch purchase order and manufacturing orders.



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VAN1

20 juin 2017

Poste	Statut OF	N° OF	Article	Désignation	Qté OF	reste	Unité	Projet	Indice ORDO
MAG	20	1044937	910016428S	VANNE PILOTAGE AXIAL SOUF SAV	7	7	UN	Emballage des 7 vannes	
VAN1	60	1044616	910012239	VANNE PILOTAGE AXIAL UPVANNE	120	120	UN		
VAN1	60	1044610	1507375	MICROVANNE 2V TEMOIN ORANGE	120	120	UN		
VAN1	20	1044653	1510004	NANOVANNE 2V TEMOIN ORANGE	120	120	UN		
VAN1	20	1044611	1507375	MICROVANNE 2V TEMOIN ORANGE	120	120	UN		
VAN1	20	5058433	910010850	MICROVANNE 2K A SOUFFLET	10	10	UN	NB11398	PROTO nouveau soufflet
VAN1	20	1044339	910010850	MICROVANNE 2K A SOUFFLET	27	27	UN		
VAN1	20	1044654	1510004	NANOVANNE 2V TEMOIN ORANGE	120	120	UN		
VAN1	20	1044612	1507375	MICROVANNE 2V TEMOIN ORANGE	120	120	UN		
VAN1	20	1044655	1510004	NANOVANNE 2V TEMOIN ORANGE	120	120	UN		
VAN1	20	3012741	910021569	NANOVANNE BOUCLIER TEM. NOIR	60	60	UN		
VAN1	20	1044851	910019884	MICROVANNE DE SECU P7 ROUGE	30	30	UN		
VAN1	20	1044617	910012239	VANNE PILOTAGE AXIAL UPVANNE	120	120	UN		
						120	UN		
						120	UN		
						120	UN		
						60	UN		
						120	UN		
						30	UN		
						120	UN		
						120	UN		

Execution for the plant was done on a daily basis according to the stock on hand buffer penetration.

MEYLAN

Pilot : results after 4 months → let's deploy in Meylan

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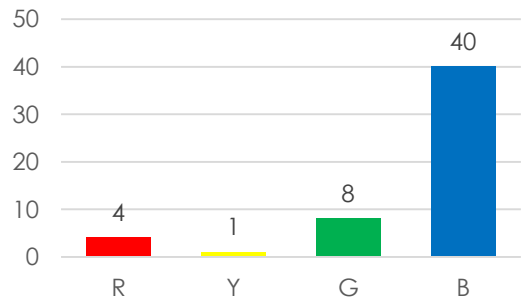
STRATEGIC POSITIONING

PROTECT

KPIs on the 01/10/16 :

- **81% OTD* (spare parts shipped at D+1)**
- Average work order MOQ : 260pcs
- Actual lead Time : 14d

Zone	SOH alert	Stock actuel (€)
B	40	
G	8	
Y	1	
R	4	
Total	53	



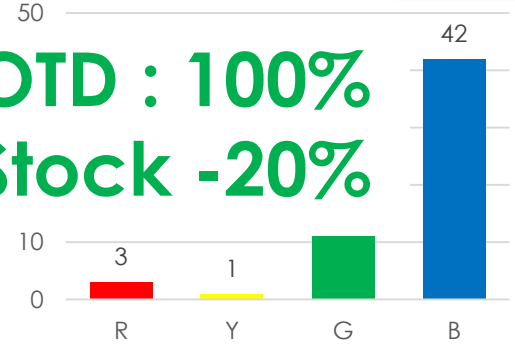
KPIs on the 01/02/17 :

- **100% OTD* (spare parts shipped at D+1)**
- Average work order MOQ : 130 pcs
- Actual lead Time : 6d

Zone	SOH alert	Stock actuel (€)
B	42	
G	11	
Y	1	
R	3	
Total	57	

OTD : 100%

Stock -20%



Other improvements
- No more manual priorities due to emergencies
- Improved product mix due to low MOQ

*OTD = On Time Delivery, based on customer requested date

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Sustain, expand and overcome

Apply your skills

DDMRP deployment started in November 2015

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- Objective of the deployment : to be secured but fast to get global similar results for end of fiscal year (sept. 2016)

2014 — June 2015 — Nov. 2015 — January 2016 — … — January 2017

Demand Driven Planner *1

Demand Driven Planner *1

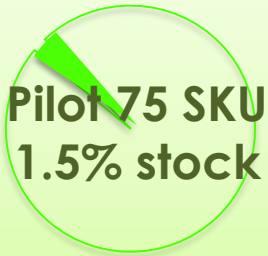
Demand Driven Leader *3

Demand Driven Planner *8

DD BRIX FACTORY *10

DD BRIX FACTORY *20

DDMRP Implementation Support *9



b2wise

STAINS

Deployment strategy : secure OTIF and management of production constraints

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- Deployment strategy to have the biggest impact on OTIF and stock :
  - Our worst supplier
  - 2 main product families (highest runner gun + pump)

Part Code	Part Description	WO Number	Outstanding Qty	Tip_format	Execution__Alert
134512092	BUSE AIRMIX HYDRO 12-092	6060067	25	55	-117.58%
134509114	BUSE AIRMIX 09-114 INSERT INOX	6070945	200	40	-16.16%
134506094	BUSE AIRMIX 06-094 INSERT INOX	6070273	100	40	0.35%
134514172	BUSE AX HYDRO 14-172	6070952	50	30	2.45%
134509074	BUSE AIRMIX 09-074 INSERT INOX	6075942	100	65	6.29%
134509152	BUSE AX HYDRO 09-152	6080035	75	30	10.00%
134509114	BUSE AIRMIX 09-114 INSERT INOX	6070946	200	40	10.55%
134509094	BUSE AIRMIX 09-094 INSERT INOX	6078701	200	50	11.31%
134514094	BUSE AIRMIX 14-094 INSERT INOX	6077928	25	65	11.82%
134509132	BUSE AIRMIX HYDRO 09-132	6078703	25	35	16.64%
134512152	BUSE AX HYDRO 12-152	6080036	75	30	17.71%
034980004+	CARBURE ATOMIS SKILL 20-07	6080031	150	80	19.83%
134504074	BUSE AIRMIX 04-074 INSERT INOX	6077010	25	50	19.84%
034980005+	CARBURE ATOMIS SKILL 25-05	6070449	50	110	20.66%
134504094	BUSE AIRMIX 04-094 INSERT INOX	6079924	75	40	21.07%
134512154	BUSE AIRMIX 12-154 INSERT INOX	6070822	25	30	21.09%
134509154	BUSE AIRMIX 09-154 INSERT INOX	6070950	200	30	21.81%
134506114	BUSE AIRMIX 06-114 INSERT INOX	6078937	150	30	24.42%
134512172	BUSE AX HYDRO 12-172	6077399	50	20	25.51%
134512154	BUSE AIRMIX 12-154 INSERT INOX	6078771	200	30	26.42%
134509112	BUSE AX HYDRO 09-112	6078905	50	40	28.67%
134520114	BUSE AIRMIX 20-114 INSERT INOX	6076566	75	55	28.96%
134512114	BUSE AIRMIX 12-114 INSERT INOX	6080359	175	40	32.10%
134512174	BUSE AIRMIX 12-174 INSERT INOX	6076910	75	20	36.44%
134506132	BUSE AX HYDRO 06-132	6075447	25	30	36.74%
134509072	BUSE AX HYDRO 09-072	6070630	150	65	36.91%
134509114	BUSE AIRMIX 09-114 INSERT INOX	6070947	200	40	37.26%
134504092	BUSE AX HYDRO 04-092	6079940	25	40	37.78%
134518174	BUSE AIRMIX 18-174 INSERT INOX	6080652	100	30	39.77%
134506072	BUSE AIRMIX HYDRO 06-072	6076564	50	55	39.98%
134514174	BUSE AIRMIX 14-174 INSERT INOX	6081532	175	30	47.24%
134506074	BUSE AIRMIX 06-074 INSERT INOX	6076692	125	55	47.82%
134514134	BUSE AIRMIX 14-134 INSERT INOX	6082119	200	40	50.17%
134506154	BUSE AIRMIX 06-154 INSERT INOX	6078904	100	20	51.07%
134512174	BUSE AIRMIX 12-174 INSERT INOX	6079941	100	20	52.33%
134514094	BUSE AIRMIX 14-094 INSERT INOX	6080130	25	65	54.04%
134509152	BUSE AX HYDRO 09-152	6081805	75	30	54.11%
134520154	BUSE AIRMIX 20-154 INSERT INOX	6082121	75	40	55.96%

  - Components for MTO
  - Machining area : adapt buffer sizing to consider production constraints and define execution rules to have the best compromise between productivity and customer service
    - Can I group production of work orders with 'tip format' = #40 to reduce setup time ?
  - All other skus

STAINS

DDMRP deployment started in February 2017

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- Objective of the deployment : to be secured but fast to get global similar results for end of fiscal year (sept. 2017)

June 2016 | Oct. 2016 | February 2017 | … | May2017 | Oct. 2017

Demand Driven Leader *2

Demand Driven Planner *2

DD BRIX FACTORY *40

DDMRP Implementation Support *9

Demand Driven Planner *8

Demand Driven Leader *1

DD BRIX FACTORY *30

CCPM *12

Pilot 60 SKU

Critical purchase 160 SKU

15 000 SKU 100% DDMRP

b2wise

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Deployment strategy : secure procurement and management of ETO

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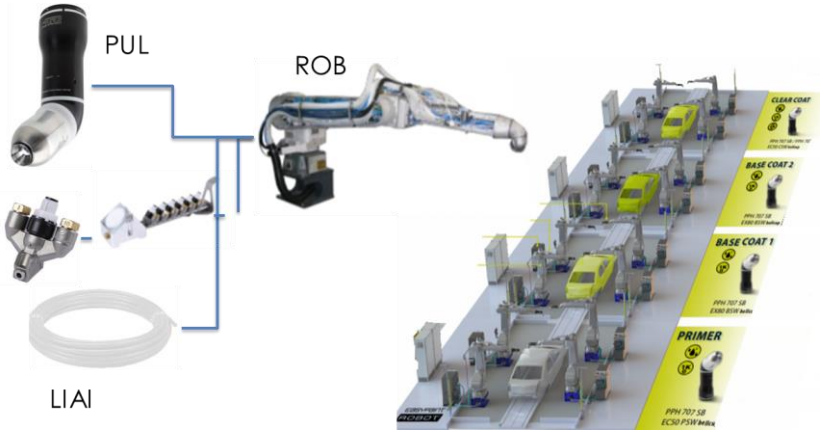
- Deployment strategy : secure components availability for spare parts and ETO
  - Components with long lead time and/or high variability
  - All purchased items
  - Sub-assemblies



  - ETO
    - 'Complete Kit' : improving lead time by reducing WIP
      - Engineering develops projects by manufacturing grouping (sub-assemblies). They start to work on it when they have all the input data.
      - Purchasers chase suppliers per sub-assembly (specific parts – non-buffered - are chased base on due date)
      - Production of standard parts are prioritized per sub-assembly
      - Producers start and complete production of the sub-assembly only when the component kit is complete (no missing parts)

MEYLAN

DDMRP deployment in distribution network – 2017/18

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- Strategic positioning : buffer or non-buffered based on final customer lead time
  - Critical spare parts →  as the transport lead time is more than a day.
  - MTS – high runner → 
  - ATO - MTO → non buffered
  - ETO – Projects → non buffered
- Adjustments : No DAF as factories (Stains and Meylan) don't shutdown
- Execution : in case of capacity issues at the factories, priority share is managed to replenished distribution buffers based on final customer demand, and not internal SK demand from transfer orders
  - This allowed us to maintain a high service level for final customer

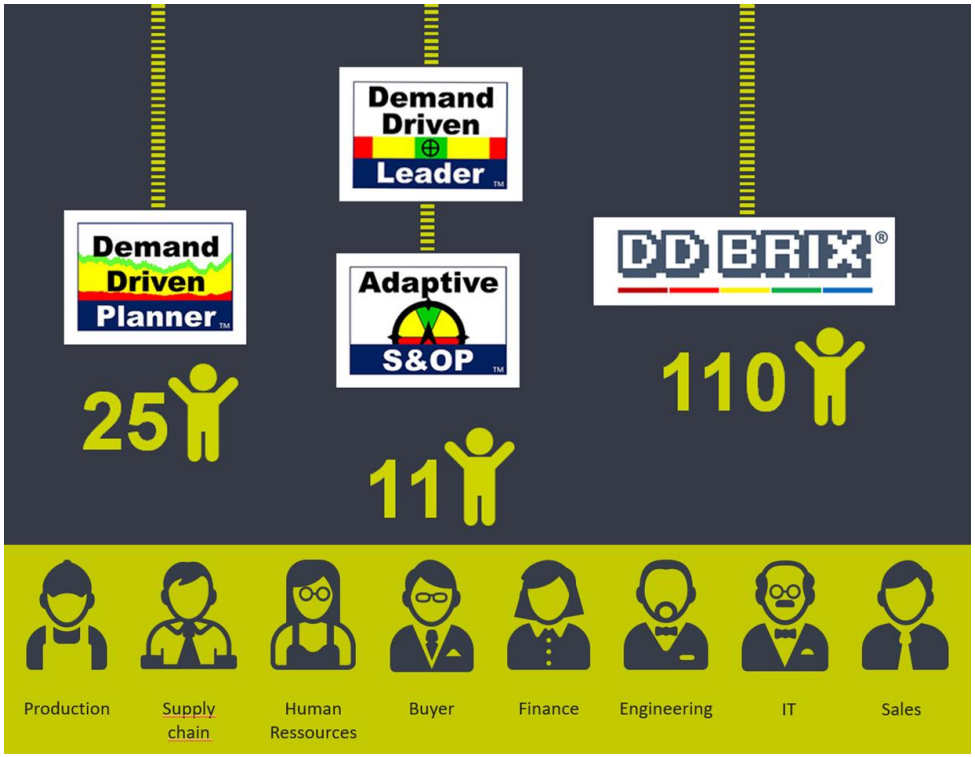
- **US**
  10 000 SKU

- **China**
  2 000 SKU

Expand and overcome of the deployment : intensive training

- To secure deployment, **training** was intensive for all planners, purchasers, producers and buyers. The training also include people from support departments (quality, engineering…)

  - Job function of planners and purchasers changed as they switched from analyzing MRP message as ‘experts’ to chasing suppliers and producers in execution to protect material flow



Expand and overcome of the deployment : adapt the KPI to become flow centric

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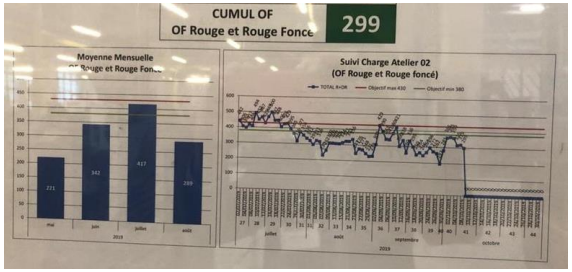
- Even if DDMRP was sustainable for the pilot, at a larger scale, some major changes had to occur not to treat the implementation and its sustainability : e.g. workers' bonus
  - Before DDMRP, the bonus was based on individual productivity (cost centric)
  - After implementation, the bonus had to be changed to be aligned with flow based on "work order color" (linked with customer demand)



- Tool : Excel vs DDMRP compliant tool
  - Few DDMRP tools available in 2015 for SK pilot → pilot in Excel
  - Even if it was very risky and people dependent, Stains had to do the deployment in Excel to validate the ROI for a DDMRP tool
  - Even if netflow and execution is possible in Excel, visibility (relevant information) is not accessible for everyone and no tactical analysis is possible (eg. no KPIs to monitor buffers, no projections)

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Improvement once the implementation was stabilized

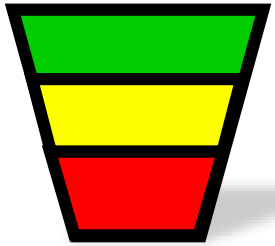
Apply your skills

Sames Kremlin Journey : 5 years with DDMRP

Sames Kremlin has now visible management by 'colors'
"Workers are proud to work for customer satisfaction"

- **Sept. 2020 :**
  - **Stains :** 18 000 active SKU – non-stocked and buffers (MTS to MTO production and distribution)
  - **Meylan :** 13 000 active SKU – non-stocked and buffers (MTS to ETO production and distribution)
  - **US :** 10 000 active SKU – non-stocked and buffers (distribution)
  - **China :** 25 000 active SKU – non-stocked and buffers (distribution)

15 000 stock buffers



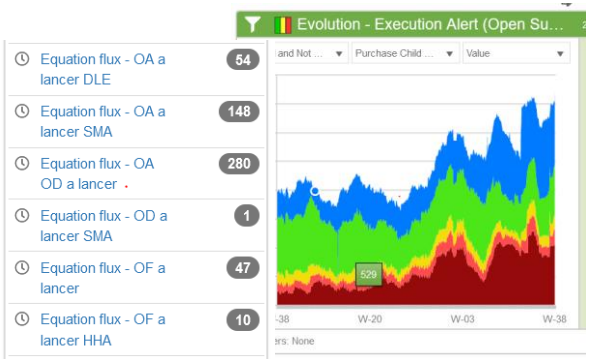
		Pilot 2015/16	Deployment 2016/17/18	FY 2018	FY 2019	FY 2020
Stains	OTIF	80%	80%	85%	90%	90%
	Stock	-27%	-27%	-6%	-5%	-5%
Meylan	OTD	100%	80%	80%	90%	70%
	Stock	-20%	-7%	-15%	-6%	-10%
USA	OTIF	-	95%	-	95%	90%
	Stock		-20%		-22%	10%
China	OTD	-	95%	-	95%	90%
	Stock		-40%		-13%	-6%

Apply your Skills

End of FY2020 include Covid19 pandemic

Gain of visibility for level of activity, prioritization and monitoring

- Examples of metrics
  - Count of order to place (netflow)
  - Hours of production per WO color



- All prioritization for all departments based on color
  - Quality control
  - Better prioritization for our suppliers
  - Production : a single prioritization for non-buffer/buffer, internal/external customer
  - Colors are meaningful for all the workers and they know they are related to the customers
  - Colors are meaningful for senior managers : they can challenge operations during Gemba walk

- Visibility of projections
  - Forecasts for suppliers
  - End of fiscal year inventory

DDMRP : impacts on all SAMES KREMLIN

- Testimonial for « King of Supply Chain » reward
  - **Planner MTS-ATO** : "DDMRP enabled me to prioritized all the production orders within the assembly workshop with B2Wise. Now the assembly workshop has a clear vision of what to be done to satisfy the customer"
  - **Planner MTO-ETO** : "One of the biggest benefit of DDMRP is that it has enabled us to plan better and to avoid producing orders too early and to avoid delays on other orders"
  - **Machining workshop manager** : "For us, DDMRP is the implementation of a color code. My favorite color is green because it means that the customer is 100% satisfied, and yellow because it means that I am on time"
  - **Assembly workshop manager** : "Thanks to DDMRP I pilot the workshops with the real needs of the customer. No more contradictory information, things are clear, the message is accurate…Go ahead!"
  - **Operator** : "Today in the workshop everything is easier and better organized… Now we know what is a priority and that is thanks to DDMRP"
  - **Industrial director** : "The benefit of the application of the method in the workshops was for the customers a significant improvement of the service rate and for the collaborators, more sense, more solidarity and more serenity in their daily work"
  - **HR director** : "First, DDMRP has an impact at the production level… immediate… more autonomy… by little it has spread to all the departments of the company… From a HR perspective, DDMRP is really a structuring project"
  - **CEO** : "DDMRP for us is a real human adventure… It enables us to improve working capital, to make logistics flow better and, most important, to increase customer satisfaction"
  - **Supply chain manager** : "The implementation of DDMRP has brought us a lot of serenity… few customers call me now"

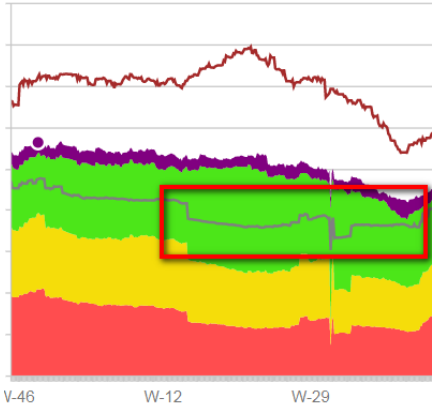
https://vimeo.com/user80997951 20180107 Les Jedi De La Supply – subtitles GB

Initial tactical adaptive cycle at SAMES KREMLIN

- Weekly DDS&OP meeting to check capacity for medium-term to manage multi-skilling and temporary workers to remain flexible

Buffer Capacity	201836	201837	201838	201839	201840	201841	201842	201843	201844	201845
AS										
Brasure										
Collage										
CYCLO										
Equipements										
Notices										
POCHETTES										
POMPES GROSSE										
POMPES PETITES										
PU 3000 + C86										
Réchauffeurs										
ss-ensemble										
Tuyaux Chauffant + Sertissage										
Volu +Regulex + Pisto										
Pistolet										
Filtre + Regul + ss ensemble pompes										
K3-STD9										

- Monthly DDS&OP meeting for continuous improvement
  - Negotiation with suppliers are prioritized based on the analysis of the average theoretical stock value and the simulation of the main improvement impact (MOQ, lead time)
  - Buffer levels are reviewed based on KPIs (buffer stock status too red / too blue)
- Covid19 management
  - From March 2020, based on Sales and Marketing forecasts, DAF was applied to reduce buffers
  - During Covid19, parts where available in the factory from supplier. However, internal service level at the factories dropped due to capacity issues (absenteeism)



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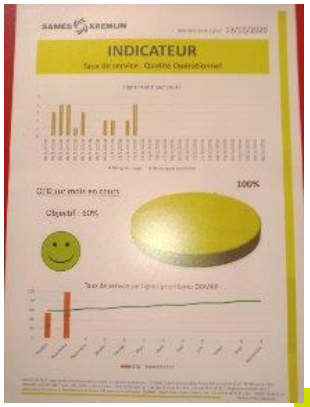
Biggest lessons learned

Apply your skills

Major issues encountered : change

- Change management
  - **Planners** were 'experts' and tried to plan 'Just In Time'. They needed daily coaching to 'trust' the buffers (net flow and execution) and to understand that protection of flow will stop emergencies. This will have an overall benefit for Sames Kremlin.
  - Productivity in **production** as main objective for machining area → adapt KPIs to flow improvement, not local optimization of unit cost.
    - Deep truth : reducing MOQ will drastically increase production costs

      …but reality : if buffers are sized according to production constraints, customer service level is improved, and production costs are be under control
  - **Quality entrance** check : priority based on production needs (color), not date. New KPI for quality check service level :
    # of DR validated VS #DR to be checked



Major issues encountered : data

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- Change management
  - Lowest purchasing price as main objective for **buyers**
    → include a max stock coverage in negotiation
    - Deep truth : reducing lot size will drastically increase purchasing costs but in reality

      …but in reality : "I was able to reduce frequency of delivery form 3 months to 3 weeks, reduce supplier LT from 2 months to 10 days, and unit price was 'only' reduced by 3%", buyer at SK
    - Involvement of the suppliers for Meylan pilot : The discussions with suppliers show that, for a same consumption, according to the organization of the supplier, different improvements could be made without impacting the unit price
- Irrelevant data from ERP
  - As operational staff were 'experts' and had developed their own Excel spreadsheets, data had not been updated on the ERP (ex. MOQ, LT…).
    With a prioritized approach (eg. inconsistency in buffer sizing), data in the ERP was updated.

Major issues encountered : global enterprise project

- Involvement of support departments
  - Senior management sponsor : implement S&OP to align Sames Kremlin strategies of all departments
    - DDMRP implementation is not only a supply chain project (planning, purchasing)
    - Never-ending project as we need and will always need to adapt

  - Marketing : define the customer tolerance time
  - Engineering : Critical chain implementation and complete kit
    - Deep truth : if you start producing the project as soon as possible, material will be allocated, and we have greater change to be on time
      …but in reality : if you start producing at the right time (material and capacity) based on priority flow and OTD will are improved
- DDMRP is not only for MTS → methodology can be applied from ETO to MTS, from suppliers to distributors

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DDMRP's journey still go on !

Apply your skills