OLIVER WYMAN

HOW TO MANAGE COSTS IN TIMES OF COVID-19

Short term actions will not suffice to ensure profitability for manufacturing firms

April 3, 2020

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EXECUTIVE SUMMARY (1/2) - IMPACT OF COVID-19 ON MECHANICAL ENGINEERING



COVID-19 recession: neither short nor shallow

- Unlike downturns through more limited events (e.g. SARS), previous broad crisis or recessions have had significant negative impact on mechanical engineering and recovery has taken more than 3 years
- COVID-19 will likely fall in the pattern of broad crises / recessions
- While it is still unclear, how the COVID-19 crisis will unfold ultimately, there are 3 main scenarios for the course the pandemic – differing mainly in length and breadth of the pandemic



Negative EBITS in 2020 to be expected for the majority of companies

- Current main stream thinking suggests that mechanical engineering firms will experience at least U-shaped recession
- In that case ("two quarter recession") already ~60% of European mechanical engineering companies will experience (significant) losses in 2020
- Assuming a four quarter 'financial crises like' recession ('L') more than 90% of the mechanical engineering companies will be writing losses
- OEM-like businesses will be hit harder than component manufacturers

EXECUTIVE SUMMARY (2/2) – REACTION PATTERNS



Short term cost cutting necessary but not sufficient

- While short term actions (e.g. short-time work, discretionary spend reduction) are **necessary**, they will be **insufficient** to cope with a longer-term 'new normal' driven by **COVID-19**
- Sustainable, mid-term & structural actions necessary to 'come back stronger'
- Lessons from the past show that using the recession to drive corporate transformation (incl. M&A, structural adjustments) yielded clearly higher returns (in terms of EBIT-margin) than pure, short term focused cost cutting

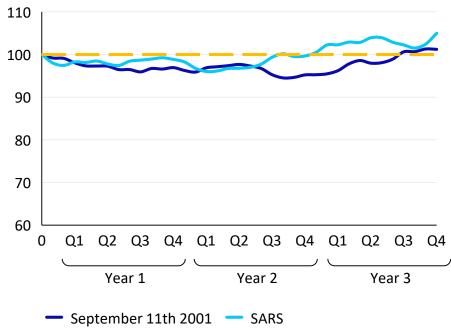
Cost transformation: Clear target picture and programmatic approach	 Structural cost transformation requires a clear target picture of the company serving as a reference point, incl. business model, portfolio, operating model, etc. A structed, holistic cost reduction program to be executed, addressing large parts of the P&L, to build a lasting lower cost base Achieving sustainability via high level of top- and middle-management commitment and fostering a cost & performance culture is key
No time to be lost	 Strong and forward-looking companies are starting to develop sustainable cost transformation programs now Short-term measures and mid-term planning have to go in parallel, with separate, dedicated teams

COVID-19 RECESSION NEITHER SHORT NOR SHALLOW

As in previous broad crisis, COVID-19 will likely lead to a strong reduction of production levels in mechanical engineering and recovery will take years

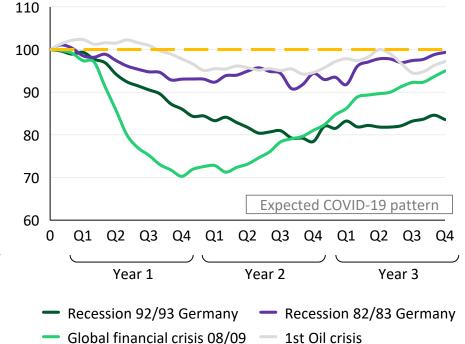
Local and timely limited crises

Monthly Production index (DE)¹; Index M0 (\emptyset 12 months prior to event) = 100



Broad crises / recessions

Monthly Production index (DE)¹; Index M0 (\emptyset 12 months prior to event) = 100



Crisis with modest impact on production (<-5%)

• Comparative quick recovery after crisis

- Crisis with strong impact on production (>-10%)
- Comparative long recovery cycles (up to >3 years)

1 Seasonal adjusted, 3-month-moving-average Source: Destatis, Oliver Wyman analysis

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LENGTH OF IMMEDIATE COVID-19 PHASE UNCLEAR

The COVID-19 development can't be predicted – Oliver Wyman defined three scenarios with varying degree of impact on mechanical engineering

COVID-19 scenarios

COVID-19 serial outbreaks

- Public health measures will contain individual outbreaks
- COVID-19 will last 3-4 months



COVID-19 pandemic

- Public health measure will NOT contain individual outbreaks
- Pandemic will break due to seasonality of virus or virus mutation
- COVID-19 will last 6-12 months



COVID-19 ongoing pandemic

- Public health measure will NOT contain individual outbreaks
- Pandemic will NOT break due to seasonality of virus or virus mutation
- COVID-19 will last >12 months







Manufacturing COVID-19 scenarios



"One quarter recession"

- Q1 equals incoming orders 2019
- Q2 is based on average of incoming order development 2019 & max. quarterly revenue decline during financial crisis
- Q3 & Q4 follow the 2019 development

"Two quarter recession"

- Q1 and Q2 as in scenario V
- Q3 is based on the max. quarterly revenue decline during financial
- Q4 follows the 2019 development

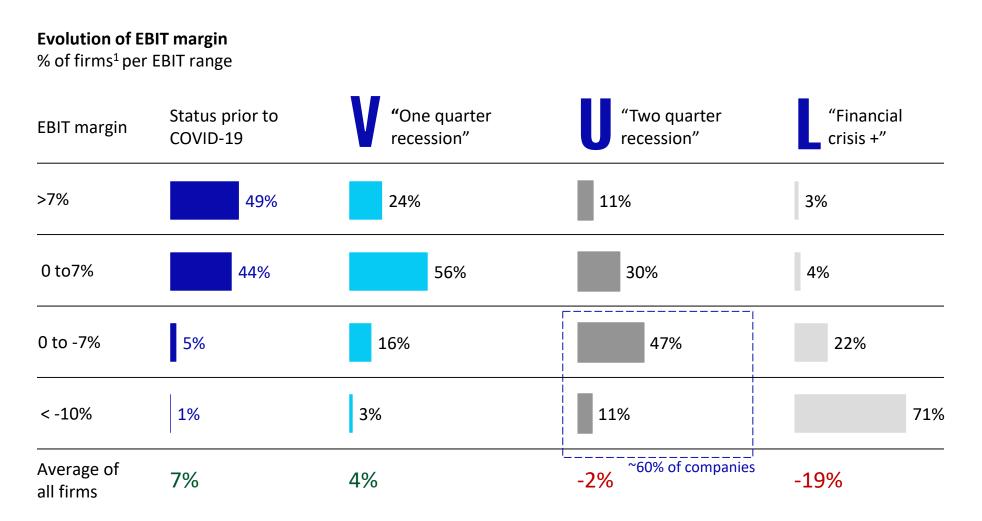
"Financial crisis +"

 All quarters are based on the max. quarterly revenue decline during the financial crisis

Source: Oliver Wyman, https://www.oliverwyman.com/our-expertise/hubs/coronavirus.html

~60% OF COMPANIES LOSSMAKING AFTER 2 QUARTER RECESSION

Already 2 bad quarters will have significant impact on profitability of mechanical engineering companies



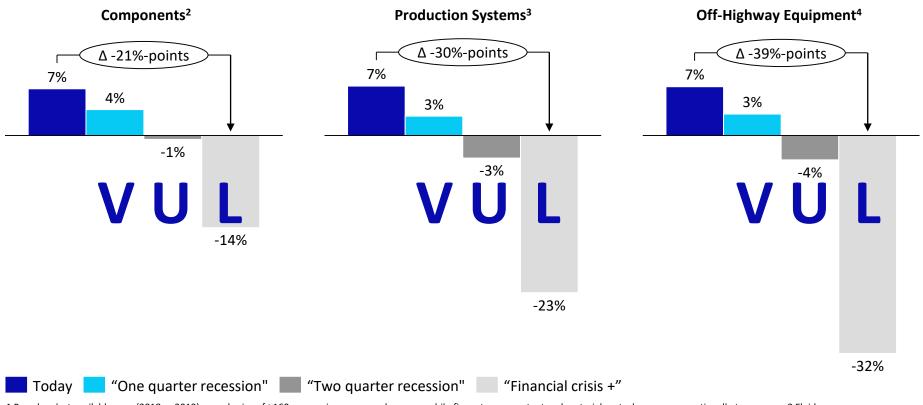
1 Based on last available year (2018 or 2019), sample size of ~160 companies, revenue decreases while fix costs are constant and material costs decrease proportionally to revenue, deviations due to rounding Source: Amadeus, Destatis, Oliver Wyman analysis

OEM TYPE BUSINESS MORE STRONGLY EXPOSED

Off-Highway Equipment companies face especially high EBIT-margin risks – reduction of up to 39%-points possible

Evolution of EBIT margin by company focus

Ø-EBIT margin¹ in %



1 Based on last available year (2018 or 2019), sample size of ~160 companies, revenue decreases while fix costs are constant and material costs decrease proportionally to revenue; 2 Fluid power, power systems, pumps & compressors, valves, tools & other mechanical components; 3 Machine tools, metallurgical equipment, food, paper, plastic & textile machines; 4 Agricultural, construction & mining equipment

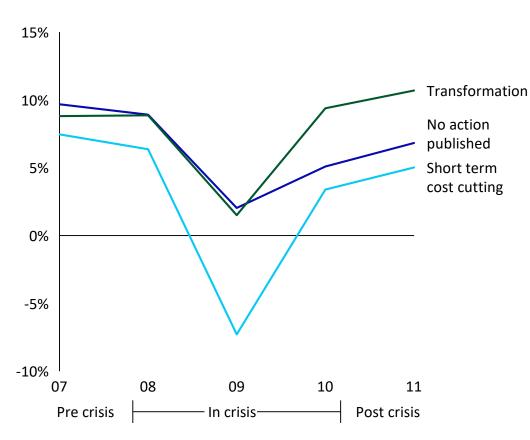
Source: Amadeus, Destatis, Oliver Wyman analysis

TRANSFORMATIONAL RECESSION STRATEGIES PAY OFF

Based on the financial crisis learnings, transformation is the fastest option to reach and outperform former EBIT margin levels after a crisis

Reaction pattern during financial crisis

Adj. EBIT margin¹ development during 2009 recession²



"No action published" companies

- Companies had a strong pre crisis ø-EBIT margin
- They didn't feel high pressure for actions
- → Ø-EBIT margin recovered slowly from the 2009 dip, Ø-EBIT margin 2011 is below the pre crisis margin

"Short term cost cutting" companies

- Companies had a weaker pre crisis ø-EBIT margin
- They felt strong pressure for actions and focused on cost cutting by lay-offs
- → Ø-EBIT margin recovered quickly from the 2009 dip, but it wasn't able to reach pre crisis level until 2011

"Transformation" companies

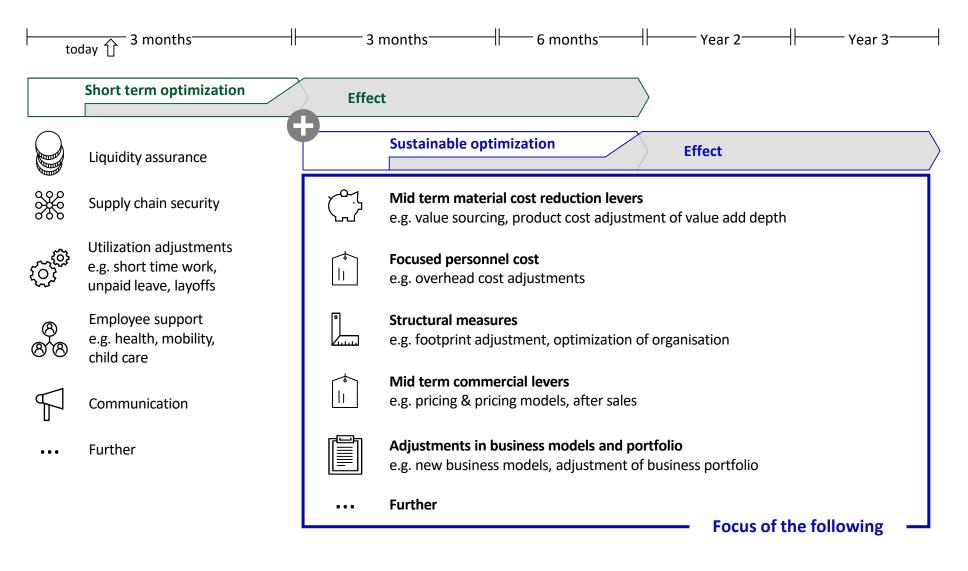
- Companies had a strong pre crisis ø-EBIT margin
- They executed cost cutting but also transformed the companies through e.g. M&A, reorganization, new business models, etc.
- ightarrow ø-EBIT margin 2011 higher than pre crisis ø-EBIT margin

¹ Adjusted for restructuring and one-off costs; 2 Sample of 100 public manufacturing excluding bankrupt companies Source: OW Financial Benchmarking, Oliver Wyman analysis

HOW TO REAGT?

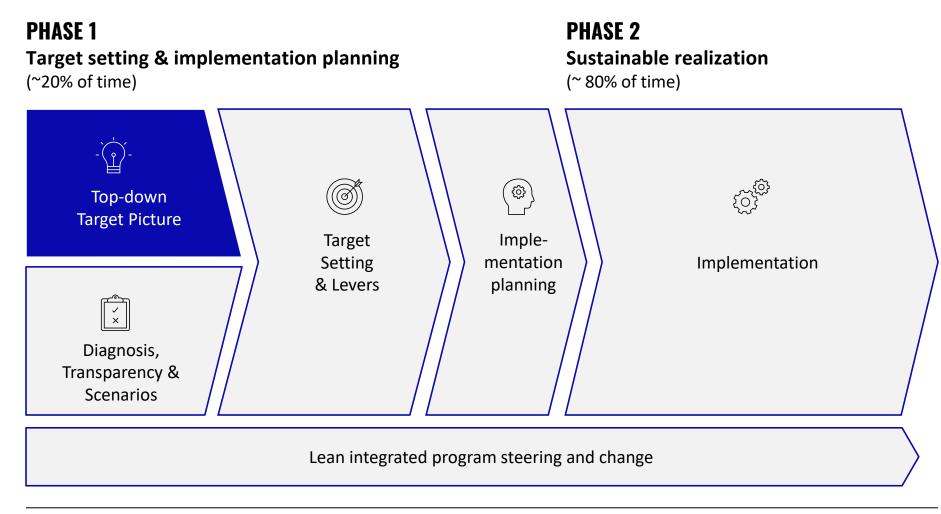
THE TIME FOR SUSTAINABLE COST TRANSFORMATION IS NOW

As short-term actions are being implemented and executed, the focus needs to shift to designing a program that safeguards profitability sustainably



OLIVER WYMAN REINVENT PROGRAM AS SOLUTION

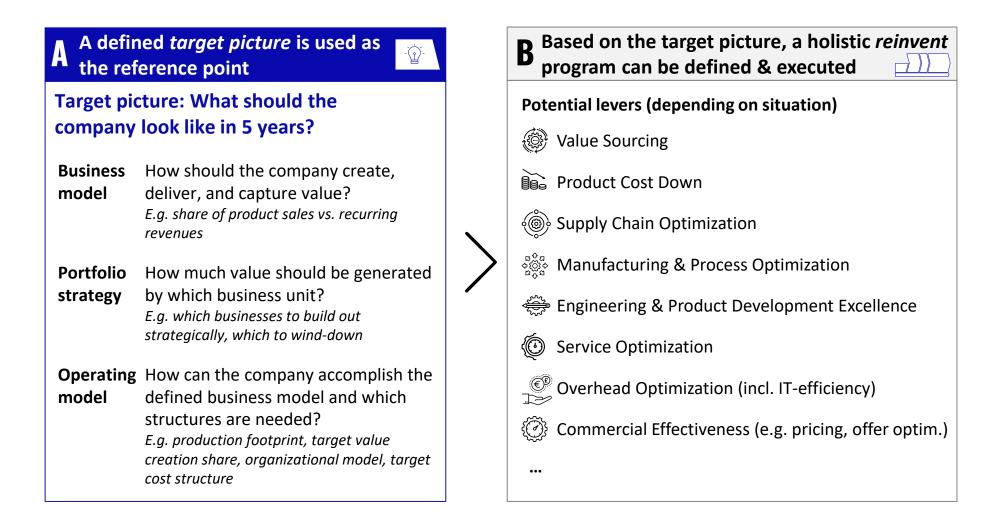
Oliver Wyman's approach focuses on delivering the right balance of 'programmatic approach' and simplicity of execution



A structured approach with focused but well grounded target setting and clear implementation focus

TARGET PICTURE CRUCIAL FOR STRATEGIC COST TRANSFORMATION

Based on the target picture the reinvent program addresses adequate cost and performance levers, sustainably



5 IMPORTANT REINVENT SUCCESS FACTORS

Based on our experience of large performance transformation programs, we see five key success factors for ensuring sustainable impact



BREAKTHROUGH IMPACT AND SUSTAINABLE BOTTOM LINE EFFECTS

Reinvent program leads to sustainable results through short term and transformational measures



Clear view on challenges and their impact



Redefined operating model to the extent needed



Fundamental optimization measures implemented



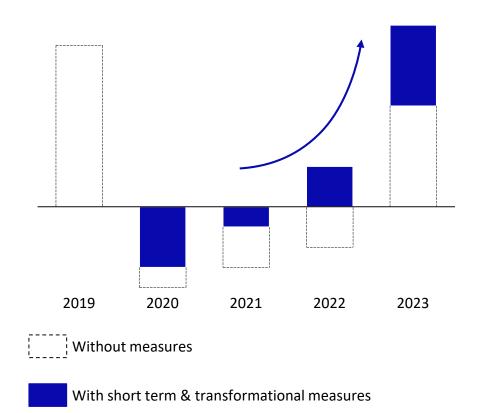
Program results embedded in budgets & P&L



Cost performance embedded in corporate culture to achieve sustainability

Impact: Sustainable improvements achieved

EBIT margin over time Illustrative



TRANSFORMATION OF ENTIRE BUSINESS AFTER FINANCIAL CRISIS

Case study of the transformation of a construction equipment manufacturer

Situation and objective

Client:	Construction equipment OEM
Disruptor:	Revenue declined of more than 50% due to a major financial and economic crisis
Task:	Secure company, define short term actions and

transformation of the entire business

OLIVER WYMAN role

- Set-up of a comprehensive transformation program
- Short term measures: Securing of financing, short term adjustment of labour force (short work and permanent reduction), reduction of discretionary spend etc.
- Mid term measures: Redefinition of target picture, reduction of value add depth, streamline production footprint, and organization, ...

OLIVER WYMAN capabilities covered



IMPACT - 400/00 Net debt within 2 years

1700 M EBIT increase within 3 years

Source: Oliver Wyman

REINVENT IDENTIFIED 280 M EBT IMPROVEMENT POTENTIAL WITHIN FOUR YEARS

Case study of a wide-ranging profit improvement program for a global production equipment manufacturer

Situation and objective

Client:	Production equipment manufacturer
Disruptor:	Drop in margin was driven by external (e.g. decreasing demand) and internal factors (e.g. rising material costs)
Task:	Define saving potentials and validate improvement initiatives and product portfolio optimization

OLIVER WYMAN role

- Analysis of root-causes, identification of levers and validation of P&L effects (both, € and FTE)
- Detailing an implementation roadmap, piloting a set of measures and set-up of PMO tools

Product cost

• Integration of the entire board to strengthen buy-in

OLIVER WYMAN capabilities covered

Commercial effectiveness

Sourcing

Production



 \checkmark

IMPACT M identified EBT improvement potential within four years

FTE identified overhead reduction

Source: Oliver Wyman

6%-PTS. EBIT MARGIN IMPROVEMENT THROUGH BROAD RANGE OF MEASURES

Case study of a comprehensive performance transformation plan to realize 6%-pts. EBIT margin improvement for an Automotive OEM

Situation and objective

Client:	European Automotive OEM
Disruptor:	Severe tightening of CO2 legislation with potentially significant EBIT reduction from 2020 onwards
	significant EBIT reduction from 2020 onwards

Task:Design and support holistic EBIT improvement program
to counter this effect

OLIVER WYMAN role

Design of holistic program, incl.

- Top-line (e.g. sales push, digital)
- Margin improvement (e.g. VBtO)
- Product cost down
- Classical SG&A cost reduction

OLIVER WYMAN capabilities covered

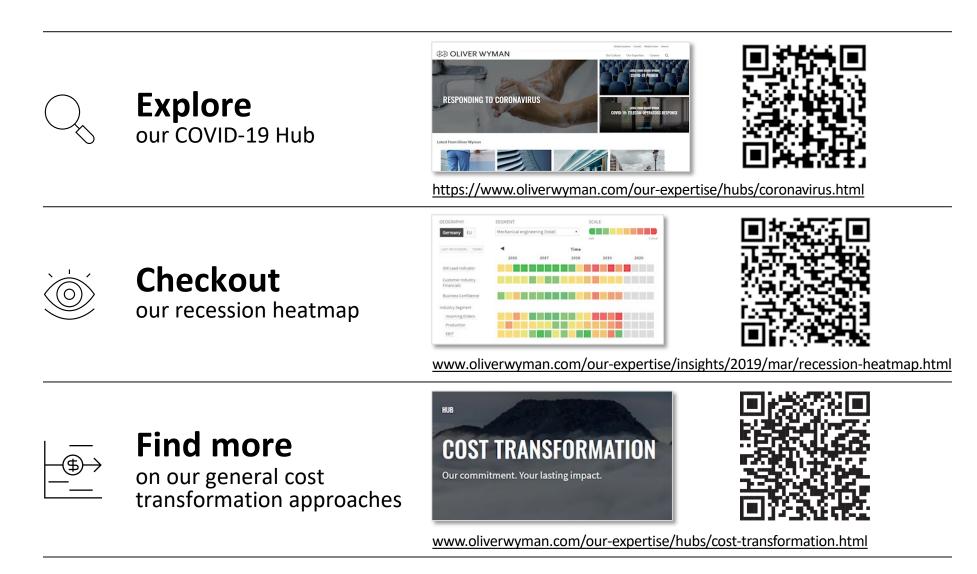


EBIT IMPACT EBIT margin improvement addressed by program **M EUR EBIT improvement realized** short term

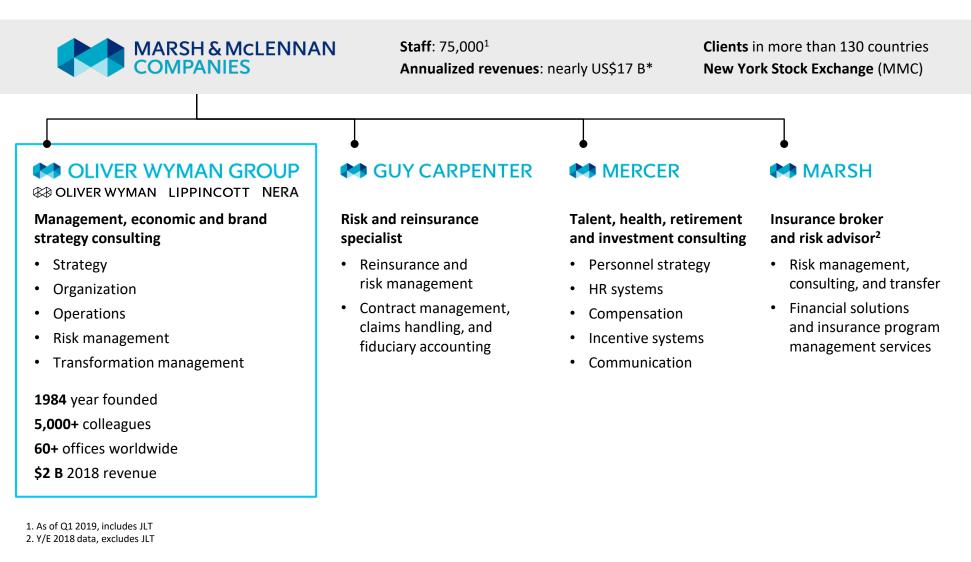
Source: Oliver Wyman

TO GO FURTHER: REACH US

Benefit from Oliver Wyman expertise on "COVID-19 developments" and COST transformation



WE HAVE UNRIVALLED ACCESS TO A COMPLEMENTARY SUITE OF CAPABILITIES FROM OUR SISTER COMPANIES WITHIN MARSH & MCLENNAN



OLIVER WYMAN COST TRANSFORMATION OFFERINGS

We offer 30+ tailored approaches to engage cost transformation, from capability turnkey solutions to large overarching platforms

 Direct & Indirect Category Management Soles & Operations planning Supply Risk Management Inventory reduction/ Production ramp-up/ ramp-down Project recovery Agile cost evolution Outsourcing & staff 		01 Value sourcing	D2 Supply chain operations	D3 Manufacturing & process operations	04 Innovation & product development	05 Service operations	DG Overheads	
 Procurement deployment deployment Performance tracking and Monitoring Digital Procurement Digital Procurement Monitoring Production Launch management & optimization Production Launch management & optimization 		Category Management • Supply Risk Management • Procurement operating model • Performance tracking and Monitoring	 Sales & Operations planning Inventory reduction/ 	 ramp-down Operations performance improvement & recovery Digital Manufacturing Footprint Re-design and Optimization Production Launch management & 	optimization • IP royalties' tax optimization	Field serviceTarget picture	functions – Lean G&A • Shared Services • Outsourcing & staff	
07 REINVENT (Sustainable Performance Improvement)	07	07 REINVENT (Sustainable Performance Improvement)						
BOOST (Rapid EBITDA)	Comprehensive cost transformation	BOOST (Rapid EBITDA)						
cost Product Cost Down 2.0 (Target costing, (Re)Design-to-cost, CAPEX reduction,)		Product Cost Down 2.0 (Target costing, (Re)Design-to-cost, CAPEX reduction,)						
Zero Based Budget		Zero Based Budget						
RESTRUCTURE (Turnaround & Restructuring)		RESTRUCTURE (Turnaround & Restructuring)						

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