

# Zmile



## Zehnder's Journey of Lean Learning

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# What are your expectations?



# The Journey



# Structure

**Who is Zehnder /  
What is Zmile**

**Learning to Zmile**

**Zmile Successes &  
Lessons Learnt**

# Structure

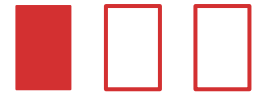
## Zehnder & Zmile

- Products
- Locations
- Key Facts Figures & Challenges
- Philosophy

## Learning to Zmile

## Zmile Successes & Lessons Learnt

# Zehnder Products



Design Radiators



Indoor Ventilation & Heat Recovery

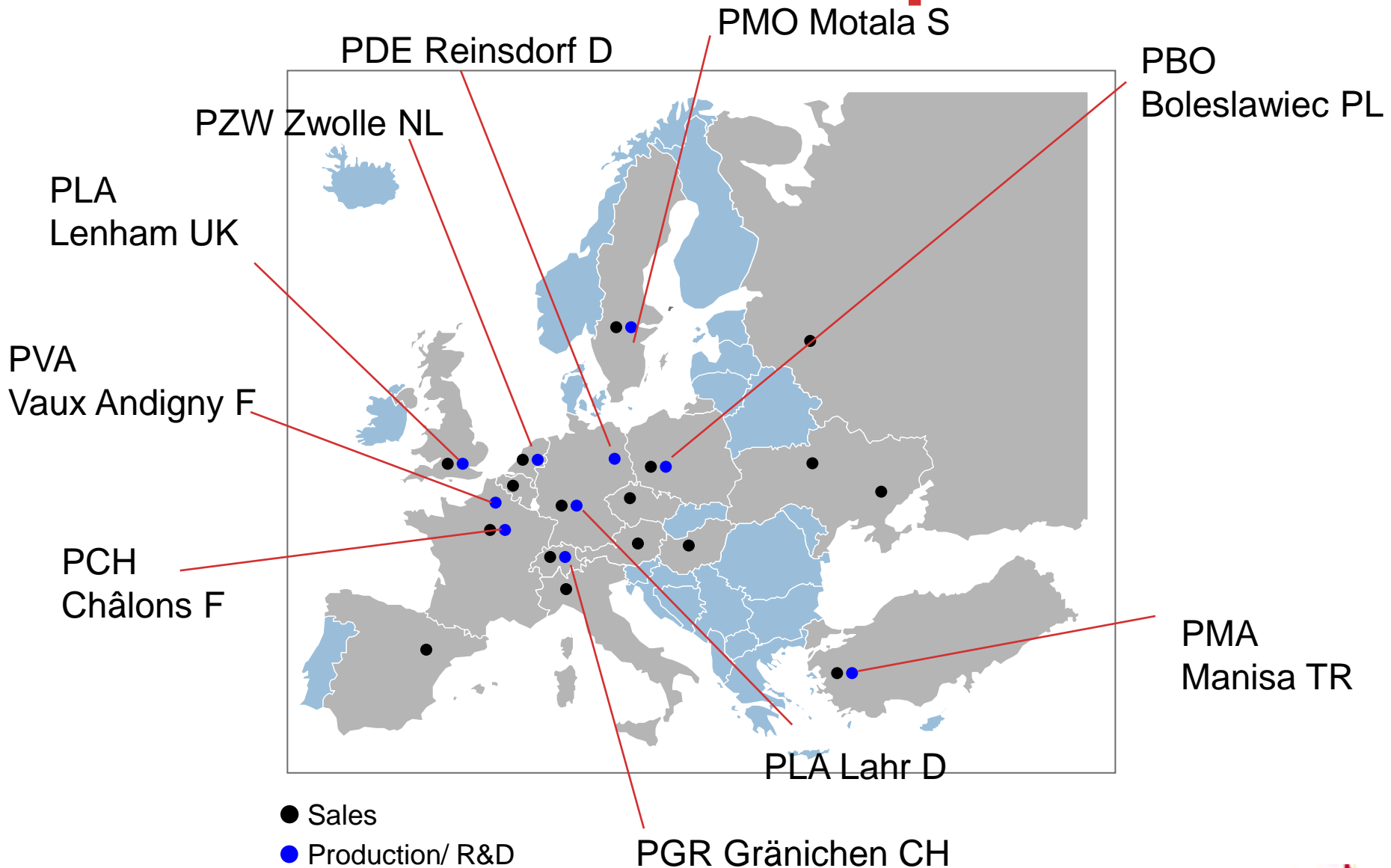


Cooling & Heating Ceiling Panels



Clean Air solutions

# Our Locations in Europe



# Our North American & Chinese Locations



dpoint Vancouver

RNA (Runtal North America)  
Ward Hill (near Boston)



PDA Dachang  
(near Beijing)

Nather Air  
Shanghai

- Verkauf
- Produktion R&D

HNA (Hydro Air North America)  
*Rittling North America*  
Buffalo



# Key Facts & Figures & Challenges



Founded 1911  
Zehnder family  
still main shareholder



Swiss



Approx 3000  
employees



Approx € 500 M  
Turnover p.a



Challenges

Radiator market in decline (underfloor heating)  
More than 30 % increase in Swiss Franc  
New product development  
Stock levels  
Profit  
Growing Complexity  
SAP / New value Flow  
Employee turnover / downsizing  
Costs

# What is Zmile



A philosophy of good can always be made better

What we do to make our employees & customers Zmile

# Structure

## Zehnder & Zmile

## Learning to Zmile

- First Steps
- Roadmap
- Train the Trainers
- A chance to Experience the Zmile Spirit
- More than Kaizen
- The Journey continues

## Zmile Successes & Lessons Learnt

# The First Steps



Audits & all Production Sites with external consultant

Kick Off Event with Senior Management with external consultant

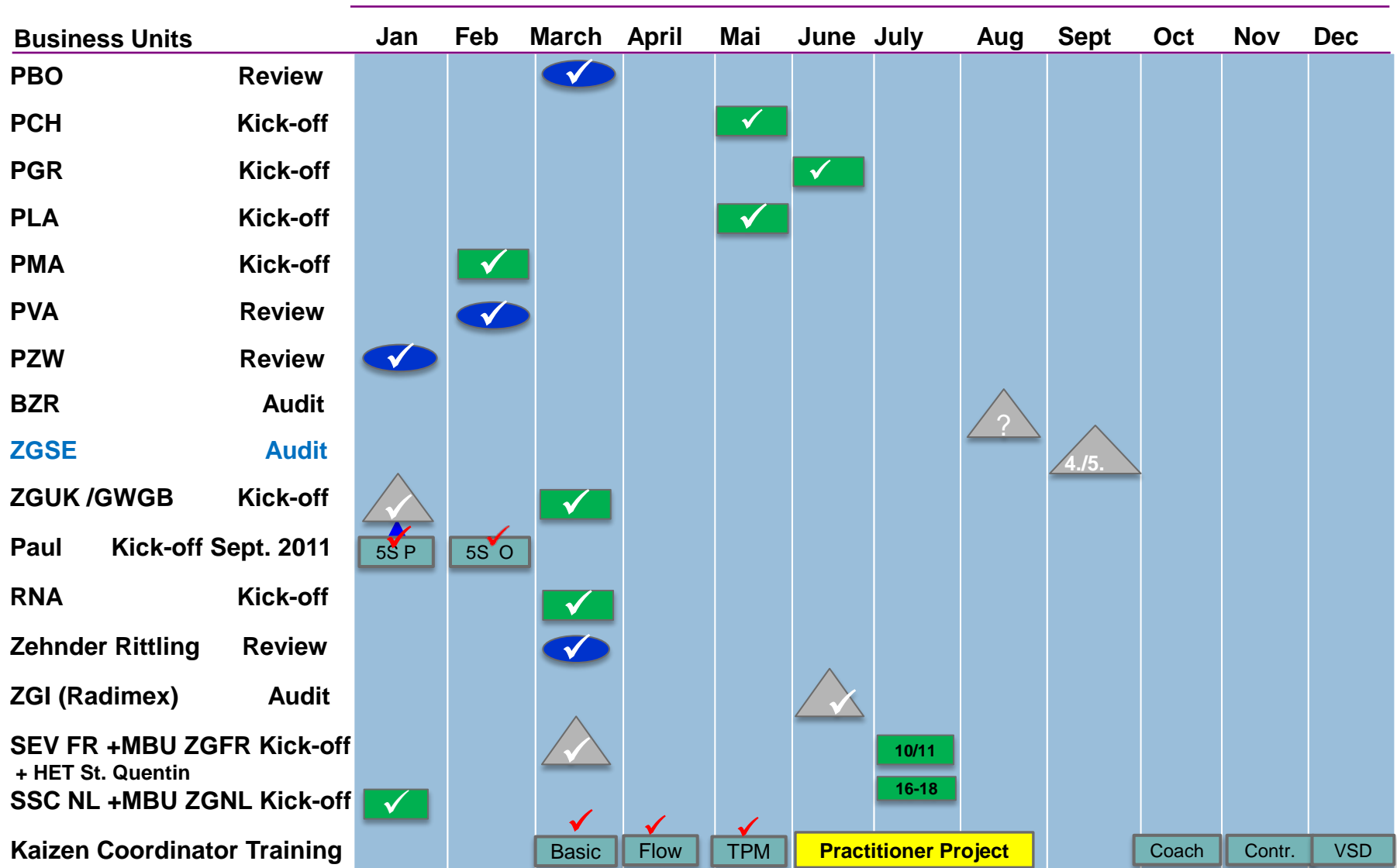
Local co-ordinator defined for all production sites ( 1 FTE per 200 employees)

Local Kick Off for local Management Team with external consultant



# ZG Kaizen Implementation Roadmap

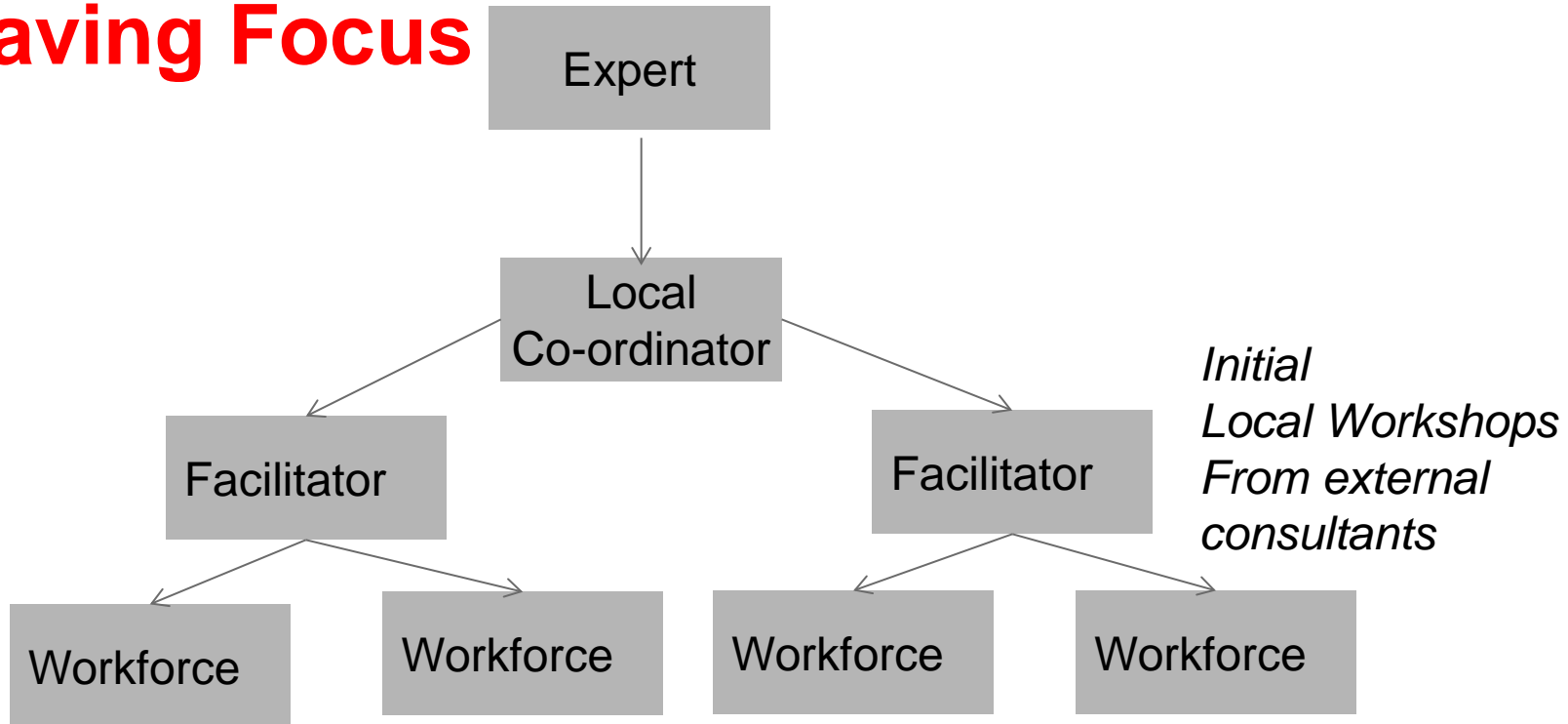
Year 2012



# Train the Trainer Philosophy

Objective	Year 1	Year 2	Year 3	Year 4
Increase Productivity	5%	10%	15%	20%
Reduce Error costs (internal & External)	10%	20%	30%	40%
Reduce Inventory		10%	20%	30%
Reduce Scrap costs	1%	2%	3%	4%

## Cost Saving Focus



# Simulations used extensively at all levels



*A chance to experience our Approach for two volunteers*

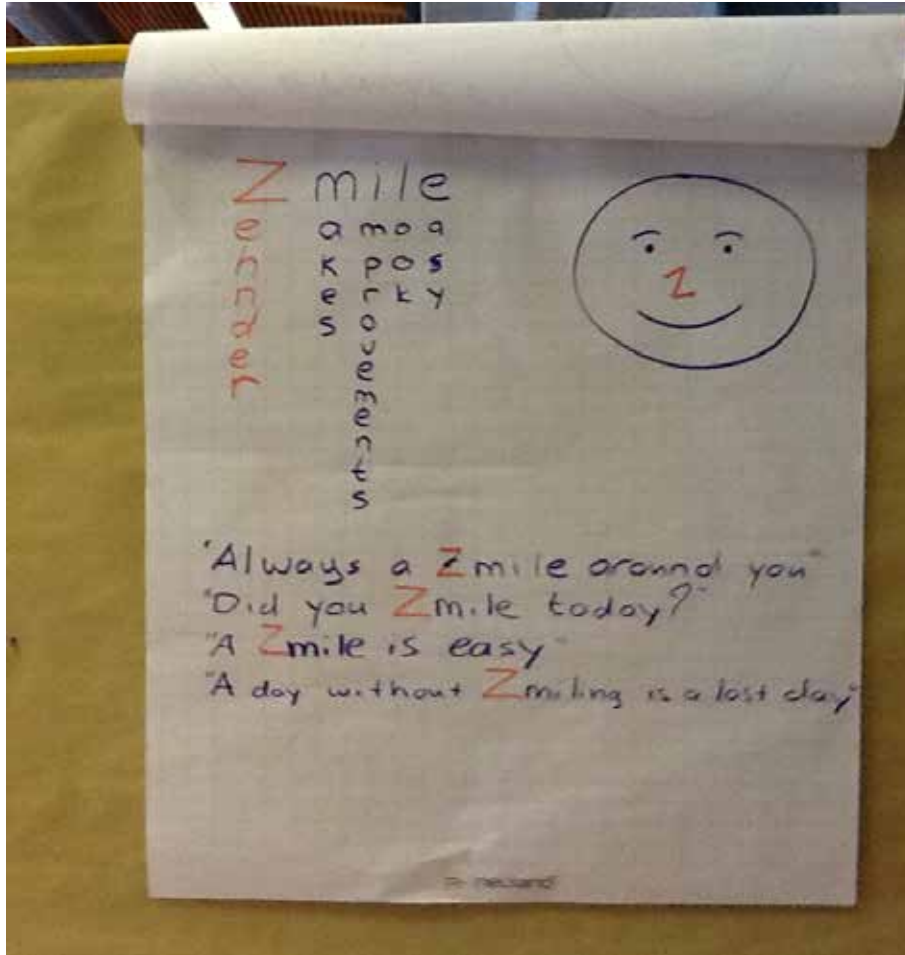
# 5S is about Improving Efficiency not Cleaning



Time Required		
Space		
Number of pcs		
Quality		
Stress		
Standard		
System		
Preparation		



# Zmile is More than Kaizen



To internalise the programme & add additional concepts such as Agility & QRM (Quick Response Manufacturing) a workshop was held with the top 60 managers within the Group to find a name for the Zehnder initiative.

# The Zmile Journey Continues...

Zmile launched in Administration in January 2015 (Kick Off, Local Co-ordinators, 10 days training)

Local Steering Committee meetings each month

Flyers distributed to every employee in local language each quarter to maintain momentum & sell successes (with prize draws for Zmile promotional gifts)

3 co-ordinator development events per year (1 product, 1 administration, 1 combined)

Audits at each production site every 2 years by Group co-ordinator & member of the board to monitor progress & define local objectives

Benchmarking started with Bosch, Swiss Railways & Georg Fischer

Current Group Objectives in addition to local goals

- → Process mapping or MCT mapping of major processes¶
- → Zero accidents each month with a display of number of accident free days in each facility¶
- → An inventory turn in Europe of no more than 75 days. It is obviously that not all functions can influence inventory turn, but an awareness of the cost of inventory & how this key performance indicator is developing is certainly relevant to display on Zmile boards¶
- → Set up a system to capture and implement improvement proposals¶
- → Introduce regular start-up meetings (huddles) to improve communication and transparency.¶

# Group Training Concept



12 stage model	New 5 Why	Kobetsu Project	<b>Kobetsu Kaizen</b>							<b>ZMILE CO-ORDINATOR</b> Written theory exam, Project with significant saving (5 X practioner project), design & run a Zmile workshop
Ice Breakers	Simulation	Resistance to change	DICE	Flipchart presentation	Zmile Board	<b>Zmile Facilitator</b>				
Processing Time	Cycle Time	Lead Time	MUDA Elimination	Current State Map	Future State Map	Practical Application	Lead a VSM Workshop	<b>VSM</b>		
Simulation	FTR	OEE	Complaints	LTA	OTIF	Lead Time	Savings estimation	<b>KPI &amp; Finance</b>		
Inventory Justification	Cost of Inventory	Inventory Turn	Simulation	KanBan	Supermarket	Line Balancing	Takt /Pull	<b>TFM</b>		<b>ZMILE FACILITATOR</b>  3 from 7 course completed. And project with significant savings
OEE	MTBF	Autonomous Maintenance	8 Pillars	7 Steps	Cleaning Lubrication Checking	Practical TPM	<b>TPM</b>			
Advantages Quick Changeover	Workshop Evaluation	Practical Application	<b>SMED</b>							
MCT Definition	Value of Time	Touch Time	White & Grey space	Effect of Inventory	MCT v VSM Mapping	Reducing MCT	Partake in MCT Mapping	<b>MCT</b>		
Processing Time	Cycle Time	Lead Time	MUDA Elimination	Current State Map	Future State Map	Practical Application	<b>Process Mapping</b>			
Zmile in Admin	Time Thieves	SIPOC	Internal Suppliers/ Customers	6 Level Model	20 second Rule	Process Mapping	<b>TSM</b>			
Fallacy of Inspection	Standards	Statistics	Pareto	Ischikawa	FMEA	8D	Poka Yoke	<b>TQM</b>		
Zmile Philosophy	5S	MUDA	One Point Lesson	Numbers Data Facts	PDCA	5 Why	PSS		<b>BASIC OPL &amp; PSS Completed</b>	

# Structure

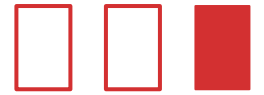
**Zehnder & Zmile**

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- Achivements
- Lessons Learnt

# Zmile Achievements



- **Approx 20000 Improvement Suggestions Generated**
- **60 days reduction in inventory**
- **47% Improvement in Internal Customer Satisfaction**
- **15% less Loss Time Accidents**



# Lessons Learnt



- Only successful where there is clear local management support
- Impossible to make progress when other major change processes are being undertaken (SAP implementation / New Value Flow)
- Too much focus on cost savings damages employee commitment to improvement
- Roadmaps, targets and steering committees continue to be needed after initial introduction
- Local coordinators will leave the company (> 25% Turnover)
- Train the trainer philosophy not always effective
- More difficult in administration (lack of visibility & targets)
- Internal training programme & certification very difficult to establish
- Simulations more effective than Powerpoint

# Questions & Answers



Were your expectations met?

