CARLTON Productivity

NFP 2023

5/10/23

Productivity Analysis (Audits) and
Productivity Improvement Projects

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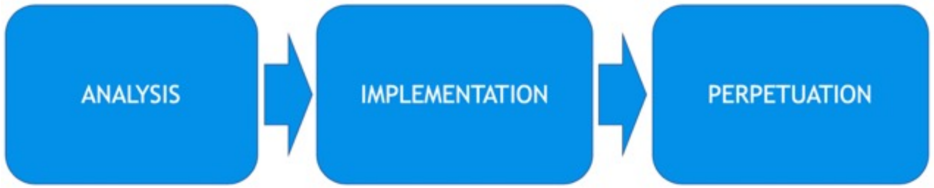
General

CARLTON Productivity develops and implements structural productivity improvements in tested and creative way with an experienced and international team

- We improve the effectiveness of your processes and reduce the operating costs through the implementation of systems and training
- We achieve for our clients productivity improvements between 10% and 20% within 6 to 8 months

A co-operation with CARLTON Productivity consists of three Phases

- Analysis
- Implementation
- Follow-up and Perpetuation



What is Productivity?

Simply said...

Output/Input

Or...

Output KVI/ Input KVI

Or...

KPI

What is a Productivity Improvement?

1

More output for the same input

2

The same output for less input

3

A combination of 1 and 2

3 Elements of Productivity

1

Your KPIs – The Performance Measurement

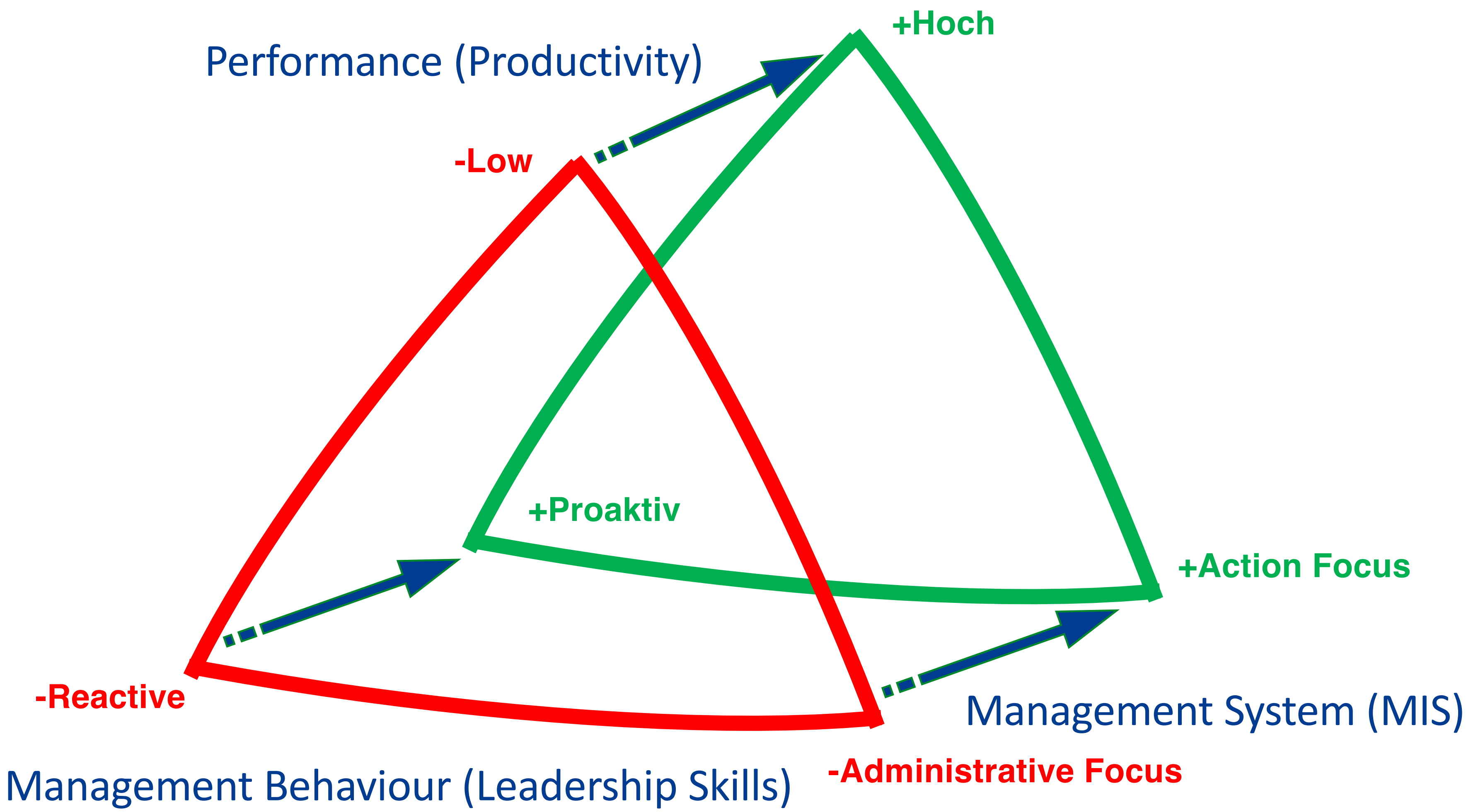
2

Your Processes – The Management (Information) System

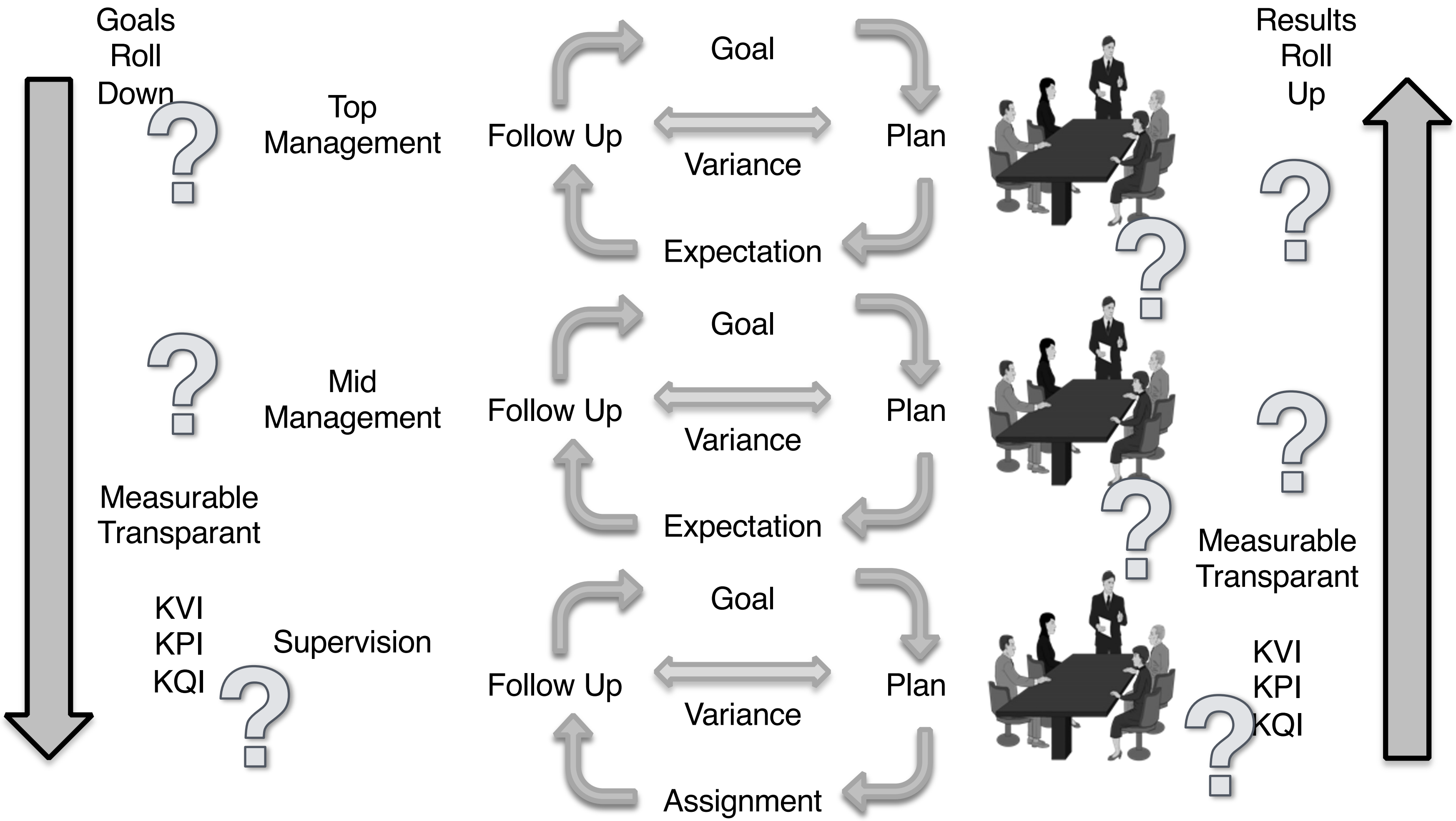
3

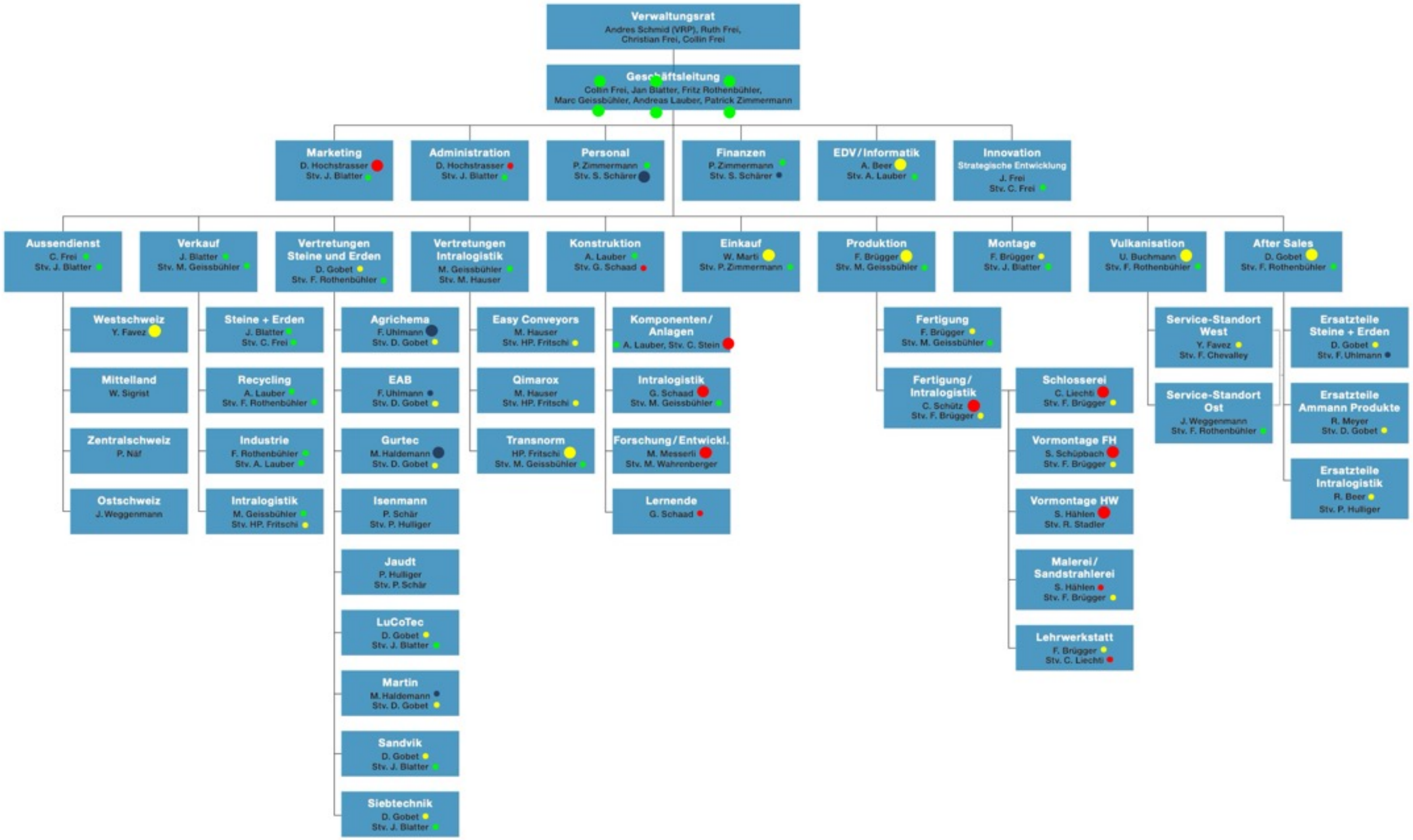
Your People – Management Behaviour/Leadership Skills

Management Triangle



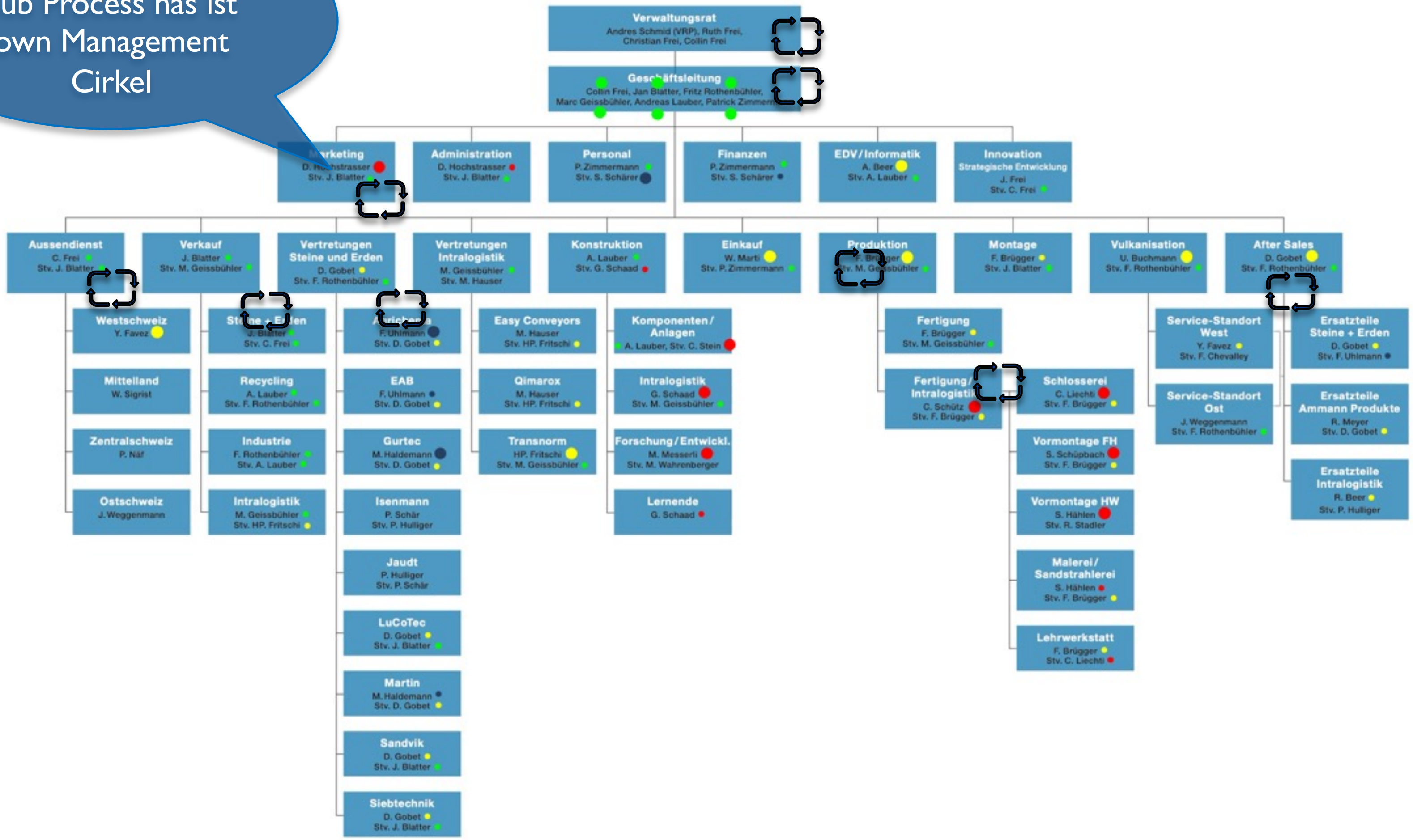
Network of Responsibilities





Verwaltungsrat
Andres Schmid (VRP), Ruth Frei, Christian Frei, Collin Frei
Geschäftsleitung
Collin Frei, Jan Blatter, Fritz Rothenbühler, Marc Geissbühler, Andreas Lauber, Patrick Zimmermann
Marketing
D. Hochstrasser
Stv. J. Blatter
Administration
D. Hochstrasser
Stv. J. Blatter
Personal
P. Zimmermann
Stv. S. Schärer
Finanzen
P. Zimmermann
Stv. S. Schärer
EDV/Informatik
A. Beer
Stv. A. Lauber
Innovation
Strategische Entwicklung
J. Frei
Stv. C. Frei
Aussendienst
C. Frei
Stv. J. Blatter
Verkauf
J. Blatter
Stv. M. Geissbühler
Vertretungen Steine und Erden
D. Gobet
Stv. F. Rothenbühler
Vertretungen Intralogistik
M. Geissbühler
Stv. M. Hauser
Konstruktion
A. Lauber
Stv. G. Schaad
Einkauf
W. Marti
Stv. P. Zimmermann
Produktion
F. Brügger
Stv. M. Geissbühler
Montage
F. Brügger
Stv. J. Blatter
Vulkanisation
U. Buchmann
Stv. F. Rothenbühler
After Sales
D. Gobet
Stv. F. Rothenbühler
Westschweiz
Y. Favez
Mittelland
W. Sigrist
Zentralschweiz
P. Näf
Ostschweiz
J. Weggenmann
Steine + Erden
J. Blatter
Stv. C. Frei
Recycling
A. Lauber
Stv. F. Rothenbühler
Industrie
F. Rothenbühler
Stv. A. Lauber
Intralogistik
M. Geissbühler
Stv. HP. Fritschi
Agrichema
F. Uhlmann
Stv. D. Gobet
EAB
F. Uhlmann
Stv. D. Gobet
Gurtec
M. Haldemann
Stv. D. Gobet
Isenmann
P. Schär
Stv. P. Hulliger
Jaudt
P. Hulliger
Stv. P. Schär
LuCoTec
D. Gobet
Stv. J. Blatter
Martin
M. Haldemann
Stv. D. Gobet
Sandvik
D. Gobet
Stv. J. Blatter
Siebtechnik
D. Gobet
Stv. J. Blatter
Easy Conveyors
M. Hauser
Stv. HP. Fritschi
Qimarox
M. Hauser
Stv. HP. Fritschi
Transnorm
HP. Fritschi
Stv. M. Geissbühler
Komponenten/Anlagen
A. Lauber, Stv. C. Stein
Intralogistik
G. Schaad
Stv. M. Geissbühler
Forschung/Entwickl.
M. Messerli
Stv. M. Wahrenberger
Lernende
G. Schaad
Fertigung
F. Brügger
Stv. M. Geissbühler
Fertigung/Intralogistik
C. Schütz
Stv. F. Brügger
Schlosserei
C. Liechti
Stv. F. Brügger
Vormontage FH
S. Schüpbach
Stv. F. Brügger
Vormontage HW
S. Hählen
Stv. R. Stadler
Malerei/Sandstrahlerei
S. Hählen
Stv. F. Brügger
Lehrwerkstatt
F. Brügger
Stv. C. Liechti
Service-Standort West
Y. Favez
Stv. F. Chevalley
Service-Standort Ost
J. Weggenmann
Stv. F. Rothenbühler
Ersatzteile Steine + Erden
D. Gobet
Stv. F. Uhlmann
Ersatzteile Ammann Produkte
R. Meyer
Stv. D. Gobet
Ersatzteile Intralogistik
R. Beer
Stv. P. Hulliger

Every Process or Sub Process has ist own Management Cirkel



Aktuelles Management System

Produktion Tiefziehen

Aktuelles Management System
Produktion Tiefziehen

Goal

Plan

Assignment

Follow Up

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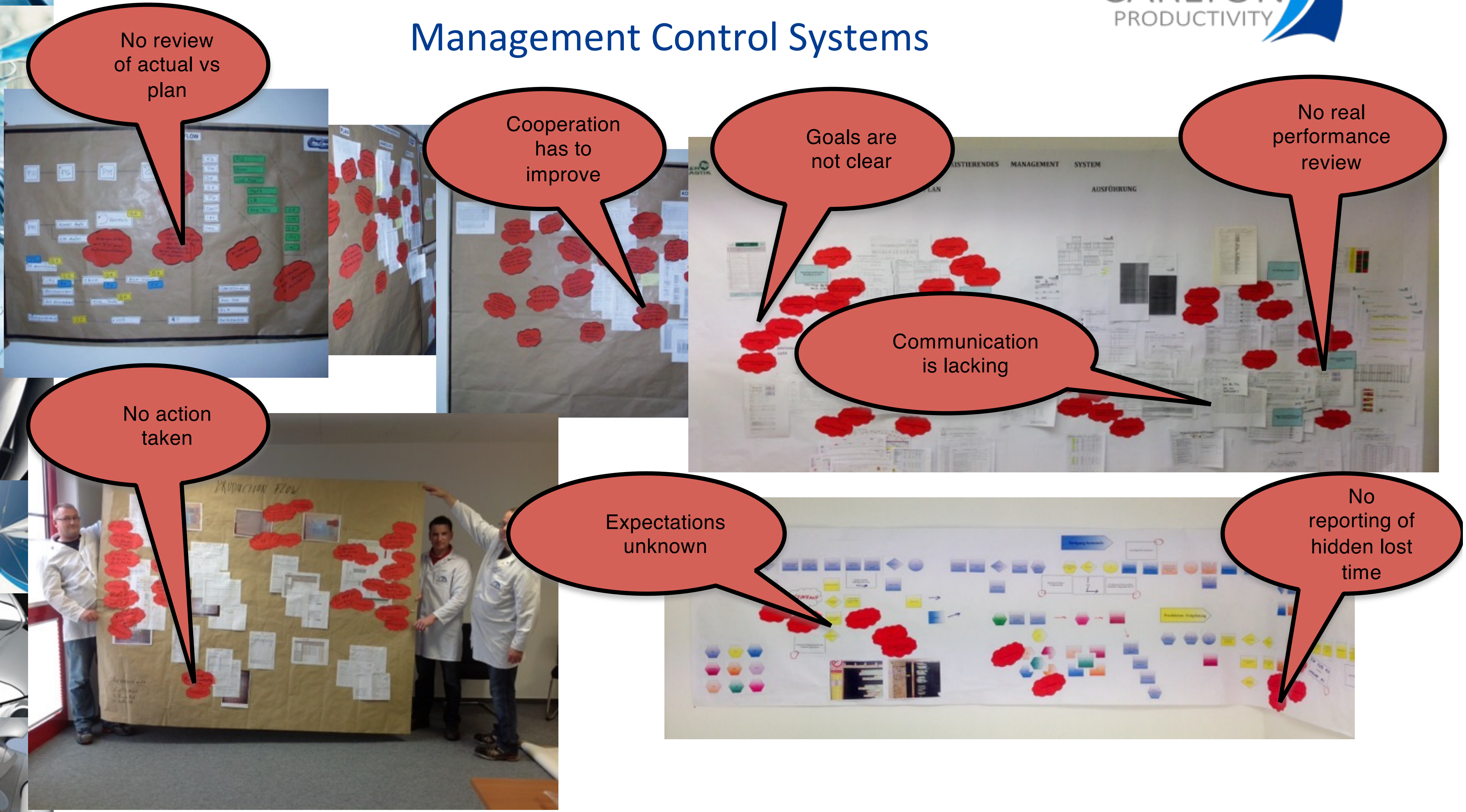
Management Control Systems

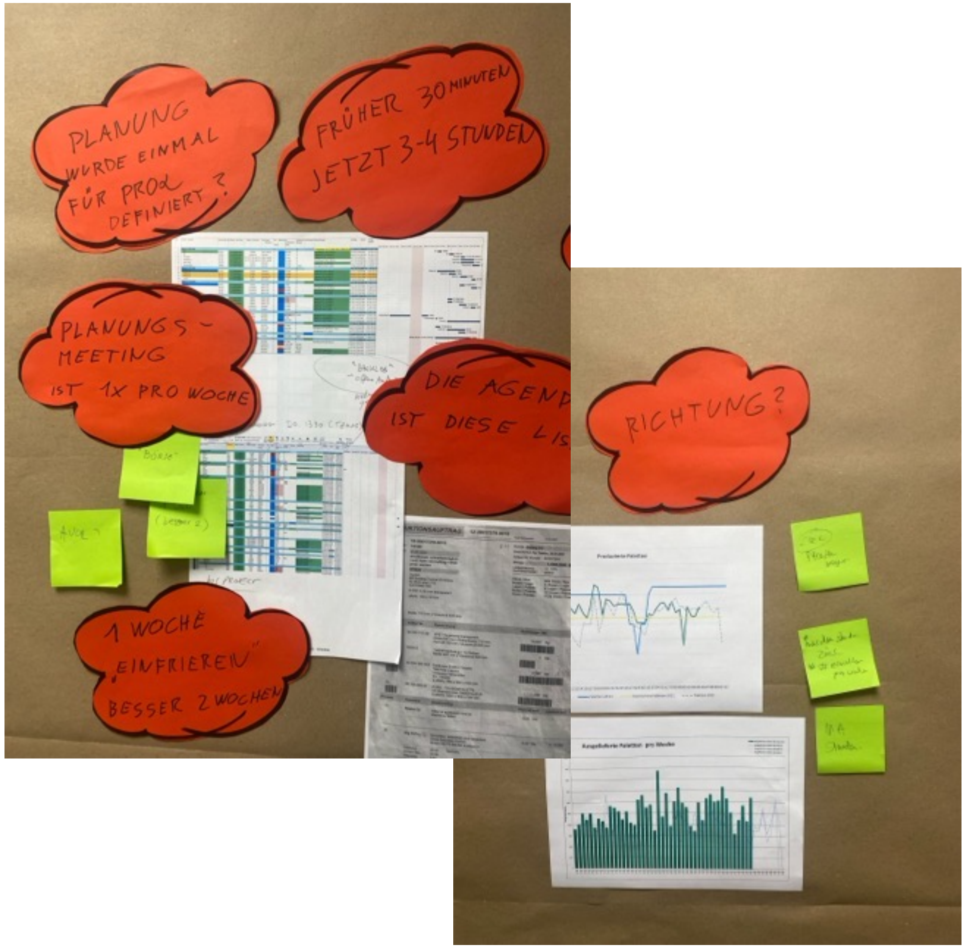


Aktuelles Management System
Produktion Tiefziehen

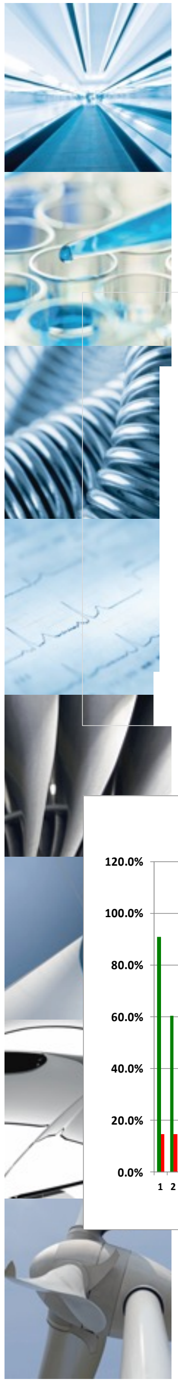
Main System Critiques

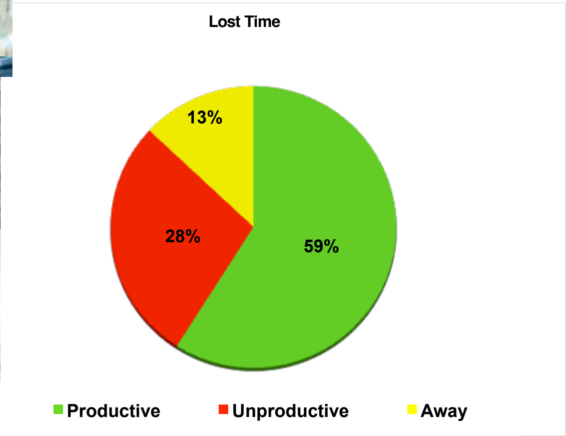
«To Do» List

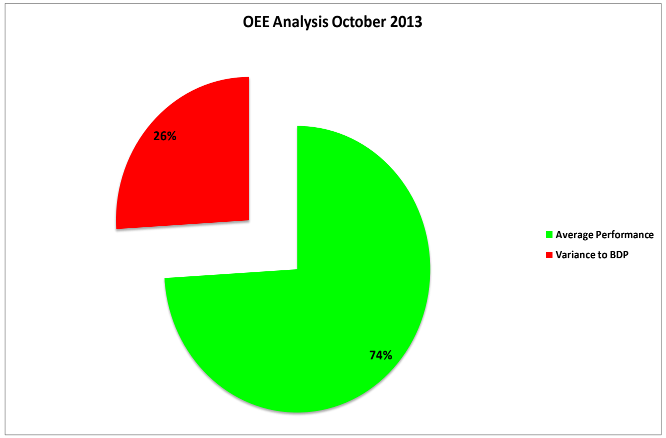
- Richtung? Ziele?
- Planung wurde einmal für Pro Alpha definiert?
- Planung gehört ins Pro Alpha -> Entwicklung zu langsam
- Wir sollten mehr Kapazitäten für BDE haben
- EIGENTLICH waren wir Anfang des Jahres im Soll
- Planungsmeeting ist 1x pro Woche
- Früher dauerte es (Planungsmeeting) 30 Minuten, jetzt 3-4 Stunden
- Die Agenda (Planungsmeeting) sind die offenen Aufträge
- Planung 1 Woche einfrieren, besser 2 Wochen
- Flexmatrix fehlt
- Maschinen sind End of Life
- Teamboard haben wir vor Corona täglich gemacht, sollten wir wieder tun
- SOLL-Zeit (Auftrag) nicht immer verlässlich
- Rückmeldung nicht automatisch
- Wir könnten mal die Toleranzen für die Abweichungen festlegen
- Ich habe mal ein Dokument entwickelt…(Maschinenstörungen)
- Kurzfristige Planungsänderungen per Mail
- Jeder der Zeit hat schreibt ein Mail (Planungsänderung)

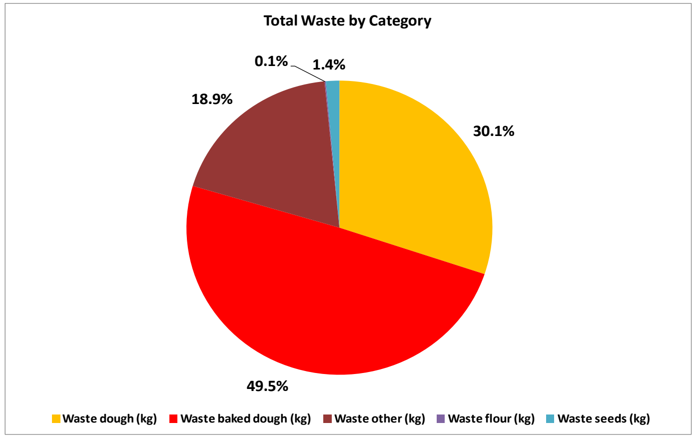


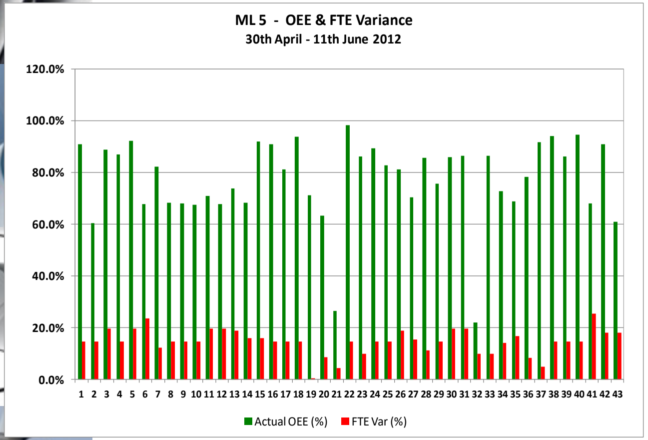
Operational and Statistical (Examples)

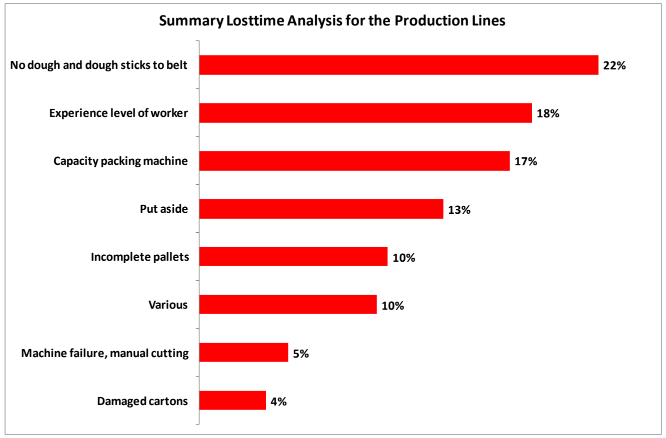


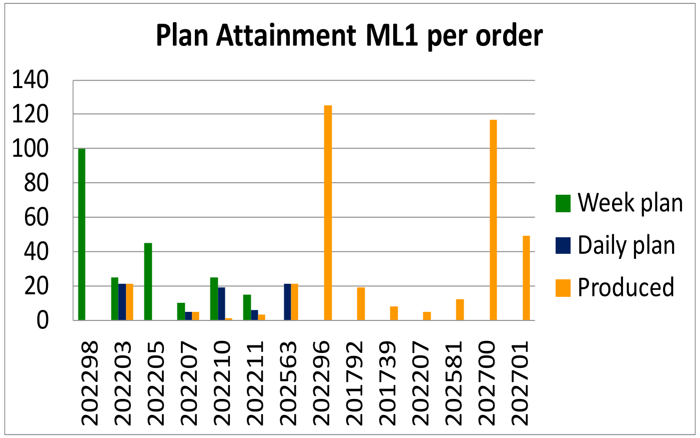




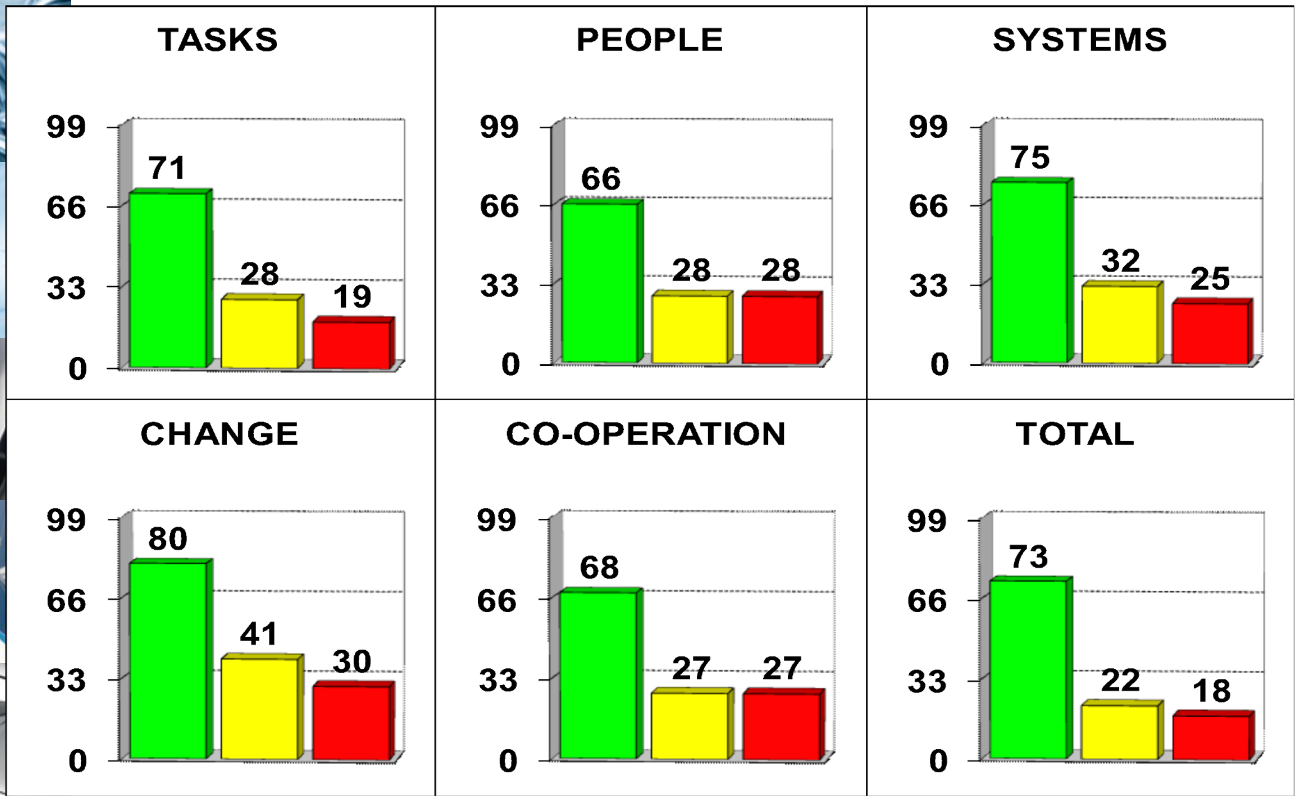






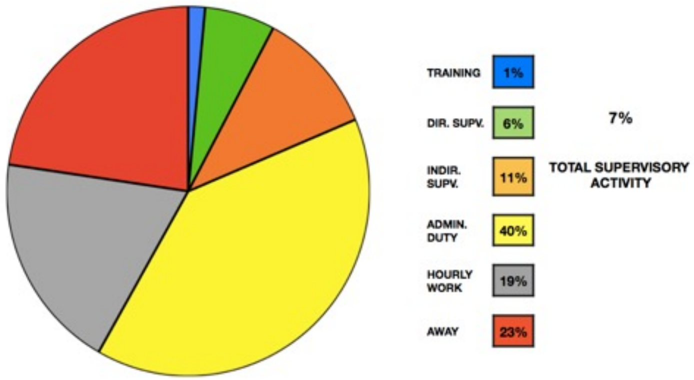


Management Skills and Behaviours

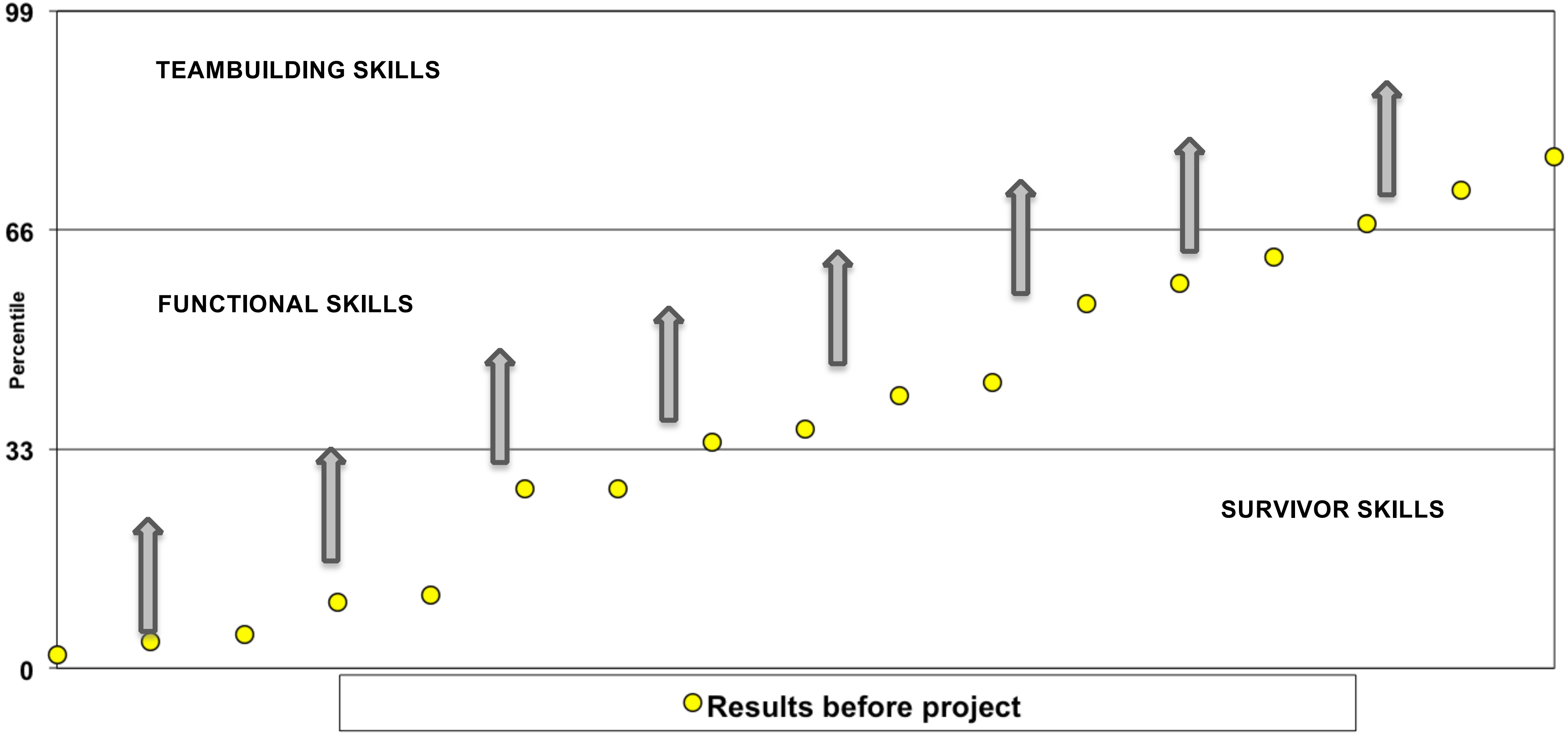


Top Management Mid Management Supervision

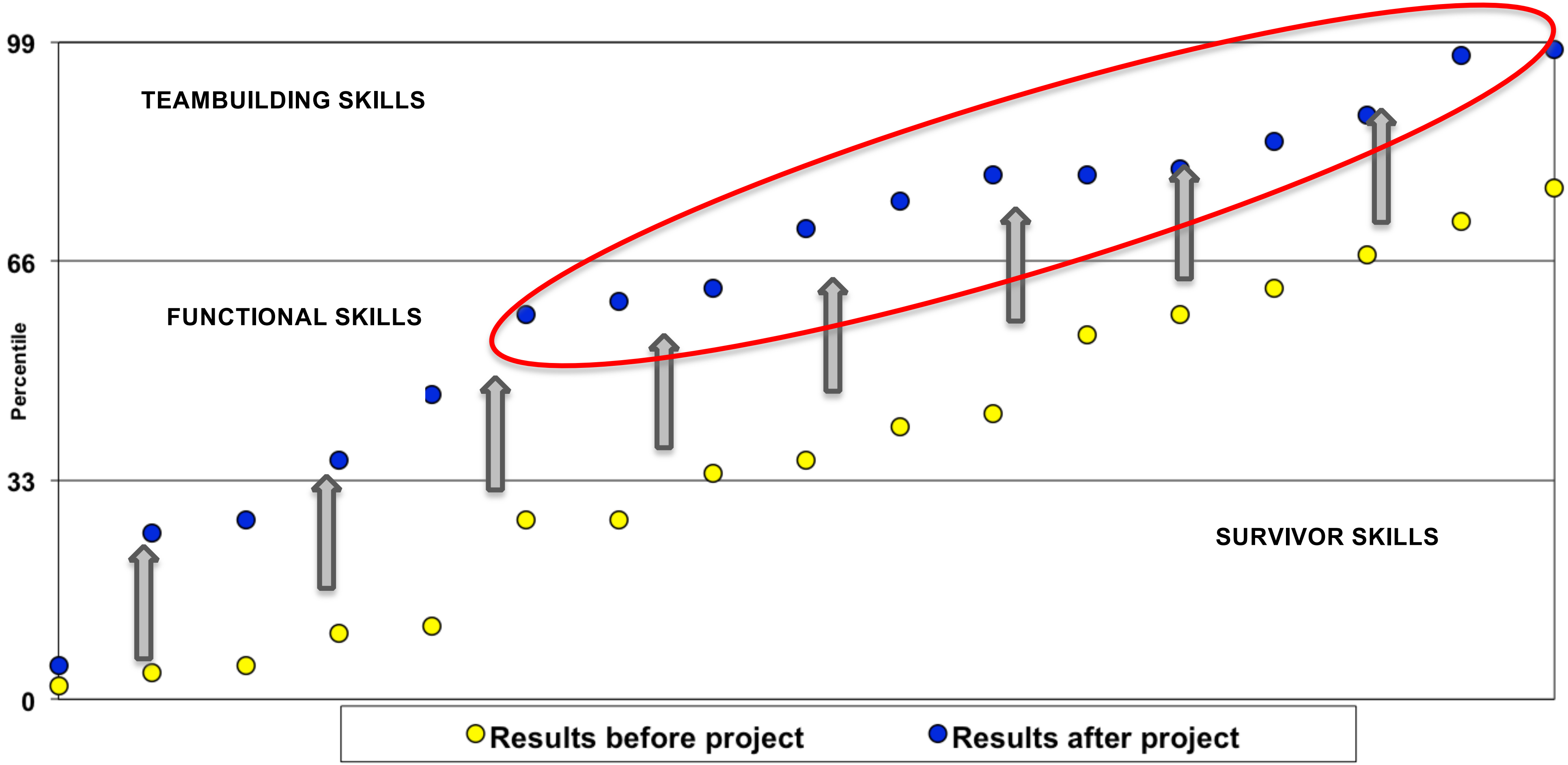
Management Elements	Description - Goals - Objectives	Exists	Used	Effective	Comments
Volume Forecast	*Predicts level of business for key volume indicators / feeds department master schedules.*				The current volume forecast is erratic with variations to actual. Season peaks such as easter show significant under forecast.
Master Schedule	*Allocates requirements - people, materials and equipment - to process forecasted volumes. Provide plans for absenteeism, vacations, training hours, productivity and overtime required.*				Some elements of capacity planning, volume forecast and allocation to lines as well as resource allocation is taking place, but in different tools and not aligned.
Standards	*Work to time relationship used in work assignment that enable supervisors and managers to measure performance*				Standards are not maintained, not used for productivity measurement and none available for changeovers and cleaning
Volume and Historical Trends	*Standard data details for key volume indicators by time increment; ie., half hour, hour, day, week and month.*				Volume and historical trends are available and used
Daily Schedule Control	*Provides the means to rolldown and follow-up upon goals and expectations in the workplace on a daily basis.*				Allcated plan times are not used in steering of the daily operations review.
Start Up / Shutdown Checklists	*Provides a systematic list of activities to be performed during start up and shut down of key equipment. This will ensure that activities are consistently performed in a structured way.*				SOP's are available and known but timmings are not monitored
Rework / Error Report	*Identifies and reports recurring problems at the worker level and feeds the problem identification system.*				Rework report has recently been introduced and is not efficiently used in order to update the production plan.
Problem Identification System	*Identifies non value added time and activities and their main causes to ensure that problems are assigned for permanent resolution*				Too much fire fighting and too little systamatic root cause analysis and problem solving.
Problem Resolution System	*Reports on solutions to problems and measures results.*				Not available.
Daily Schedule Review Meeting	*Provides communication and visibility of daily / weekly goals and expectations and actual performance versus plan. Used for discussion of problems and assigning them for resolution.*				Has little tracking of problem solving. Only W2 has 2 set meetings every day at 7 and at 15h. There is what they call the TPM round at 7:45 where all managers visit the lines and discuss last 24hrs results but this differs markedly from a production meeting
Daily / Weekly Operating Report	*Summary of operations by department including attainment to plan for all key indicators. Assists management in identifying off-schedule conditions so appropriate action can be taken.*				There is no follow-up from one prodution report to the next one. The reports are not used to establish what is needed for a continuous production flow
Management Report	*High level weekly / monthly summary of key indicators for top management.*				Data integrity is questionable.



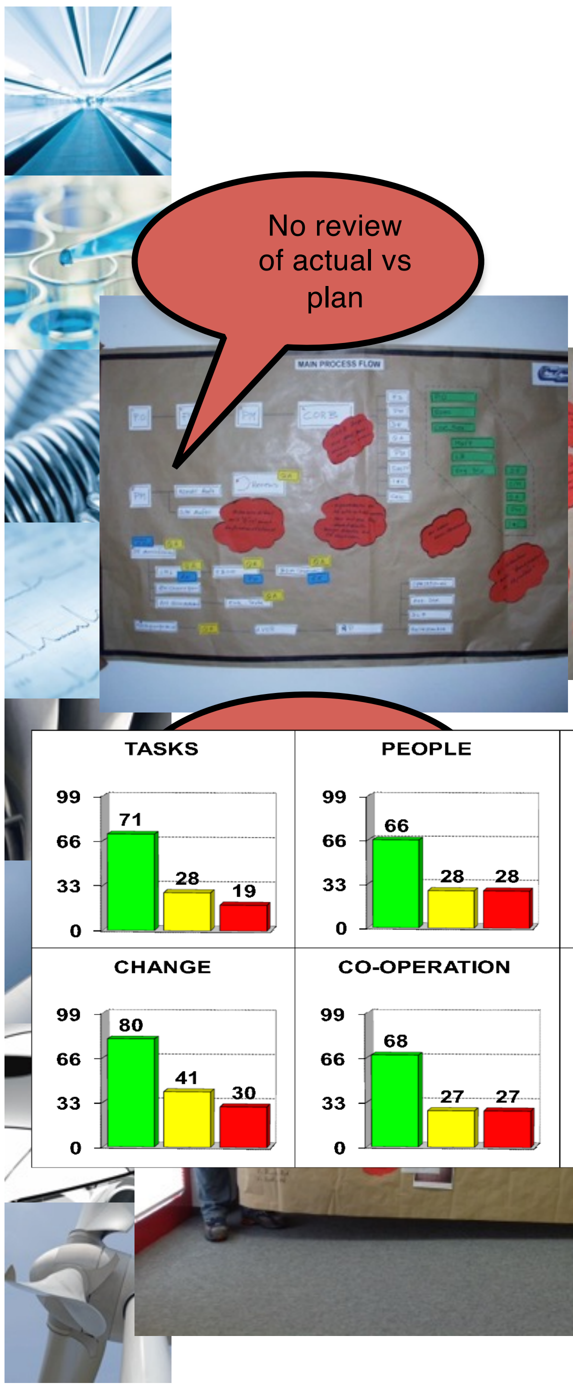
Management Values Survey

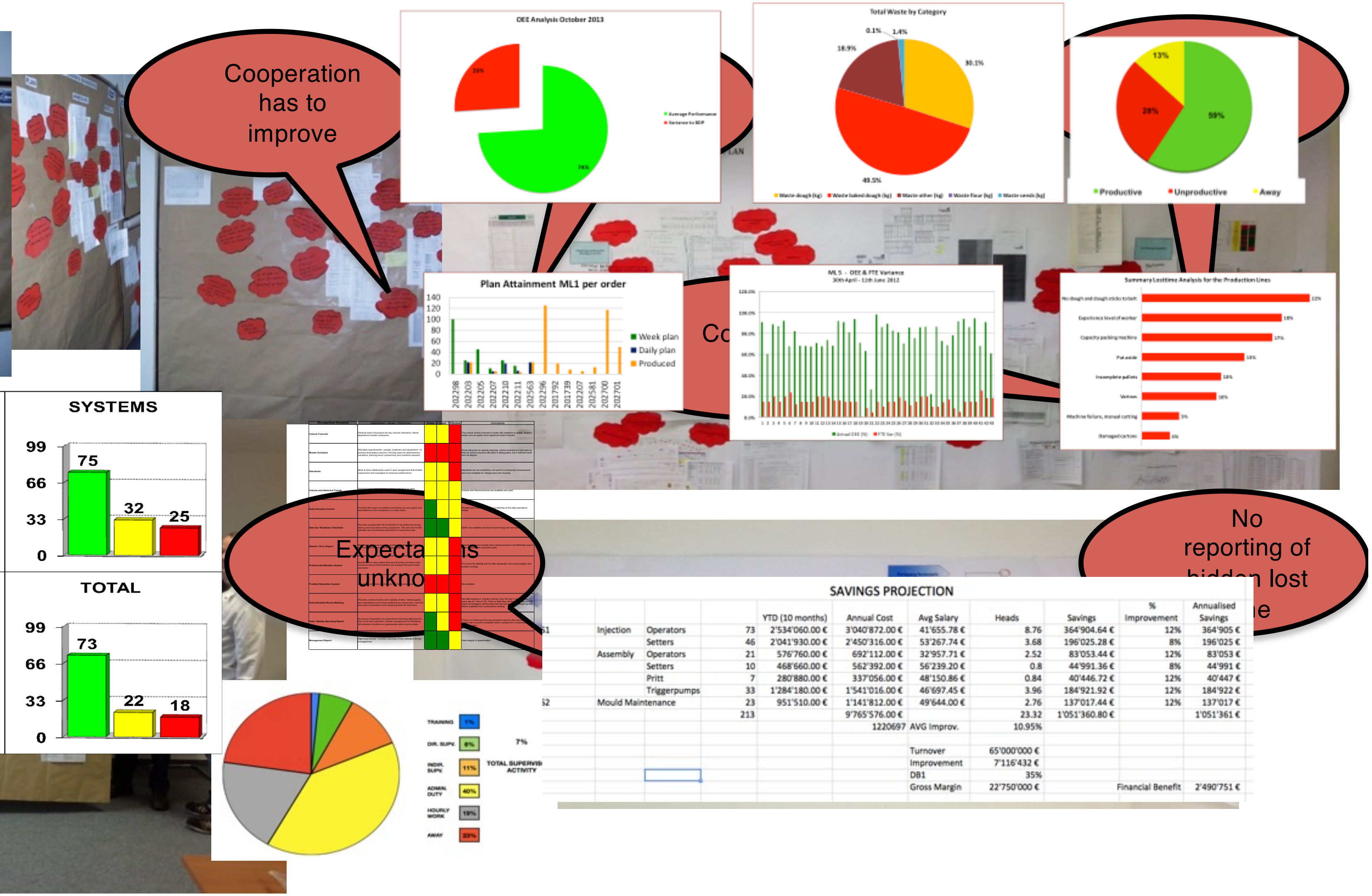


Management Values Survey



Summary





SAVINGS PROJECTION

				YTD (10 months)	Annual Cost	Avg Salary	Heads	Savings	% Improvement	Annualised Savings
51	Injection	Operators	73	2'534'060.00 €	3'040'872.00 €	41'655.78 €	8.76	364'904.64 €	12%	364'905 €
		Setters	46	2'041'930.00 €	2'450'316.00 €	53'267.74 €	3.68	196'025.28 €	8%	196'025 €
	Assembly	Operators	21	576'760.00 €	692'112.00 €	32'957.71 €	2.52	83'053.44 €	12%	83'053 €
		Setters	10	468'660.00 €	562'392.00 €	56'239.20 €	0.8	44'991.36 €	8%	44'991 €
		Pritt	7	280'880.00 €	337'056.00 €	48'150.86 €	0.84	40'446.72 €	12%	40'447 €
		Triggerpumps	33	1'284'180.00 €	1'541'016.00 €	46'697.45 €	3.96	184'921.92 €	12%	184'922 €
52	Mould Maintenance		23	951'510.00 €	1'141'812.00 €	49'644.00 €	2.76	137'017.44 €	12%	137'017 €
			213		9'765'576.00 €		23.32	1'051'360.80 €		1'051'361 €
					1220697	AVG Improv.	10.95%			
						Turnover	65'000'000 €			
						Improvement	7'116'432 €			
						DB1	35%			
						Gross Margin	22'750'000 €		Financial Benefit	2'490'751 €

Presentation of Analysis Results

TENTATIVE PROGRAMME SCHEDULE

Week		1	2	3			4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Week Starting Date		2-12	9-12	16-12	23-12	30-12	6-1	13-1	20-1	27-1	3-2	10-2	17-2	24-2	3-3	10-3	17-3	24-3	31-3	7-4	14-4	21-4	28-4	5-5	12-5	19-5	26-5
Intervention Area	**Intervention**																										
Overall	Plant Management Structure																										
	Goals Roll Down Process																										
Production	Production Planning																										
	Injection Management System																										
	Assembly Management System																										
	Mould Maintenance Management System																										
	Work Group: S.M.E.D.																										
	Work place Organization Work Group																										
	Management Coaching																										
	Management Training																										
Follow Up																											
Program Control	Weekly Follow Up Meeting	O	O	O	O	O	O	O	O	O	O																
	Progress Meeting								O																		

Development

Agreement

CARLTON Productivity

Thank you