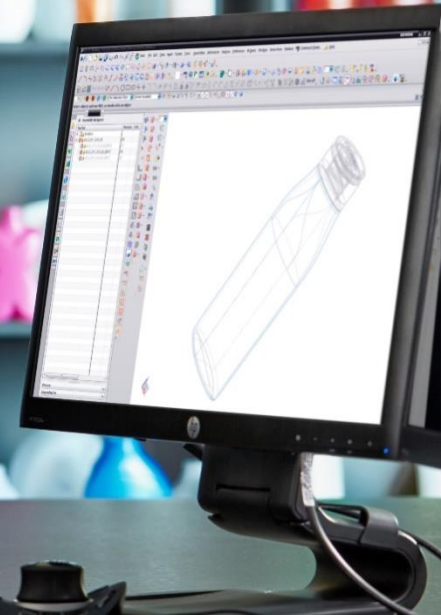
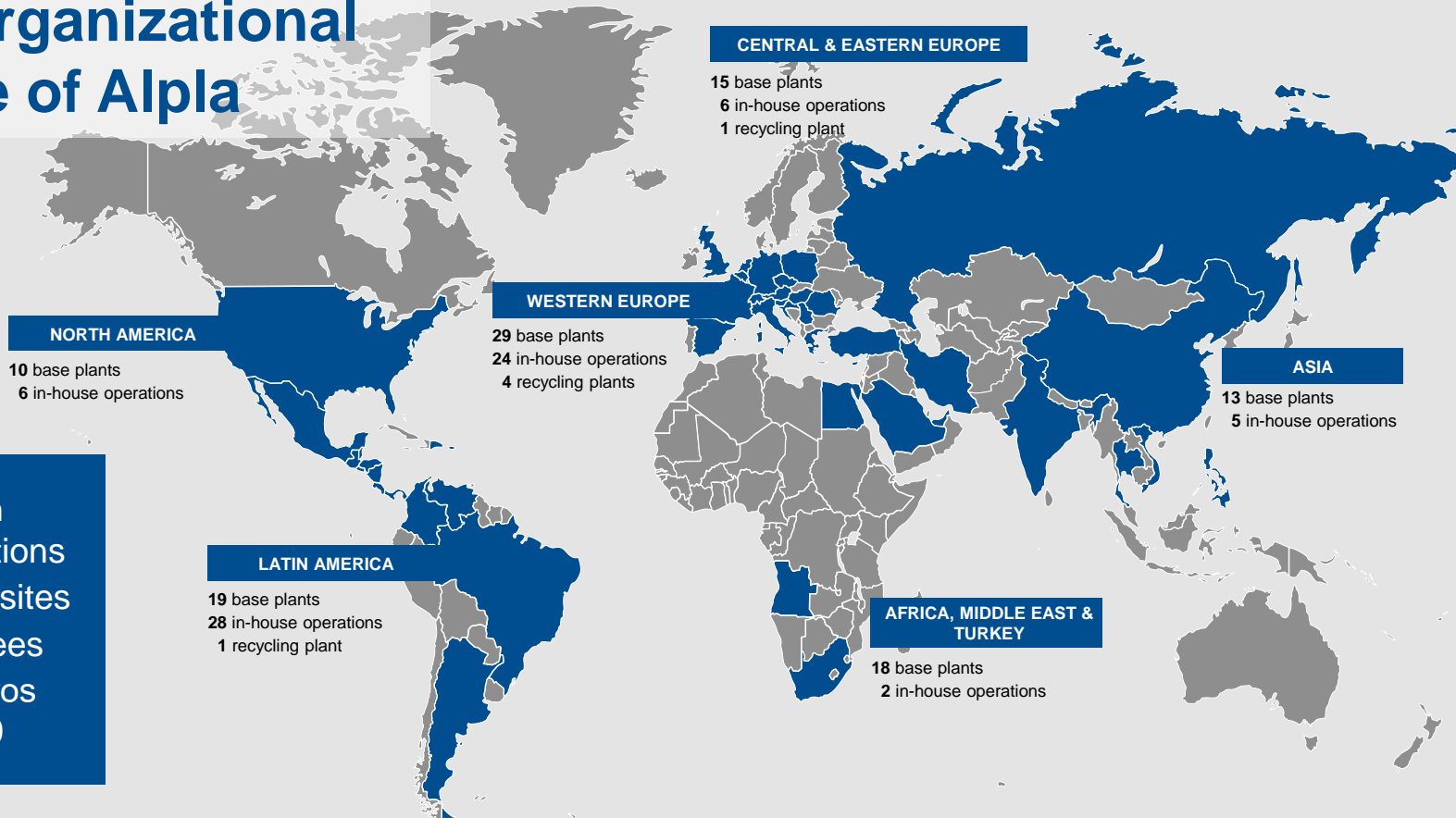


# Operational Excellence in der Instandhaltung @ Alpla

*ÖVIA Webcast, 17.06.2020; Daniela Ebner*



# Global Organizational Structure of Alpla



- Global leader in packaging solutions
- 181 production sites
- 20 900 employees
- € 3.8 Billion euros total sales 2019



# Market segments

Our high-quality packaging



Beverage



Food



Milk & Dairy



Beauty Care



Home Care

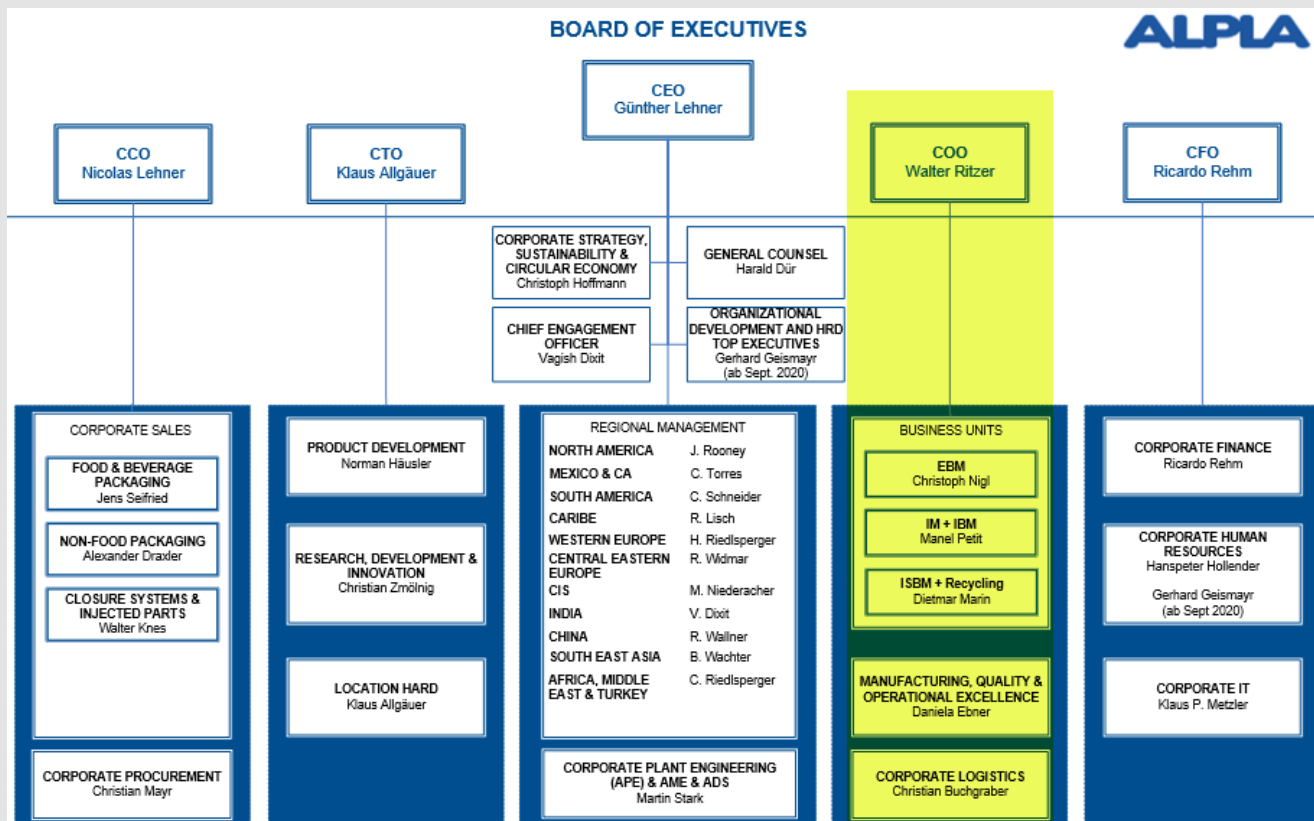


Oils and lubricants



Pharmaceuticals

# Organization Chart



# Operational Excellence

## Definition

Operational Excellence at ALPLA stands for providing packaging solutions for our customers which consistently meet the required levels of service and quality at optimum costs.

The focus is on our core process “Manufacture, Store and Deliver Products” including all other associated support activities.

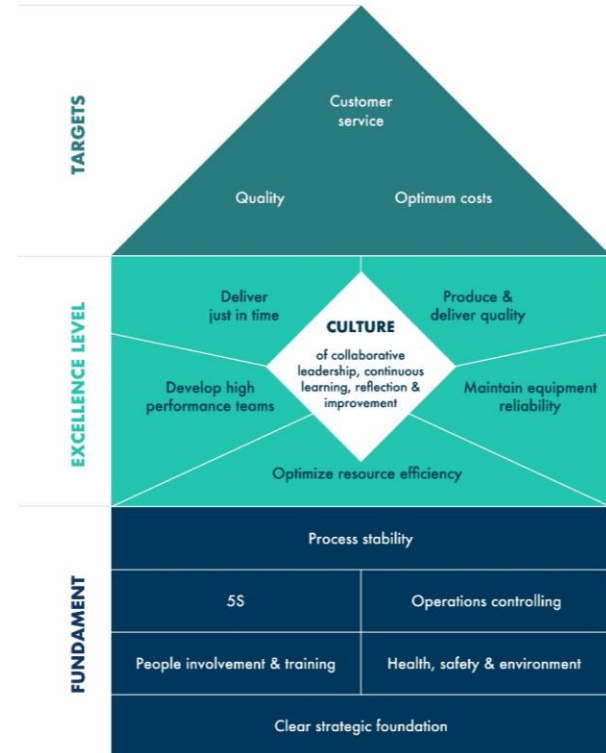
## Vision

We create the appropriate environment to motivate our employees, empowering them to positively contribute to the operation’s success.

Through OPEX we will increase customer satisfaction and improve our position as the preferred supplier in the marketplace.

## OPERATIONAL EXCELLENCE HOUSE

ALPLA



# NEXT is our program to achieve Operational Excellence!

NEXT is a **worldwide tailor-made program** that ALPLA introduced to implement the basic principles of Operational Excellence.

The **aim is a structured and efficient work environment** for our employees as well as the **continuous improvement** of our production and support processes.

This will help us to **guarantee consistently good quality of our products** at optimal costs.

**The collaboration with customers and suppliers will be active and on a partnership basis.**

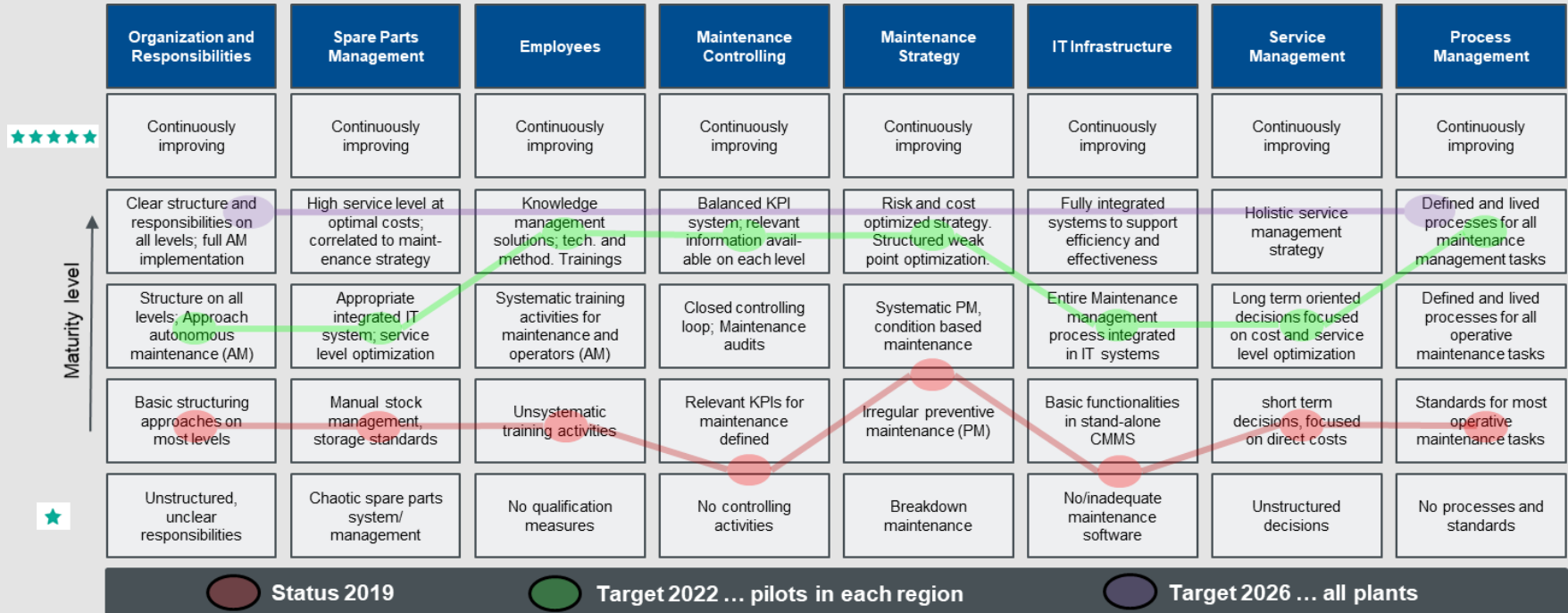
# *Vision for “Maintain Equipment Reliability”*

## *(Alpla Maintenance System)*

- 
- All aspects of the maintenance system are designed to **maintain** the demanded **equipment** specific **reliability** and enable a maximum effective utilization (TEEP1) at optimum costs.
  - All involved employees and managers strive to minimize maintenance related downtimes as well as maintenance and downtime costs through continuous improvement in efficiency and effectiveness.



# Current status and targets for Maintenance Management Categories





# Excellence Tools for Maintenance

Methods, Tools and Routines	Maintenance strategy tool	Mobile maintenance	Preventive maintenance	ABC/XYZ analysis	Deep cleaning
	Spare parts mgmt. software	Autonomous maintenance	Data analysis	Maintenance Software	
	Standard Work	Root cause analysis	Kanban	OPL (One Point Lesson)	DMAIC
	Tag system	Visual Management	Poka Yoke	Risk analysis (e.g. FMEA)	

Pre-Requisites	<ul style="list-style-type: none"> <li>• 5S is in place in production.</li> <li>• Spare parts management assuring availability of parts and inventory on regular basis.</li> <li>• Stable maintenance organization; dedicated and qualified personnel.</li> <li>• Maintenance processes are defined and executed at regular pre-determined intervals.</li> <li>• Relevant maintenance history is recorded for future use.</li> </ul>
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# Good Practice Exchange @ALPLA

NEXT Good Practice

ALPLA Fußach

ALPLA INSIGHT

180



EXPORT/IMPORT ADMINISTRATION DATA CENTER GOOD PRACTICE FAQ

Filter: categories profit centers favorites

Search bar

41 Good Practices found. 7 Good Practices are not older than a month.



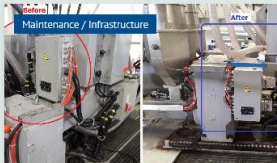
15<sup>th</sup> of June 2020

### Fixed downs pipes for PET feed to dryers and mixers.

HSE, Product Quality, ergonomy, 3S assessment, 7 wastes

Installation of a fixed piping system to connect material from portable hoppers in the production area to the dryers and mixers on the upper floor, to facilitate work and reduce food safety risks.

0 0



11<sup>th</sup> of June 2020

### Optimize SEB extruder's electrical panel position

Improvement, machine efficiency, preventive maintenance

Move the SEB extruder's electrical panel to a more suitable location to avoid damage. The material feeding hose sometimes collided with the current extruder's power plug. Maintenance team will have more work space

0 0



3<sup>rd</sup> of June 2020

### Downstream equipment performance light indicator

process, production efficiency, unplanned downtime, visualization

Visual management with a light signal in order to see in the downstream equipment where is exactly the problem (Grinder machine, Tschritter, Cam for visual control, TVP ...).

0 0



1<sup>st</sup> of June 2020

### Welding Components Organization

preventive maintenance, planning, improvement project

Due to the high time for preparing the components of the welding machine, due to the fact that each item is stored in a different location, a mobile cabinet was created, allowing the organization of all items in one

0 0



What is a Good Practice

## OUR RANKING

Western Europe - 23 plants

1	Les Franqueses	1163
2	Requena	904
3	Noblejas	804
4	Montornes	521
5	Bridgwater	447
6	Aston Clinton	443
7	Droitwich	432
8	Fußach	180
9	Tortona	164
10	Golborne 2	80
11	Rambouillet	75



# Maintenance Strategy

## Maintenance Strategy

Continuously improving

Risk and cost optimized strategy. Structured weak point optimization.

Systematic PM, condition based maintenance

Irregular preventive maintenance (PM)

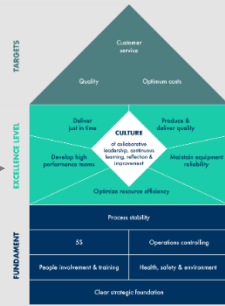
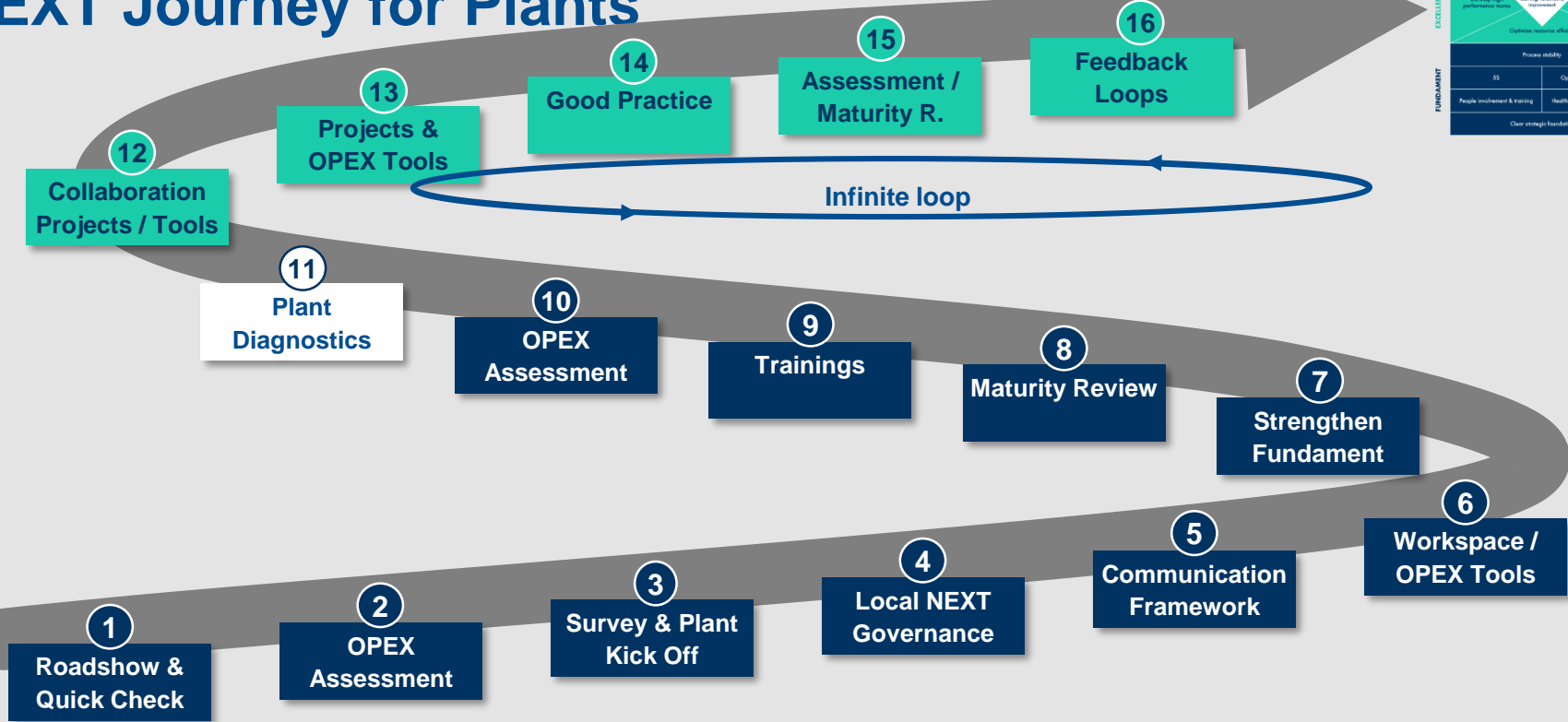
Breakdown maintenance

## Recommendations

- Improvement of current and new equipment according to RAMS (reliability, availability, maintainability, safety)
  - A lot of activities on all levels, less coordination → develop standard, information exchange ...
- Risk and cost based maintenance strategy optimization for equipment
  - Develop approach with pilot plants
  - Centralized (corporate) optimization of maintenance strategy for standard equipment → define scenarios
  - Decentralized (local) optimization of maintenance strategy for special equipment
  - Integrate new maintenance plans in AM software

# NEXT Journey for Plants

Start





# Highlights of NEXT

## OPEX Assessment & Instant Feedback

**OPEX ASSESSMENT**

**Louveira**  
15.03.2018  
Assessor: Rogério Mariano

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**1\_OVERVIEW**

Thank you for completing the OPEX Assessment and taking the first step with us on our journey towards Operational Excellence. The following summary provides you with an overview of your results and should serve as a guideline to help you identify potential areas of improvements.

OPEX Overall score: ★★★★★

Corporate OPEX Team - [opex@alpla.com](mailto:opex@alpla.com)  
Page 1 of 7

ALPLA

**Results**

**3\_RESULTS**

The following section depicts the current state of your plant and your progress on the path towards Operational Excellence. It contextualizes your results with other ALPLA plants that have already conducted the OPEX Assessment and contrasts your current results against your last result.

**3.1\_DETAILED RESULTS - OPEX ELEMENTS**

The spider chart displays your current results in comparison to the previous results.

**3.2\_AVERAGE RESULTS - OPEX ELEMENTS**

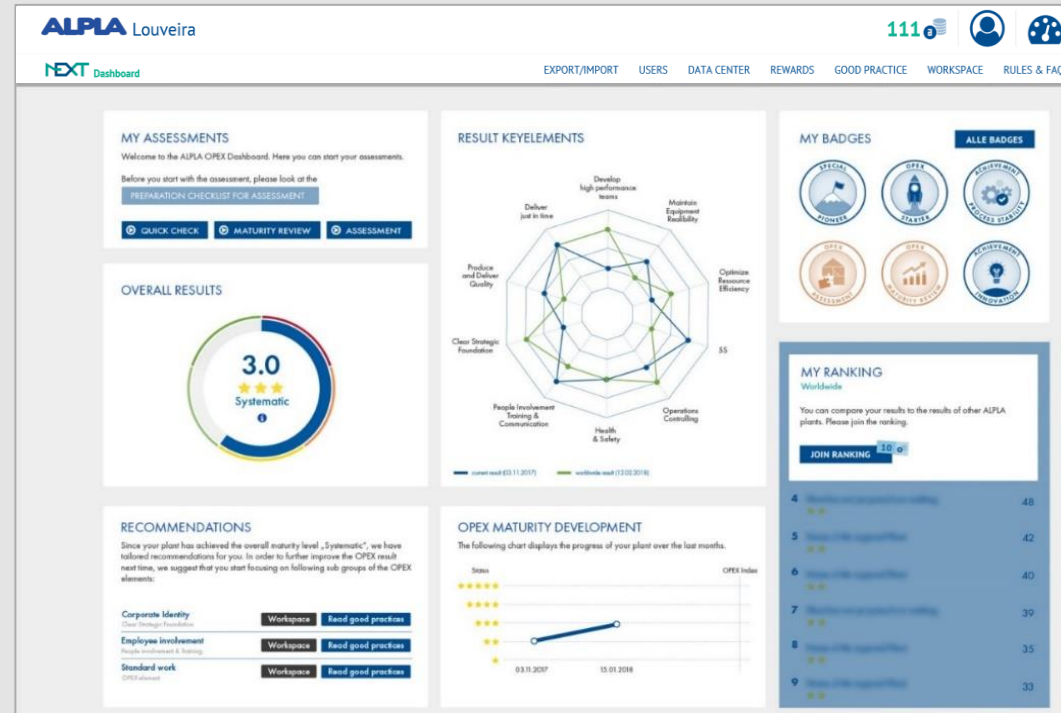
The spider chart displays your current results in comparison to the average results worldwide.

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Page 3 of 7

ALPLA

# Highlights of NEXT

## NEXT Dashboard & Gamification



# Highlights of NEXT

## Collaboration & People involvement

