

OPERATIONS MANAGEMENT TEAM:

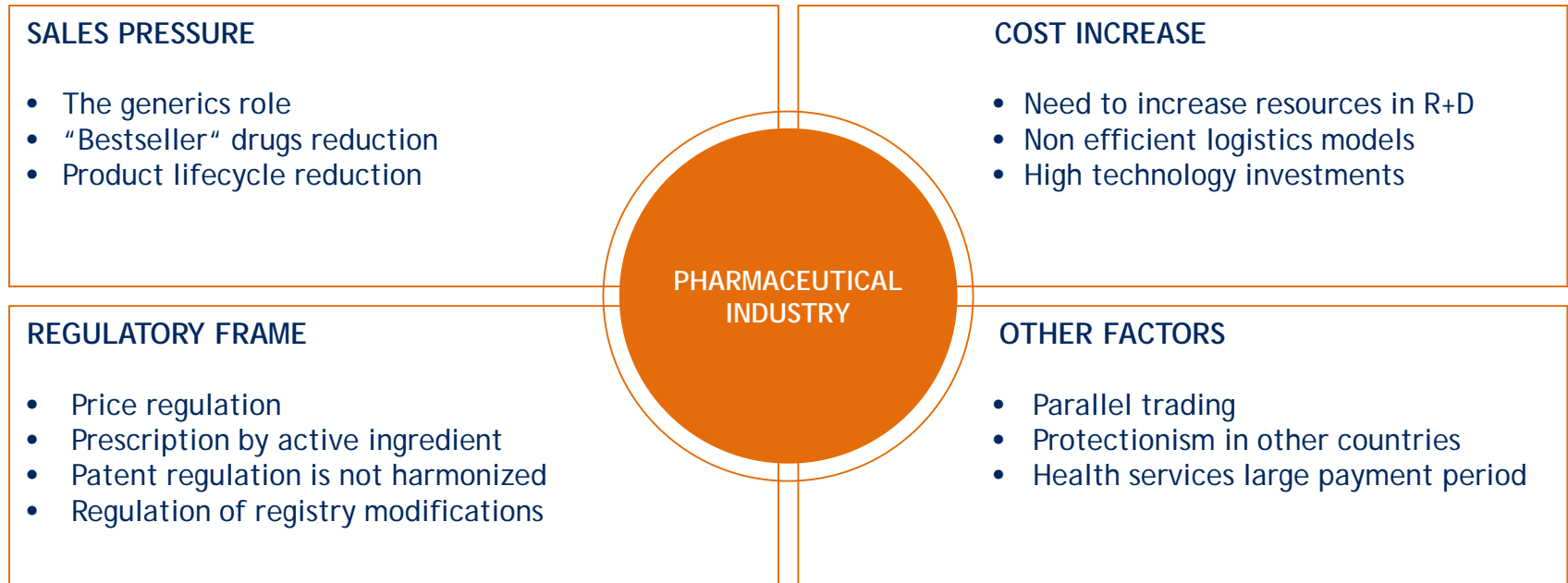
A SCIENTIFIC APPROACH TO PRACTICAL SOLUTIONS





NEW CHALLENGES IN THE PHARMA INDUSTRY

- The Pharmaceutical industry is under unprecedented pressure to deliver innovative health benefits at affordable costs



All these factors decrease margins and make pressure on pharma industry profitability

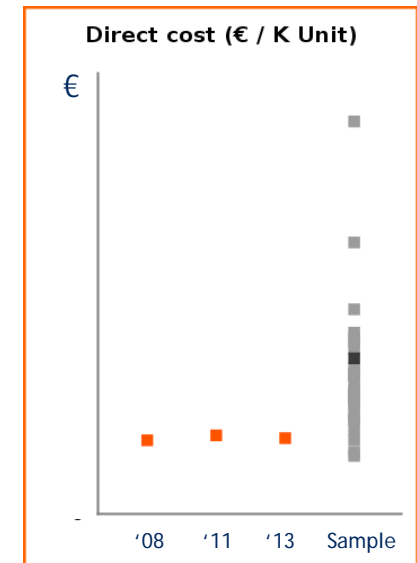
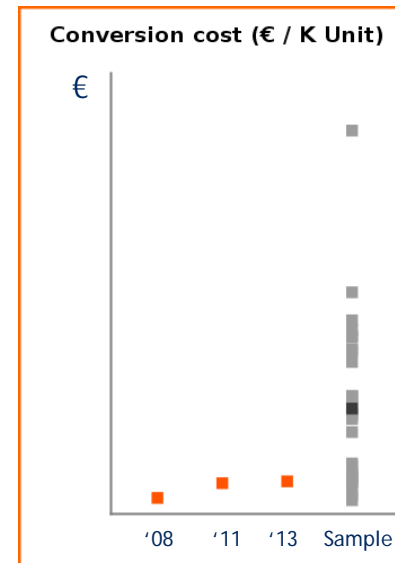


How to Face Issues

- **Operations Management** is challenged to maximize the strategic benefit it provides to the company at an acceptable level of cost
- As a key driver to delivering on this challenge, the industry has been adopting operational practices which should be understood as **Operational Excellence**
- The effectiveness of these approaches requires the use of practices, procedures, technics, tools, and relevant Key Performance Indicators (KPIs) across the entire organization

The Benchmark

- A key tool useful to this scope is the Benchmark, which pursues two objectives:
 - Aggregate a set of performance indicators in structured KPIs, in order to identify the business performance in all the Supply Chain areas
 - Provide the company's position with respect to the total of the sample for each indicator typology and in aggregate form for each KPI





PHARMA INDUSTRIAL EFFICIENCY BENCHMARK

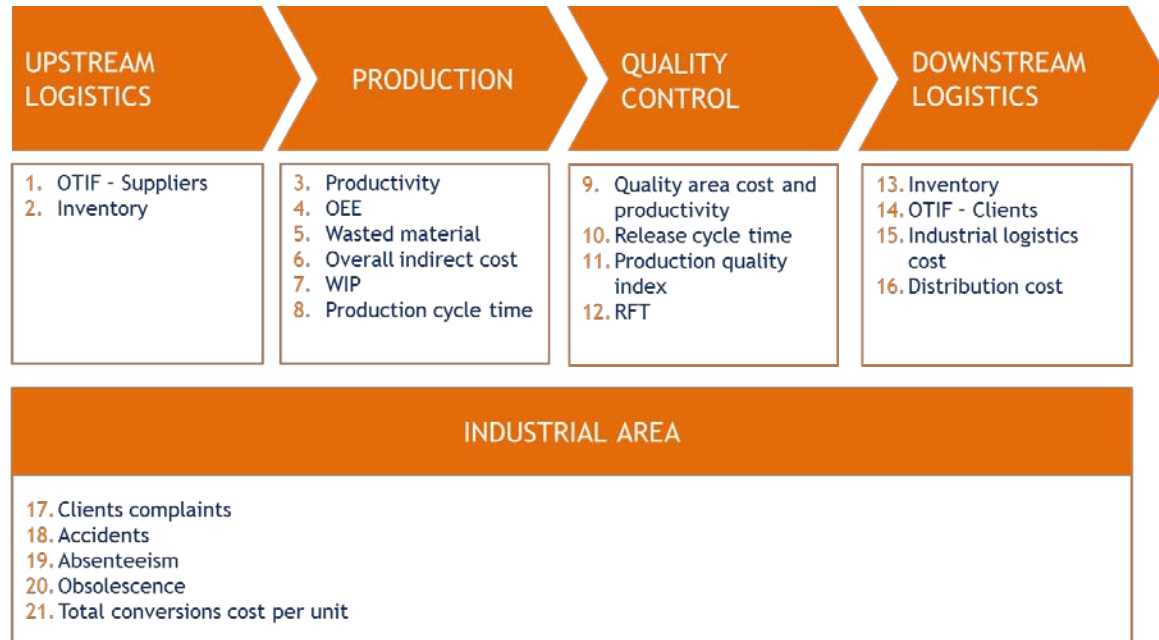
Origin and development



- Worked out in 2008 by the Spanish consulting company **MANAGEART** for pharmaceutical companies in Spain and Portugal in order to identify potential **improvement opportunities** of industrial efficiency
- Thanks to the benchmarking tool, each pharmaceutical plant could identify which areas need to be investigated in order to define the **best solutions** to attack the loss of efficiency and thus to **reduce costs**

What is it

- Dedicated **exclusively** to **pharmaceutical** companies
- Analysis focused on the **single plant**, rather than on the whole company
- Anonymized comparison with over **600 indicators** structured in **21 KPI**, scalable per size, **pharmaceutical forms**, etc.
- Participation of **more than 30** pharmaceutical plants among Spain, Portugal, Italy, Germany, Switzerland, and Austria





Segmentation

- One of the key success factors of the Benchmark is the capability to deep dive the information and to segment it in order to compare with the proper competitors

From general perspective to detail

- Direct Productivity (Units/hours)
 - Solids
 - Formulation
 - Tablets
 - Capsules
 - Granules
 - Packaging
 - Blisters
 - Bottles
 - Sachets

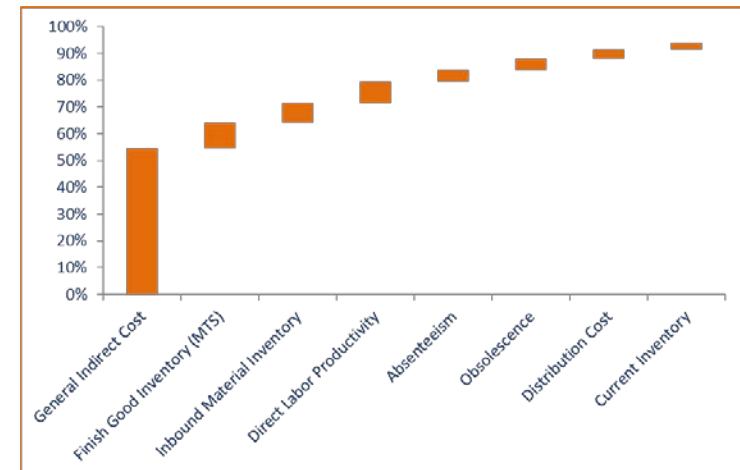
Level of segmentation

- By Company profile
 - Galenical forms
 - Equivalent units produced
 - Only generics manufacturers
 - FDA companies
- By similar complexity
 - Number of formats
 - Average order size
 - % of units delivered to Retail Channel

Target
identification
for the Company
and KPIs to be
measured

Benefits

- The tool provides an effective aid for the management of data collection and allows a detailed and reliable comparison among different companies, furthering the identification of improvement areas and accurate corrective actions, quantifiable in terms of potential savings

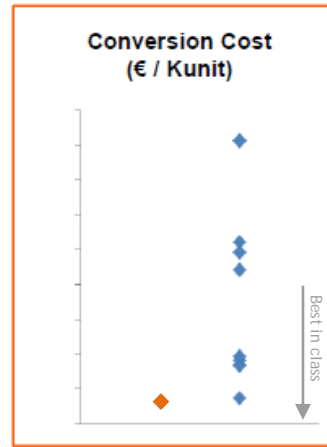




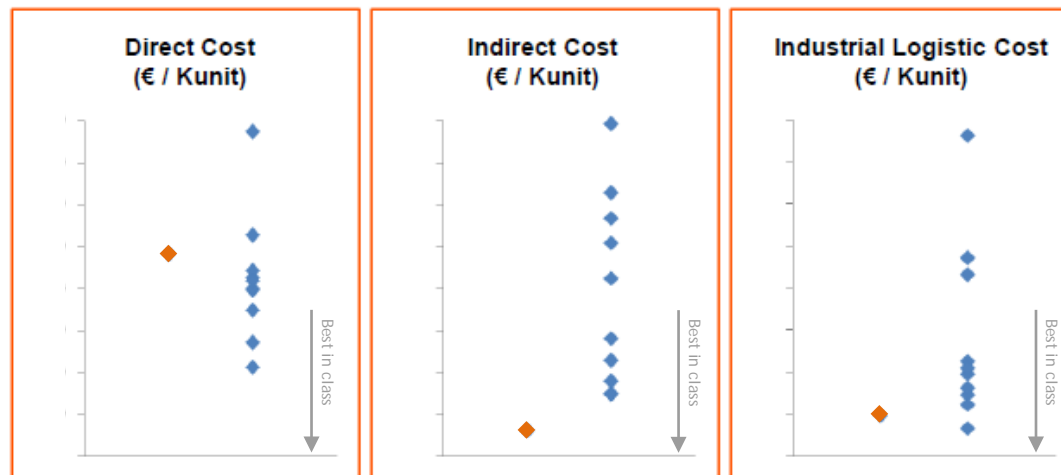
PHARMA INDUSTRIAL EFFICIENCY BENCHMARK: A SUCCESS CASE (1/2)

MANAGEART

- In 2010 a leader of the Spanish pharmaceutical market participated to the Benchmark and it turned out the «best in class» plant with respect to the conversion cost

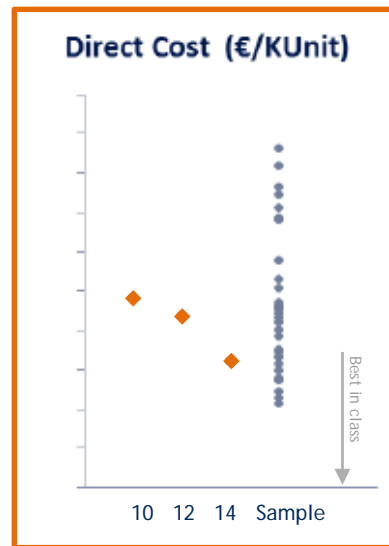


- Analyzing the different components of the conversion cost, it really turned out that the company was «best in class» in indirect and logistics costs, but it bears high direct costs. This drove the company to identify some improvement opportunities





- The company decided to invest in a big Operational Excellence project, specifically in Solid Packaging area, through SMED programs, formats standardization, OEE measurement, and reorganization of Packaging lines



- The investment payback was reached only with **10 months**, as well as a valid **performance measurement system**, the growth of operators skills from the viewpoint of Lean Manufacturing, and a drastic **reduction of direct costs**
- The company has repeated the Benchmark twice the following years, highlighting a constant decrease in direct costs, becoming one of the «**best in class**» plant also in this component
- This area for improvement would not be easily identified without such a tool able to going deep reaching this adequate **level of detail**

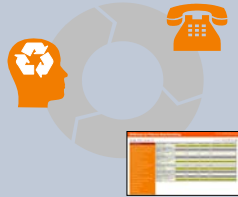


PHARMA INDUSTRIAL EFFICIENCY BENCHMARK: ORGANIZATION

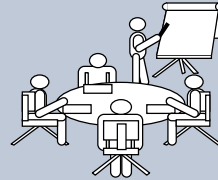
MANAGEART

PROJECT
MANAGEMENT

QUESTIONNAIRE
FULFILLMENT



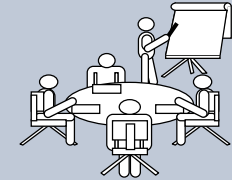
WORKSHOP FOR
DATA VALIDATION



QUESTIONNAIRE
COMPLETION



PRESENTATION OF
FINAL REPORT



INFORMATION
FLOW

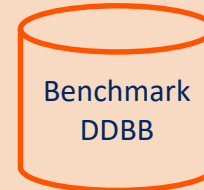
BENCHMARK GUIDE



WEB PLATFORM
QUESTIONNAIRE



SQL DATABASE
FEEDING

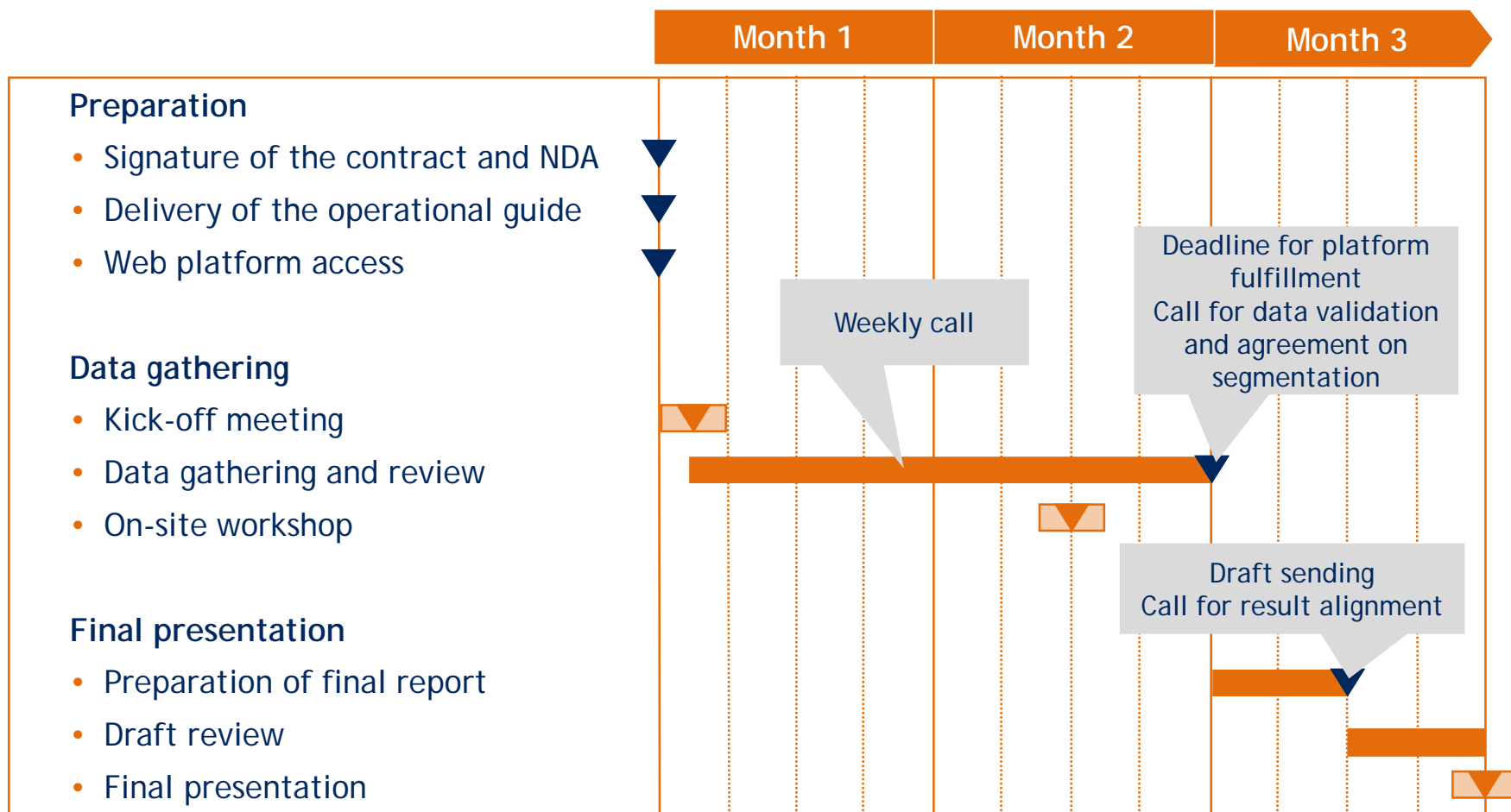


BUSINESS INTELLIGENCE
ANALYSIS



Goals

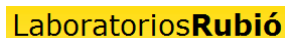
- Provide a substantial **analytical basis** to support **Continuous Improvement** activities
- Detect **improvement opportunities** for the plant, with an accurate measurement of the potential savings
- Ensure the **comparability of industrial activity** among different production plants
- Encourage the **standardization of Pharma industry indicators**





PHARMA INDUSTRIAL EFFICIENCY BENCHMARK: PARTICIPANTS

MANAGEART



REFERENCES



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