CERN@RI.Logistica
LEAN Culture Integration

SESSION 4: It's YOUR turn to MOVE: Sharing Best Practice

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19.05.2021
CERN at a Glance

- 23 member states, 8 associated member states
- ~1.15B CHF / year
- ~10'000 people on site
- 100 nationalities
- 653 buildings
- 57 km of tunnels
- 53km of roads
CERN Mission and Key Achievements

- Provide a unique range of particle accelerator facilities that enable research at the forefront of human knowledge.
- Perform world-class research in fundamental physics.
- Unite people from all over the world to push the frontiers of science and technology, for the benefit of all.

https://home.cern/
CERN Organization

Directorate
Director-General
Appointed by Council, usually for five years, the Director-General manages CERN. A directorate assists the Director-General, who proposes its members to Council. The Director-General reports directly to the Council, and can also propose any adjustment deemed necessary to meet the evolving needs of the research programme.

Directorate Members:
- Rachid Bello (Director for Finance and Human Resources)
- Mike Lamont (Director for Accelerators and Technology)
- Joachim Nijh (Director for Research and Computing)
- Charlotte Warakaulle (Director for International Relations)

Heads of departments
- Site and Civil Engineering
  - Engineering
  - Theoretical Physics
  - Accelerator Systems
  - Information Technology
- Technology
  - Beams
  - Experimental Physics
- Industry, Procurement and Knowledge Transfer
- Human Resources
- Finance and Administrative Processes

Structure

https://home.cern/about/who-we-are/our-governance
The Services & Supply Chain group [SCE-SSC] provides the CERN community with high standard campus experience and optimal industrial supply chain execution by offering the following rationalized, efficient, and transparent services:

- Catering
- Housing
- Mobility
- Cleaning & Waste
- Installation
- Installation
- Shipping
- Mail
- Goods reception
- Internal distribution
- Storage
- Standardisation
- Replenishment
- Raw materials
- Central stores
Material Flow

**Resources**

- ~15 FTEs CERN staff + 30 FTEs industrial support

  - Logistics and contract management
  - Shipping, Customs and Fiscal office
  - Replenishment
  - Standardisation & Referencing
  - Logistics service contract

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**Diagram Notes**

- 10k import files
- 75k receptions
- 68k/75k receptions
- 7k/75k receptions
- 93k picking lines
- 85k demand lines
- 160k distributions
- 1k movements
- 9k export files
- 5k outbound expeditions
- E-Catalogue

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**Additional Details**

- Long-term storage
- Shipping (import) and (export)
- Non EU -> FR and Non CH -> CH
- Logistic and contract management
Maximize **customer value** while **minimizing waste**. Based on 2 pillars:

- **Continuous improvement** through deployment of the methodology and tools (5S, standards, problem resolution, value stream mapping…)

- Engage front-line workers (**Gemba**) 

=> Target: Evolution of culture!
LEAN Implementation

2017
- Training (foundation + LEAN manager)
- KPI redefinition and visualisation
- Parcel Tracking Tool

2018
- Black Belt (CERN + contractor)
- Logistics contract per activity with bonus/malus on service rate KPIs

2019
- Workshops (5S, flux, office)
- Standards and audits
- Problem analysis and solving tools, PDCA

2020
- Short Interval Management (level 1, 2 and 3)
- New technical specification

SCE
Site and Civil Engineering
LEAN Methodology – 5S Workshops

Before

After
LEAN Methodology – Standards & Audits
LEAN Methodology – Service Rate & Feedback

- Positive trend despite COVID first confinement
- Stabilization of service rate between 85% and 90%
- 2018 pick of positive feedback
- Decrease of negative feedback in % over time