



iMEL – Integrated MES Solution for Manufacturing

Philip Morris International Management SA

Deploying MES to Support Production of Philip Morris International Reduced Risk Products

“Andea has proven to be a highly competent and reliable partner in delivering our iMEL solution using the Apriso FlexNet platform. Their deep MES knowledge combined with industry experience has benefited our project greatly.”

Mario Harz
IS Project Manager at Philip Morris
Products SA

Executive Summary

For more than a decade, Philip Morris International has dedicated significant resources to the development and scientific assessment of non-combustible alternatives to cigarettes. PMI refers to these products as Reduced Risk Products (RRPs) which have the potential to reduce individual risk and population harm in comparison to continued smoking cigarettes.

PMI is developing different platforms of RRPs, and several products have already been commercialized in 20+ markets worldwide.

In order to meet future demand, PMI is extending the production capacity in 2 plants near Bologna, Italy and enabling RRP's manufacturing in other factories.

Challenges

To ensure its manufacturing quality standards, PMI decided to deploy an integrated solution to support the production of RRP's. This integrated solution includes ERP, MES, Automation, Logistic and other third party systems and covers the end-to-end manufacturing processes.

PMI named this solution iMEL – integrated Manufacturing Execution Layer – and it is based on the Apriso FlexNet platform.

The aggressive timelines to extend the production capacity and the complexity of system integration were the key challenges that PMI had to address.

PMI needed an experienced Apriso FlexNet MES services provider that would help them in delivering the desired integrated solution and meeting the challenging deadlines.

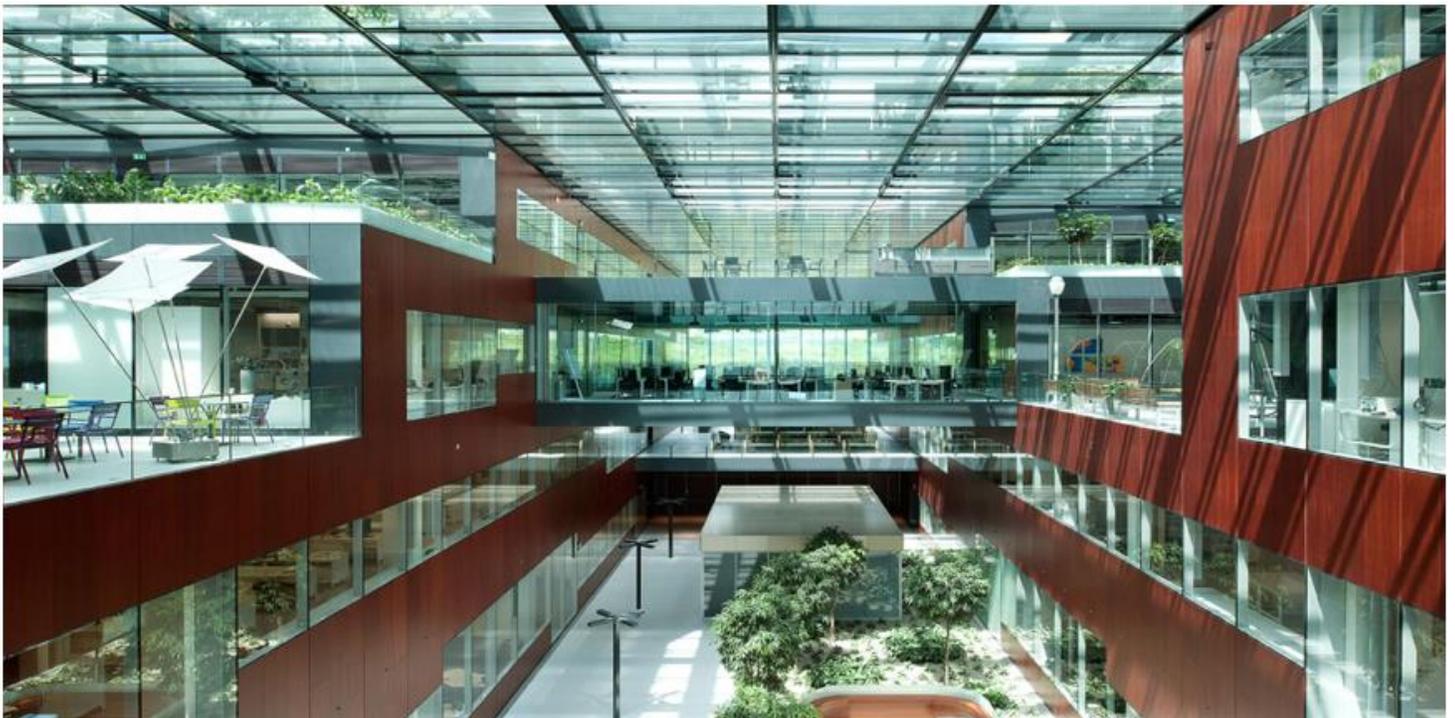
How Andea Helped

PMI chose Andea Solutions as their strategic partner for the implementation of iMEL solution. Andea's area of responsibility includes:

- Supporting the phase of user requirements gathering
- Delivering functional and technical designs
- Customizing the Apriso FlexNet platform
- Collaborating with plant equipment vendors to design machine integration layer
- Performing formal Functional Tests and User Acceptance Tests
- Providing maintenance of the iMEL system and implementing enhancements to the solution

Results and Future Plans

Today, iMEL is implemented and operational in 2 plants in Italy, and there are plans to deploy the solution in additional manufacturing facilities to sustain the market's demand. The solution will also be enhanced to gain efficiency and productivity. Andea will continue to be a strategic partner for PMI in this journey.



PMI's Research & Development facility in Neuchatel, Switzerland