

Increase robustness, agility and safety in your operations and in your labs

Pharma industry faces very important evolutions: increasing elderly population, highly individualized medicine, more and more global competition, rapid growth in the generic market, extremely complex and costly quality and safety controls, severe cuts in government aids, binding and costly regulations, ...



To meet all these challenges, it is essential to have an **robust and agile production system**.

Today, plants and labs can benefit from **mature industry 4.0 techniques** to ensure the robustness of their methods, to increase machine utilization without altering cost or quality of products or to follow more easily the fluctuations of the

demand. Here are some examples of these techniques:



Operational excellence, lean & agile behaviors

Predictive maintenance, less shutdowns, pull process flows, alignment on performance goals, standardized and robust processes, safe behaviors, continuous improvement culture, process optimisation, 5S, TPM, QRM, ...



Smart sensors and actuators & automation

Collaborative and self-learning robots, tracking with RFID tags, sensors connected in WIFI, automated visual inspection, laser picking, automated guided vehicles, alerts on tablets or phones, connected tools, ...



Vertical & horizontal integration of industrial systems

Supply chain integrated with suppliers and customers, interconnection of machines MES/WMS, of laboratories LIMS and resources management systems, execution systems integrated with the performance, ...



Knowledge management & 3D design and printing

Computer aided design and revamping of production lines, computer aided modeling and optimization of internal logistics, 3D printing for maintenance, computer aided knowledge management, ...



Data analytics & predictive maintenance

Big data analysis for quality improvement with predictive model, scheduling improvement or predictive maintenance, monitoring of signals to detect defaults, ...

	Rapid scan & diagnostic	Focused pilot project support	Long-standing transformation
Objective	Explore and identify potential financial opportunities	Define the roadmap and prove financial impacts	Drive successful & sustainable implementations
Activity	<ul style="list-style-type: none"> Visit and analyse facilities and offices Consolidate initiatives and best practices Communicate and align with key stakeholders 	<ul style="list-style-type: none"> Structure, launch and monitor rapid prototypes Assess feasibility and effort of implementations Mobilize and align on vision & governance 	<ul style="list-style-type: none"> Ensure day to day delivery of the project team Follow-up medium and long term planning Report to steering committee
Tool	<ul style="list-style-type: none"> Benchmarks, interview guides and workshops 	<ul style="list-style-type: none"> Ad Hoc tools and tech-niques, working groups 	<ul style="list-style-type: none"> Vision, agile briefing, detail-led planning, focus reporting
Key success factor	<ul style="list-style-type: none"> Availability of key stakeholders 	<ul style="list-style-type: none"> Right scope, agile and experienced project team 	<ul style="list-style-type: none"> Strong sponsorship and employee mobilization
Deliverable	<ul style="list-style-type: none"> Maturity assessment against benchmarks Consolidation of as-is initiatives List of pilot projects to be launched 	<ul style="list-style-type: none"> Roadmap, business cases, feasibility assessment Lessons learned from pilot projects and scale-up potential Proposed governance and organisation 	<ul style="list-style-type: none"> Project team mobilization and follow-up Planning and performance monitoring against KPI Sterco reporting and project adjustments

Do you want **robust project management** including **structured change management** and strong governance?

Pharmaoperation could help you to define your **strategy factory 4.0** and provide you the project managers who could effectively align the management, plan a roadmap and mobilize all employees on the implementation.

Do you need **proven, flexible solutions** that allow you to **gain performance on the short, medium and long term**?

We can help you design your industrial system by integrating Lean and Digital solutions while respecting your values and mission.



Do you need to **engage the entire society in a culture of continuous improvement**? With our strong expertise in operational excellence in the pharmaceutical industry, we will ensure a sustainable implementation and short-term results.

Industry 4.0

pharmaoperation has more than 20 years experience in Lean & Automation

We serve production, maintenance and engineering managers to

- build a vision and a strategic roadmap
- manage projects and manage change
- set up automation technologies and operational excellence methodologies

We accelerate your projects with the help of solid experts and agile solutions

To know more about us, please consult www.pharmaoperation.com or www.industryoperation.com