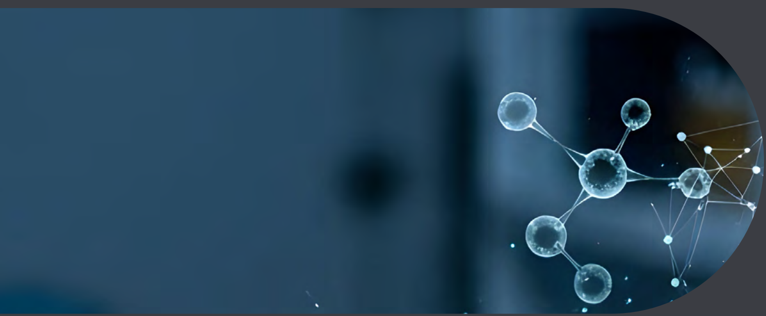
Advancing Performance
from Lab to Patient

Raising the bar for Quality, Speed & Productivity in the Life Sciences Industry with Lean Lab Excellence



www.efeso.com

EFESO
Management Consultants
Real Results, Together

EFESO Management Consultants is the leading international management consultancy with a focus on operations and performance improvement.

We help global corporations, medium-sized companies and private equity investors to contribute to a future-proof world and to secure their productivity and efficiency in the long term – and ensure success in more than 1,500 projects per year in over 75 countries.

Together with our Life Sciences team, industry leaders transform performance, meet and exceed regulations, synthesize digital with operations, and accelerate innovation cycles. This applies in particular to the market sectors Pharma, Cosmetics and MedTech.

BSM EFESO
Real Lean Lab Transformation

Drawing on a unique track record of hundreds of successful laboratory projects worldwide over the past 20 years, BSM EFESO is the specialist team for laboratories and the pharmaceutical industry within EFESO Management Consultants.

We pioneered lab-specific methodologies and solutions that deliver substantial improvements in quality, speed & productivity.

This is what distinguishes us in the market:

- **20% - 50%** productivity improvements in labs
- **+50%** faster product launches
- **> 30%** R&D capacity boost
- **50% - 90%** lead-times reduction
- **> 90%** OTIF (On-Time In-Full) increase
- **30%** productivity boost across **40+** labs

Achieve *Operational Excellence* with us:

Visit website

Schedule a meeting

Connect via email

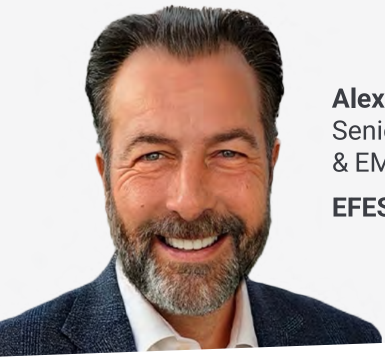
Connect via LinkedIn

Shaping the *Future of Health* with EFESO

Sustaining Today's Performance while Building the Capabilities for Tomorrow: Our Approach for the Life Sciences Industry

Operate *Ahead of Change*

Priorities for Action for Industry Leaders



Alexander Fink,
Senior Partner
& EMEA Life Sciences Lead
EFESO Management Consultants

Dr. Andrew Harte,
Expert Partner
& Managing Director Lean Lab
EFESO Management Consultants

The global Life Sciences market is in a decisive phase. The need for better, more targeted and more accessible health solutions continues to grow, while scientific progress is opening new opportunities in pharmaceuticals, biopharma, medtech, diagnostics and consumer health. At the same time, leaders face a more complex operating environment: regulation is evolving, supply chains are being regionalized, cost pressure remains high, portfolios are becoming more complex, and new technologies are changing how work is designed and executed, especially AI. These challenges are real, but they should not define the agenda. The more important question is how Life Sciences companies can use this moment to build the capabilities, operating models and performance systems required for the next decade.

> *For Life Sciences leaders, the future will not be won by strategy alone. It will be won by the ability to translate ambition into resilient, scalable and high-performing operations.*

This makes operations a strategic priority for industry leaders worldwide. In the past, operations were often viewed primarily through the lens of efficiency, cost and compliance. Today, they are becoming a platform for growth, innovation and competitive advantage. The ability to accelerate product launches, scale new modalities, ensure quality, increase productivity, secure supply reliability and create transparency across end-to-end value chains is no longer a functional improvement topic. It is a leadership task more than ever before.

The priorities for action are therefore clear: Life Sciences executives need to strengthen operational resilience without locking their organizations into rigid structures. They need to streamline complexity in laboratories, quality functions, manufacturing networks, supply chains, R&D and regulatory processes. They need to connect lean principles with digital tools, data-driven decision-making and people-centered transformation. They need to turn capacity management, flow, standard work, visual management and cross-functional collaboration into everyday management practices. And they need to ensure that transformation reaches the places where value is created.

The next generation of Life Sciences winners will be those that make operations faster, more transparent, more reliable and more adaptable—while maintaining the quality and compliance standards on which the industry is built.

Life Science Expertise

For four decades, EFESO has worked with Life Sciences executives to transform operational complexity into significant, measurable outcomes.

We implement lean and digital transformation directly within your labs, QA, and manufacturing divisions — extending beyond the boardroom to where impact happens.

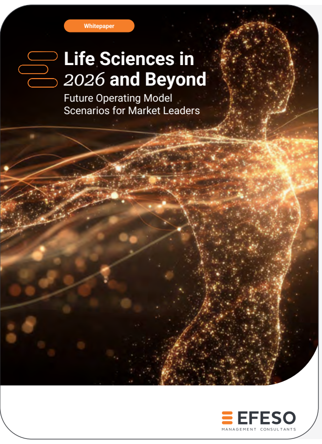
Visit website

Lean Lab Expertise

Over more than 20 years, EFESO has transformed 500+ laboratories worldwide via our dedicated Lean Laboratory Management practice.

We have an unrivaled track record in the achievement of significant and sustained improvements in lab performance and have carried out projects and/or multi-site programs with 17 of the Top 20 pharma, biotech and cell & gene therapy companies.

Visit website



EFESO Whitepaper Life Sciences in 2026 and Beyond

The Life Sciences sector enters 2026 at an inflection point. Demand remains structurally strong, driven by ageing populations, chronic disease growth and continued scientific innovation. Yet operating conditions have become materially harder.

Now it's time to evolve and transform. Find out in our latest industry whitepaper which key areas of action decision-makers at market-leading Life Sciences companies are prioritizing.

Read the industry paper

Paul Hartmann AG

In the further development of our PLM process, we have come to appreciate the consultants' working methods and competence. They are characterized by the introduction of best practices, e.g. on quality measures, as well as the equally successful integration of our employees at all hierarchical levels in the analysis and conceptual work.

When it comes to implementation, we value flexibility and responsiveness – without losing sight of the goal. For these reasons, we now work in partnership with the EFESO consultants in several areas.

Michael Zaiser, Vice President Corporate Quality

KOB GmbH

Together with EFESO, we examined our intralogistics concepts and defined potentials for further strategic development. Through the analysis, we were able to reveal important findings for the further course of the project. Relevant technologies and trends were then evaluated for our specific use case, and implementation options were developed.

The EFESO consultants distinguished themselves through their high methodical competence and goal-oriented work. The cooperation and the result were excellent at all times.

Dr. Achim Hehl, Managing Director

OLYMPUS SURGICAL TECHNOLOGIES EUROPE

EFESO's consultants have been supporting the development of Olympus OSTE R&D's processes and organization for several years. Among other things, the projects involved establishing lean development, introducing engineering floor management, and developing design-to-X and leadership skills. We appreciate the highly competent, challenging and at the same time mediating manner. Consistently, we enjoy the close collaboration on-site and remotely!

Dr. Mathias Kraas, Director Research & Development

Fresenius Medical Care Nephrologica Deutschland GmbH / Renal Pharma

In collaborating with the committed EFESO consultants, it quickly became apparent that we'd found the right partner. Together, we were able to achieve the set objectives – in spite of a tight schedule.

Dr. Wolfgang Hofmann, former Managing Director

Read more testimonials

Operations as the Key to *Efficiency and Profitability*

Increase Operational Excellence and Activate Efficiency Potentials with EFESO

With EFESO, Life Sciences companies are optimizing their operational processes and structures. They thus ensure that transformation does not become a risk, but a growth driver – and profitability remains secured even in volatile times. In fact, the operating segments provide strong levers for capturing opportunities and creating viable business models for future markets.

For Life Sciences decision-makers, this operational expertise creates value where strategic ambition meets execution reality: in laboratories, quality functions, manufacturing networks, supply chains and cross-functional operating models. EFESO combines deep industry understanding with proven lean, digital and performance-improvement methods to help leaders translate complex market, regulatory and innovation requirements into measurable operational progress.

This is especially relevant in an environment where compliance pressure, portfolio complexity, cost discipline and resilience expectations increasingly interact with one another. By improving flow, transparency, capacity management and decision-making across critical operations, EFESO enables Life Sciences organizations to protect value, accelerate time-to-market, strengthen supply reliability and build the capabilities required for sustainable growth.

Starting at the core of value creation

In this context, laboratories play a pivotal role as the starting point of innovation and value creation. Because regulatory requirements influence this stage from the outset, improvements in control, documentation, throughput and process stability have an especially strong impact on quality, speed and overall performance.

Laboratories are highly specialized environments, and their improvement potential is often less visible than in manufacturing. Yet the industry increasingly recognizes that quality functions contain significant untapped opportunities for improvement in lean performance, particularly in how work is planned, balanced, executed and continuously optimized.

Many lab excellence initiatives fail to address the most critical underlying issue: short-term volatility in the system. This volatility is difficult to diagnose and even harder to resolve. Our “Real Lean” approach tackles it directly, using proven methods that help Life Sciences leaders to increase speed, productivity and reliability while creating sustainable ways of working for laboratory teams.

On the following pages, you will discover how companies in Pharma, Cosmetics and MedTech work with EFESO to improve operational performance and secure long-term profitability. With a strong focus on measurable results, we see R&D as the starting point of successful value creation in these markets.

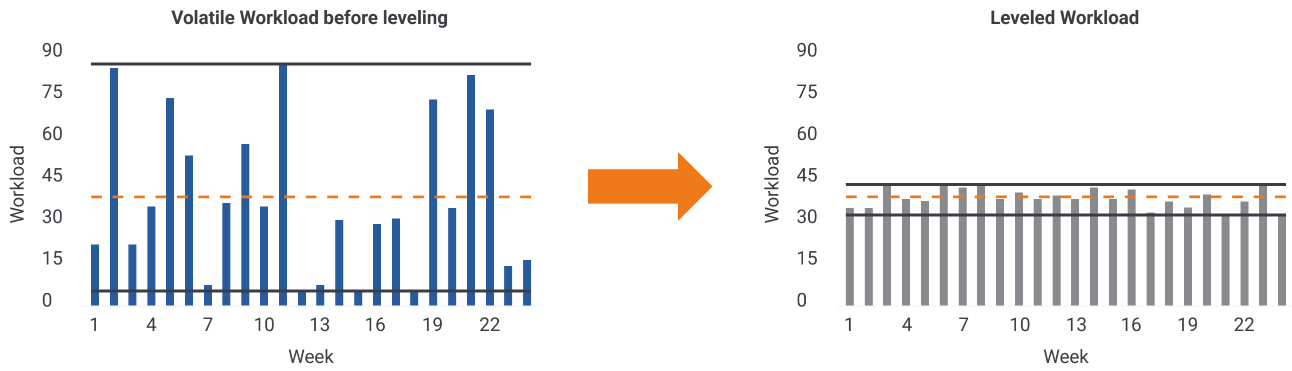
Advancing Performance from *Lab to Patient*

EFESO Impact for Lean Lab Excellence

EFESO provides deep knowledge and practical application of Lean and Operational Excellence concepts that provide significant value in a short period of time. Based on this expertise, we developed an innovative and highly effective approach to optimize the procedures and performance of laboratories in the Life Sciences industry.

We work with your lab teams to develop processes that effectively level short interval workloads, minimize throughput times and support an appropriate level of standardization of tasks. Your laboratory then becomes what your business needs, a reliable engine delivering consistent, quality results while your people thrive in sustainable roles.

Volatile vs. Leveled Workload



Minimum	5	30
Maximum	80	40
Average	35.6	35.5
Coefficient of Volatility	0.72	0.09

At the core of our Lean Lab solutions are leveling, flow and standard work. This is undoubtedly where the biggest opportunity for lean gains in any QC laboratory lies. Levelling and flow are intrinsically linked – generally you cannot flow unless you level and you cannot level unless you flow. Value in the system is moved or flowed in a structured and optimized manner, resulting in marked increases in customer service. When paired with standard work, this creates balanced and productive roles for all analysts.

One final essential element is clear, concise and informative visual management to facilitate the planning and execution of daily workloads and to monitor performance trends over longer periods to drive continuous improvement activities. Together with your teams, we drive and secure Lean Lab Excellence across three dimensions, outlined in the following pages. When these elements are brought together, they consistently achieve a minimum improvement of 20% in lab performance.

Results from Lean Lab Projects

KPI / Metric	Focus	Before	After	% Improvement
Lab Lead Time	Speed	15 days	5 days	67%
Testing Right First Time (RTF)	Quality	49%	90%	84%
Batch Approval to Target Time	Speed	43%	98%	128%
Earned Hours (measure to productivity)	Productivity	3.43 Hrs	5.29 Hrs	52%
Samples per Analyst	Productivity	17	37	118%

Lean in Quality Assurance (QA)

Lean initiatives are often focused on manufacturing and laboratory operations, while Quality Assurance functions remain an underleveraged source of efficiency gains. Yet QA plays a critical role in enabling faster, more reliable and more compliant operations across the entire value chain.

Challenges

- Large and overly complex batch records; records that inadvertently promote errors rather than actively avoid them.
- Ineffective interim reviews / excessive reviews; absence of visual management systems.
- Queues, backlogs and long lead times.
- Lack of performance management systems and continuous improvement in culture and mindset.
- Unwieldy, slow and punitive correction processes with poor root cause analysis.
- Lots of non-value-added activity with respect to open investigations.

Our Approach

A QA improvement project typically focuses on two core levers: the physical record itself and the QA processes built around it. To reduce errors and improve Right First Time (RFT) performance, batch records must be redesigned to be clearer, more robust and easier to execute correctly. At the same time, a fast, proactive correction process supported by rigorous root cause analysis is essential for improving quality and preventing recurring deviations.

To reduce lead times, record review, disposition and investigation management need to be addressed end-to-end. Real-time review is increasingly regarded as best practice, as it enables issues to be identified and resolved earlier in the process. In addition, removing product ownership or product dedication helps level-load QA resources, reduce bottlenecks and improve overall flow across the organization.

Lean in Research & Development

Because work in R&D labs is usually less routine, implementing some of the classic operational excellence disciplines can be more challenging. However, with the right degree of ingenuity and adaptation, core lean principles can be applied very effectively – often delivering even better results than in QC labs because of the significant untapped improvement potential.

Challenges

- Project based workload dependent on project phases leading to highly volatile workloads.
- Siloed / dedicated project resources; long lead times, often ill-defined.
- Changing / competing priorities leading to shelving / pausing of projects.
- Paucity of targets and performance management (KPIs).
- Poor or no visibility on overall workload / understanding of capacity / resource management.
- Lack of standardization for process and reporting; limited time available for true innovation.

Our Approach

Optimizing the underlying processes that shape how R&D laboratories operate can deliver substantial benefits. Standardized approaches to project work, combined with effective interim milestone management, improve reproducibility, efficiency and execution speed. Simple, focused visual management further increases workload transparency, supports balanced scientist allocation and strengthens knowledge transfer across teams.

TÜV SÜD Product Service GmbH

Together, we undertook a strategically important project to redesign the way services are provided in our laboratories.

EFESO consultants understand how to structure processes and make them efficient, and they quickly fit in with the team. Particularly worthy of mention is the way knowledge gained from the manufacturing industry was successfully applied to the processes of a services company.

Joachim Birnthaler, CEO

Lean in Regulatory Affairs (RA)

The opportunity to apply lean principles in Regulatory Affairs is not always immediately apparent. RA activities are often project-based, shaped by variable and unpredictable workloads and timelines. Furthermore, they involve tasks that differ significantly in complexity and require very senior people to progress them.

Challenges

- Dedication of resources by product, task, therapeutic area, or region resulting in short interval volatility and in-balance in individual's workloads.
- Poor, group level, visibility of current and future activities and workloads.
- Lack of clear process step ownership or role definition.
- Constant level of "firefighting" to get the current "most important" submission / filing completed resulting in continual prioritization and re-prioritization of workloads.
- Inefficient use of resources.
- Variation in process from location to location and TA to TA.
- Delays throughout the process lead to a constant level of urgent requests.

Our Approach

Developing an effective lean solution for Regulatory Affairs starts with defining the end-to-end process and establishing clear roles and responsibilities that can be applied consistently across therapeutic areas and regions.

Significant gains can be achieved through mixed workstream leveling and, where possible, by reducing dedicated resource allocation. A standardized approach that integrates triage, content development and review cycles for each task creates greater consistency across all TAs and regions. Finally, virtual visual management supports these solutions by improving transparency, coordination and prioritization across geographically dispersed RA teams.

Industry Best Practices:
EFESO Life Sciences Case Studies

The perfect operations day as a benchmark

Taking Operational Excellence to a new level is the ambition of a leading chemical and pharmaceutical group. Together with EFESO, the production of pharmaceuticals is optimized in a pilot project. At the same time, a Leadership Excellence program with elements such as a workshop on the "Perfect Day" enables managers to anchor OPEX in the corporate culture beyond the production line.

Read Case Study

Recipe for success for the industry 4.0 transformation

To expand into new markets, a manufacturer of pharmaceutical raw materials aims to make its organization more scalable and strengthen its resilience. With the help of Industry 4.0 technologies, existing customer relationships are to be strengthened and new ones closed. EFESO acts as a sparring partner who brings new impulses and perspectives to a company that already has a high level of performance.

Read Case Study

Re-start for production networks

A market leader in the life science and chemical sectors has recognized that current market developments are jeopardizing its ROCE targets. Together with EFESO, the company is reviewing the industrial footprint of its global production network and introducing its own Business Operations Strategy (BOS) methodology.

Read Case Study

Portfolio compass for future security

To invest resources in strategic and future-oriented products, a medical technology manufacturer is realigning its product portfolio. EFESO develops a suitable portfolio compass with the company. Agile co-creation is combined with a level model of the product portfolio to improve market positioning and increase customer attractiveness.

Read Case Study

We deliver *measurable productivity impact*

Additional results from EFESO projects

Customers market	Project Focus	Results
Pharma	Real Lean Implementation in Quality Control (QC) and Quality Assurance (QA)	• Reduction in QC lead time from 13.4 to 4.7 days. • Alignment of the QA timeline to the QC timeline i.e. disposition ready to complete as soon as the lab results are finalized. • Fixed repeatable analyst requirement. • A culture and mindset of continuous improvement is growing within the laboratories.
Pharma	Lean Lab Implementation	• Productivity improved, incl. 2 years +33% production across product portfolio. • +19% Quality Control, +5% Analytical Development. • Visual management: daily workload managed with whiteboards; KPIs to foster lab process ownership, monitor new operation systems and boost CI.
Pharma	QC Lab Implementation	• 46% reduction in average lead-times. • Increase in the % of batches released on time from 37% to 91%. • Absorbed an 11% increase in batch volumes with zero increase in Lab resources.
Pharma & MedTech	Industry 4.0 Assessment with Focus areas smart Material Flow Automation, predictive Maintenance, digital Shop Floor Management	• Identification of high-impact smart factory initiatives: more than 50 projects were launched. • Conducted business case calculations, including project prioritization and cost-benefit analysis. • Detailed implementation roadmap for Industry 4.0 projects in three waves, including work packages, resources, and budget.

Industry Expertise:
Contact

Alexander Fink

Senior Partner &
EMEA Life Sciences Lead

alexander.fink@efeso.com

Connect

Dr. Andrew Harte

Expert Partner &
Managing Director Lean Lab

andrew.harte@efeso.com

Connect

Thomas Reynolds
Expert Partner

Giovanni Tomaini
Partner

Sylvère Ode
Partner

Stefano Erba
Partner

Ralph Lodder
Partner

Erik Diks
Partner

Gernot Schaefer
Partner

Jamie Fowler
Principal

Julien Vital
Expert Director

Adrian Fegan
Senior Manager

Real Results, Together

EFESO Management Consultants is a global leader in operations strategy and performance improvement. We work closely with clients across a broad range of industries to deliver real results tailored to their unique needs.

Our end-to-end services integrate industrial AI, digital solutions, sustainability, and people development, transactions and turnaround, R&D and product profitability, cost and value engineering manufacturing, procurement, and supply chain. We drive transformation through 1,500+ projects annually in over 75 countries.

Powered by deep industry knowledge and a commitment to lasting impact, EFESO works closely with global brands, mid-sized companies, and private equity to build resilience and future-ready operations.

www.efeso.com

Visit website

EFESO
MANAGEMENT CONSULTANTS

Real Results, Together

www.efeso.com