University of St.Gallen

Institute of Technology Management

Operational Excellence (OPEX) in QC Labs

St.Gallen QCEx Meeting 3
Orientation Round (add-on) – OPEX
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OPEX Vision

What is the overarching vision or purpose of OPEX in your QC organization? How does it align with the lab's overall goals?

The overarching vision of Operational Excellence (OPEX) within a QC organization is to foster a culture of continuous improvement that drives efficiency, standardization, and sustainable profitability. OPEX enables cost reduction, shorter lead times, and higher quality, while supporting digital initiatives such as lab information management systems and broader quality objectives, including minimizing deviations and improving RFT performance.

By focusing on waste elimination and systematic process optimization, OPEX ensures that efficiency gains translate into measurable benefits. Data-driven approaches, including statistical analysis and matrix methods, underpin informed decision-making and effective performance management. Standardized workflows, clear guidance, and capability-building initiatives foster consistency, reinforcing compliance, reliability, and competitiveness across the lab.

Ultimately, OPEX provides a framework for continuous improvement where operational efficiency and high-quality output coexist, aligning closely with the lab's strategic goals and overall organizational objectives.

Global Setup

How is OPEX organized at the global level (centralized, decentralized, top-down, bottom-up)? What are the advantages and disadvantages?

At global level, OPEX in QC organizations is typically structured with a combination of centralized guidance and decentralized implementation, balancing top-down direction with local flexibility. Central units or global departments often define policies, frameworks, and governance, providing harmonized processes, training, and knowledge-sharing platforms. These global structures facilitate alignment, standardization, and the identification of synergies across sites, while ensuring a consistent approach to quality excellence.

Implementation, however, is usually decentralized, with local leads or lean experts driving initiatives on the ground. This approach enables faster decision-making, better adaptation to site-specific challenges, and engagement of local teams in continuous improvement projects. Some organizations follow predominantly top-down models, ensuring strong policy enforcement, while other combine centralized frameworks with bottom-up initiatives to identify pain points and tailor improvements effectively.

The hybrid set-up offers clear advantages. It promotes global alignment, accelerates deployment of successful practices, and fosters cross-site learning. At the same time, it can face challenges, such as the difficulty of applying a one-size-fits-all approach, variations in process knowledge across sites,

and the need to balance governance with local agility. Overall, this structure allows OPEX to drive sustainable improvements while accommodating the diverse needs of individual QC labs.

Local Setup

How is OPEX structured at the site level? Which teams or functions exist (% of QC workforce focuses on OPEX activities)? Where are the functions embedded? What are the advantages and disadvantages?

At site level, OPEX structures in QC organizations vary widely depending on lab size, focus, and local priorities. Some sites maintain dedicated OPEX teams, while in smaller labs, responsibilities are integrated into broader operational roles. Typically, only a small proportion of the QC workforce – often between 1-10% - is directly involved in OPEX activities, such as project management, progress tracking, and implementation of continuous improvement initiatives. Green belts or trained personnel may support projects on a part-time basis rather than full-time, reflecting the balance between operational demands and improvement initiatives.

Embedding OPEX locally provides clear benefits, including stronger leadership engagement, faster implementation of site-specific initiatives, and closer alignment with day-to-day operations. However, limited dedicated resources, competing priorities, and part-time focus can constraint effectiveness, particularly in smaller sites where OPEX leads manage a wide range of responsibilities. Despite these challenges, a well-structured local presence – whether through dedicated teams or operational support – ensures that continuous improvement and efficiency initiatives are embedded in the lab's daily operations, completing global OPEX frameworks and sustaining long-term performance gains.

Decision Making

Who decides which OPEX initiatives are implemented, and what criteria and/or processes are used to approve and prioritize them?

The decision-making process for implementing OPEX initiatives typically involves multiple layers, balancing local autonomy with global oversight. Smaller or less complex initiatives are often decided at the site or departmental level, allowing local management and QC teams to prioritize improvements based on operational needs and potential efficiency gains. Larger, high-impact initiatives such as strategic projects, digital implementations, or cross-site programs require approval from senior leadership or global decision boards, ensuring alignment with organizational strategy, investment priorities, and expected returns.

Prioritization is guided by a combination of factors, including cost-benefit analysis, expected return on investment, impact on quality and compliance, and alignment with strategic objectives. Involving the people responsible for implementation is critical, both to assess feasibility and to ensure engagement and sustainability. This tiered approach allows organizations to capture grassroots

improvement ideas while maintaining oversight for projects with broader implications, balancing agility with strategic alignment across the lab network.

Summary

OPEX in QC is about embedding a mindset of continuous improvement into lab operations, rather than implementing isolated projects or tools. Its focus is on enhancing efficiency, quality, and reliability in a sustainable way, aligning improvements with broader organizational goals and ensuring that resources and stakeholder engagement are secured from the start. OPEX thrives where structured processes meet cultural readiness, enabling labs to adapt global frameworks to local realities while fostering ownership and accountability at every level.

The impact of initiatives is maximized by balancing strategic priorities with operational practicality, using data-driven insights to guide decisions and focusing on areas with the greatest benefit. Success depends on integrating improvement activities into day-to-day workflows, supporting leaders in driving change, and maintaining flexibility to respond to site-specific challenges. Over time, OPEX evolves into a self-reinforcing system, turning continuous improvement into a core capability that enhances both performance and compliance, while fostering a culture where efficiency, quality, and sustainability naturally coexist.