



Largest Independent Pharmaceutical Benchmarking Survey

Operational Excellence in the Pharmaceutical Industry III



**International
Academy for
Quality, USA**

Largest Independent Pharmaceutical Benchmarking Survey for Operational Excellence

The international research project "Operational Excellence in the Pharmaceutical Industry" deals with the implementation of Six Sigma, Lean Thinking and other basic principles of Operational Excellence in the Pharmaceutical Industry.

In the year 2004 the first edition was launched by the Institute of Technology Management of the University of St. Gallen (ITEM-HSG), Switzerland. The participation of 102 production plants all over Europe permitted the most detailed recording of a current status of the Pharmaceutical Industry in terms of Operational Excellence.

Starting in 2008 a periodic realization bi-annually will help to screen the industry and thereby detect major changes and improvements in terms of Operational Excellence as well as structural parameters of the industry.

Key findings of the first two surveys have been:

1. Strong Need of Pharma-adapted Production Systems

The industry is lacking behind concerning the implementation of basic principles of Operational Excellence. Only Top Performer Sites revealed a higher implementation of basic elements. The study also pointed out that there have not been major operational improvements for years and that there are tremendous differences in the efficiency of quality management. Another point was the low implementation of Just-In-Time practices which influenced the management of inventory.

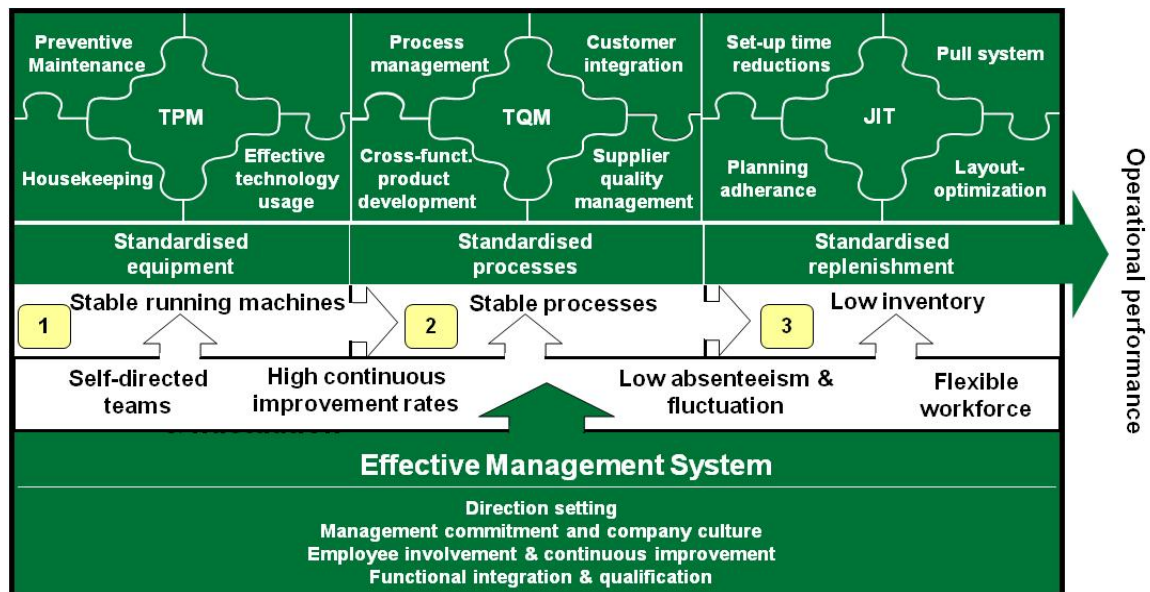
2. Development Pathway for a sustainable Transformation

The statistical analysis of the sample revealed that Top Performer in Total Productive Maintenance who operate with stable running equipment have an above average implementation of Total Quality Management. This pays off with stable operating processes and a higher Just-in Time Performance which enables significant lower lead times.

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«The right implementation of basic principles of Operational Excellence will lead to a significantly higher performance among pharmaceutical manufacturing plants and thus to a higher overall business performance of the company.»

This hypothesis was already proven by the first two surveys and is examined more profound using the following model:



Main research questions are:

- » What does it need to be a Top Performer in terms of Operational Excellence?
- » What has changed compared to the former projects?
- » Which principles of Operational Excellence are currently implemented?
 - Just-In-Time
 - Total Quality Management / Six Sigma
 - Total Productive Maintenance
 - Effective Management System
- » What is the future role of manufacturing in the pharmaceutical industry?
- » What are the implications for pharmaceutical manufacturing?
- » How should pharmaceutical manufacturing respond to the changing environment?

Benefits and Deliverables

Major changes and new trends can be observed since our first survey: almost all multinational pharmaceutical companies have launched efficiency and continuous improvement initiatives; global competition, increasing cost pressure, shorter product life cycles and a more and more complex production program have a strong impact on the industry and its production sites.

To quantify today's level of Operational Excellence, to depict its journey within the last years and to analyze its future role in manufacturing is the aim of this Operational Excellence project.

Therefore the study will deliver:

- » a **Performance Rating** of your site against Top Performer as well as the industry level including major Key Performance Indicators to help you find out where improvement projects are most urgent
- » an **Implementation Rating** of your site against Top Performer as well as the industry level including basic principles of TPM, TQM and JIT
- » the knowledge of **Best Practice** in your industry to help you to identify **your own room for improvement**
- » an **Detection of Existing and Future Trends** in pharmaceutical operations
- » a **Multiple sites Rating** within your company network
- » a **Comparison** between regions (India, Europe, China, Puerto Rico, US, ...)

The research project 'Operational Excellence in the Pharmaceutical Industry' is conducted by the University of St. Gallen which disposes of one of the leading European benchmarking institutes that has experience with over 40 international benchmarkings. The project is fully financed by the participating partners. These facts ensure the **independence** from single sponsors and an high interest in **added value** of the results for practitioners as well as for the scientific community.

The study will provide you with these deliverables:

"OPEX @ My Site"

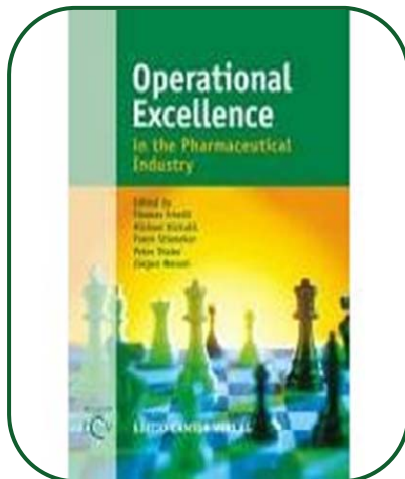
- a personalized site report focusing on your relative KPI performance, your strengths and weaknesses concerning TPM, TQM, JIT and your management system
- an analysis of site-related factors

"OPEX @ Pharmaceutical Industry"

- an industry report that shows which pattern Top Performers have in common
- a depiction of practices that are really driving Operational Excellence within pharmaceutical companies

"OPEX Development"

- a development report for those companies that participated in more than one OPEX survey
- an insights in yours and the industry's development

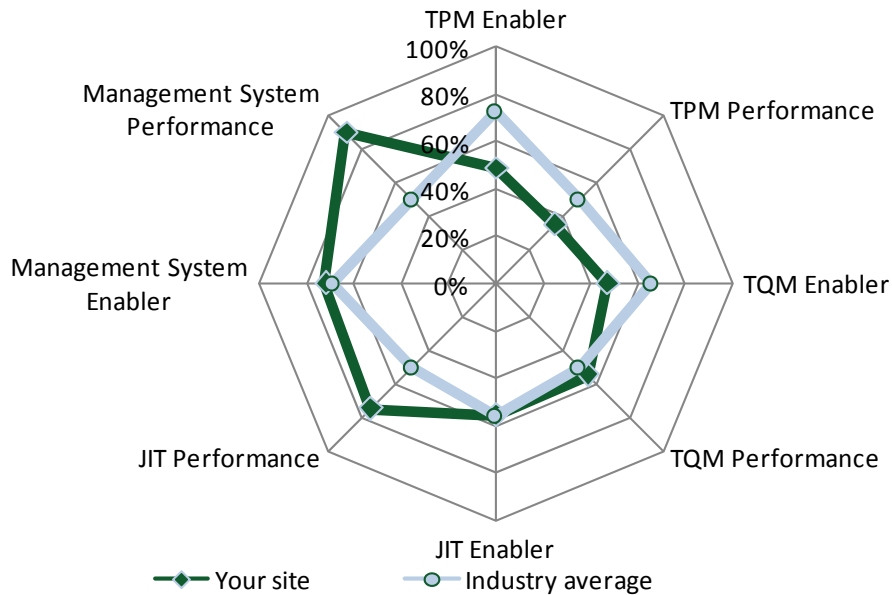


- The book "**Operational Excellence in the Pharmaceutical Industry**" by Prof Dr. Thomas Friedli et al. that provides a detailed overview of the results and shows the different key issues of setting up an improvement program for operational excellence

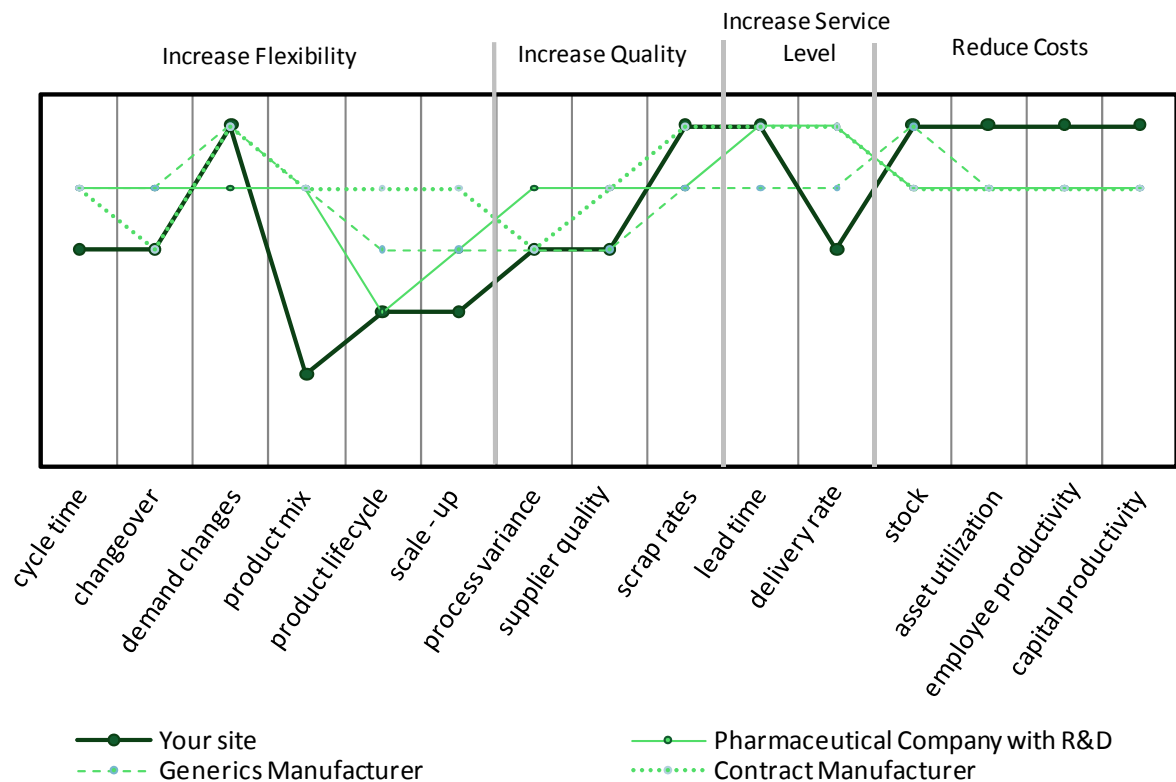
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Some examples from the outcomes of the surveys

Overall Result for "OPEX @ Your Site" shows your position relative to the sample.



Manufacturing Strategy shows the future trends.



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Data Security

The benchmarking project will be conducted in accordance to the International Benchmarking Code of Conduct which ensures a correct attitude of all participants. The company data will be handled with utmost discretion and if applicable will be made anonymous. Company specific data is not to be used without prior approval of the respective company. The project initiators reserve to themselves to use the project results in summary and blinded for publications.

Investment

The investment for the participation in the Benchmarking-Study is **€ 2000 (excl. VAT) per participating site**. For more than three sites, please ask for discounts.

Time Table

Deadline for registration:	July 15 th
Receiving Personalized Reports:	August 15 th
Receiving Industry Report:	September 1 st



Tracking the Industry

Every half year a follow-up will be realized. Hence participants will have the chance to continuously track their improvements compared to the industry. It also allows to measure and structure the success of improvement programs.

Project Partners

The **University of St. Gallen** (HSG) is among Europe's leading business universities. It is not only well-known for its basic research but also for its applied research for direct implementation which is performed by its institutes.

As one of the institutes at the University of St. Gallen, the purpose of the **Institute for Technology Management** (ITEM-HSG) is to act as a "Center of Excellence" in the following fields: a leading European research institution for the management and use of technologies, recognized in the scientific as well as in the management community; a competent center for the efficient transfer of research results into practice.

Contact

Thomas Gronauer
thomas.gronauer@unisg.ch
University of St. Gallen (HSG)
Institute of Technology Management
Dufourstrasse 40a, CH-9000 St. Gallen

Saskia Guetter
saskia.guetter@unisg.ch
University of St. Gallen (HSG)
Institute of Technology Management
Dufourstrasse 40a, CH-9000 St. Gallen

Contact Benchmarking Project Operational Excellence in the Pharmaceutical Industry

To:

ITEM-Institute of Technology Management

University of St. Gallen

Thomas Gronauer

Dufourstrasse 40a

CH-9000 St. Gallen

FAX: +41 (0)71 224 73 11

FON: +41 (0)71 224 72 69

E-mail: thomas.gronauer@unisg.ch

From:

Name:

Company:

Function:

Telephone:

Fax:

E-mail:

Address:

My interest is:

- I would like to participate in this project. Please provide me with the needed documentation.
- I would like to know more about this project. Please contact me.