



It's all about the people!

Deploying operational excellence programmes in process industries

Taking operational excellence concepts to the shop floor and sustaining the benefits remains a key task and a challenge for top management. Our recent research conducted in cooperation with MANNHEIM BUSINESS SCHOOL suggests that the main pitfalls for successfully establishing operational excellence programmes are people-related. Furthermore, results indicate that coping with digitization, advancing knowledge management and leveraging operational excellence concepts across functional silos are key topics on the operations manager's agenda.

Continuously improving operational performance has become an imperative in today's volatile and globalized competitive environment across process industries. Many companies respond by installing dedicated operational excellence programmes aiming at cutting costs, increasing productivity and improving service levels and safety. However, although the underlying approaches are far from being radically new, many companies struggle to deploy OpEx programmes effectively, and ultimately miss out on the intended top-line and bottom-line improvements.

Focus on where it matters most

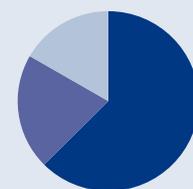
The term 'operational excellence' has been around for quite a while. The multifaceted buzzword comprises a set of levers and proven concepts to drive operational performance along the value chain. Beyond well-known concepts of lean management, companies in process industries put strong emphasis on asset management and automation. A blend of those concepts often makes up a company's management or production system.

Our research reveals an industry-dependent pattern where OpEx delivers the biggest benefits. Little surprisingly, the common nucleus of OpEx effort lies in manufacturing. However, while chemical companies mostly stay within this quite narrow scope and put a lot of emphasis on core production and manufacturing processes, pharmaceutical companies tend to extend their OpEx efforts to R&D, where a high degree of risk and financial resources are involved, and food-processing firms cover almost the entire value chain, paying special attention to efficient supply chain and distribution processes – a key business enabler in a FMCG environment.

Operational excellence is all about the people

Challenges in implementing OpEx

- People-related
- Resource-related
- Process-related



It's all about the people!

Asked for challenges in implementing OpEx programmes, the interviewees identified a total number of 24 different aspects, which fall into three distinct categories.

- **People-related challenges:** this category involves all setbacks caused by employees of the company from all hierarchical levels, e.g. open employee resistance, low involvement, lack of leadership support, insufficient training and qualification, communication deficits and misunderstandings.
- **Resource-related challenges:** here, the OpEx implementation is challenged by insufficient or mismatched resources allocated to the OpEx programme. These may e.g. result from allocation errors in the first place or from a programme scope shift during implementation which is not supported by a re-allocation of resources.
- **Process-related challenges:** these arise from faults in the OpEx programme's process design. Vague roles and responsibilities within the OpEx programme, insufficient or overly complicated OpEx programme planning and monitoring, deficits in programme flexibility during implementation, and bad methodology (introducing the wrong, too many or too complex OpEx tools) as well as unrealistic process timescales make up this category.

Recommendations on how to cope with the three challenge categories

Companies successfully deploying OpEx have anticipated the above-mentioned challenges very early in their deployment process and address them effectively by ensuring senior management commitment, by breaking down complexity, and by actively involving employees.

Go beyond paying lip service

Senior management plays a pivotal role when it comes to installing OpEx initiatives and sustaining a vivid continuous improvement culture. However, limiting the involvement to motivational speech during programme inception and occasional shop-floor visits is not enough – if not counterproductive. Senior managers need to roll up their sleeves and focus on where they can add most value.

- **Promote a long-term business vision:** long-term goals and strategic intent of OpEx efforts must be very clear. A sound OpEx vision should be explicit on what the organisation aims to achieve (i.e. in terms of product quality, delivery speed and reliability), and it should serve as 'north star' to align the organisation to coherent goals.
- **Follow up persistently:** OpEx programmes should be driven by meaningful business targets and priorities. If business success is at stake, it should be natural that senior management regularly reviews status and is available for mentoring and steering where needed. Prerequisite is a stringent performance management process, monitoring impact and efficiency of the OpEx programme. However, follow-up should not be limited to reviewing the numbers. Regular on-site visits and true involvement in operative challenges are appropriate.

“Listen and accept, and if possible, apply the contribution of employees.”

Keep it simple

A common pitfall is that OpEx is approached from a technical and engineering perspective, with a focus on the quantity and sophistication of tools in use. Experience shows that starting with a limited set of simple tools and principles is more effective. The

It's all about the people!

initial goal should be to educate the organisation in structured problem solving and continuous improvement.

- Customize your toolbox / embrace cherry-picking: focus on a few tools suited to your organisation and do not swamp and confuse employees with a multitude of new tools to learn.
- Create a simple framework based on goals, not solutions: care for what you want to achieve rather than how.

Truly involve employees

An OpEx implementation goes along with a change of corporate culture. Such a culture change cannot be dictated, but grows from within the organisation, necessitating a change in the mindset of the employees. Gaining the involvement of each and every staff member is thus an important foundation for successful OpEx programmes.

- Foster bottom-up creativity: if shop-floor personnel notice that their ideas are appreciated, transparently assessed, and eventually implemented and rewarded, a positive feedback can arise, generating even more ideas towards OpEx.
- Leverage gamification approaches to motivate: a (light-hearted) comparison between OpEx contributions from different teams or individuals, e.g. a kind of OpEx treasure hunt, can unleash great creative potentials.

Outlook and future OpEx trends

“The next challenge will be to adapt it to a digital supply chain or a highly digital network.”

The survey confirms that OpEx is not just a topical subject, but will remain an important issue in the process industries in the future. Already, some trends are emerging from current OpEx practice which will shape OpEx programmes in the near future.

- **Cross-functional OpEx:** OpEx will not remain confined to operations in the narrower sense. In the future, we will see more OpEx initiatives crossing the interface to all kinds of production-related services such as maintenance, logistics or analytics. Overcoming the gap between production and services by cross-functional optimisation will foster new significant improvements.
- **Knowledge management:** especially when following a decentralized approach to OpEx, it's important to communicate best practices quickly and efficiently. For this to happen, knowledge management is crucial. Its importance will grow with the cross-functional OpEx extension and it will be supported by collaboration and networking platforms.
- **EHS:** workspace improvements by means of OpEx programmes must neither impair the workers' health and safety nor the environment. Instead, EHS improvements will become more of a focal point in future OpEx deployment.
- **Digitalisation:** along with the general industrial development, OpEx programmes will make progressively more use of IT, fusing with the technology-driven trend towards smart factories.

It's all about the people!

About the survey

The survey is based on qualitative in-depth interviews with fifteen experienced managers in the chemical, pharmaceutical and food processing industries. Participants were asked to elaborate on where and how they apply OpEx concepts within their company, the challenges they face, and on their view on future trends and the development of OpEx. The research was conducted by MBA students of Mannheim Business School.

About 3con Management Consultants

3con specializes on operations management and on transformation in process industries. We enable growth and we drive efficiency – by aiding our clients in using their operational resources optimally.

For more information, please visit our website www.3con-consultants.de or contact us at info@3con-consultants.de.

The authors



Dr. Ziad Mahayni (Partner), Dr. Oliver Becker (Senior Expert), Daniel Bochnitschek (Project Manager)



Eugen Gajdamak, José Juan Navarro Meléndez, Terrie Valeriano, Yuseon Won