



Engagement of the organisation, strong leadership and best practice exchange are critical success factors in operational improvement

Driving more out of less

Companies are turning to operational excellence programmes to improve performance, but how are they doing? An ICIS/Hitachi Consulting survey reveals all!

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Increasingly challenging market conditions are pushing chemical companies to explore possibilities to drive more out of less. In October therefore, *ICIS Chemical Business* invited readers to participate in an online

survey, conducted in association with Hitachi Consulting, to share their experiences of operational improvement programmes.

This article reveals how your peers in the industry see the journey to get more out of less, and specifically:

- What types of programmes are running in the industry
- What objectives companies are targeting

and how satisfied they are with the results achieved, and

- Which practical challenges are encountered and what is being done to overcome them.

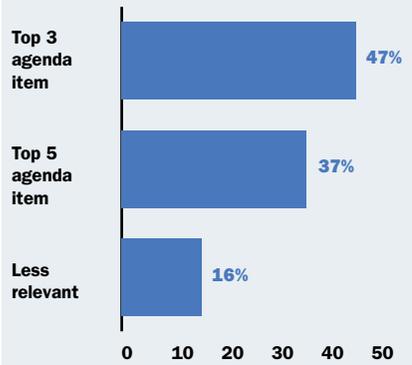
Due to specific requests from respondents we also include here a case study of a company going through such a transformation – focusing especially on how it managed to engage its organisation in the improvement journey.

Based on the survey data, more than 55% of respondents were actively involved in some kind of structural operational improvement programme – showing how widely spread this topic is in the industry.

Also, in terms of importance for management, it became apparent that these programmes are seen as a relevant priority – around 84% of those taking part judged them as a Top 5 agenda item. Almost one in two respondents saw their operational improvement programme as a Top 3 element in senior management discussions.

Looking more closely at the types of programme underway, it is possible to see some interesting patterns. To be able to classify programme types in a meaningful way, we asked

HOW IMPORTANT IS OPERATIONAL IMPROVEMENT IN SENIOR DISCUSSIONS?



SOURCE: ICIS/Hitachi Consulting survey

respondents to provide some information around the functions involved, as well as how strongly central support and best practice exchange were used.

Based on this, it is possible to group programmes on two dimensions:

1. Organisational reach: here we can differentiate three different types:

- One or few core functions: focus on 1-2 core functions – in the main either manufacturing, supply chain or sales and marketing

- Core function plus support: core function linked up with immediate support functions. Manufacturing for example was mainly linked with maintenance and environment, health and safety (EHS)

- Full integration: inclusion of (almost) all functions of the organisation, including suppliers

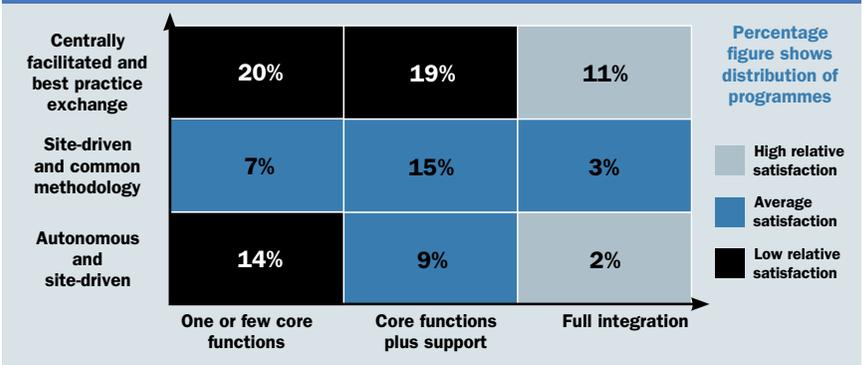
2. Central facilitation/collaboration level: here, also, we differentiated three types, as shown in the matrix above.

Combining these two dimensions, it is possible to see some patterns. In the main, programmes are either focused on a few core functions or combine core and support functions. Fully integrated programmes are – as expected – less represented.

These integrated initiatives go along with a stronger need for governance/coordination and alignment of the organisation. This higher need for collaboration can also be seen when looking at the percentage distribution of programmes: the more integrated they get, the more the trend to use the option of a centrally facilitated approach. Looking at relative satisfaction level, it appears that the more integrated the programmes are, the higher the satisfaction level.

According to Hitachi Consulting, this is obviously not just due to setting up a bigger programme – it is merely driven by the boundary conditions, which typically go along with them, eg a much stronger focus/priority for management, better possibilities to attract talent through attractive career

PERCENTAGE DISTRIBUTION OF PROGRAMME TYPES RUNNING AND ACHIEVED SATISFACTION LEVEL



SOURCE: ICIS/Hitachi Consulting survey

options and the fact of structurally promoting best practice exchange.

OBJECTIVES AND SATISFACTION

As part of the survey we also asked for the main objectives being targeted in the programmes and how well those were achieved. From a global perspective, the main three objectives were focused on structural cost reduction, the support of innovation and growth, as well as support of quality improvements. Customer satisfaction did not make it into the Top 3 – but was following very closely.

Looking at this in more detail, it was interesting to see different emphases depending on whether a programme was manufacturing-related (64% of all programmes) or non-manufacturing related. In the manufacturing-related programmes a relatively stronger focus was set, for example, on achieving better delivery reliability. For non-manufacturing programmes the strongest emphasis was on the innovation & growth aspect – followed by customer satisfaction and (surprisingly) safety.

Comparing these findings with the satisfaction level with results achieved, we can see a somewhat challenging picture. Half of respond-

ents rated their programmes as falling short against initial expectations, 45% evaluated their programmes as achieving or slightly over-achieving and only for 4% were their initiatives significantly beating initial expectations.

Looking for possible explanations for this, we found a correlation between results achieved and the priority the programme receives from senior management. Accordingly, programmes making it to the Top 3 of the agenda of senior management achieve on average a 30% better satisfaction score than those initiatives that are not in the Top 5 list.

This might not be surprising as such – but is a striking quantitative confirmation of what the majority of respondents rated as the No. 1 success factor: the ability to engage the management team and the organisation to own and drive such programmes.

CHALLENGES AND STRATEGIES

Following the question around satisfaction levels we wanted to understand which challenges companies faced during programme deployment – and which priorities and best practices they used to overcome those. According to Hitachi Consulting, it is possible to categorise improvement programmes into

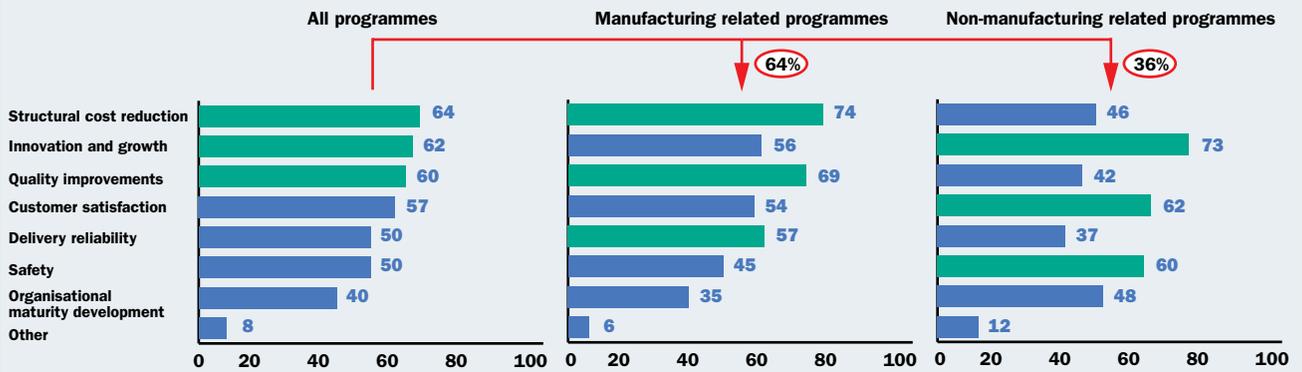
PROGRAMME RESULTS AND SATISFACTION DEPENDED ON LEVEL OF SENIOR MANAGEMENT COMMITMENT



SOURCE: ICIS/Hitachi Consulting survey

Note: *Average satisfaction score given by respondents on scale of 1-4

PRIMARY TARGETS OF OPERATIONAL IMPROVEMENT PROGRAMMES



SOURCE: ICIS/Hitachi Consulting survey

Note: Multiple choices possible. Scale: % of respondents selecting target

» approximate life-cycle phases – each of which poses specific challenges.

From an overarching perspective the attraction of talent, competition with parallel initiatives and lack of implementation speed are the key difficulties faced. Breaking this down to life-cycle phases, it is indeed possible to see a differentiated picture:

■ Phase 1 – Year 1 programmes: typical start-up/pilot phase with strong difficulties to involve top talent and facing competition with other initiatives. Characteristic of this phase is the difficulty of demonstrating tangible results due to a typically limited (pilot) scope and difficulty in finding the right “way of working”. Overcoming the issue of lack of tangible results is specifically relevant in this phase as it is one of the key elements to gain the necessary momentum in the organisation for ramp-up.

■ Phase 2 – Years 1-3: with typically broader scope and growing organisational reach, the search for talents continues to be a challenge, but specifically the need for knowledge sharing (such as, how to “industrialise” the learnings from initial phase) and how to effectively govern and drive implementation increase in priority. Year 3 is very often a tipping point for programmes, where the decision is being made whether to change from an initiative to a structural change platform. More than 50% of responses see their programmes in that important phase.

■ Phase 3 – Years 3-6: in this phase programmes typically start expanding into functions not originally involved and thus also start competing with other initiatives. Along with this, the mode of deployment often changes to more of an “installation approach”

– amongst other elements this creates a lack of pull from the organisation.

■ Phase 4 – Year 6+: programmes in this phase often start to face end-of-life difficulties. Comparing the average challenge score, it goes gradually down from Phase 1 to Phase 3 – in this phase it starts going up again.

When looking at how companies try to mitigate the difficulties encountered, different priorities are set for each programme phase. On a general level, one of the main focus points going forward will be for companies to find a way to better use the know-how sitting in the network – promoting best practice exchange and thus achieving faster improvement.

With growing programme maturity, the people and engagement dimension of the organisation gets more relevant as well as the ability to set up a programme which better

CASE STUDY OPERATIONAL EXCELLENCE

PROGRAMME IS BUILT ON FOUR KEY DIMENSIONS

AFTER 15 years of acquisitions the company had grown to employ nearly 40,000 people globally, with a diverse product portfolio. But variations in management style, technology and operational maturity levels had left the company balancing 20+ different management approaches across 50 production units. The decision was thus taken to launch an operational excellence programme, to:

- significantly improve the cost position and thus ensure competitiveness
- develop the people/organisation and create a platform to drive operational excellence through the network
- create a more coherent organisation, sharing best practices and

common ways of working.

The programme was built around four dimensions: performance management, process excellence, organisational effectiveness and people engagement.

The challenge was how to engage the sites for this transformation and make sure that changes stuck. One of the first steps was to go through a best practice phase, where the practices to be consistently rolled out were selected. Elements ranged from visual management standards, standard operating processes for key activities, and planned & preventative maintenance routines to factory blueprint. With strong involvement of regional heads these building blocks were devel-

oped, piloted and improved.

To create the capability to drive and sustain the initiative from the bottom up, the roll-out was designed in two stages. First Europe, then gradually the rest of the world. “Champions” were trained in the European phase. Some would stay in their “home” sites to form local teams and others would go on to lead implementation at sites outside Europe.

One of the key success factors was the engagement of workforce and site management. The conviction was that if you truly want to drive behavioural change, it has first and foremost to start with the management.

Specific focus was therefore set on defining new leadership behav-

iours, coaching, and measuring the degree of change which could be experienced by the shopfloor.

These new behaviours included communication elements as well as, eg, implementation of effective Gemba walk culture, participation in local 5S and Kaizen events, etc.

The journey continues today – expanding further in network and into other functions, but after two years the organisation can look back on tangible results achieved.

Success has been greater than anticipated and the champions of the programme have taken it further, promoting operational excellence, sharing specific best practices and designing the next phase of improvements for their own sites. ■

links to company strategy and thus makes it relevant for senior management. According to Hitachi Consulting's experience, companies are putting more focus on creating a platform for change and thus go beyond a single improvement initiative.

Considering a breakdown into different life-cycle phases, the picture again appears differentiated – and very much in line with the challenges highlighted before:

■ **Phase 1 – Year 1:** different to all other phases, the element of improved collaboration is not yet a priority element – focus going forward is much more set on standardising/industrialising the approach as well as proving the ability to deliver tangible results.

■ **Phase 2 – Years 1-3:** after the element of stronger collaboration, the factor of people development and communication is selected as the next development step – a first indication of the intention to change from a “technical programme” into a platform for change.

■ **Phase 3 – Years 3-6:** this is the phase where programmes need to “re-invent” themselves – among other things expanding into functions not part of the programme so far. Also interesting to notice is the much stronger focus on leadership behaviours as a carrier to impact company culture.

■ **Phase 4 – Year 6+:** facing an end of life-cycle situation companies continue their focus on engagement of the organisation – and thus maintaining momentum as well as driving further best practice exchange. Following this, the priorities are more evenly distributed – factors like organisational reach and focus on results/governance receiving similar scores.

As a closing element we wanted to understand what factors would be selected as the main success factors in making programmes work. In order of priority, the Top 6 elements mentioned were:

■ **Commitment of the full organisation** – clear senior mandate and support, committed middle management and engaged workforce

■ **Setting clear measurable targets and a common vision** – connecting programme to strategic agenda/align leadership team to own the programme

■ **Focus on cultural change and leadership behaviours** – allow time and dedicated resources to make sustainable change happen

■ **Qualification of change agents and flawless deployment** – have qualified agents and a robust deployment engine

■ **Pragmatic and hands-on execution and agile decision-making** – avoid big committees, but keep the programme “real”

■ **State-of-the-art, common methodology** – employ the same language and approach to drive improvements.

Operational improvement programmes are a necessity for chemical companies to improve their competitive position. Organisa-

SURVEY OPERATIONAL EXCELLENCE
SURVEY SPANS THE INDUSTRY

THE ICIS survey, conducted in association with Hitachi Consulting, was carried out online in October this year, and elicited replies from around the world. A quarter of respondents were based in Europe and 19% in North America, with a further 29% in Asia and 15% in the Middle East and Africa.

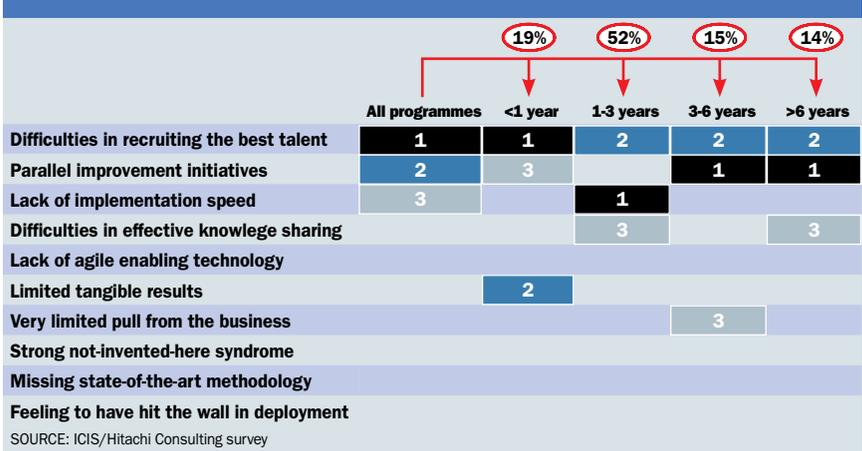
Companies represented in the results covered the full spectrum of the chemical sector, with 20% saying they were active in polymers, 15% in specialty chemicals, 14% in commodity and bulk chemical manufacturing and 12% in chemical distribution.

In terms of job function, 31% of respondents identified

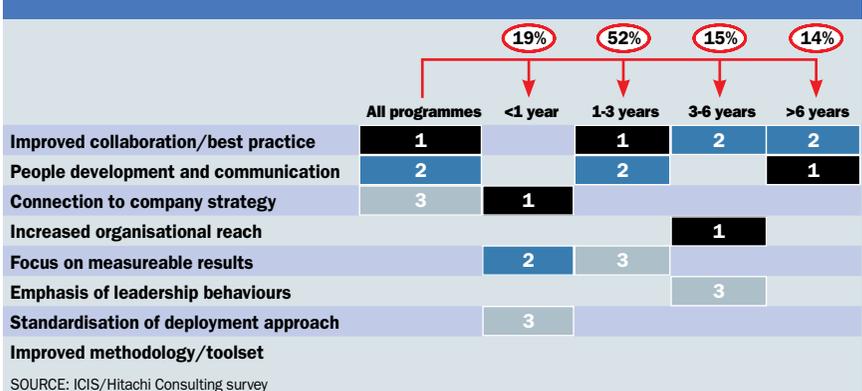
themselves as CEO, vice president or board level, and 18% as a general manager. Site managers and other managers made up a further 24% of those taking part in the survey.

Average participant company size measured in terms of turnover was \$3.6bn, with 13% over \$10bn and 36% under \$500m. ■

TOP THREE CHALLENGES DIFFER WITH DURATION OF PROGRAMME



TOP THREE PRIORITIES DIFFER WITH DURATION OF PROGRAMME



tions more and more want to explore possibilities for stronger collaboration and best practice exchange and thus the installation of a change platform rather than a punctual improvement programme. Along with that goes a much stronger focus going forward on people development and engagement of the organisation for this transition – or as one of the respondents put it: “Employees and (top) managers commitment is the most important factor. The rest is operational.”

We hope you found this article relevant for an understanding of where you stand with your programme and that it contributes some new ideas of where to take it next – to ultimately achieve the goal of driving more out of less. ■

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