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Reliability: Implementing a Performance Management Culture

Often appearing in different forms and banners such as Lean Manufacturing, Operational Excellence has been used by companies for more decades to improve their EBIT, and now, in the context of slowing growth and rising material, payroll and energy costs, the pressure on managers to enhance margins is extremely high. However, as many of those additional costs cannot be passed onto customers, the need to make operational improvements is strong.

Operational Excellence is frequently both presented and treated as a corporate initiative. As a result, it is often highlighted in Annual Reports as part of Boards' attempts to influence analysts and attract investors. Following Corporate Communication, the impulse to actually start and carry through Operational Excellence programs is frequently external or consultant-led, while the roll-out is predominantly conducted by internal resources. This can create a number of obstacles during implementation and can threaten the sustainability of the program itself.

This paper examines the ways in which Operational Excellence initiatives can be implemented so that they are both effective and continue to function in the long term. Generally speaking, the initiative will cover both variable and fixed costs, whether they are Operations overheads or Sales General and Administration (SG&A). In order for implementation to be sustainable, the following three pillars need to be addressed simultaneously:

» Processes;
» Performance management; and
» People.

Covering each in detail and supporting theory with real-world examples, the paper will detail how companies can use Operational Excellence to improve the return on capital employed.

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Robust Processes

Ensuring that robust processes are in place is one of the three key elements of achieving Operational Excellence. For the purpose of this discussion, "robust processes" means the way in which physical assets and resources are optimized to create value, while at the same time minimizing losses. The term also assumes that the process will work the majority of the time, even when under stress or with fewer people. Within that framework, establishing which parts of the processes spanning Production, Maintenance, TA/Shutdown management, Contractor Management and Supply Chain are value-adding and which aren´t is vital. In order to find the weaker parts, a detailed evaluation of each process must be conducted. As the first step, existing processes must be mapped so that an accurate overview can be gained. Then, in order to get a realistic picture of the "difficulties" that stakeholders are facing, the process map must be reality checked and reviewed.

Additionally, conducting observations in the field will enable the identification of other issues which stakeholders have accepted as part of everyday life and

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simply do not notice anymore. During these observations, every single action undertaken by, let us say, an onsite mechanic would be written down alongside the time when the action was taken, so that after one day, the exact time intervals required to do each task is made clear. These time intervals are then entered into a data sheet collecting all of a team's daily field observations so that those tasks which take longer can be identified and later examined to work out why they take longer. Does, for example, the aforementioned mechanic start his assigned tasks later than is scheduled? If so, is that because the tools he needs have not been delivered on time and he is forced to wait, or is it due to a lack of punctuality or motivation?

Conducting interviews with employees is also extremely important as it will also help to provide more detail as to the reasons why time is being wasted. It is essential that these are recorded and also entered into the data sheet as it is possible that there are a few key root causes which have a knock-on effect and are negatively impacting a wide range of employees and their work. If for example, the time taken for tools to arrive for a scaffolder consistently prevents him from starting to erect the scaffold, then it could be that a mechanic who needs the scaffolding to reach a certain pump is also stuck waiting around, doubling the impact of the delay.

Employees often know the reasons why non value adding time occurs and keeps occurring, but are either not asked or not listened to, so ensuring that they are involved in the evaluation process can speed it up as well as provide valuable information as to the root causes of problems. Once a specific cause and its impact on performance identified, the manager and his team can utilize the information to create an action plan and remove the obstacle.

While To-Be processes are being designed, roles and responsibilities also need to be clarified at the same time as they can have a lasting, negative impact on the efficient running of processes if they are ignored. If duties overlap, tasks will either never be fully complete or unnecessary resources will be used up while more than one person tries to execute them. In order to prevent that from happening, formalized boundaries between departments and roles must be clarified. For each step of the process being looked at, it is important to establish who is personally responsible for carrying out which specific task. For each meeting, the agenda, participants, input and output need to be defined as well, so that everyone has a clear picture of what each process involves and which actions belong to whom.

Case Study A

At an international chemical producer in Europe, the problems highlighted above were having a very negative effect on productivity. In order to counteract them, a new planning and scheduling process was installed according to the new work flow, which involved paying close attention to the performance of both planners and schedulers. The Microsoft tool used for scheduling was incorporated with SAP so that schedulers' time was not wasted and work packs were developed and handed to planners. The combination of better work preparation, scheduling and active supervision led to a 25% increase in maintenance efficiency by the end of the project.

Performance management

Once processes have been fully evaluated and corrected, the ways in which performance will be driven and spend controlled are the next levers which must be considered. As any process is only as good as the people using it, it is vital that employees fully understand what they are doing and that they are focusing correctly. From forecasting, planning, execution and follow-up to reporting, performance management covers the entire cycle and its users. Depending on the industry a company operates in, plans need to be broken down from the quarter, the month and the day to the shift. The workload for each should be incorporated into the schedule, so that both management and teams have a clear indication of which activities need to be carried out and when.

In order to ensure that procedures are actually working, what an employee needs to perform his tasks efficiently as well as what activities are expected from him during that time must be clarified on both sides. As an example, meetings should be held at the start of the day to allocate tasks and then follow at shift changeovers where those leaving brief those arriving so that work is neither doubled nor forgotten. Execution follow-up is then vital so that issues can be identified and actions taken as soon as possible to mitigate recurrence.

Following the clarification of expectations, how performance will be measured - for example using Key Performance Indicators (KPIs) - should also be decided upon so that a thorough understanding of what level of performance is required is fully understood all round. Often, the need for using indicators to analyze variance is not always understood at the supervisory level so defining the exact means and frequency of performance

measurement is paramount. Once they have been fully established and integrated, they must be analyzed and discussed with teams on a regular basis. Having set review intervals – daily, weekly and monthly – is vital to the proper structuring of results and each should utilize elements of critical assessment, such as the Plan / Do / Check / Act loop.

In a production environment, these discussions frequently take place around a white board or an action corner, last no more than 10 to 15 minutes and can be conducted standing up. To use the scaffolder example again, if he was unable to build scaffolding within the set time due to delayed arrival of tools, why did that occur? Perhaps the scaffolding was erected within the allotted time but failed its first inspection - why?

Asking the right questions as well as listening to the answers is critical to the success of the measurement process. Supervisors often express frustration that useful responses are difficult to get from their teams, while the teams are equally irritated that the reasons for not reaching their required performance level are not taken on board. Both sides must commit to giving and receiving honest feedback and using it to improve processes. In that way, both the presence of obstacles and the absence of necessary support can be addressed and formulated into a single action plan for improvement.

People

Creating the right environment and developing a climate for collaboration is vital to the success of any improvement project. As soft skills are the hardest to change, commitment and support must come from the top down: those on the shop floor must understand that the modifications they are making are part of a cultural shift towards long-term improvement and not a short-term fad. Managers must ensure that they communicate and align targets so that all teams – across Maintenance, Production, TAR management, various onsite departments and Business Unit sites – know what is needed for those targets to be achieved. As certain targets may require quite significant change, getting buy-in is crucial. Setting SMART objectives as well as installing an Action-Needed System will help to engage colleagues and prevent the project from losing momentum.

Furthermore, it is highly likely that a number of colleagues – if not whole teams – will need to learn and implement new skills. Training workshops should demonstrate and explain how new processes will work, but they must be followed-up by one-on-one coaching sessions which apply new skills in a practical environment.

Case Study B

At a global producer of chemicals in the United States, recent staff cuts had caused a sharp rise in unscheduled overtime levels as well as decreased productivity. Following a two-week analysis, T.A. Cook worked with the onsite team to design a ten-week improvement plan to introduce a Management Control and Reporting System (MCRS) which would address the root cause of the problems. Daily and weekly maintenance coordination and operations meetings were set up, while monthly performance review meetings used the data collected in the MCRS to accurately evaluate performance and address challenges. Together with training workshops and one-on-one coaching sessions, the changes contributed to $2m (30%) reduction in unscheduled hours and a schedule compliance improvement to 70%.

In general, as less than 15% of training is implemented, the coaching side of the process is absolutely critical and applies particularly to management and supervisory skills as they tend to be more difficult to sustain. Employees must be helped to practice until they have clearly demonstrated that they do not need that help anymore and can handle the “change drive” themselves.

Critical Success Factors

Experience shows that a number of factors are critical to the success of Operational Excellence initiatives. Management must demonstrate and take ownership of Operational Excellence programs and ensure that the right environment is created for teams to implement new processes and behaviors. Without support and commitment from senior managers, any changes that are implemented in the short term will be quickly discarded if teams do not feel and understand the drive for change. Despite being treated as a Corporate initiative, Operational Excellence is built bottom-up at site level. Stakeholders of each process or area need to be involved in the review of their existing processes and must participate in the design of the To-Be processes.

Furthermore, communication between management and teams must be clear, consistent and continuous, providing complete transparency throughout the whole change management process. As outlined above, specific roles and responsibility for all project personnel need to be defined and clarified early on so as to prevent confusion and unnecessary resource wastage. All of these factors must be in place if the Operational Excellence initiative is to have any chance of success.

After the project: continued support

One of the most common complaints heard from managers is that having been initially successful with a number of Operational Excellence initiatives, they have realized after a number of months that changes are being ignored and productivity has once again decreased. The main reason for this is that after the project ends, the necessary steps are not taken to ensure sustainability. Employees leave the company or bad habits resurface.

However, it is possible to prevent these negative developments. Refresher training and education on a regular basis combined with individual coaching plans should be conducted so that each employee both feels their responsibility as part of the change movement and gains the necessary support to keep moving forward. Booklets that capitalize on the lessons learned and concepts deployed will further help to develop the learning curve of new employees and managers. Finally, regular audits will help to establish the success of implemented initiatives long after the project's official end date and should be used to address any gaps in training or performance.

In order for Operational Excellence initiatives to achieve sustainability, commitment needs to start from Day One and never stop: it is a continuous process which needs constant care and attention. Only if those factors are present can companies hope to implement lasting change which will improve return on capital employed and contribute to the relentless drive for profit enhancement. After all, embedding a continuous improvement mindset is more profitable than a step change.