

People Development through Cross-functional Teams

The typical role of Cross-functional Teams is to solve problems that require the input from various departments or skill sets.

Cross-functional Teams are certainly a step above the Traditional or Mass Production thinking of giving the task of improving equipment and processes to Industrial, Process or Reliability Engineers.

Often their solutions were limited by their individual ability and experience, and were pushed onto the workforce who were responsible for using the equipment or processes to produce the value for the customer. In many cases, even if the desired improvements were achieved, once the engineer was allocated to another project there was a high likelihood that the initial gains would fall away, or old habits would return, due to lack of ownership to the new way by the people doing the work.

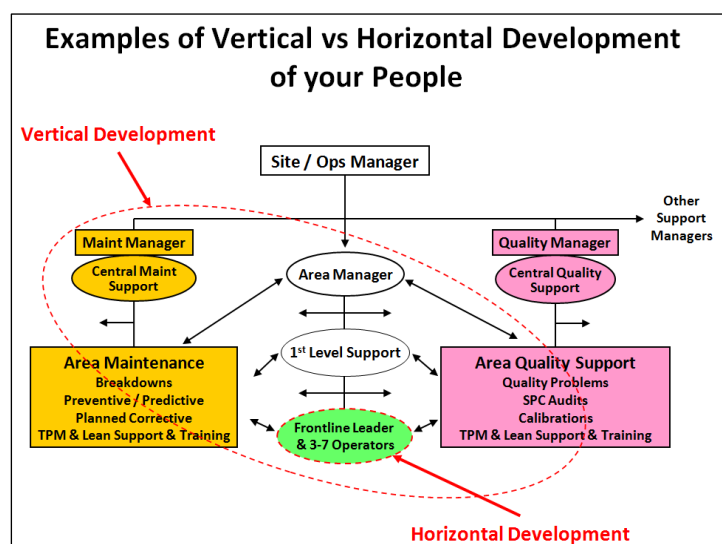
Hence the use of Cross-functional Teams has become popular in many organisations, however our observation is that their full potential to develop people, is often missed or not seen as a priority.

Most sites recognise that Cross-functional Teams should have a clear mandate or purpose, boundaries and timeframe supported by a stepped process framed around a proven scientific method of problem solving, however many sites miss the important point that Cross-functional Team make-up and activities should allow for the Vertical Development of their people.

What is Vertical Development of people?

Vertical Development is the 'Opportunity to regularly work with people in different departments and at various levels in the organisation to share, appreciate and respect differences in knowledge, skill and understanding while developing and applying Problem Solving and Teamwork skills as part of their normal job'.

In other words, we find the development process should be on-going in that you are always developing your people by having them spend say 5% of their normal work time each week being a member of a Cross-functional Team focused on strategically driven improvement. We have also learnt that physiologically, team based improvement activities should not exceed 12 weeks duration. As such, ideally all Cross-functional Teams should not exceed 12 weeks duration, meaning that the improvement requirements need to be scoped into 'up to 12 week' mandates so



that team members get to celebrate their success after no longer than 12 weeks. Then after disbanding, each team member would be allocated to another Cross-functional Team to take on a new challenge and further their Vertical Development (this is why we call it On-going Continuous Improvement).

We have found that there needs to be 6 key ingredients for Vertical Development to occur:

1. Clear mandate, boundaries and timeframe for the team that will be monitored weekly and formally reviewed mid-way through the life of the team (team life should ideally not exceed kick-off plus 12 weeks);
2. Team membership not to exceed 8 people otherwise some team members may not fully contribute;
3. Leader of the Team can see personal benefit in the success of the team (ideally not the most senior member of the team) and is able to ensure the workload of the team is evenly distributed (facilitation support often helps here);
4. Team Members be from different levels and different departments such as Manager, Support Staff, Supervisor, Frontline Leader, Shopfloor from Production, Maintenance, Quality, Engineering, Planning etc;
5. Structured Analysis approach is taken involving various activities that will expose different points of view and interpretations such as surveys, observations, process walks, knowledge base reviews etc; and
6. Effective facilitation to ensure the more senior people in the team don't override the inputs from other team members.

Striving for Operations Excellence provides great opportunities for developing your people rather than just solving problems or addressing equipment and process performance issues.

The key to achieving and sustaining Operations Excellence is to develop excellent people especially at the frontline. Too often we find sites more focused on trying to improve equipment and processes without developing excellent people at the frontline to sustain the improvements.

Many companies use Cross-functional Teams because they acknowledge the need for specific technical skills to address the problem at hand. However, few recognise that the primary role of Cross-functional Teams should be to develop all their people, with the secondary role being to improve equipment and processes.

This means the selection of the team members should be given critical attention recognising the importance of clear guidelines or policies covering such things as 'how many teams a person should be on at any one time' (suggest 1 Cross-functional Team at a time so as not to interfere with their normal workload) and 'doing their Cross-functional Team improvement activities in normal work time'.

Example of Success

At a large Food Processing Plant in country NSW they identified they had capacity constraints in their Packing Plant and as such to address the immediate problem moved the plant onto a 4 shift 12 hour roster system to allow the plant to run 24 hours x 7 days. Each of the 4 shift teams were structured so that 7 operators manned 5 packing lines and 2 palletisers. Each shift team was under the guidance

of a Frontline Leader (Team Leader). The 4 shift Team Leaders reported to the Packing Plant Production Supervisor (dayshift role).

While changing to a 24 x 7 operation helped alleviate some of the pressure on the Packing Plant by increasing production plan attainment, as well as reducing the impact on upstream processes, performance of the plant was still a concern, with OEE's on all packing lines ranging from 40-50%.

Previous attempts at introducing improvement programs had not sustained, and in recent times the site was relying on a few CI specialists within a corporate led team that ran various ad-hoc improvement interventions with little focus on developing the people.

Site management soon recognised there was not just a need to improve plant performance but most importantly rapidly develop the people in the Packing Plant to ensure sustained improvements. The Production Supervisor had recently been promoted from a technical support role, the 4 Team Leaders were newly appointed into their roles and senior operators were frustrated by inadequate training of new team members resulting in the lack of engagement of the workforce.

Based on recommendations from a number of staff at the site who had, over the previous 1-2 years, attended one of the regular public workshops conducted by CTPM on Getting TPM & Lean to Sustain in an Australasian Workplace, the decision was taken to engage CTPM to assist the site to introduce a more formal structured approach to on-going continuous improvement that progressively engaged all personnel especially Operators and Maintainers, while facilitating rapid learning of the Senior Management Team by also involving them in the improvement teams.

After initial education and a planning session, the on-going continuous improvement journey started with the creation of 4 Cross-functional Teams headed by each Team Leader from each shift with one operator in each team (this allowed the plant to run while the team was having its 1.5 hours meeting each week). In order to provide Vertical Development other team members included a mechanical and electrical person, 2 support people, and a manager or supervisor. So as not to overload anyone, the rule was that a person could only be on 1 team. Each team was allocated one of the lines and given the mandate to understand all the losses, develop a vision of ideal performance, divide the performance gap into technical opportunities or people development opportunities, then work on some of the technical opportunities to increase line performance by at least 20%. Due to the rotating roster system, the teams, after a half-day kick-off workshop, were given 12 meetings over 14 weeks to complete their mandate.

To ensure rapid sharing of ideas between the teams an in-house Improvement Co-ordinator / Facilitator was appointed who attended all the meetings.

After the success of Cycle 1 where there was a significant increase in OEE performance across all lines, Cycle 2 commenced with the focus on Area Based Team improvement activities supported by a few focused Cross-functional improvement teams. By investing some of the OEE gains from Cycle 1, each crew, under the guidance of their Team Leader, embarked on Work Area Management for their designated Improvement Area to allow all their team members to be engage in on-going continuous improvement. This was complemented with further Cross-functional Teams focused on specific problem areas along with a Daily Review Process Team so as to further develop the skills of the Team Leaders while addressing their day to day issues. Again all personnel were restricted to being on only 1 Cross-functional and 1 Area Based Team at a time and the Improvement Co-ordinator attended all team meetings to ensure ideas and learning was shared rapidly.

After 2 cycles of improvement, output from the Packing Plant increased to the point where it was no longer the constraint of the site – OEE on the packing lines started to increase past 60%. The momentum generated in the Packing Plant resulted in the improvement journey cascading to other Production Departments as well as the Maintenance Department.

In sharing insights into the power of Cross-functional Teams at a recently held conference, the Site's Operations Manager explained how the development of the Packing Plant Team Leaders was highlighted by the pride they displayed in what they were achieving through their improvement activities. This translated to greater ownership from the Team Leaders, which filtered down through their respective shift teams. The introduction, during Cycle 2, of a structured Daily Review Process in the Packing Plant through the work of the Cross-functional Team, helped consolidate the gains in equipment performance, improved relationships between operations and maintenance and further helped develop the leadership and management skills of the Team Leaders.

The impact of these improvement activities on people development is also best summarised by some of the recent leadership and development opportunities offered to some of those involved:

- A Team Leader from Packing Plant elevated to role of Production Supervisor while the incumbent Supervisor seconded to Production Planning department for 2 months. During this period a senior operator was also promoted to a Team Leader role.
- Improvement Co-ordinator seconded to another Production Department to drive improvement initiatives required to ensure successful launch of newly developed products from the department.
- Production Supervisor leading a Project Team responsible for the installation of a new packing line and palletiser into the Packing Plant.

Key Learning

To achieve Operations Excellence organisations need excellent people who can ensure the equipment and processes run perfectly. Unfortunately, many sites focus on trying to improve equipment and processes using improvement specialists without recognising the importance of developing the people who are required to plan, operate or maintain the equipment and processes on a daily basis to produce the maximum value for your customers. As such, there is often an initial lift in performance due to this focus, however without the long term development of the people responsible, the full performance improvement rarely sustains.

Unless the focus of your organisation's improvement journey is the on-going development of all your people through both Cross-functional Teams and Area Based Teams, your quest to achieve and sustain Operations Excellence will become a dream rather than reality.

For more information about CTPM's approach to Operations Excellence and On-going Continuous Improvement, please contact Ross Kennedy on +61 2 4226 6184 or visit CTPM's web page at: www.ctpm.org.au