During the current time globalisation and the forces of competition are causing many of the worlds industries to change frequently in order to either remain in the game, or to try to gain advantage in some manner. Organisational structures are becoming transient things used as a tool to facilitate change. For example people often are required to do project work for short periods in order to maintain the continuous improvement focus that an organisation may wish to achieve.

As a result here are many and regular changes occurring within the fields of maintenance as well. A CMMS system may be implemented, maintenance strategy review undertaken, business processes reviewed or even the regular addition of root cause analysis projects. TPM and lean maintenance programs have also now entered the landscape as part of the changes open to maintenance departments.

All of these forces can cause the organisational culture to shift somewhat. The organisation of the early twenty first century finds itself in the situation where it is always breaking paradigms and accepting new ones only to break them again as their advancement continues.

However much if the continual change within some organisations is due to the lack of success of previous programs. The “Program of the Month” phenomena. I feel that there is somewhat of a misunderstanding of this issue. Mindsets such as these are often attributed to the fact that management are not fully behind the concept, or a coping mechanism for a workforce that has reached a saturation point in terms of the continual changes that they need to endure.

While there is, of course, some validity in these arguments the prime reason, the reason that proven programs fail is generally due to the lack of adequate communication. There needs to be an understanding created of:

- The overall concept that is being attempted
- The detail in how it is to come about
- How it is to be measured and what the results are expected to be

Many proven programs have passed all of the criteria of successful ventures. They have been well defined, goals sought out and highlighted, teams selected for various tasks and the project plan laid out in a great deal of detail. However without the communication to all those involved and to the organisation in general all of these efforts can easily be in vein. The principle tool for communication of issues under these circumstances is Training.

Role specific training is the missing ingredient in most projects, changes or implementations. Quite often the scope of a project will include training but this is generally ill defined or misdirected. In short without a well-defined and planned training
regime any cultural change WILL NOT FULLY SUCCEED. It is vital to the smooth flow of continuous improvement through an organisation.

To clarify what is meant by well defined training regimes we will look at the example of implementing CMMS in an organisational structure. This is one of the more far-reaching and dramatic changes that can be undertaken. As such it will serve as a good example.

Training must, by necessity, be targeted at the needs of the organisation. As such there are a few steps required prior to embarking on a training regime.

1. **Establish the responsibilities of each role**

   In the example of a CMMS implementation we need to look at what responsibilities each role will have in relation to the changes being made. For example:
   - Does a supervisor need to know how to administer the system?
   - Does the planner need to know how to program work orders?
   - Do the craft teams need to know how to raise work orders?

   The answers to these will depend almost entirely on the organisational structure in place at the installation. However for this example what we are trying to define is the need for the development of a Training Matrix to determine which roles will receive which training. Again this needs to reflect and to be reflected in the role descriptions of each of the participants. The matrix below is a possible matrix for various roles when implementing a CMMS. Of course each site will vary greatly depending on the needs.

<table>
<thead>
<tr>
<th></th>
<th>Craft and Operations Employees</th>
<th>Supervisors</th>
<th>Planners Schedulers</th>
<th>Data Entry clerks</th>
<th>Engineers</th>
<th>Administrators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edit and Change the Plant Register</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Raise Work Requests</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Raise Works Orders</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Scheduling Module</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Creation of work order Templates</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Reports and analysis</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Backlog Management</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Closing Works Orders</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

2. **Conducting the needs analysis survey.**

   Once the responsibilities and duties of each role have been established and the training for each in the use of the system has been created then there is a need to analyse the specific skills of each incumbent of each position. For example it has been my experience that the closer you get to the front line of maintenance the lower
the computer management skills are. Therefore a brief course on navigation of a computer may be of use. Other areas that may need to be addressed are generalities of maintenance management, generalities of stores management or even training in deciphering analysis and or KPI’s that are in use.

3. Course Creation and Delivery

This can be a very laborious time. Requiring time for creation and review of the courses themselves, scheduling of time for each of the participants to attend and to be tested as well as scheduling a review period after they have been required to use the skills for a short time. In the review period there will be a great deal more information required by the users, as they are now familiar with the system and concepts that they were originally taught.

Another approach, which builds on the approach above, is to use key users as training people. In this example the key users will best be described as the system administrators. Those people who will be the ultimate owners of the system for a given area or department. This has the added benefit of early transition of ownership from the original trainers, possibly representing the contractor or system, to the end users through a stepped progression.

Whatever approach is taken it needs to be remembered that without a full and thorough training program no system will live long past the “Program of the Month” status and will ultimately disappoint in terms of realised versus proposed gains.

Daryl Mather
Maintenance Consultant
darylmather@bigpond.com.au