

The importance of a procedures manuals in maintenance management

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1. INTRODUCTION

This article will explore the need for a “manual of procedures in maintenance management” in a practical, clear and concise manner to encourage the reader to produce or update their own manual.

2. WHAT IS A MAINTENANCE MANAGEMENT PROCEDURES MANUAL (MMPM)?

It is a communicative ‘super-tool’ that seeks to systematize and normalize maintenance concepts, procedures, work instructions, providing guidance on maintenance activities whilst promoting the adoption of necessary management practices for these activities.

Meanwhile, it must also compile information on the current norms and regulations for the company's present activities.

Any manual must be fit for purpose, produced alongside the guidance of internal departments in the company and consultancy experts who can offer assistance in producing the finished manual.

The MMPM must be viewed as the department's metaphorical ‘Bible’. It should not be considered a “miracle worker” among the department, nor will it be able to solve all future challenges posed, however it will offer a valuable starting point for overcoming these forthcoming issues.

It must be institutionalized within the organization, whereby it becomes an official company document. From this moment onwards, once the manual has become “the” document, it must be accessible to all company personnel.

3. WHAT IT IS FOR AND WHY IT IS NEEDED?

There are numerous advantages to having a MMPM in any organization.

In terms of practical usage, some of the benefits of institutionalizing an MMPM are:

- Normalizes the modes of practice within the technical department;
- Standardizes processes and concepts;
- Identifies individual and collective responsibilities at each stage of the maintenance process;
- Implements best practices;
- Having clear and objective instructions on the company's operations and organization concerning the maintenance function.

This:

- Provides the company with useful and updated information;
- Outlines the role of each employee in the company in a clearer fashion;
- Keeps the “ship afloat” in ensuring maintenance management activities are fulfilled;
- Ensures compliance with current legislation concerning maintenance management.

ISO certifications have made an enormous contribution to maintenance management for organizations. They “oblige” us to describe and provide evidence for the fulfillment of a set of maintenance-related actions that comply with the required standards set for maintenance rules, procedures and regulations.

There shouldn't be a “one size fits all” solution for organizations when it comes to a procedures manual, not just in terms of maintenance or the technical area of a company, but for the whole organization. It should be mandatory for organizations to have an official procedures manual for each individual department.

Either way, if your company identifies with one of the following, it might be important to consider producing a manual:

- Resistance to change, or to the introduction of new processes;
- Recurrence of accidents due to non-compliance with standards;

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- Insubordination, or non-recognition of hierarchies;
- Lack of conforming to rules among personnel
- Sub-dimension of the maintenance team;
- Low staff retention rate in the maintenance department;
- Increasing number of “defects” found within the department;
- Diminishing boundaries and responsibilities.

4. STRUCTURE AND CONTENT OF A PROCEDURES MANUAL

Although there is no standard format for the structure of the manual, from the author’s experience, the points mentioned below should be an integral part of your manual:

- Structure of organization and functions: *what does the company “do”; what are you [staff] doing; how is this activity organized; how will we communicate; ...;*
- Maintenance strategy in the company: *navigating of activities; maintenance plans according to the manufacturer; only reactive maintenance; ...;*
- What are the areas within the company requiring maintenance interventions: *machinery and equipment; replacement of lamps in WCs; repainting of walls; ...;*
- Responsibilities and competencies: *who does what, what are the requirements of the job;...;*
- The maintenance concepts currently present within the company: *what is maintenance; ...;*
- Administrative procedures: *flow of information; ...;*
- Organization and management of maintenance information: *on paper, via a software;...;*
- Asset management: *which assets are registered; types of codes; what is the relevant information;...;*
- Maintenance plans: *who defines them; how regularly are they reviewed; ...;*
- Maintenance work performance: *how detailed are the intervention records; what details are included; what jobs are managed and recorded; ...;*
- Intervention reports: *who registers them, how and when are they registered; what is registered; ...;*
- Maintenance management performance indicators (KPIs): *which ones are relevant for the*

organization; who defines them; how information is collected; which information regularly produced; ...;

- Stock management: *the number of warehouse personnel; how management is performed; how spare parts are supplied; ...;*
- Legislation relevant to the company’s activity: *what is the current legislation; who is liable for any breach of legislation; ...;*
- And other notable topics...

5. WHO PRODUCES AND UPDATES THE MANUAL

The creation of the procedures manual should comprise the opinions and preferences of both the different company departments that directly interact with maintenance, and an external entity that has more experience and detailed knowledge on this topic.

The procedures should be reviewed and subject to changes when needed, whether this corresponds to the introduction of new procedures, or adjustments to existing ones. Experts recommend that a review be undertaken at least once a year. It is normal to change maintenance routines over the course of a year, albeit small ones, and that they are not echoed word-for-word in the manual. When re-reading it, this offers an opportunity to assess and update it, ensuring that what is defined in the manual matches the activities carried out in practice.

Manually-produced versions must have their own coding system and clear identification of changes that have been made.

6. MMPM IN PRACTICE

When assessing the practicality of forming an MMPM, based on the author’s experience, there are 3 general stages of production:

Stage 1 - Identify the people involved

Assuming that an external entity will support you in designing the MMPM, it is imperative that you identify the personnel central to maintenance in your company, and interview them for suggestions and opinions, whether it be maintenance technicians, production technicians, directors etc.

Stage 2 - Duration of the process

A recurring concern for companies is the MMPM’s timeframe for completion, i.e. “when”

the MMPM will be ready for usage. Based on our experience, 3 (three) months is the minimum time you can expect to complete this process. Don't be in a rush to publish this Bible (in a metaphorical sense). The author describes below the process that will produce the best quality MMPM in a short period of time.

Stage 3 - The process

We view this process as being a guided “trip” for the company, where we have a starting point - the current state - and planned finished product.

- Gathering information: Interviews with the personnel involved in the process, identified during Stage 1, where the current state is refined and the finished product starts being designed. These interviews are extremely important because they enable the head of maintenance to begin envisioning which concepts and practices he really wants to institutionalize in the company.
- Pre-report: Provisional document that details the current situation and the finished product, outlined in the previous bullet point.
- Approval: After analyzing the pre-report and making the necessary adjustments to it, the head of maintenance approves the report and allows the finishing touches to be made – this forms the Final Report.
- Internal training: Final process where the involved personnel have access to the new document, and where the following will be presented – processes, responsibilities, tasks, concepts, etc.

7. FINAL CONSIDERATIONS

As noted, it is easy and simple to design an MMPM, although it is time-consuming and requires extensive planning. There are several steps in this process that require a serious investment of time. If this time is indeed seen as an investment, the outcome of the document will be of a much greater benefit to the company, and can be seen as a worthwhile task. The MMPM is something that will remain institutionalized within the company, a maintenance Bible for personnel (in a metaphorical sense).

With an MMPM, the effects of errors are minimized and uniformity of activities is promoted, with the company's maintenance work and expected level of performance from the maintenance department made known to all. Meanwhile, responsibilities are defined which avoids the inevitable “it wasn't me” excuse, and the process of recording maintenance information is widespread.

Regardless of whether an MMPM is relevant to your position in your company or not, you should consider (re) kick-starting the development process of the document, taking into account the above information provided.