

# Brief approach to the strategic importance of the maintenance function

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The maintenance function, through actions related to both management and technical aspects, acts in a decisive way in the performance of the organisations. This is the consensus shared by the several agents of the sector. Almost *ad nauseam*, the message of the justified importance of this area for companies is repeatedly conveyed, however, until relatively recently, without an overall adherence to reality.

In fact, as this vision was not seen with the necessary priority by organisations, it did not gain substance, but rather was assumed as a *nice-to-have*, defended and liked, but for which little or nothing was done. However, breaking a very deep-rooted model, for some time now this discouraging scenario has started to show signs of transformation, and today we are witnessing a different positioning by several companies. It is hoped that, in some way, it will produce a systemic effect.

It is in this context that we, briefly, try to systematise and highlight in the following lines some of the reasons why the maintenance function should be understood as strategic by organisations.

Perhaps contrary to widespread thinking, the role of the maintenance function is not only to restore the equipment to its initial state or, in other words, to make it capable of fulfilling its required function. In fact, although still present in the common maintenance vocabulary, terms such as "repair" and "correct" no longer have the importance that was once attributed to them.

According to Kardec and Nascif [1], the maintenance function should increasingly be seen as an integral part of any organization's strategy. To this

end, it will be fundamental the stage in which the goals to be achieved from an adequate maintenance strategy are defined

As a result of the simple exercise of identifying some of the clearest objectives of the maintenance function of an organisation, it is easy to conclude that one of the main ones is to guarantee the availability of the equipment to fulfil its required function. It is therefore easy to see that these objectives are naturally intertwined with several of the potential benefits. Four stand out:

- **Production improvement:** the implementation of preventive maintenance or, in certain cases, predictive maintenance, allows for the reduction of the downtime caused by unplanned events. In the event of a failure, the application of failure analysis methodologies supports its resolution, guaranteeing the shortest possible equipment downtime and contributing to the achievement of the established production goals;
- **Safety of people and facilities:** this is a primary objective of an adequate maintenance strategy. Accidents often result from equipment failures, so, as mentioned, the probability of their occurrence may be reduced through preventive maintenance actions. Performing these activities is extremely important, especially in equipment (or components) from which failures with serious consequences may result. The definition of this equipment, usually designated as "critical", can be done using risk analysis tools;
- **Cost reduction:** well-maintained equipment is less likely to fail, with direct reflection on the reduction of costs related to corrective interventions - namely, those related to labour resources, materials and/or services -, but also on those indirectly linked to this type of maintenance, with particular emphasis on costs resulting from production stoppages.

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The literature on maintenance establishes that unplanned works represent a cost three to four times higher, when compared to planned ones [2];

- **Management and control of maintenance indicators:** in order for maintenance to be recognised as a strategic function, it is imperative to define and control maintenance indicators, which should provide, unequivocally, representative data of your performance. With the purpose of raising the levels of the maintenance function, the well-known saying should be taken as a premise: one can only manage what can be measured. The choice of key performance indicators has, therefore, a special significance - they should translate, in an unquestionable way, what is intended to be analysed. The definition of indicators carries an important first step in the process of improving the state of the maintenance function of any organisation. Once this stage is fulfilled, benchmarking policies should be introduced (a search for reference points to measure and control a certain indicator) with a view of establishing tangible goals.

The confidence that one can have in the capacity of a certain equipment to function in the desired manner, in other words, without problems - a property that in the terminology established in the standard corresponds to the concept of reliability -, presents itself as a good example of a circumstance strongly linked to the state of the maintenance function of any organisation, being all the greater the better its condition. Along with other factors, a healthy maintenance function represents, for any company, a considerable advantage over its most direct competitors.

Based on some of the potential benefits, some of the reasons why the maintenance function should be seen as strategic by organizations have been pointed out. Undoubtedly, there will be others. Together and articulately, they contribute in a decisive way to the success of any organisation, considering that these correspond to some of the most important in that realm.

It is certainly not an abuse of language to state that the importance of the maintenance function does not exhaust itself in the reality of organisations, because everything, absolutely everything, requires maintenance. Considering this, what is left to say is: this is also true in our lives, in our day-to-day lives. As a matter of fact, the elementary task of scheduling a pet's appointment in the veterinarian for vaccination is, obviously at a different level, an example of systematic maintenance. It is believed that the relevance of the subject will make it worthy of further study in its own article.

#### BIBLIOGRAPHIC REFERENCES

- [1] Pinto, A. K.; Xavier, J. N. (1998). *Manutenção: função estratégica*. Rio de Janeiro: Qualitymark.
- [2] Cabral, J. P. S. (coord.) (2021). *Gestão da Manutenção de Equipamentos, Instalações e Edifícios*. Lisboa: Lidel.