

## **The Application of 5S Methodology into Plant Maintenance KPIs**

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### **Abstract**

5S is a workplace organization method that uses a list of five Japanese words: Sort, Shine, Set in order, Standardize, and Systemize. The list describes how to organize a work space for efficiency and effectiveness by identifying and storing the items used, maintaining the area and items, and sustaining the new order. The decision-making process usually comes from a dialogue about standardization, which builds understanding among employees of how they should do the work. Riyadh Refinery team members succeeded in implementing, the experiment of applying this methodology into maintenance KPIs. The study identifies the complex items such as, notifications, orders, DCs, Backlog. Team started by sorting each type of activity is a separate KPI. Cleaning workplace is mandatory for shops activities, however, we have utilized this concept to clean all backlog in order to be able verifying the new comers. Who comes first is the one who serves first; furthermore, we have sit the priority, audit, safety, etc. to be the first for serving. To ensure the similar type of KPI will be handled efficiently, we have standardized the Reproducibility and the reliability of the KPI. To ensure sustainability, different ideas were implemented to have the reporting system in place and repeatable at the same time every day.