



INTERNATIONAL OPERATIONS & MAINTENANCE CONFERENCE
IN THE ARAB COUNTRIES

UNDER THE THEME

"MANAGING MAINTENANCE WITHIN INDUSTRY 4.0"
CONICIDE WITH THE 16TH ARAB MAINTENANCE EXHIBITION

**Integrated Maintenance Management
System under Current Economic
Challenges: Review and Applications
to Reduce Product Cost**

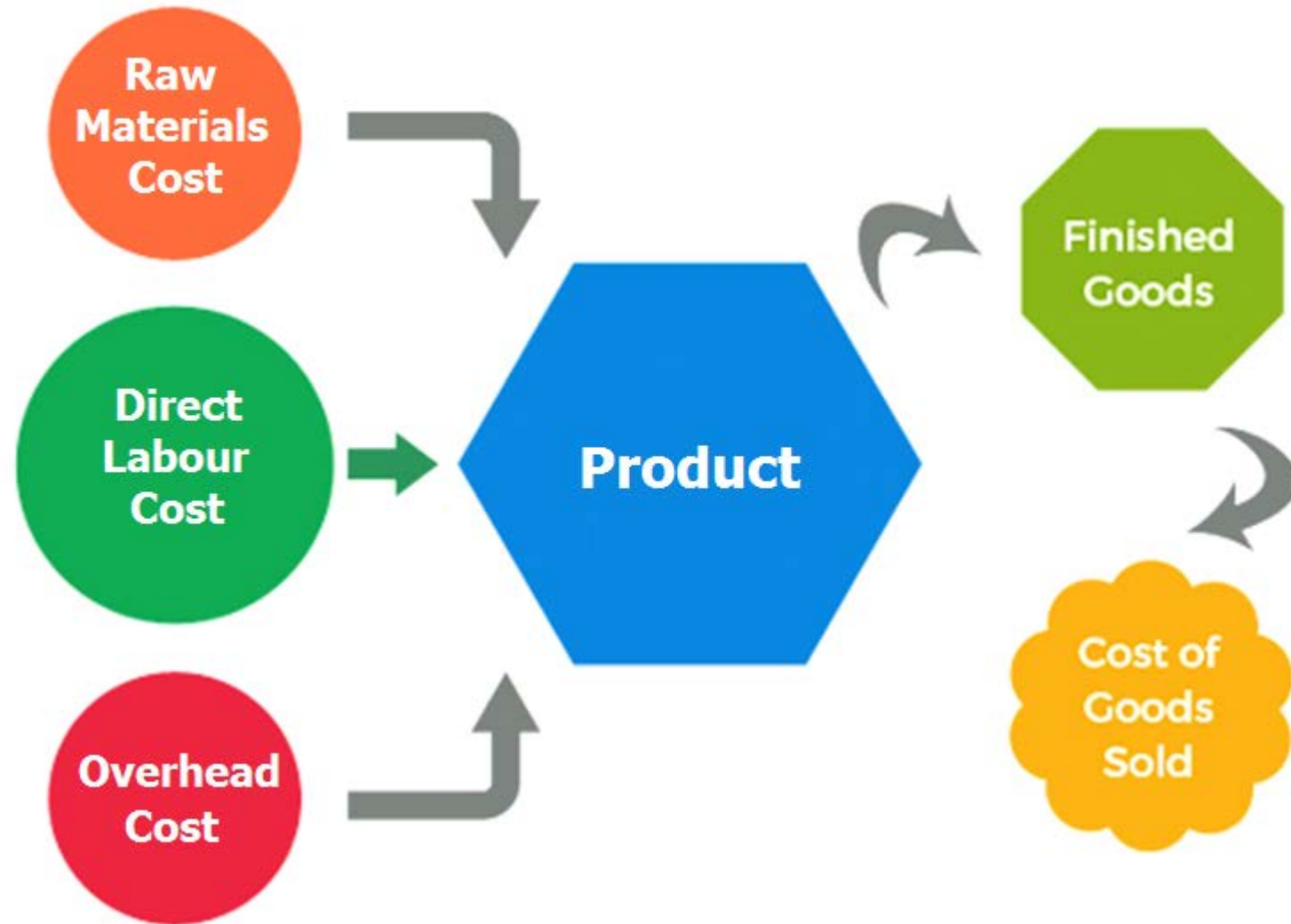
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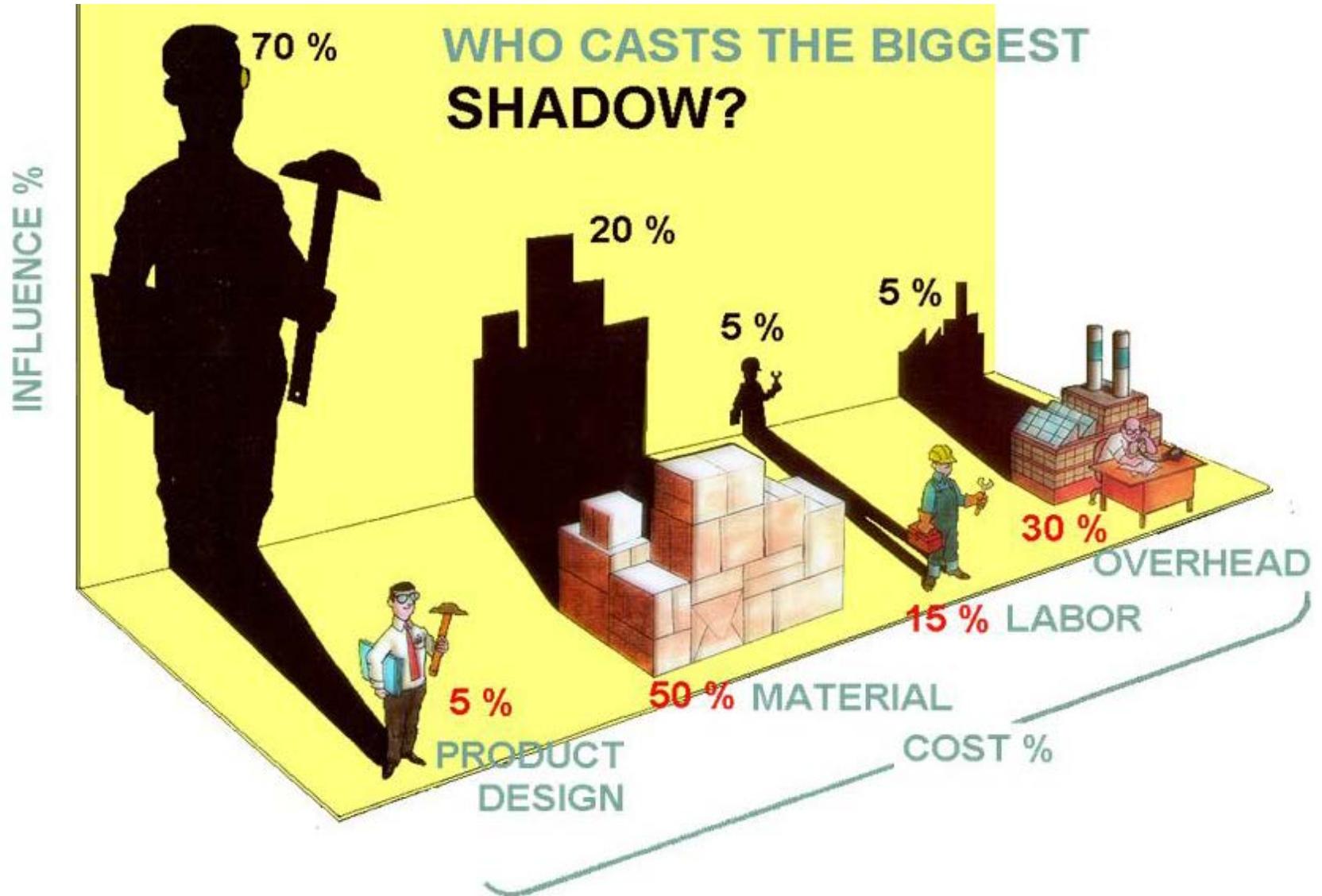
4.0



Product Costs



Product Cost Reduction Strategies



Maintenance Management and Barriers to Development



- 1 Lack of prioritizing equipment maintenance works standardization
- 2 Allocation of additional funds for maintenance
- 3 Sharp standardization of repair activities
- 4 Less efficiently central decisions to immediately service equipment
- 5 Communication problems and joint planning

Cost Drivers Analysis of IMMS



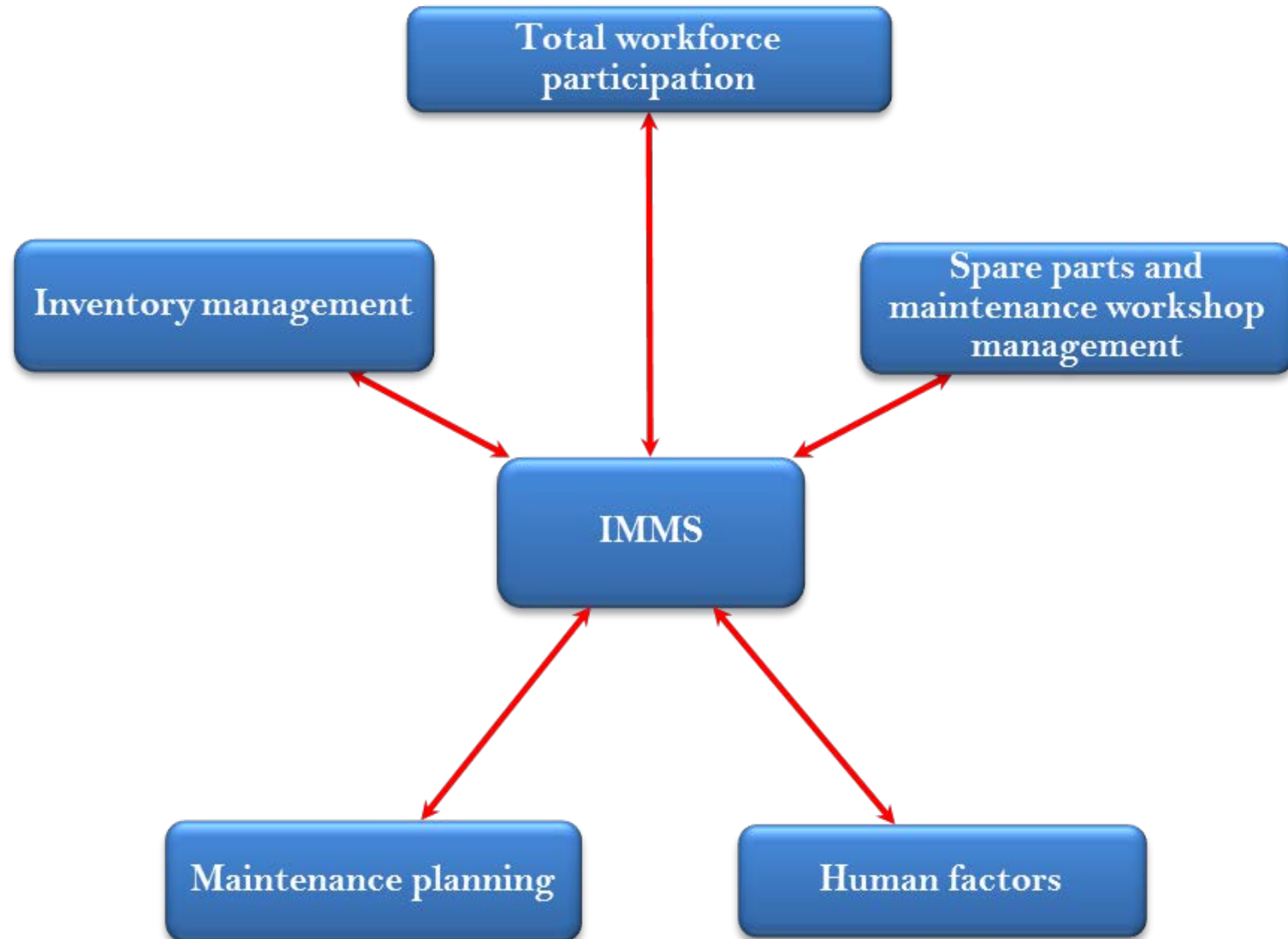
Performance Indicators Measuring

- Maintenance delivery
- Maintenance work quality
- Equipment reliability
- Operational risk reduction
- Maintenance resource usage
- Maintenance costs

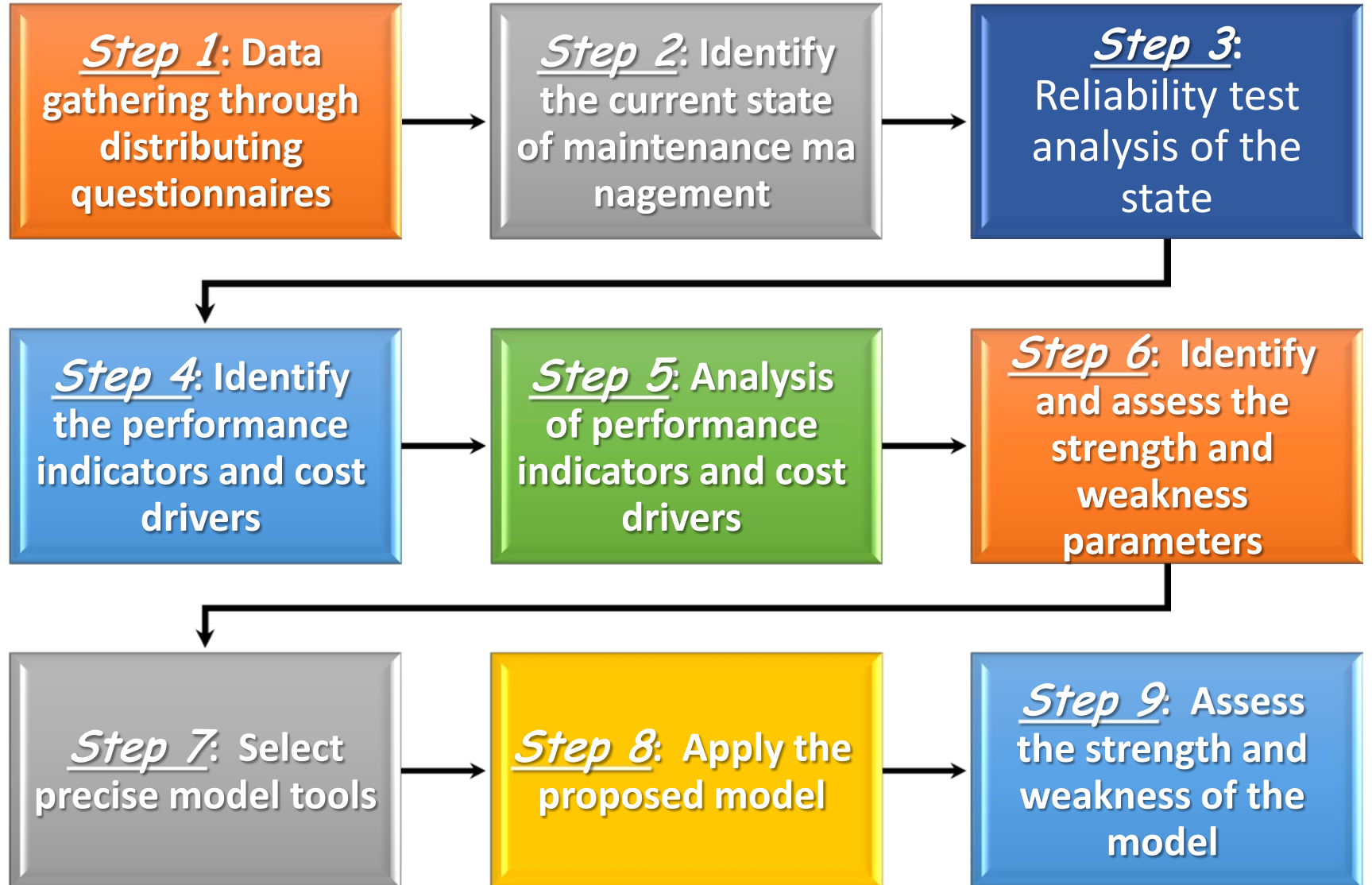
Cost Drivers Identification

- **Maintenance cost drivers-normal operations**
 - Delayed maintenance
 - Operating practices
 - Quality of completed maintenance work
 - Design and construction quality of the equipment.
 - Closing between operating conditions and design envelope of the equipment.
 - Maintenance strategy adoption
- **Maintenance cost drivers - shutdowns**
 - Bad appreciation of shutdowns frequency and duration
 - Lack of data collection

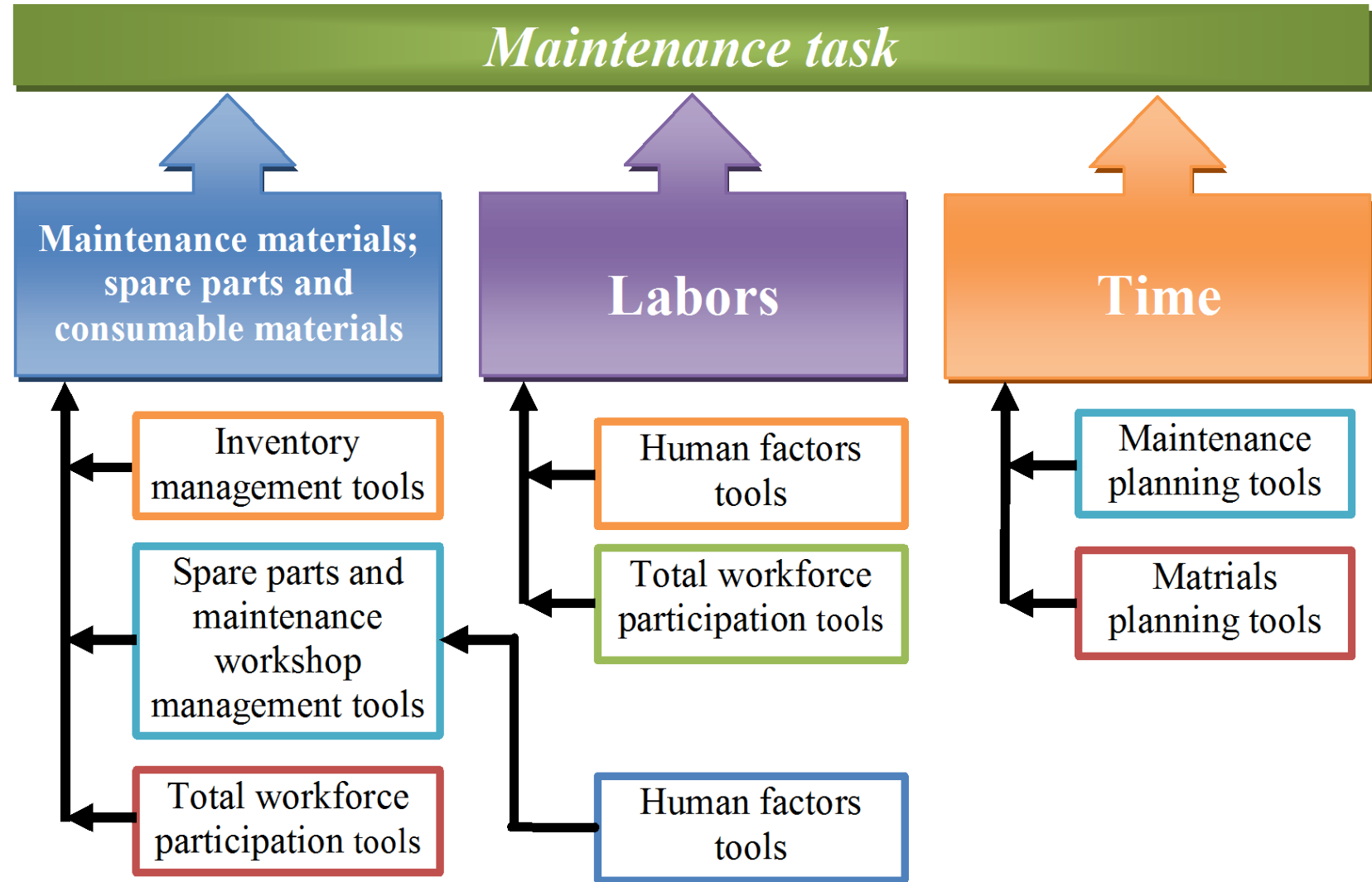
Proposed IMMS Model Description



Proposed IMMS Model Steps



Proposed IMMS Model Methodology



Conclusion



1. Integrated maintenance tools such as human factors, inventory management, Spare parts and maintenance workshop management tools have much more to offer to a maintenance organization both in the areas of safety and profitability.
2. The proposed model employs to identify and manage the factors that have been shown to contribute to increase the productivity of the maintenance organizations workforce can be effectively used to reduce the product cost.
3. The analysis of the performance indicators and cost drivers is a valuable tool for maintenance systems developers.



*Thank
You*