Helmerich & Payne, Inc. is a contract drilling company headquartered in Tulsa, Oklahoma, and engaged primarily in the drilling of oil and gas wells for exploration and production companies. The Company stands as one of the primary land and offshore platform drilling contractors in the world and is an industry leader in innovation, a fact most notably demonstrated by its FlexRig technology.

**ANALYSIS**

The analysis involved a qualitative and observational assessment to understand the current state and workload constraints impacting Maintenance effectiveness and to understand the potential obstacles hindering operational performance.

Over the course of the analysis, we collectively gained insight into significant opportunities for improvements in uniform processes across the districts and the links to the processes for SLPC (Safety Learning & Performance Center) and RAMS (Rig Asset Management System), in planning and control and in skills management practices.

The primary areas of opportunity identified were:

- Inconsistent practices and procedures between Maintenance Supervisors within the same region and across regions.
- Data being captured from the Maintenance EAM system was flawed and unusable from a planning and performance feedback perspective.
- Tools for effective planning, scheduling, and follow up did not exist.
- No metrics for measuring district performance existed.
- Skills competencies and capabilities were not formally assessed.
- Poor and/or inconsistent communication across all facets of the company.
- No truck inventory management standard.

**PROJECT APPROACH**

The project objective was to develop and implement uniform processes, management planning and control practices and a skills development program across the districts that will allow management to have improved visibility, control and predictability over capacity utilization and performance.

The approach included:

1. A review of the following:
   a. Regional Maintenance Planning (Electrical/Mechanical).
      i. Overtime monitoring.
      ii. Schedule population and creation process.
      iii. Materials and equipment planning process.
      iv. Manpower Confidence Scale/Skills Flexibility Matrix.
   v. Truck outfitting.
   i. Skills Competencies required for manpower assignments.
   ii. Scheduling process.
   iii. Roles and Accountabilities expectations.
2. Overarching Management Control System (MCS) – the tempo and rhythm with which we work.
   a. KPI Dashboards for goal calibration and target attainment.
   b. Meeting structures and agendas – who needs to be talking to who about what and at what frequency?
   c. Action Log compliance and documentation – What needs to be done? Who is going to do it? When are they going to do it by?
   d. Meeting Effectiveness – short, prescribed methodology oriented around specific initiatives only.
   e. Short Interval Control Mechanisms.
      i. How are we doing against our daily, weekly, monthly targets?
      ii. What are we doing to course correct?

IMPLEMENTATION
A project kicked off with a team of 3 Renoir consultants and 5 H&P maintenance superintendents. The team reviewed the approach and developed appropriate solutions. The solutions were then tested at two of the districts for additional modifications. Prior to installing the tools at the remaining districts, all superintendents were brought in for training. This allowed them the opportunity to ask questions and raise their concerns.

RESULTS
Open Work Order Days Reduction – Open work orders improved from an average of 55 days old down to 25 days.
Average Labor Hours Worked per Technician – Without increasing staff, maintenance technicians average hours per week fell from 90+ hours per week down to 84.
Alignment of position Descriptions – Superintendents collaborated, developed, and documented the responsibilities and aptitudes for each technician level (a three up to a one +).
Improved Data integrity – The emphasis here is on how maintenance were completing work orders. The inconsistencies between districts were addressed to allow for improved reporting.
Truck Audits for accountability – A new truck audit process was developed and implemented to ensure that maintenance technicians were held accountable for what parts and tools were on their trucks.
Improved Scheduling and Follow-up – The maintenance superintendents now have tools to properly plan work for their technicians and to follow up on the work that was assigned. There is also a tool to ensure that they can properly determine the resources available and fully load each technician with a full day’s worth of work.