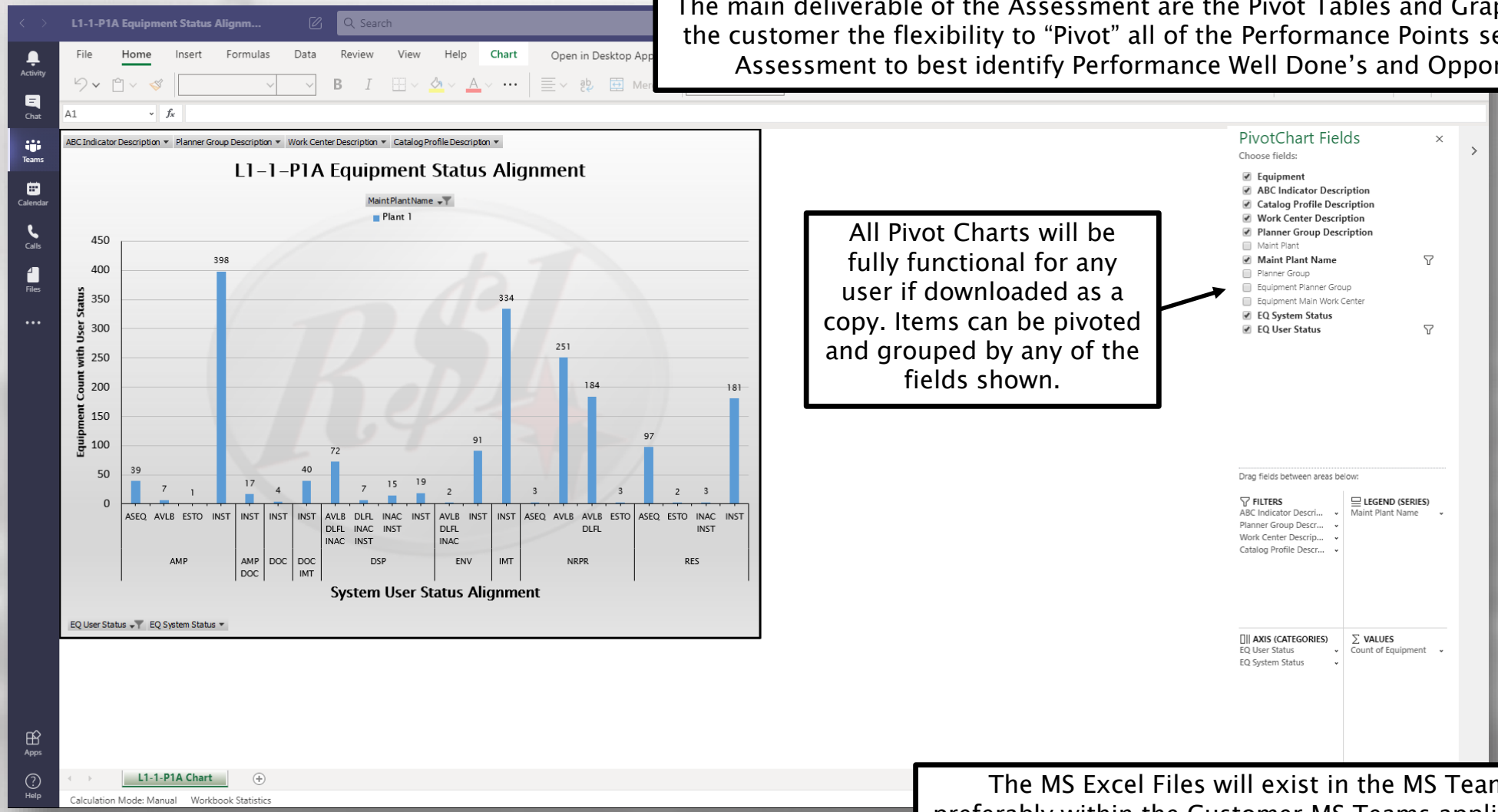
SAP PM Assessment Deliverables

Performance Point Graphs

The main deliverable of the Assessment are the Pivot Tables and Graphs that allow the customer the flexibility to “Pivot” all of the Performance Points selected in the Assessment to best identify Performance Well Done’s and Opportunities.



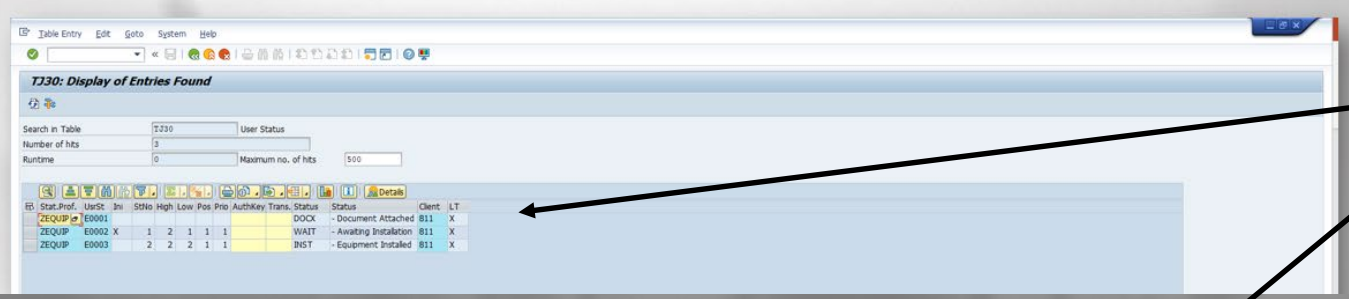
All Pivot Charts will be fully functional for any user if downloaded as a copy. Items can be pivoted and grouped by any of the fields shown.

The MS Excel Files will exist in the MS Teams structure, preferably within the Customer MS Teams application, but either way, all MS Excel Files are downloadable for individual use.

Reliability Solutions, Inc.

Performance Point Explanatory Reports

L1-1-P1R Equipment Statusing



There do exist Explanatory Reports in some cases that detail Configuration information that allow for understanding of Functionality. In this case, these two slides show how Equipment User Statuses are configured to perform and link to System Statuses.

L1-1-P1R Equipment Statusing

Assessment Summary Report

A Final Report will be submitted for a management overview of the Assessment findings.

Reliability Solutions, Inc.
Igniting Reliability with an SAP Spark!

Customer SAP PM Assessment Final Report

Executive Summary

During June and July 2019, Reliability Solutions, Inc. and Customer executed an SAP Plant Maintenance Assessment Process to evaluate how well SAP PM supports the Customer Maintenance Performance Metrics and SAP PM Best Practices. The evaluation period was January 2018 through April 2019.

The opportunity statement that was presented to RSI prior to the assessment was twofold, SAP PM was too slow and cumbersome for their application on the vessels (which use a satellite link to communicate), and that there was a need to solidify the SAP PM Training Process. There are some unique challenges to making SAP PM function well in an offshore environment.

The SAP PM Value Proposition lies on three fronts

- Providing Customer with the facilitation and documentation for maintenance work execution.
- Providing Customer with the Equipment Reliability and Maintenance Performance Metrics to use for business decision making, and
- Providing that information to all levels of the organization.

The assessment did reveal that Customer demonstrates a clear strength in SAP PM Asset Structure and Preventive Maintenance application, which after all is the main event. The commonality of the vessels presents a perfect opportunity to share Equipment Reliability lessons learned and maintenance strategies. The barrier to SAP PM value realization actually lies in the base application of recording of equipment reliability and corrective work order planning and execution. In order to effectively implement SAP PM, a clear vision on how to execute maintenance work is needed, and that strategy is clearly defined in the Maintenance Manual. The step that is lacking is tying the Maintenance Manual directly to SAP PM with clear deliverables such as:

- Detailed description of how SAP PM provides effective reporting for Customer
- Detailed description of how SAP PM design facilitates the Maintenance Improvement Strategy
- How the Maintenance Organization will embrace the SAP PM skills to realize the SAP PM Value Proposition to support Equipment Reliability Improvement.

The solution to all of the issues above is to clearly establish in SAP PM what Customer Maintenance Success is by detailing the reporting needs and establishing a streamlined process to capture the data requirements of those reports reliably, and finally design an education process that effectively prepares all of the SAP PM stakeholders to succeed.

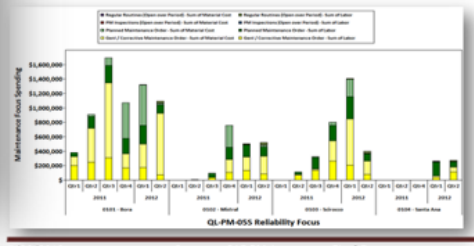
Reliability Solutions, Inc.
Igniting Reliability with an SAP Spark!

2.0 SAP PM Significant Well Done's

It is important to recognize the areas of effective SAP PM design and usage on which to build in the SAP PM path forward. The areas that deserve special mention are as follows:

2.1 **Effective Management of the SAP PM Technical Object Structure** – The foundation of good reliability history is assigning the history to the correct location. While there are opportunities to improve parts of the Technical Object Structure, it is evident that the centralized maintenance of the vessel Technical Object Structures is paying off. The hierarchies are well aligned for inter-vessel benchmarking and maintenance information sharing. Equipment criticalities are actively used and valued. Bills of Materials are a focus of Technical Object Structure success. Administrative data on Functional Location and Equipment Master Records are reasonably well managed and Technical Object statuses are also in good alignment. While RSI cannot comment as to the accuracy of the Technical Object Structure, the management processes are effective.

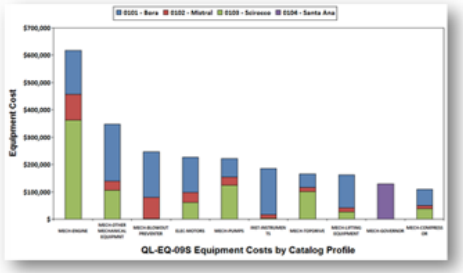
2.2 **Good Understanding and Application of the Preventive Maintenance Application of SAP PM** – It is important to understand the "End Game" of Equipment Reliability and that is effective and efficient application of Preventive and Predictive Maintenance. The Preventive/Predictive Maintenance Application within SAP PM does have a certain amount of complexity to accompany the flexibility and power that is required, and the Customer central SAP PM team is effectively applying this process. While the unique nature of the "plants" (vessels) being off-shore, there is a distinct advantage in centralizing this functionality in Houston. There exists a solid understanding and application of Maintenance Plan, Maintenance Item, and Maintenance Strategy/Package applications in SAP PM. This does result in Customer dedicating a significant portion of its Maintenance effort and spending to Preventive and Predictive Maintenance. This is demonstrated in Performance Page QL-PM-05S which shows Corrective Labor and Material Costs in yellow, and Preventive/Predictive Labor and Materials in green over time.



Reliability Solutions, Inc.
Igniting Reliability with an SAP Spark!

3.0 SAP PM Significant Opportunities

3.1 **Better Definition of the SAP PM Reporting Strategy is Needed** – A very prevalent complaint about SAP PM Implementations is that much effort is spent inputting data and the outflow of information is minimal, or at best confusing. While it is important to understand the data that needs to be entered in order to just get the maintenance work done, there is information on a higher plane that defines how Customer Measures Maintenance Performance and a derivative of that is bringing opportunity to the surface. A good example is Performance Page QL-EQ-09S below, showing Maintenance Spending by Equipment Type (Catalog Profile):



Information of this type is used to set improvement direction specifically by Equipment Type, which is how maintenance organizations achieve systemic improvement. Based on the data above, one could reasonably assume that all vessels should focus on engine maintenance knowledge and application until that cost is minimized.