Key Performance Indicators in an Agile Supply Chain

Jacob Langston
Wright State University - Main Campus

Follow this and additional works at: http://corescholar.libraries.wright.edu/master_infosystems

Part of the Management Information Systems Commons

Repository Citation
http://corescholar.libraries.wright.edu/master_infosystems/22

This Abstract is brought to you for free and open access by the ISSCM Master Programs at CORE Scholar. It has been accepted for inclusion in Master of Information Systems Capstone Executive Summary by an authorized administrator of CORE Scholar. For more information, please contact corescholar@www.libraries.wright.edu.
Key Performance Indicators in an Agile Supply Chain

Student: Jacob Langston
Faculty Advisor: Kevin Duffy

Agile supply chains offer the flexibility required to support customers who require a “quick response” to demand requirements. Coupled with lean process improvements and integrated solutions, cost-effective supply chains can be established that provide the infrastructure needed to support the agility needed to meet customer demands; ultimately increasing market share and continued growth. While Emerson’s mission to remain an industry leader in the HVAC&R Industry aligns with these aspects of supply chain management, current system infrastructure does not support such flexibility. Multiple execution tools, processes and one-off solutions make it difficult to standardize reporting methodologies for performance metrics. This leads to confusion between different operational functions and groups. Additionally, this confusion adds wasted time and effort at extensive cost to the organization that must be eliminated. For these reasons, opportunity exists to reduce this confusion and wasted effort by developing a standardized process for all affected business groups involved.

The proposed solution will eliminate the need for two separate metrics that require duplicated efforts by independent groups; resulting in a faster more flexible supply chain. This project will mitigate risk in regard to system errors for operational key performance indicators such as Supplier On-Time Delivery and Operational Execution Efficiency. Additionally, we anticipate this will remove complexity throughout the supply chain, through streamlined management of $892 million of direct material components annually.

The primary goal of this project is to create a standardized process for capturing supplier on time delivery performance for both the AC and Refrigeration Business Units. The newly implemented process will provide an integrated supply chain execution reporting system resulting in alignment of two separate existing suppliers on time delivery metrics.

The intent is to integrate two key execution systems to eliminate redundant work by multiple groups. The purpose of this project is to eliminate waste and reduce cost by automating multiple data streams that reside today within the supply chain. We plan to integrate the supplier portal that houses forecast and order data for our suppliers to access, the Ultriva execution tool, as well as the Mainframe and Oracle ERP systems where transactional data resides. Exhibit 1 details the current state and future state for the number of reports currently published, the hours and employees required to complete the reports today; and how implementation of the project we are working on will reduce those requirements.
This integration will result in a reduction of hours required to collect and validate data, a reduction in the number of employees required to complete the monthly reports, as well as a consolidation into one standardized report output. As an added benefit, we hope that this project will ultimately introduce new reporting opportunities by utilizing the latest to market analytics for additional processes that could benefit from lean process improvements. Modern supply chain metrics will facilitate substantial process improvements for the business that will have lasting impacts for years to come. These metrics will also provide enhanced visibility into daily operations which were previously difficult to visualize.