

Experiences with Quick Response Manufacturing

In an ongoing search for improvement methods that are applicable in the SME MRO sector, the research team from 'Maintain your Competitive Edge' is also interested in best practices from industries outside the aviation. On April 1, 2014 the research team visited a theme meeting: 'Lead time reduction with QRM'. QRM is an abbreviation for Quick Response Manufacturing and is an improvement method that aims at lead time reduction. According to the founder of QRM Rajan Suri: "The guiding management strategy is ideally suited for companies offering high-mix, low-volume and customer-engineered products." The speakers of the QRM meeting also acknowledged this principle and explained why this was a good solution to their problem. Erik van Avendonk, manager technology and quality assurance at Legrand, explains to have succeeded in lead time reduction with the use of QRM. With a high product mix of 36 products and low volumes varying from 1 to 15 pieces, the lead time is reduced from an average of 116 days to an average of 25 days. Besides Legrand, Fried Kaanen from BOSCH schanieren also applied QRM to reduce the lead time significantly. The lead time reduction is mainly the result of the use of Paired-cell Overlapping Loops of Cards with Authorization (POLCA). This specific tool is aimed at capacity signalling of QRM cells. QRM cells are small departments on the work floor where different operations on the product are performed. The capacity signalling creates flow and minimalizes inventories at QRM cells.

Research from the HAN Lean-QRM research department

Jannes Slomp, lector world class performance at HAN, explains that lean and QRM are different but go together. This explains the stripe between Lean and QRM in his presentation (Lean-QRM). Lean aims at reducing waste using standardisation, coordination and flow and to secure success, lean uses the concept 'continuous improvement'. But in practise the coordination and flow within the process appears to be difficult to organize when much variation is present. This is where QRM kicks in. Lean and QRM are close together as improvement method, but have a different focus. Organizations do not focus on eliminating the 7 wastes, but focus on lead time. In addition, results from the HAN emphasize the importance of employee involvement when implementing Lean-QRM.

Growth of QRM

According to Hans Gerrese, partner at LeanTeam, is the implementation of QRM no longer to be stopped within the industry. Hans indicates that there is a high demand to implement QRM. There are even requests from Belgium, Denmark, Germany and Poland to work together.

Conclusion

Because QRM is good received in the industry and especially at organizations with high-mix low-volume characteristics, it is interesting for the research team of 'Maintain your Competitive Edge' to evaluate the possibilities of QRM within the roadmap.

Damy Snel – Graduate student
Enos Postma – Researcher trainee