
Bottleneck problems in intralogistics systems and a way of resolution

Many companies face obstacles with their logistics system as often one or more components are limiting the outcome or performance of the whole environment. The phenomenon for this is called “Bottleneck” and bottlenecks are usually identified as resources or utilities that limit the outcome and the performance of a system.

Although this is not satisfying research find out that, “Every logistic system has at least one bottleneck, which has a significant influence to the overall performance.” (Goldratt). Thus, it can be said that the overall efficiency of a logistics system is determined by its bottlenecks. Therefore, it is just obvious that an optimization of these bottlenecks will instantly help improving the outcome and performance of the system.

In order to stay competitive and to gain needed results, companies see themselves in a battle for improving these constraints, as detecting the bottlenecks is still a major challenge, due to the fact of modern systems diversities and the substantial increasing complexity of the supply chain network.

Different approaches exist since years to solve the bottleneck problem, but no universal and satisfactorily solution exists. Therefore, redPILOT addresses this topic and concentrates on solving the bottleneck problem through a specific approach:

redPILOT focuses in its work on the shifting bottleneck detection algorithm. With this method, active and passive states of a resource can be defined and dime times can be calculated. Thus, redPILOT is able to help its customers to increase the understanding of the constraints within their system and allows a much more reliable bottleneck detection.