

## **USING SCRUM METHODOLOGY FOR SUPPLY CHAIN MANAGEMENT PROCESSES**

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In the modern world, managers face a lot of problems with managing interconnected and complex tasks in a quickly changing environment. This can be a problem in supply chain management (SCM) processes that are very complicated and require a lot of effort to coordinate different aspects of such activity. At the same time in project management the agile methodologies, e.g. Scrum, are widely used for more effective and flexible organizing of different processes in small and medium-size teams. These methods can be used to improve workflow and motivate people to participate in challenging tasks. But the application of such techniques in SCM is not obvious and requires additional investigation.

Scrum methodology is typically used in creative projects, product development, software development, research and other fields where it is possible to give work results to users in an incremental way. The distinctive feature of this method is that it uses short periods (sprints) for breaking down large task lists (product backlogs) for a more effective organization of work. On every sprint, team members perform only the needed activities to deliver the working final product. The work continues in iterations, delivering improved products every time. Sprint duration is usually relatively short to allow people to concentrate on necessary features and problems without keeping in mind a lot of different non-urgent tasks.

While being created for collaborative product development the Scrum methodology, or at least its elements, can be adapted for the needs of management in the field of supply chains. The main area of improvement using this approach is personal time management of logistics and supply chain management staff, organization of decision-making process and work on reporting. So, it is any field of activity with some result in form of decision or a document is created.

Obviously, the adaptation of scrum to SCM requires changes in the approach and terminology. For personal use in time management, it is possible to ignore the concepts of the development team and scrum master, to reduce sprint duration to one or several working days and to set only short-term goals. The product owner will be a higher-level manager or a reports user. In case of teamwork on the development of a warehouse in structures, transportation routes or inventory management schedules it is possible to maintain the original Scrum workflow synchronized with native logistics cycles: replenishment periods, order fulfillment time, etc. Providing usable results (reports and decisions) with Scrum methodology as fast as possible and then providing additional enhancements to them in iterations can facilitate flexibility of the supply chain and improve the responsiveness of management.