

Acceleration Through Quality – Accelerating Order-Specific Processing by Increasing the Quality in the Early Phase

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The phenomenon of possible acceleration and stabilization of “end-to-end” processes through the precise increase of the quality of specific process steps is in itself not a new concept. However, it still seems to be counterintuitive and therefore hard to implement. For arguments sake, the customer is most often cited as the reason. He does not want to wait for an answer forever and otherwise might be lost. Urgency is created and everything takes place at increasing, yet often uncontrolled speed. Experience teaches that it often pays off to take the necessary time at important stations in order to achieve a qualitative process performance.

The order management process as a reflection and starting point for operational excellence

The situation was typical for a company whose core value-added process, the order management process, does not run sufficiently stable. The reasons can be numerous. Often it can be traced to rapid growth in the past, an emerging business segment, or organizational complexity. In this case, it was a mixture of several components. A more or less disappointing adherence to delivery dates, too long and strongly fluctuating throughput times, as well as comparatively high scrap rates were often the result. Schuh & Company was hired to analyze the fundamental weaknesses of the order management process step-by-step, suggest action items, and oversee their implementation.

Only the holistic view of the process as well as the analysis of the causes leads to approaches of sustainable improvement and acceptance by the employees

The starting point of every process analysis has to be the modeling of the current situation. In this case, the most important phases of the order management process were segregated and for each the

company found an expert team. Within a half-day expert workshop, the order management process was captured with the help of the values stream analysis for administrative processes. Process and throughput times were also determined and the main weaknesses were identified and discussed. Figure 1 shows an excerpt of how such a modeling and discussion could look and how they can be created by directly working with the company employees (Figure 1: Example for the current modeling of a phase of the order management process).

The analysis revealed the need for action in the following five areas:

- Inadequately clarified processes and frequent questions
- Partially ambiguous and non-homogenous product specifications along the process
- Strongly fluctuating lot sizes
- Complex, often inappropriate production planning and timing
- Complex final inspections and release



Figure 1: Current State Map of an Order Processing Value Stream Section

The employees accepted the results of the analysis, because they were clearly based on the input from the expert workshop and everyone was deeply involved in the identification of the areas. The result was easily comprehensible and understandable for everyone involved. Thus, the developed solutions were accepted and successfully handled and implemented.

Most of the time an early clarification accelerates the speed of the later phases of the process

The center of the approved measures was the reorganization of the early phase of the order management process. The focus lay on the early and extensive clarification along all specifications of the whole order management process. Starting with the product and packaging characteristics, the production, extending all the way to the quality with regards to product functions and testing procedures. In the past, early production releases based on insufficiently clarified specifications sometimes led to major disruptions along the processes. It was not ensured that all specifications fit together continuously. Another problem was caused when changes to orders that were performed in the past in similar yet not identical form,

were underestimated. The results were huge efforts towards the end of the order management process that were neither intended nor scheduled and always led to increased capacitive stress. These two topics caused many other challenges, which is why the optimization of the early phase of the order management process was the first step.

The measures to reorganize the processes pursue three goals:

- The preferably objective classification of orders on hand (adaptation development versus new development)
- Completeness of all specifications prior to the start of production
- Consistency of all specifications along the whole order processing

To reach these goals, the three topics content, process, and structure needed to be addressed.

- **Content**
 - 1) Definition and description of the criteria that lead to the differentiation of new and adaptation development.

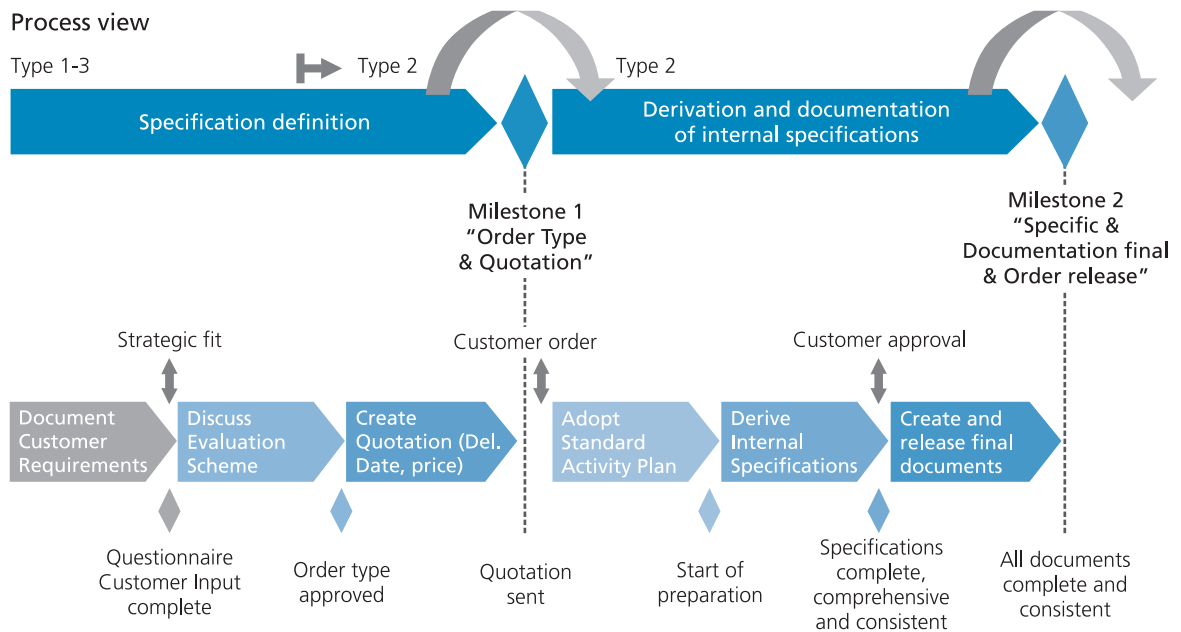


Figure 2: The redesigned process on levels 1 and 2 (of 5)

2) Collection, correction and description of all necessary and subject-specific detail specifications along the entire order management process in a specification matrix. Organizing and keeping contents and templates in a centrally kept master database.

- **Process**

Definition of a target order management process on five detailed levels to standardize order specific customer inquiries as well as derive and define all necessary specifications along order processing after receipt of the orders (Fig. 2).

- **Structure**

Development of organizational elements to optimally support the new process including the definition and implementation of three new process roles including the goals and roles, responsibilities and expertise.

- **Manager for Strategic Orders**

A functionally independent and neutral role, responsible for the coordination, control, and

documentation of the whole order processing procedure from customer inquiry to on-time delivery of the product for orders that are especially important.

- **Clearing House**

A role close to sales that is responsible for the completeness of the customer specifications as well as the control of the interdisciplinary discussion to objectively classify the order types.

- **Adaptation Engineering**

A role close to production that is responsible for the deduction of all order and content-specific specification during the process phase as well as the development for adjustments to drawings with little scale (without involving the development department)

The successful implementation of all topics up to the fifth process level was achieved after the concept phase with the help of Schuh & Company. Predefined work packages were consistently transferred to

the company and thereby shifted the responsibilities to ensure success. The transfer and implementation phases that relied on drastically less external consulting ensured that the content-related questions that had not been answered were addressed. The work progress was still made transparent and the need for action recognized, described, and transferred into the project planning.

Quick, operative successes as well as active employee participation build the foundation for the continuous improvement process

The achieved results are multi-faceted. The highest priority is given to problems that needed operative improvements. First and foremost, the stabilization and decrease of throughput times along the Lean Principles and the increase of the adherence to delivery times should be mentioned in our case. To achieve lasting effects, the introduced process standardization and the intensively practiced cross-functional discussion and teamwork culture were of more importance. These should and can lead in the next step of the implementation to the continuous improvement process that not only creates continuous improvement, but also optimizes other similar processes step-by-step. The project with Schuh & Company for the process-oriented reorganization of order management can serve as pilot project and model.

About the Company

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