

BREAKTHROUGH

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6σ THE DEFINE PHASE

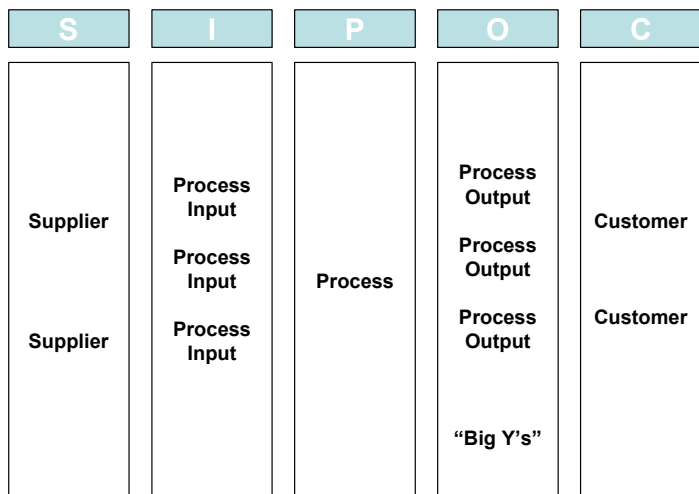
By Harold Chapman

STEPS TO DEFINE

In the last newsletter we discussed the phases of Six Sigma. There are 5 phases in the Six Sigma problem solving process. Each phase is very important to the overall success of the project. This month we will dive into the first phase of the Six Sigma process, which is called the DEFINE phase. There are four main steps within the DEFINE process to ensure there is complete understanding of the project and process being addressed. Those steps are: Initiate the Project, Define the Process, Determine Customer Requirements and Define Key Process Output Variables.

The first step is to initiate the project. The main tool used to facilitate the process is called a Team Charter, which ensures there is alignment between the team and management; therefore giving the team the full support from management on any changes that need to be made during the project cycle. The team charter accomplishes the following objectives:

- Alignment with the company’s strategic business plans.
- Clear Targets
- Clear Scope
- Clear Roles and Responsibilities
- Team Member Alignment with the Team Purpose



Once the project has been initiated and the team charter has been developed, the team can begin to define the process. Defining the process is critical to the project, since trying to improve a process that isn't understood will lead to failure in most cases. Two common tools used to define the process are SIPOC Maps and Value Stream Maps. SIPOC maps are used when a process is being studied, while Value Stream Maps are used when an entire system is being studied.

S.I.P.O.C. stands for Supplier, Input, Process, Output and Customer. The process is mapped at a high level using this tool. The illustration to the left shows how the SIPOC map is developed.

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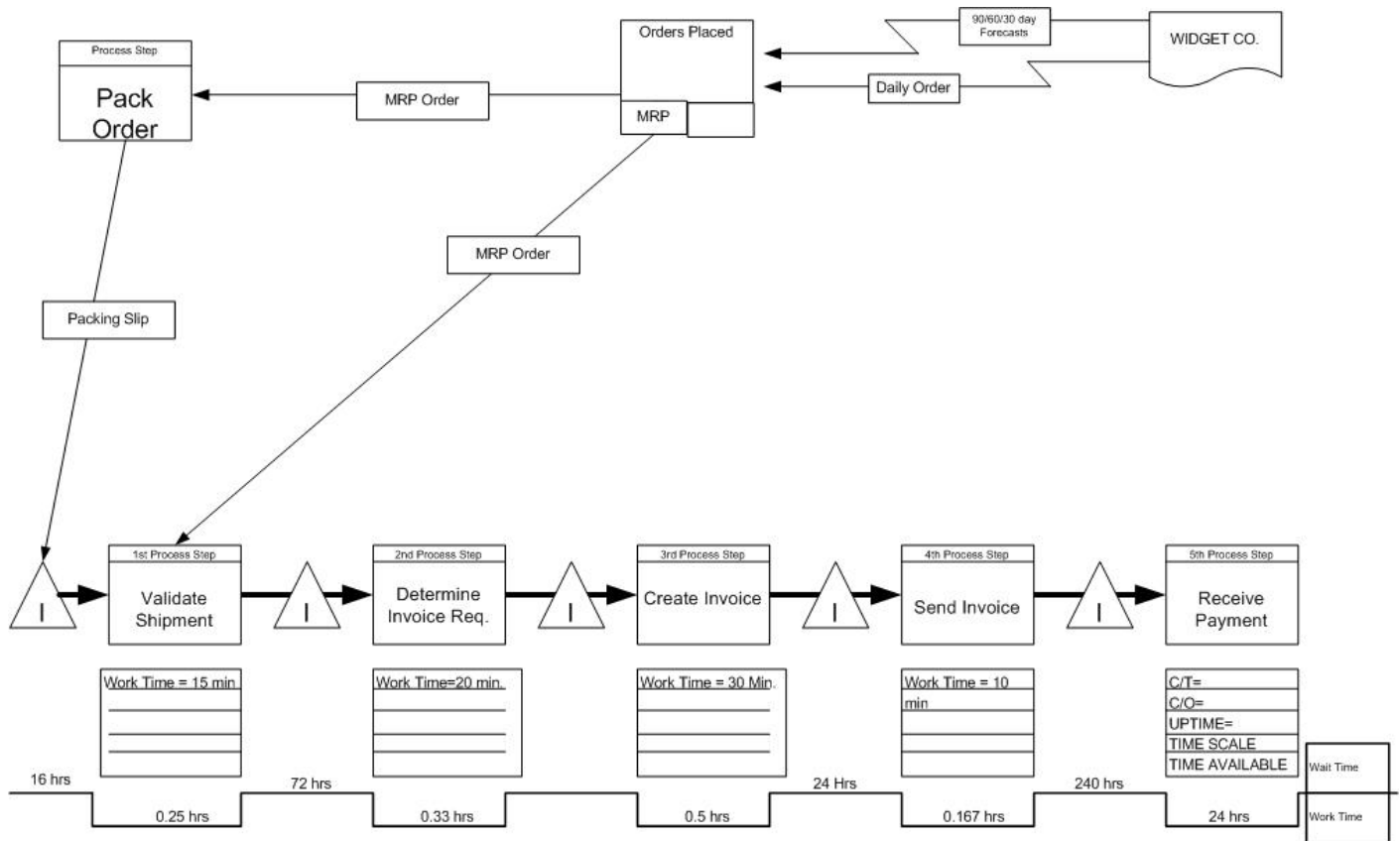
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VALUE STREAM MAP

Value Stream Maps are used for a more detailed mapping of the system to be improved. The Value Stream Map covers much more information than a SIPOC map and is used when the entire value stream is being studied versus a single process step. The example below shows the value stream for an invoicing system being mapped.



CUSTOMER FOCUS

The next step in the DEFINE phase is to define the customer requirements. The customer can be an internal or external customer. We should always ensure the requirements are clear, so we don't give the customer less than what they expect. We also need to ensure we don't over deliver on things that aren't important to our customers. By over delivering, we are paying for value that isn't needed. There are several ways to understand the customers' needs. We can use interviews, surveys, focus groups or brainstorming session with our customers. Once the customers' needs are determined, we can use a Customer Requirement Tree to develop our metrics.

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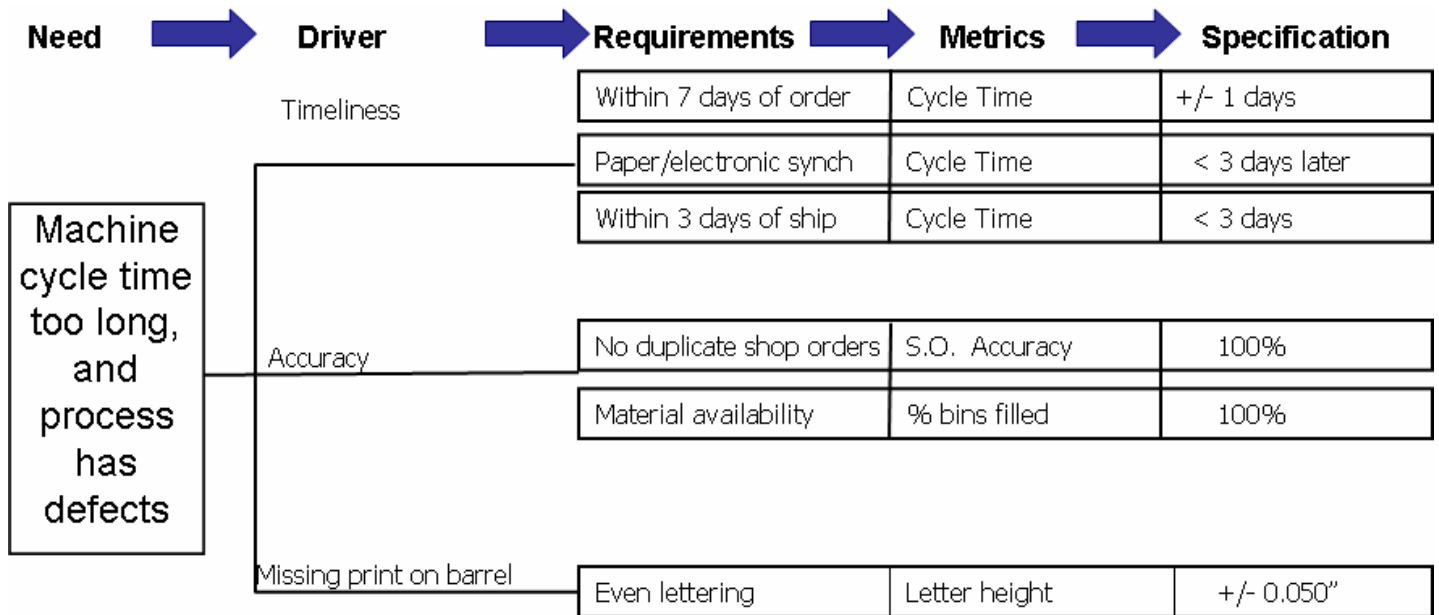
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CUSTOMER FOCUS, cont'd

Below is an example of a Customer Requirement Tree for a printing process:



By understanding our customers' needs and translating them into Specifications, we can now define our Key Process Output Variables (KPOV). In the case above, our process KPOV's are:

- Cycle-time
- Shop Order Accuracy
- % Bins Filled
- Letter Height

At the end of the DEFINE phase, we will have clear direction from management, understand the process and understand our customers' needs from the process. Our focus then is to improve the process to meet those customers' needs. One should take a look at one's organization and ask the question, "Am I pleasing my customers', both internally and externally?" If this question can't be answered with a resounding and confident YES, then there is a great opportunity to implement Six Sigma.

Stay tuned as we dive into the MEASUREMENT phase of the DMAIC process in next month's newsletter. In the meantime, remember: "If you can't measure it, you can't improve it." We always question our measurement methods first, and that's part of the MEASURE phase.

3/3

Stay tuned! This series continues to the next phase in the DMAIC process, Measure. Read more, [just click here](#) or visit www.LMSPI.com to review the FREE Online Insider Archive now!