The Technology Value Stream

By

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Value Stream

-the sequence of activities necessary to deliver a product, service or experience to a customer, internal or external.

Value streams include every touchpoint on the journey from idea generation to delivery of value to customers. Without this knowledge, you won't know what is working and where you have problems. Every company has one even if they do think they do.

Purpose of VSM

Is to make sure that changes are made with the customer's interest in mind, so they don't add more than that needs to be added which lowers waste. Value Stream reduces cost by identifying what work is unnecessary which saves resources and time. VSM also reduces the unpredictable outcomes that could happen. By having real-time data available throughout the organization lets people track initiatives and adapt to changing corporate priorities.

Defining Lead Time vs. Processing Time

Lead time is the time between the start and end of a process, while process time is the time it takes to complete a specific activity within a process.

Processing time is the time it takes to complete a specific activity within a process.

Even though developers think about the cycle time, customers think about the lead time. So, having developers know when it was created also lets them know how important it is to work on that to get it fixed for the customers.

Defining Lead Time vs. Processing Time (cont'd)

LEAD TIME

WORK REQUESTED

WORK STARTED

WORK COMPLETED

CYCLE TIME

businessmap
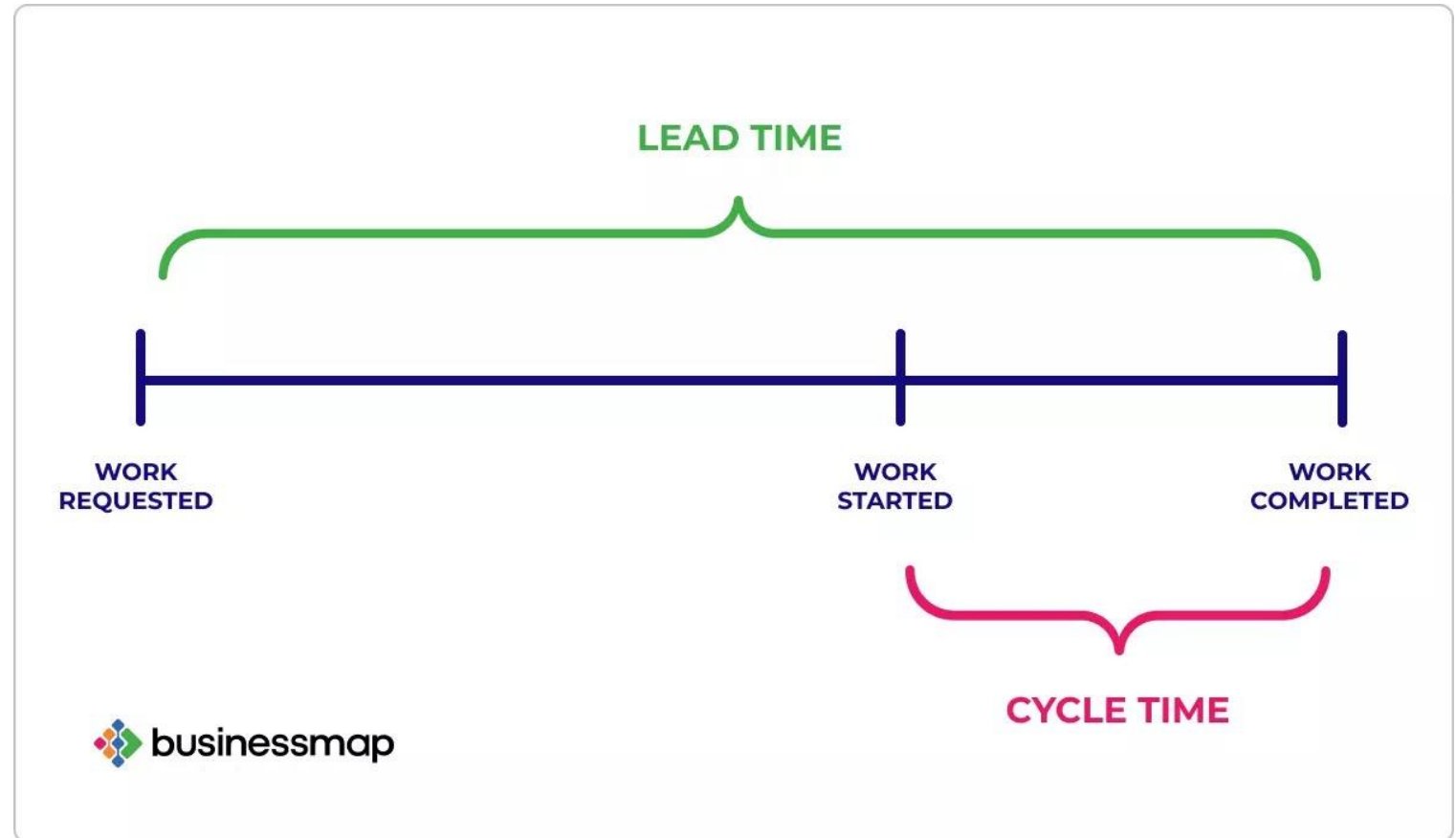
The Common Scenario: Deployment Lead Times Requiring Months

Many companies find themselves in long wait times because they are waiting on approvals, long manual testing and more. Even with all the testing and long waiting time for approvals, it could not work at the end of the process. This leads to poor customer satisfaction and then more days and months on reworking the problems again.

This is known as Continuous development.

Our DevOps Ideal: Deployment Lead Times of Minutes

To not make things take months DevOps have found that it is better to receive quick feedback which can help them fix, implement, integrate and test the new code. By making small changes into the code helps ensure that it works and creates an environment to where the team knows it works and produces faster deployments for customers as well.

This is known as Continuous Deployment.

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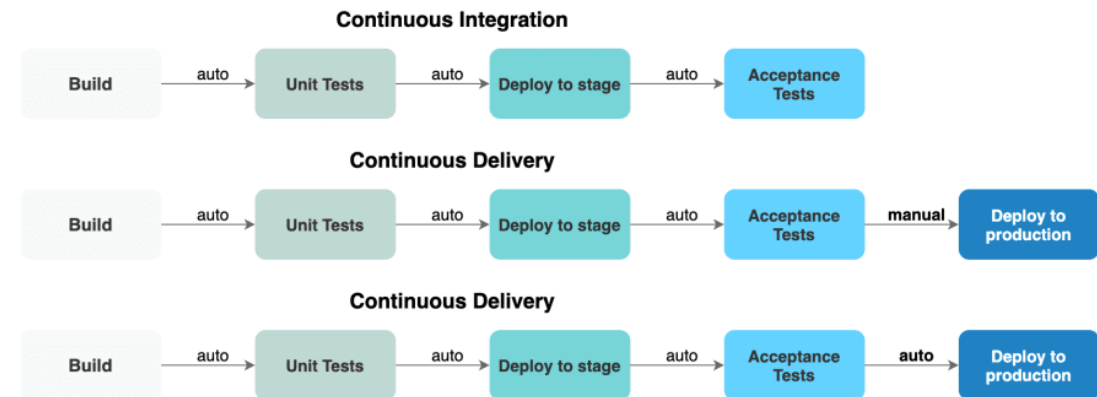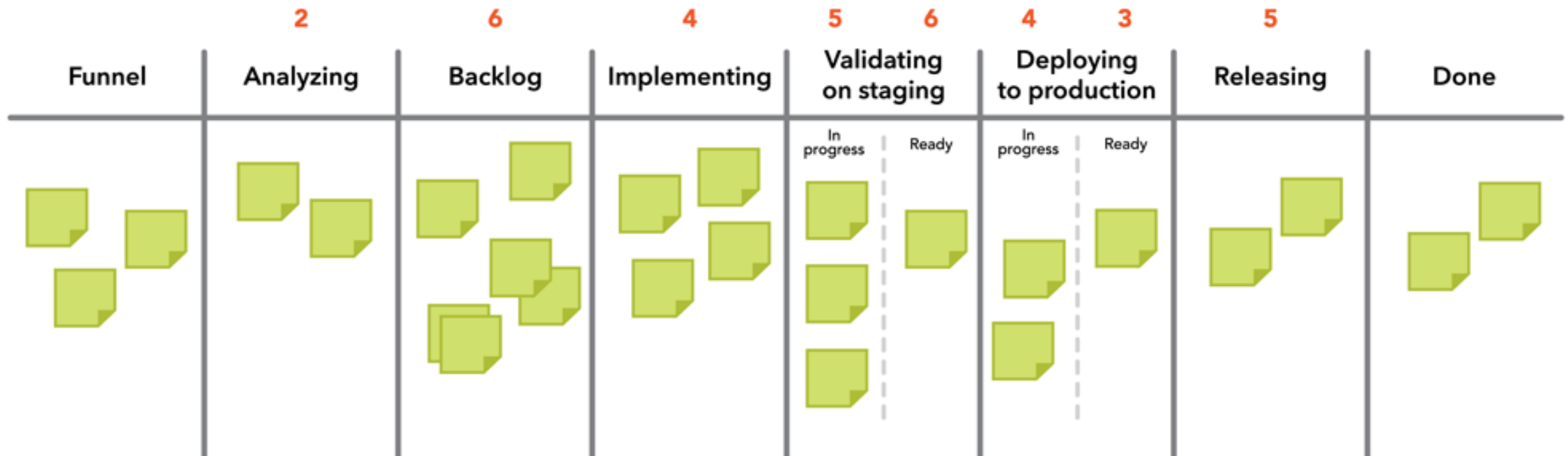
Process: Aluminium Tube
Owner VSM: www.dmaic.com

Value Stream Map for Aluminium Tube process.

Supplier → 2 packs weekly → Production order. Goal = 950 pieces per day

Planning — Customer orders
- 1 x per week for 4 weeks later (to Supplier)
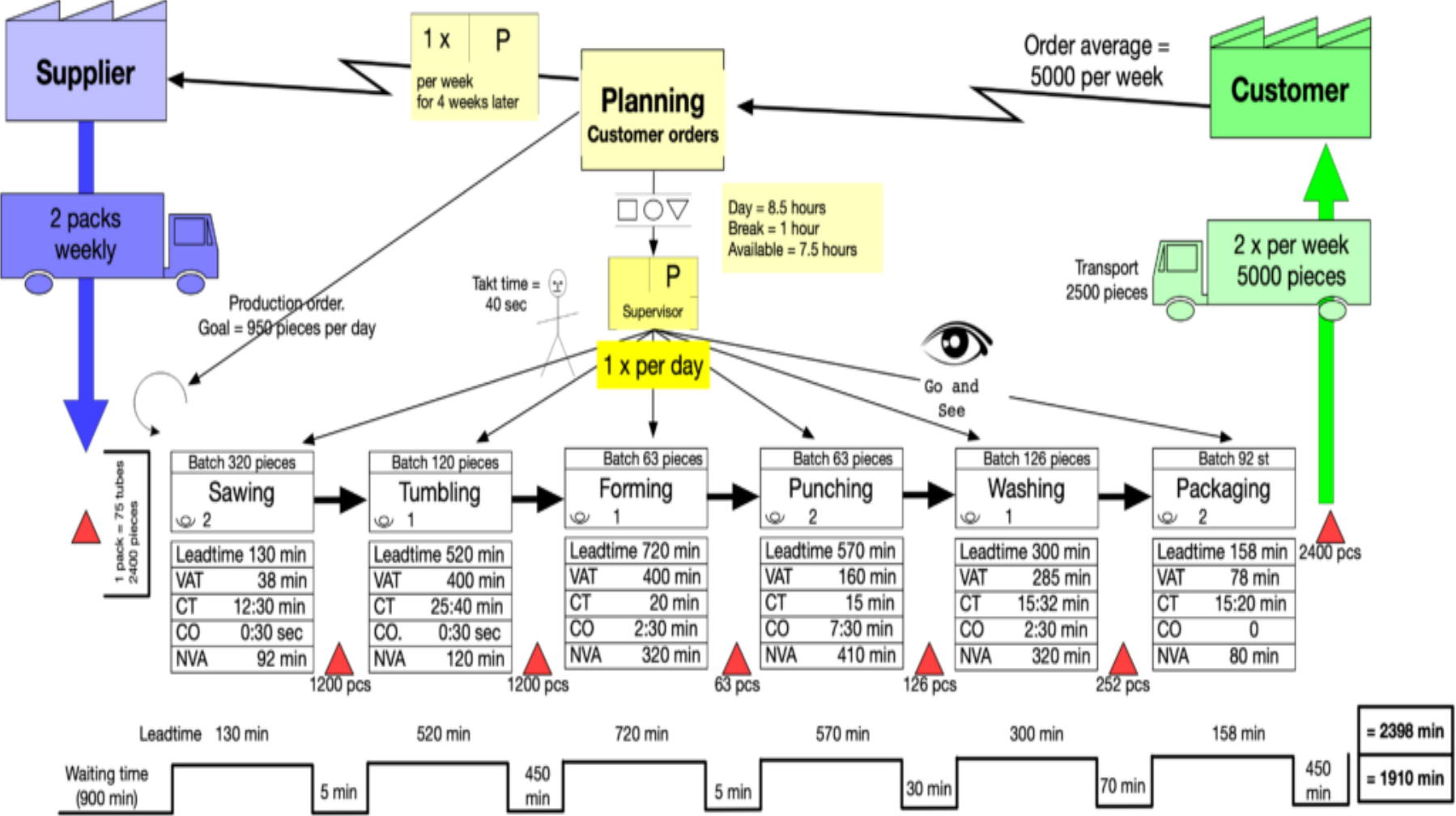- Order average = 5000 per week (from Customer)

Day = 8.5 hours
Break = 1 hour
Available = 7.5 hours

P — Supervisor → 1 x per day

Takt time = 40 sec

Go and See

Customer
- Transport 2500 pieces
- 2 x per week 5000 pieces

1 pack = 75 tubes, 2400 pieces

Process	Batch 320 pieces Sawing 2	Batch 120 pieces Tumbling 1	Batch 63 pieces Forming 1	Batch 63 pieces Punching 2	Batch 126 pieces Washing 1	Batch 92 st Packaging 2
Leadtime	130 min	520 min	720 min	570 min	300 min	158 min
VAT	38 min	400 min	400 min	160 min	285 min	78 min
CT	12:30 min	25:40 min	20 min	15 min	15:32 min	15:20 min
CO	0:30 sec	0:30 sec	2:30 min	7:30 min	2:30 min	0
NVA	92 min	120 min	320 min	410 min	320 min	80 min

Inventory: 1200 pcs | 1200 pcs | 63 pcs | 126 pcs | 252 pcs | 2400 pcs

Timeline:

Leadtime	130 min	520 min	720 min	570 min	300 min	158 min	= 2398 min
Waiting time (900 min)	5 min	450 min	5 min	30 min	70 min	450 min	= 1910 min

Resources

https://www.atlassian.com/agile/value-stream-management

https://www.isixsigma.com/methodology/lead-time-vs-cycle-time-whats-the-difference/