

Lean Activity K-5: Value Stream Map

Value Stream Mapping is a great tool that Industrial Engineers use in order to see the process from a "birds eye view". This means that they are able to see everything going on and can identify areas of improvement where they can help!

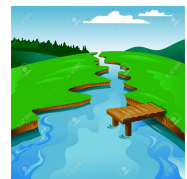
Value Stream Map - Just Like a Treasure Map:

Value Stream Mapping has three big words, let's break it down to understand it.

Value: Something that has meaning... like buried treasure!



Stream: Like a river, which flows from one place to another, so does the path of a treasure map, it flows from one step to another to reach the value or treasure!



Map: A piece of paper that shows you where everything is located in an area and where to go, just like a treasure map.



Parts of a Value Stream Map:

Now that we know what a Value stream Map is, let's find out what are the important parts that help engineers create lean in a process.

1. **Numbering the steps:** It is always good to put a number starting at 1 for the first step all the way to the last step.
2. **Name for each step:** So, we know what happens at each step in the process.
3. **Put arrows to show the path:** This helps us see where we need to go.
4. **Star areas for Problems:** Engineers put stars where we can see problems or danger ahead. The stars will stand out on the map and tell us where we can improve!
5. **Create a list of Solutions for the Stars:** Engineers see the stars and then think of ways to go around them and come up with solutions to help them reach their goal, the buried treasure!

Now that we know all about Value Stream Mapping let's do an activity with Pirate Pete.

Activity: Lean Treasure Map

Pirate Pete loves searching for buried treasure, he finds lots of valuable objects and loves adventure. He and his crew are setting out on a new treasure hunt and want to be sure that they do not encounter any danger on the way. The map below shows his plan. Pirate Pete added you to the crew to make sure that they can get to the buried treasure safely. Can you help Pirate Pete and his crew by using the Value Stream Map elements we just learned?

1. **Number the Steps:** Number all of the steps that Pirate Pete's crew will take to get to the buried treasure.
2. **Name for each step:** Put a Box around each of the **places** that Pirate Pete's crew has to go through to get to the treasure.
3. **Put arrows to show the path:** Put arrows on the path to show the direction the ship is taking.
4. **Star areas for Problems:** Star the areas where Pirate Pete's crew might run into some danger.
5. **Create a list of Solutions for the Stars:** Beneath the map, make a list of things that Pirate Pete's crew can do to overcome the dangers in order to get the buried treasure.

What we Learned:

By using Value Stream Mapping, we are able to help the pirates find the buried treasure in an **easy, lean** way!



PIRATE PETE'S TREASURE MAP



