Introduction to Lean Construction
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Module – 1, Lecture 42
VSM vs PM; Process Flow chart - variations; Swim – Lane diagrams; Summary

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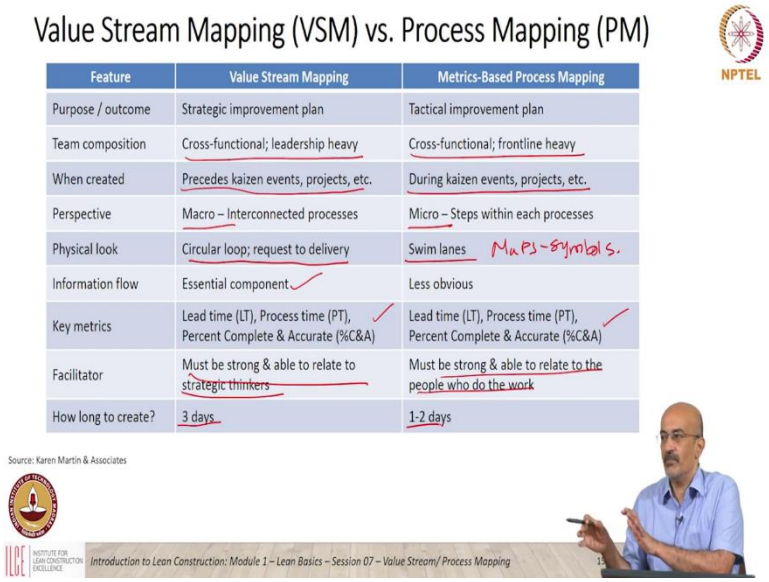

Now, when you compare a value stream map with a process map there are this is always a question that happens, what, why where do I mean we I think we have discussed in quite a bit about where to use a value stream map and where to use a process map. But, just to kind of summarize, we know that a value stream map is more from a strategic point of view, macro process map is tactical or a micro point of view.

Team, we understand this is a cross functional team and it is more leadership oriented, this is also cross functional but frontline. This is preceding the Kaizen events, this is kind of pre, this is during. So, this kind of brainstorming is done during the Kaizen events. We talked about macro and micro, we talked about the kind of processing and the physical look, you have seen what the VSM looks, here you have seen not only the process map, but also the swim lane look, which I will introduce a little later.

Because there are 2 types we can do, we can have swim lanes, or we can have the maps as we have seen it map with symbols. And information flow, the process map does not have an information flow, we only see the material flow, whereas the VSM also has an information flow. And it is essential because it is a high level one.

The key metrics remain the same, we have not discussed this metrics with reference to the process map. But exactly what we discussed for the value stream map can be done for the process map also. And it was a lot of times we would do it at the VSM level, if the details are available for the process map, we should be able to do exactly the same level of same type of computation.

The facilitator in the first case, for a VSM we know it is more of a strategic kind of facilitator. Here, it is a person who is able to go into the details and relate to the people who do the work. So, the facilitators skills are little different. In VSM, I think is a minimum of 3 days a process map is a bit simpler 1 to 2 days. Kind of gives you a comparison and what to do? A lot of times people find it easier to start with process mapping because it is of a particular operation or a single process or sub process and then as the organization by move towards the VSM.

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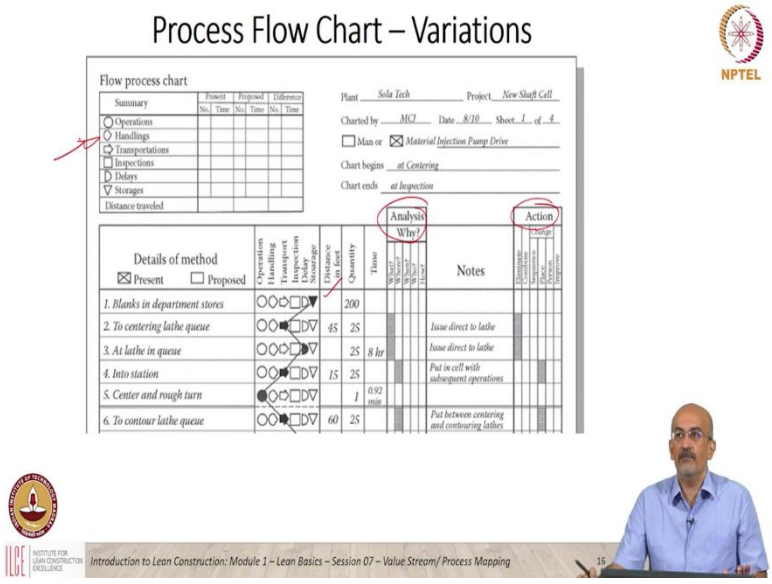

Now, just to show some variations, so, here is another and as you can imagine, because a process shot was originally started in the early 1900s. Over time, there have been many organizations that have adopted it and adapted it to their kind of needs and changed it. So, here is a minor variation to the process chart where you can see lines are drawn showing how the process goes, distances are quantified and noted. There is a lot of questions asked as to analysis what actions should be taken to change, there is also some kind of new symbology on handling activities act added. If you go into any flow-charting tool, you will see that a process chart symbols are a part of them. And I just wanted to show there are some variations also that is possible with a process chart.

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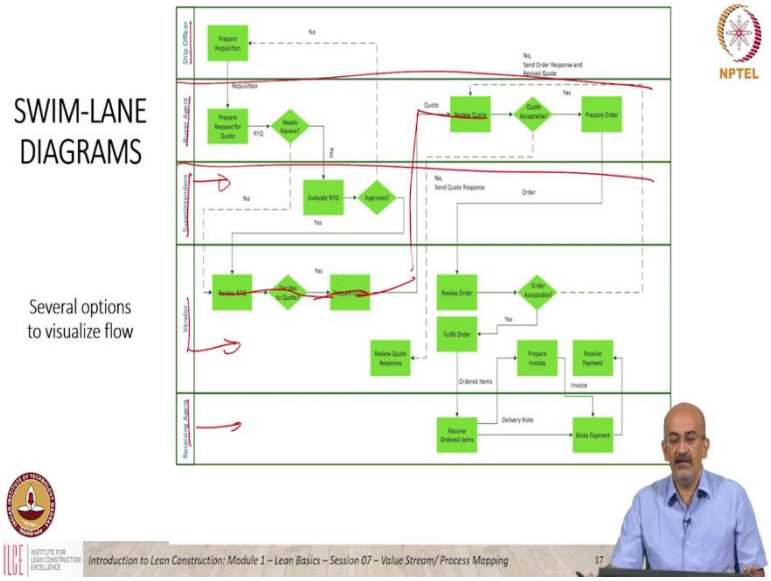

Now, coming to this topic of swim lane diagrams, I am only going to introduce this briefly, this is another way of showing a process and it is a very popular way. And the reason it is called a swim lane diagram like a swimming pool, you have lanes. And these are the swim lanes and you have different people with responsibilities or different organizational levels on each lane.

So, this is like the lane for the receiving agent, this is the lane for the vendor, this is a lane for the superintendent. So, these are all the lanes. And as the process goes, it actually goes through each of where it starts and goes through each lane as to what are the steps it takes how is the process flowing.

So, it can be you can actually represent not only the flow of the process, but the person responsible for moving the process also. So, the swim lane diagram becomes very, very good to be able to visualize for an organization how the process is flowing through the various people or entities or the kind of groups in the organization. I am leaving it at that this has been it is also a very popular tool and used a lot of times for visualization and brainstorm.

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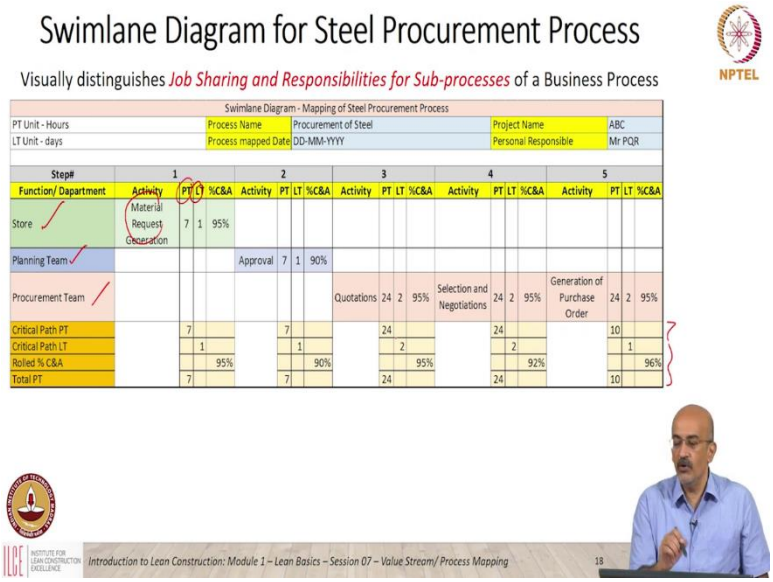

Now, here is actually an example of swim lane diagram for the steel procurement process discussion earlier. So, we had the storage team, we had the planning team, we had the procurement team, these are the lanes, all of the metrics of the processing time, lead time, the activities are represented in each of the lanes. And using this further metrics can be calculated as shown here. I will not get into the details of these numbers, but I have just put this up to show you that swim lanes can be used with very numerical with numerical notation, so that we can quantify the process in more detail.

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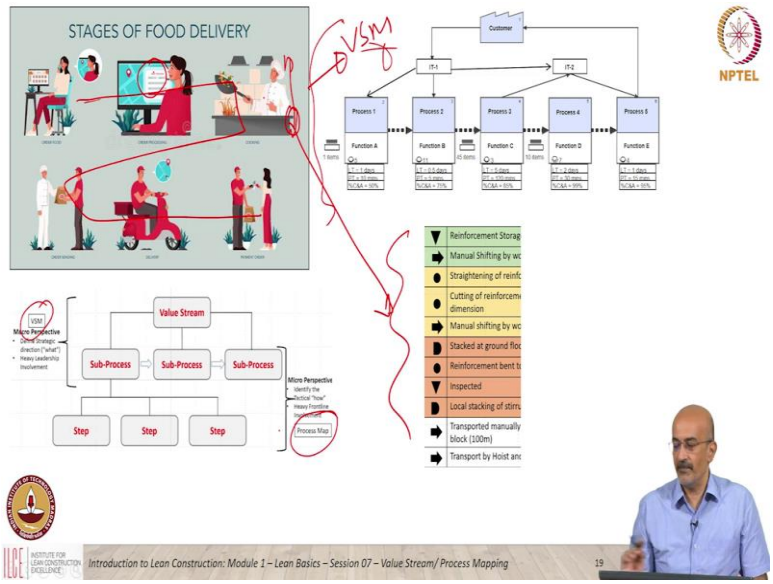

Now, to summarize, the summarize both what we discuss about the value stream map as well as the process map, if you recall, we started with this process of food delivery. And we

looked at the macro level process, from a macro level. If someone wanted to change this process, improve this process like for example, change the communication between the customer and the restaurant.

It could be that interface could be only done by top management or change the way the, we know make the order taking centralized and kitchens all distributed. So, if I went into the kitchen process and say I want to optimize how actually, the kitchen has the operations in the kitchen, to be able to make the kitchen more efficient, the metrics in the kitchen more efficient, I would go to the process map.

In the other case, it is the value stream, so, I would go to the process map. In the earlier, in the case of doing a macro level change, I would go to the VSM. And in the case of a micro level change, I would go to the process map. And that is again, just to refresh what is shown in the figure here. At the macro level is the VSM, at the micro level it is a process map.

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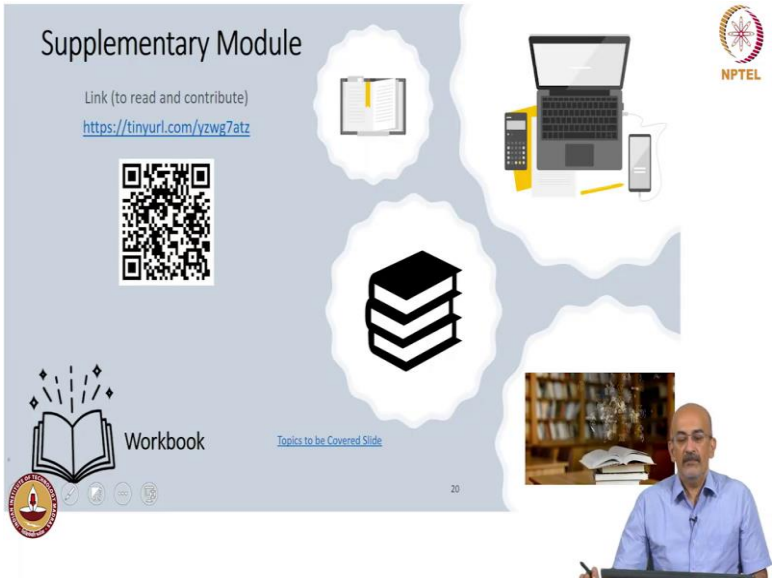

Again, we have supplementary materials on this and I encourage you to visit these to learn more about this topic. Thank you.

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