

Welcome to the Lean for Dummies book review. [inaudible] I am glad you joined us today. We review one chapter of the book, Lean for Dummies. As you can see, on our current schedule, we will be finished with the entire book on May 29. Also, you can see we have the great fortune to have a special guest joining us each week and this week our special guest is Yusuf Rashid. He is from group health Cooperative and he is a return partner on the book review. We are glad to have you back, Yusuf. Thank you for joining us.

Yusuf: Happy to be here.

Darrell: Just a reminder that we post all sessions, the WebEx recordings on the website. The link is here in the presentation. Also, the presentation is available all the time, so you can watch the recorded sessions or navigate the website anytime on your own if you want to review materials from the previous weeks. Remember, the purpose of the book reviews to help you understand more about Lean so you can participate in your agency. That is the whole idea. We've been through these tips if you time, you get the idea. To be fully engaged in the learning and talk about it and share with other people to deepen your own learning is the point. Everyone is on a mute to avoid background noise. Please use the chat feature to interact or ask questions. Make sure you select everyone in this into drop-down box so all facilitators can see the question you posed. Of course, you can chat privately to one another as well. If you haven't already done so please fill out the question, type in the name of the city where you are and the number of people participating at your location right down. If you want to dig into the course information about the objectives, the process stuff, that is available if you are in the presentation anytime. Let's get to reviewing chapter 10. That's what we are on this week. I will slide us out to 172. Chapter 10, customer and value stream tools. Here is the table of contents for this week's chapter. You can see communing with the customer, capturing the voice and understanding what satisfies customers and sizing up the competition and working with the value stream, things you can do to quantify and investigate and getting ahead of the curve using design keys and using software tools. Let's look at the key points for the chapter. Chapter 10. For the context we are in part for a toolbox. For today, we cover chapter 10 which is customer and value stream tools that we will go to chapter 11 and after that, chapter 12 will be on the perfection tools and management tools. These next four chapters on the tools in the Lean toolbox. Let's look at the first key point for chapter 10. The chapter starts off with a look at three tools that focus on the customer. The table in the slide, with the tool, the purpose and a link of additional information related to the tool. The three things in the table that the book mentions our data Kano model to differentiate customers requirements into needs, wants and desires. This book covers this in Chapter 6 so if you want to review the recording, go to the accountability website and look for the February 27 session. The middle row of the table is about benchmarking were comparing products, processes and services. Would you like to comment about the idea of benchmarking?

Yusuf: I would be happy to. We can all think of our own personal experience with customers when we read about the model and the textbook for example we think of what we need and what we want and what customers want. I find that in highly regulated industries like ours or nonprofit organizations, it's even more important to be intentional and take time to understand and think about who is the customer and how are they experiencing services you provide. It is so natural to design our work and processes around existing regulations or what's working easiest for our teams or sponsors or funding our work are envisioning. These are important federations but we can't forget to appreciate what is the real experience of the customer. For the pharmacy for instance I took over with group health three years ago, the story of the patient wait times were terrible. At that time. If we wanted to embark on any kind of improvement it was important for the team doing the work for 30 or 40 years to understand pharmacy before they can improve the process. We had a plan around that and the team had 30 or 40 years of experience in reasons why we had to do things the way we did. In our case, we waited for the patient to arrive at our window before we got the order ready. Before changing our patient experience, we had the staff go out and interview and observe and experience the pharmacy from their objective. They would sit there and experience the pharmacy through the patient perspective so we could build and design future improvements around the needs of the patient. It's simple enough when you look at the model but to do it intentionally in the workplace takes discipline. For benchmarking with our pharmacy and best practices of competitors and other organizations for quality, safety, we look at labor models for efficiency to improve and be competitive and for capturing the voice of the customers, we do mail out surveys to customers, we discussed the results of surveys in the pharmacy monthly. We make sure customer comment cards are available and we make sure we celebrate kudos with the team for recognition of the work we do. We do actively in the pharmacy is choose a day once a month and dedicate that day to having staff take the time to ask the patient how service was today and how we could do anything better. Those are a few tools we use for the customer.

Darrell: That is great advice. We are getting the message here, in state government, that the voice of the customer is important and continues to be important if we have to stay focused on customer needs and requirements. I'm looking at a question from one of our participants. It says, how do we consider the voice of the customer when we are addressing an internal processes that the end the customer has little part of for example, the customer has little interest in how we view our accounting but that is a topic right before being baleen or thinking Lean applied to improving. The question here is in terms of listening to the voice of the customer, the difference between some people term it internal customer or the person I'm handing my person by work to that's part of the organization that's long before the recipient outside of government Washingtonians or in your case people that are picking stuff up at the counter in the pharmacy. In group health, have you

made a distinction between the internal folks you are handing quality off to versus the folks outside of your organization that you consider customer?

Yusuf: Absolutely. It's a great question. It starts with everyone in the organization understanding the mission and in the end of the consumer. Every internal process needs to be looked at as a potential for waste, any potential for improvement and creating as much efficiency as possible so the resources of the organization can be reinvested into those things most meaningful for us the patient and end the user. Only look at our billing practices, third-party payers, for collecting payment, the backhand work, we need to streamline those processes as efficiently as possible because that frees up resources to reinvest in things that impact patient health. That's how we look at it and also, every member along that chain of value best to recognize how focusing on improvement every day will ultimately impact the end user.

Darrell: Thank you. Perhaps the other angle is thinking about avoiding the view of looking at the person I am handing my internal product off to, avoiding the view that says, it is whatever they want and failing to think about how that is efficient or not in the process and whether or not it's helping me in the customer in some way. I think in state government historically we have not always focused on the Washingtonians were the recipient of the product or service and will we lose that view we look at each other as the customer and designing as you mentioned a minute ago, designing our processes for our own systems, our own pain avoidance and all the internal machinations of our government. To your point, we should point ourselves continuously toward what is most important to our customers and how we can run the rest of the support processes in ways that are consumed the least amount of resources in the shortest amount of time.

Yusuf: You will find when you do that that some of those departments may exist and do valuable work, but they exist to [inaudible] could potentially be avoided. For instance, we have third-party billing that exist to reconcile errors that occur in the first place and that needs to be understanding the root cause of the problem and where we can continue to find improvement.

Darrell: In the long run, perhaps we can completely eliminate those processes that are built over time to correct defects or whatever. Okay, let's look at the last point on slide three. The house of quality. This is a tool from the concept of quality function deployment. Which is a method used to clarify how customers demand can inform the design of systems. This method was developed in Japan via [inaudible] in the 1960s. He was the guy that developed the strategic planning approach referred to as [inaudible]. In the book on page 2 of two, it points out the house of quality tool. This is one tool in the whole method that is a fairly complex tools so we will go into it today but the link I put in a presentation on the slide will take you through a tutorial that walks you through each component in the house of quality which gives you a nice overview and helps you understand what goes into each component come to the presentation and click on that link and get more information their. Let's move on to the tools focus on value stream. We have the spaghetti diagram, this tool helps you analyze the flow of people and product. It is a simple technique but is very informative. You create a map or floor plan and you may conserve and or observe the movement in that space and draw the line on the map or floor plan as the person or product moves from point to point. You end up with lines on the paper which is why it got the nomenclature, spaghetti diagram, because it looks like a bowl of spaghetti and the more convoluted were trafficked there is in the process the more lines you get and the more spaghetti like it looks. This example on the screen the difference in the color of the lines was to designate a different type of worker working moving from one place to another. The point is to keep it simple, you simply sketch a floor plan on a piece of paper and make observations. Your thoughts on using the spaghetti diagram concept and nonphysical environments?

Yusuf: It's a fun tool. If anyone does use it, I recommend you have a partner in the team mapped out by observation. Like Darrell alluded to, you can apply this method to a nonphysical environment. I'm on my computer right now and for one of the tasks I do we have three different spreadsheets open to get the information I need. That is an example of waste in the process is there a way to work with the data folks to reconcile the data into one sheet so that you can use the information more useful, creating less search time and your computer system just like we see search time described in the diagram. It is something to think about.

Darrell: I definitely encourage folks to look at the spaghetti diagram. Not just the physical movement but the electronic diagram you work in as well. Let's go to slide five, continued value stream focused tools. Things like calculating takt time, which is dividing total time by the customer demand. So you can determine that pace of the customer demand and there is more detail about calculating takt time in chapter 7 in the book. The next one is box scores. We share with our participants how box score data helps you identify and improvement opportunity.

Yusuf: I can try. It is complex. I know the book talked about soccer teams so I'll try my best to describe an illustration that might be better for people on the call. First, understanding your work in terms of time, cycle time being the length of time it takes to do any process and takt time, how often that type of work or customer demand occurs. The rhythm throughout the day at how often it occurs. With our pharmacy, we had staff time one another to get cycle times for how long a prescription takes. We realize there's different types of prescriptions with different lengths of time and at different rates. We made a box chart but that and called at six different types of prescription orders as an example one can be a refill for a prenatal vitamin and one can be a the link the discharge from a hospital that walks up to the counter and these aren't very different rates

and take different amounts of resources and time. Once we understood our work in terms of the different types of work and how often they occur and how long they take to do, it became easier to understand the work objectively and look for opportunities to do the next step lead time reduction charts. We had process maps of every step involved in each type of prescription and we looked for waste in the process, things that could be done differently to gain efficiencies. We applied that to the different types of prescriptions to look for the biggest opportunity for improvement. Take a message, understand your work in terms of cycle time and tact time and have your staff time one another to work better to gain trust in the team and gain trust and the data you collect to improve on.

Darrell: Excellent. Thank you. The last part of the slide in the section of the book, says you can use the 5W's and 1H,, though, what, when, where, who, and how, this sounds simple but it is often overlooked and there is a lot to be gained by stopping at each of these words and thinking about what is going on in your process and talking to others about it to and not just skipping over the idea because it looks too simple. The questions are basic but powerful so we encourage you to use them. Slide six, lists the steps in designing new processes. This is often referred to as the reduction, preparation process. I think what would be helpful here, you can see the seven steps listed in the book, but I know you have done some great new design work in pharmacies and I think it would be helpful for our participants if you could talk through how you've done these steps in your work and give participants something to hang the idea of 3P's and what I would really look like.

Yusuf: Sure. Happy to do that. Where we left off was on the box charts. Understanding for the pharmacy of the different types of prescription orders and how long they take your describing them in terms of process time. What we did from there is, we did product process needs. We understood the steps involved in each process. What was the goal as far as serving every patient within 10 minutes of the wait time and describing the type of prescription orders in terms of process steps. The diagramming requirements, our goal is to serve every patient within 10 minutes. Creating a fish bone diagram is a tool to help us understand the causes for why we are not reaching our goal were causes for the problem we're trying to solve, why were 90% of our patients being served in 10 minutes? Three years and those in our pharmacy patients were waiting 30 minutes or more, after providing the methodology to apply our work better, we were able to transform the pharmacy in a very process oriented way. Before I, the causes for not serving patients in a efficient way was that there was too few staff, too many patients, inadequate computer systems, but after we applied the methodology of Lean to understand our work more objectively, we would realize the biggest impact was pretty obvious. We could improve the patient experienced if we focused on one type of prescription order that occurred frequently and instead of waiting for the patient to arrive before we started the order, we would try to identify all those orders and get them ready before the patient got to the pharmacy. It sounds simple enough but this was a radical change because our entire process was designed on starting the order when a patient walks up. When we think about what did the patient expected, they expect a prescription to be ready when they walked in. We designed around that patient need. We used Lean to decide anew process. We looked at alternatives. When designing alternatives, staff who did the work and measured the current state designed alternative processes and that was our biggest opportunity to improve and impact patients and every decision along the road looking at different ideas, we asked ourselves what would the customer want us to do? Rather than gravitate to the easier step for our process, what would the customer want us to do and how do we avoid finding reasons why we could not make that change and focus on how to change to meet customer expectations. That's how we determined design alternatives. Will re-redesigned our workflow, it was a lengthy process we did in the designing eight mock up of a mock pharmacy one of the meeting rooms. We used teddy bears and stuffed animals to represent patients. We use stopwatches to time their hypothetical movement through the process and the staff who designed the new process invited Stapp from the pharmacy to experience with them in this world placesetting to visually experience with the new workflow would look like to the staff as well's muster the patience and from there we were ready to implement. It was a fun way to introduce the plan, the theory in a controlled environment that was safe. There is also including stakeholders in the design review impress that meant coordinating with clinic leadership, the doctors, the providers that work at the clinic to make sure they understand how we change the product process and how that could impact patients they are serving. We implemented the new design in broadened support to support that change for one week and long story short we were able to achieve a 100% improvement for all of our patients by focusing on the biggest opportunity that Lean identified. Two years later we are still sitting here gaining on the momentum, improving and service has been nothing but improve after we made the transformation. That a few of those seven steps in an illustration of how it was used in our pharmacy.

Darrell: Can you give a sense of the timeframe and how long did that take and how many, it sounds like let's all put together in one room and do some sort of event and go through all seven steps and come out of the room ready to go, how long did it take to go to the process?

Yusuf: The actual redesign of the work took one week. We pulled select key staff members out to help redesign. But prior to that, we took a good month of understanding our current state starting with understanding the patient's experience. Two, timing one another to get enough data to be able to say, this type of order on average takes this long. To describe our work. We took a month to understand current state and that allowed us to focus on mixed opportunities to change the design. Besides that, there is a month of planning but before that month, we did some teambuilding work as well like you are doing now to educate the team on what Lean is and how it is not a threat and that was all conversations that took place before we tried to implement anything.

Darrell: Great. Thank you for sharing that example. I want to point out one more thing. In step three, find and give value weight nature for inspiration, and ideas for making improvement. The last slide, I pulled out to illustrate what this is talking about. In the world of biomimicry were mimicking what's going on in biology or nature, looking to nature for designs and ways to do things that humans are doing and copying what's going on in nature, this example about the Kingfisher bird. It was the inspiration for the shape of the nose cone on the bullet train in Japan. But the problem was the train which travels 200 mph, when that train went through a tunnel, there is a huge loud thunder clap from pushing air through the tunnel. That was disturbing to the people that lived within a half-mile of the tunnels the trains went through. So the train's chief engineer looked at nature for a smooth transition from one medium to another and he discovered the Kingfisher bird dives into the water to catch fish, that's what he likes to eat, and when making dives into the water, there's almost no splash. They explored that design and by copying the design of the Kingfisher, the bullet train not only got quieter but reduced the electricity they use by 15% and increased the speed the train was able to travel by 10%. That step three in the 3P process, looking to nature, is the idea. But, it is not a requirement for you to go out and find some places to look for seven different types of examples of how nature solves the problem you are solving but it is a powerful technique. But don't get wrapped around the actual thinking you have to go find a Kingfisher equivalent to all the problems you are solving. It is a great technique and you can use it where it may be helpful for you. Well, we have another minute. If you have a question and want to get in on the chat, we will entertain that. I haven't seen the chat move for a while so I will offer Yusuf the last word.

Yusuf: What I described it was a big event for our pharmacy, a turning point. From there, that spirit of continuous improvement is contagious. If you find small things to improve upon, it feeds off itself. The pharmacy here has been better since we had this significant transformation in our work.

Darrell: Thank you, very much, Yusuf, for being part of the book review today. And for your help and guidance on the Lean journey for state government. Thanks to everyone for joining the book review today. Don't forget to take the quiz. We will see you next week when we review chapter 11. Have a great week and go learn to use Lean to deliver better value to more Washingtonians. Have a great week.