Course: The 8 Wastes in Construction "DOWNTIME"



What is a Video Action Team?

It is a small group of 4-8 people who come together on a weekly basis to discuss the Construction Accelerator[®] videos they are watching and to share their learning. The intent is to clarify the ideas, pick out the most relevant ones for their work, and put what we learn into *Action*. Today.

How to use this guide

Ownership of a Course or purchase of a Pass or Subscription gives us access to the videos. This Guide groups videos in a "small batch" way that allows us to watch about 15 minutes of video before each week's meeting, then, in the meeting, discuss them for 45 minutes, developing our Action Plans. Meetings can be in person or virtual using Zoom, Teams, etc.

The opening round robin on the next page is a general query to the group to get the conversation going and bring out the thoughts that are top of mind. There are a selection of discussion questions that follow, but don't feel like we need to go through all of them! Use them to branch out from the round robin discussion or lead the group to explore other ideas in the videos.

The overall goal of the discussions is to give the group good answers to the second Action Round Robin: "What action can you personally take immediately..."

Tips

- Switch it up! Swap who leads the discussion each time we meet. A big part of Lean practices involves leading a group through thoughtful discussion to fruitful action. Get some practice here!
- Stick to a regular schedule! If we intend to meet once a week and that keeps not happening, then consider shifting to every other week if that helps. Avoid continually shifting or cancelling meetings because things get "busy". Consistency is key for morale *and* for motivation!
- Follow your interests! While this VAT Guide charts a logical path to learning each topic, if your interest or the demands of your work take us to a different set of videos, we can let our needs "pull" us in the right direction. Just assure you come back where you let off.

Course: The 8 Wastes in Construction "DOWNTIME"



Topic 101

(NOTE: The first 2 sessions are on Value, Waste & Flow. This is also a separate Course, and if you've already watched and discussed these videos, you may go directly to Session 3 and begin the 8 Wastes discussions. If you have not already watched and discussed these, please do so, as they form the context for the 8 Wastes.)

PREPARATION

WATCH: 2 Highlighted Videos: "Value" (in green) and "Waste" (in yellow) – Note: only 7 ½ minutes of video to allow time to read three short pieces, below.

DOWNLOAD and READ: "The Construction Industry Must Change"

READ 2 short Blog Posts: "Lean is All about Providing Value" <u>https://leandesignconstructionblog.com/lean-is-all-about-</u> <u>providing-value/</u> and "Get a 10:1 ROI on Waste Reduction" <u>https://leandesignconstructionblog.com/get-a-101-roi-on-waste-reduction/</u>

DO: The first three Action Items: "Who are your Customers?", "Ask Yourself" and "Look Around" (These may be done before or after this discussion.)

OPENING ROUND ROBIN

- What was the most important or interesting point in these videos from your perspective?
- Was there something you didn't understand or didn't agree with?

DISCUSSION QUESTIONS (Choose from these)

- Was there anything surprising about the question, "Who are your Customers?"
- How does it change behavior when you and the people you work with think of each other as "Customers"?
- Who defines "Value"? How can you know what their definition of "Value" really is?
- Why, in the video, does Andy say, "If it's not Value, it's Waste"?
- How can it be possible that 57% of construction labor is waste?
- What are some examples of design waste? How do they cause construction waste?
- What are examples of "necessary waste"?
- How can you reduce "necessary waste"? What's the role of processes in this?

ACTION ROUND ROBIN

• What is the one example of Waste in your work that you will reduce or eliminate tomorrow?

PLUS/DELTA (2 Minutes)

• What did you like about today's session and what would you change for the next time?

TAKEAWAY ROUND ROBIN

In two words what is your big Takeaway today?



| Select Topic: | | | | |
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| V | Value, Waste and Flow | | | |
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| | VALUE, WASTE AND FLOW | | | |
| 0 | Value | 03:26 | | |
| 0 | Waste | 04:56 | | |
| 0 | Flow | 04:06 | | |
| 0 | Stories from the Field: Flow to go Fast | 03:34 | | |
| 0 | Lean in Real Life: Qwikinstall Doorframes | 03:41 | | |
| | | | | |

Select Course:

The 8 Wastes in Construction

Course: The 8 Wastes in Construction "DOWNTIME"

Session 2: Flow

Topic 101

PREPARATION

WATCH: 3 Highlighted Videos: "Flow" (in green), "Stories from the Field: Flow to go Fast" and "Lean in Real Life: QuikInstall Doorframes" (in yellow)

DO: The last 2 Action Items below the video: "Think about Flow" and "Discuss What Blocks Flow"

OPENING ROUND ROBIN

- What was the most important or interesting point in these videos from your perspective?
- Was there something you didn't understand or didn't agree with?

DISCUSSION QUESTIONS (Choose from these)

- What is YOUR definition of "Flow" as it relates to the processes of construction? (Round Robin discussion)
- What are examples of good flow from your current or past projects?
- What BLOCKS flow (examples from real life)?
- What are the benefits of good flow: for the owner, for the whole project, for individuals?
- What was one big takeaway <u>about Flow</u> from the interview with the PM and Superintendent using Last Planner (the video "Stories from the Field: Flow to go Fast"?
- What was your overall observation about how products like Quikinstall Doorframes can increase flow on a project?
- How could similar Lean products and the use of modularization and off-site construction increase flow on a project? When do we need to start planning for using these?

ACTION ROUND ROBIN

- What is one thing you will do tomorrow to unblock/increase Flow in your own work?
- What is one thing you will discuss with your teammates tomorrow to identify and unblock/increase Flow in **your team's** work?

PLUS/DELTA

• What did you like about today's session and what would you change for the next time?

TAKEAWAY ROUND ROBIN

In two words what is your big Takeaway today?

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| VALUE, WASTE AND FLOW | | | | |
| 0 | Value | 03:26 | | |
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Course: The 8 Wastes in Construction "DOWNTIME"

Session 3: Overview, Defects,

Overproduction and Extra Processing

Topic 102

PREPARATION

WATCH: 3 Highlighted Videos: "The 8 Wastes - Overview" (in green), "Defects" (in yellow) and "Waiting" (in yellow) –

DOWNLOAD and READ: "Guide to the 8 Wastes"

[Note: we are not going through the videos in the DOWNTIME order, because some are more closely related, and discussion will flow better when grouped this way.]

OPENING ROUND ROBIN

- What was the most important or interesting point in these videos from your perspective?
- Was there something you didn't understand or didn't agree with?

DISCUSSION QUESTIONS (Choose from these)

- Discuss: How much waste do you feel you encounter around you?
- How does this waste impact you personally? How much does it impact schedule and profitability?
- What are some of the ripple impacts of "defects" (on the jobsite or in the office)?
- What are some recent examples of defects you've encountered?
- How much of your work is "waiting"? What are examples of waiting in your life?
- What's wrong with providing "more value than the customer needs or wants or even asked for"?
- What do we mean by "clearly communicated Conditions of Satisfaction"?
- How can we get "clearly communicated Conditions of Satisfaction" from "the Customer" and each other?
- What does Kyle mean by "construction contracts leak at the intersection of contracts"?

ACTION ROUND ROBIN

• What is the one example of Waiting in your work that you will reduce or eliminate tomorrow? What is your strategy (action plan) to eliminate it?

PLUS/DELTA (2 Minutes)

• What did you like about today's session and what would you change for the next time?

TAKEAWAY ROUND ROBIN

In two words what is your big Takeaway today?



| Select Course: | | | | |
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| The 8 Wastes in Construction | | | | |
| Select Topic: | | | | |
| 8 Types of Waste 🗢 | | | | |
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| | 8 TYPES OF WASTE | | | |
| 0 | The 8 Wastes - Overview | 04:02 | | |
| 0 | The 8 Wastes - Defects | 02:36 | | |
| 0 | The 8 Wastes - Overproduction and Extra Processing | 05:10 | | |
| 0 | The 8 Wastes - Waiting | 02:26 | | |
| 0 | The 8 Wastes - Non-Utilized Human Talent | 02:50 | | |
| 0 | The 8 Wastes - Transportation and Motion | 03:55 | | |
| 0 | The 8 Wastes - Inventory | 03:07 | | |
| 0 | The 8 Wastes - Waste Walk | 04:48 | | |
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Course: The 8 Wastes in Construction "DOWNTIME"

Session 4: Overproduction & Extra Processing, Transportation &

Motion, plus Inventory

Topic 102

PREPARATION

WATCH: 3 Highlighted Videos: "Overproduction & Extra Processing" (in green), "Transportation & Motion" and "Inventory" (in yellow)

[Note: we are not going through the videos in the DOWNTIME order, because some are more closely related, and discussion will flow better when grouped this way.]

OPENING ROUND ROBIN

- What was the most important or interesting point in these videos from your perspective?
- Was there something you didn't understand or didn't agree with?

DISCUSSION QUESTIONS (Choose from these)

- What are examples of Overproduction on your project or in your office?
- How does Overproduction relate to the Lean concept of "small batching"?
- What's wrong with too much Work in Process?
- We need some Inventory buffers to keep flow, but how does Overproduction create too much Inventory?
- What's the difference between Overproduction and Extra Processing?
- What are examples of Extra Processing in your own work? (multiple software entries, multiple steps and signatures, etc.)
- If wasted Transportation is the unnecessary movement of material and information, what are some examples of this on your jobsite or in your office?
- Why is the telephone an important tool in the asking and answering of an RFI?
- How does the Lotus Engineering's motto "add lightness" offer ideas for you in reducing waste?
- How are you "turning digital information into a physical burden" on the walls of your Big Room?

ACTION ROUND ROBIN

- What is one step you will take tomorrow to begin to reduce Extra Processing in your work?
- Where can you stand in one spot and trace the paths people are taking to do their work (spaghetti diagram)? How will that create awareness of wasted Motion?

PLUS/DELTA

• What did you like about today's session and what would you change for the next time?

TAKEAWAY ROUND ROBIN

In two words what is your big Takeaway today?

| The 6 Wastes in construction | | | | |
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| 0 | The 8 Wastes - Defects | 02:36 | | |
| 0 | The 8 Wastes - Overproduction and Extra Processing | 05:10 | | |
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| 0 | The 8 Wastes - Non-Utilized Human Talent | 02:50 | | |
| 0 | The 8 Wastes - Transportation and Motion | 03:55 | | |
| 0 | The 8 Wastes - Inventory | 03:07 | | |
| 0 | The 8 Wastes - Waste Walk | 04:48 | | |
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Select Course:

The 8 Wastes in Construction



Course: The 8 Wastes in Construction "DOWNTIME"

Session 5: Non-Utilized Human Talent, and

Waste Walk

Topic 102

PREPARATION

WATCH: 2 Highlighted Videos: "Non-Utilized Human Talent" (in green) and "Waste Walk" (in yellow)

[Note: we are not going through the videos in the DOWNTIME order, because some are more closely related, and discussion will flow better when grouped this way.]

DOWNLOAD and REVIEW the Excel: "Waste Walk Guide"

DO: The two Action Items: "Waste Walk" and "Action Plan" (These may be done before or after this discussion.)

OPENING ROUND ROBIN

- What was the most important or interesting point in these videos from your perspective?
- Was there something you didn't understand or didn't agree with?

DISCUSSION QUESTIONS

- How has YOUR own talent been under-utilized or completely ignored? Give specific examples.
- How is the human talent of others around you being under-utilized or completely ignored?
- How does valuing and fully utilizing all human talent lead to Continuous Improvement?
- Now that we've talked about the 8 wastes, which one or two are so obvious they demand immediate attention?
- Discuss: "Removing Waste is an opportunity to make workers happier and more productive without working harder."
- On a Waste Walk, what is the value of bringing "fresh eyes" with you?
- What is the value of "dumb questions" in discovering waste?

ACTION ROUND ROBIN (spend a bit more time on this to make action plans)

- What specific plan (with date and time) will you do a Waste Walk with colleagues either (a) on site, or (b) in a conference room using whiteboard or with Flip Chart pages as shown in the video? (Recommended: use the Waste Walk Guide Excel download)
- What will be your follow-up steps to actually start removing the waste you identify?

PLUS/DELTA (2 Minutes)

• What did you like about today's session and what would you change for the next time?

TAKEAWAY ROUND ROBIN

In two words what is your big Takeaway today?



| Select Course: | | | | | |
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