

Planning and Facilitating Rapid Process Improvement Events





# Agenda



- 1. Welcome
- Context and Overview
- 3. Kaizen project roles
- 4. Kaizen Facilitator competencies
- 5. Kaizen Simulation
- Debrief (Plus / Delta)

#### Day 2

- 7. Check-in
- 8. Kaizen Simulation (cont.)
- Report Out Presentation
- 10. Implement Changes
- 11. Monitor Performance
- 12. Sustain Improvement
- 13. Debrief (Plus / Delta)

# **Learning Objective**



- Understand when a Kaizen event is appropriate
- Learn Kaizen project roles and responsibilities
- Know the steps, tools, templates, and supplies for conducting a kaizen event
- Build your facilitation skills through applying the tools



3

# Introductions

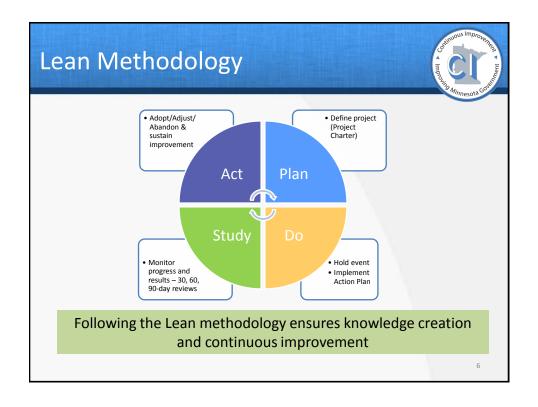


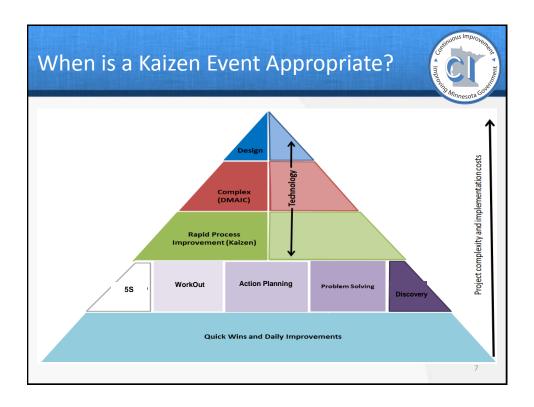
#### Please share your:

- Name
- Title
- Organization

Minnesota Office of Continuous Improvement







## **Top 10 Project Success Factors**



- 1. Strategic alignment
- 2. Open, 2-way communication
- 3. Committed sponsor
- 4. Clear objectives, plan, and realistic schedule
- 5. Properly resourced (time, \$, expertise)
- 6. Clear roles and responsibilities
- 7. Staff have skills, knowledge and tools
- 8. Risks, issues, and resistance are managed
- 9. Voice of the customer is included
- 10. Performance measures are shared and used

# **Project Roles - Sponsor**



- Has the authority to make decisions and provide resources
- Is ultimately accountable for the project's success (project owner)



You may also find it important to add the role of "Champion"

9

# Project Roles – Team Leader





- The operational manager and leader of the team
- The Team Leader may coordinate implementation of changes or this role may be assigned to a Project Manager

# Project Roles – Team Members



- Subject matter experts – include IT
- Include the customer whenever possible
- Balance CAVE dwellers
- Include someone from outside the process



Know who may be a CAVE dweller

11

## Project Roles - Facilitator





- Neutral convener who manages the structure needed for effective human interactions so objectives are achieved within designated timeframes
- Lean process coach, advocate, and expert

#### Kaizen Facilitator Attributes



- 1. Positive attitude
- 2. Inclusive encourage and value all opinions
- 3. Effective communicator provide clear directions and know when to instruct, facilitate, and intervene
- 4. Time management
- Observant senses the "mood of the group"
- 6. Comfortable with conflict manages group dynamics
- 7. Analytical objective and non-judgmental, comfortable with data, helps the team recognize and validate assumptions
- 8. Flexible ability to adapt the agenda or bring in new tools and approaches based on the needs of the team/project
- 9. Emotionally intelligent good self awareness
- 10. Lean expertise (principles, methodology, and tools)

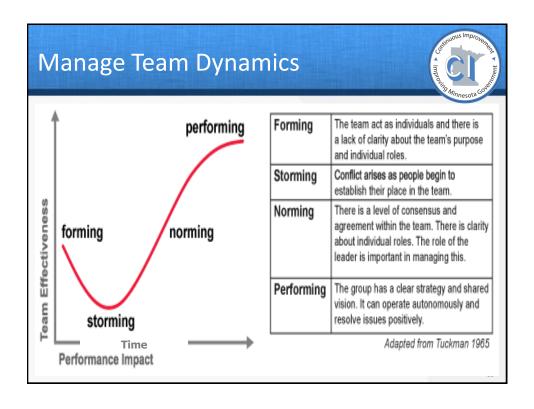
A good sense of humor is also helpful!

13

## **Provide Training**

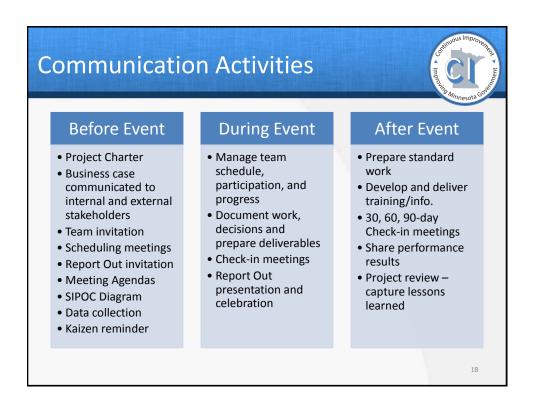


- Lean Overview
- 2. Process Mapping
- 3. Problem Solving
- 4. Creative thinking (brain gym, Power of Future Conversation video, Deep Dive, Embracing Change)
- 5. Brainstorming rules and process
- 6. Affinity Diagram
- 7. Relations Diagram
- 8. Impact/Difficulty Matrix for prioritizing ideas

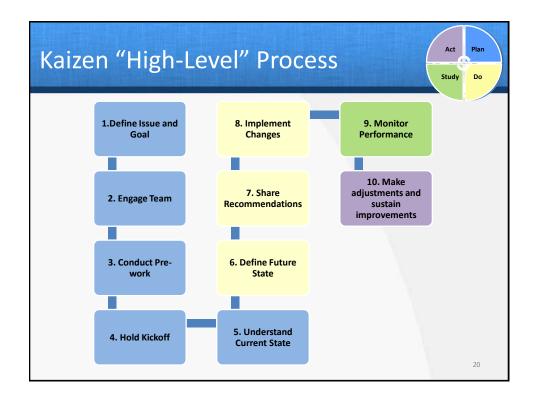












## Simulation: Medical Check-up



#### Background:

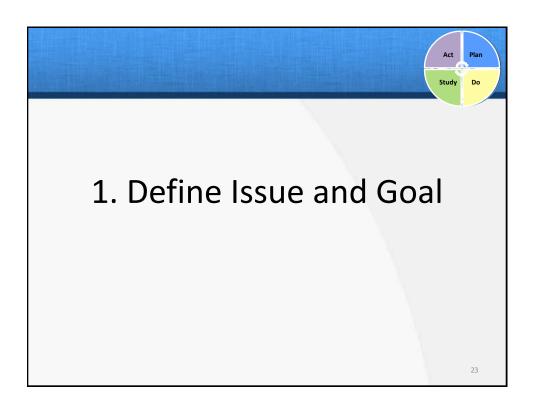
- A new Minnesota law requires 90% of patients to have an annual medical check-up.
- Genera Hospital needs to increase the percent of patients who receive an annual check-up from 70% to 90% in two years.
- As a first step, they have decided to hold a Kaizen event to map and streamline their medical checkup process.
- You are a member of the kaizen event team!

21

## Simulation Agenda



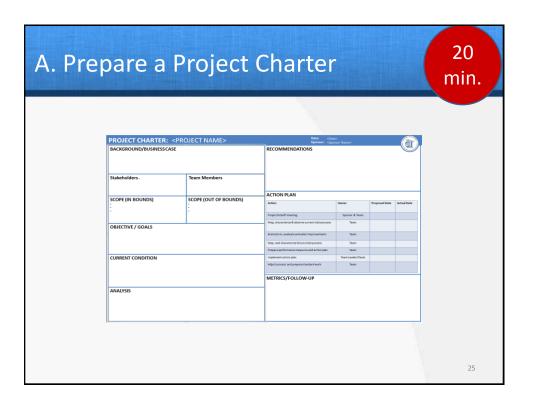
- A. Prepare a Project Charter (Group)
- B. Complete a SIPOC diagram (Group)
- C. Define customer requirements (Group)
- D. Define success (Teams)
- E. Set ground rules (Teams)
- F. Map current state process (Teams)
- G. Apply process metrics (Teams)
- H. Analyze the current state (Teams)
- I. Brainstorm improvement ideas (Teams)
- J. Prioritize improvement ideas (Teams)
  - \* Volunteer for simulation roles

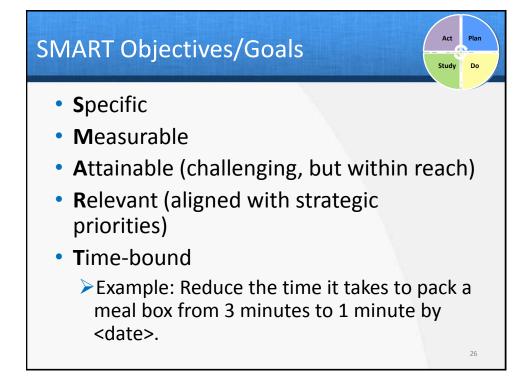


# **Project Assessment Questions**



- What is the subject area for improvement?
- Why is the project needed? What problems/issues/ opportunities exist?
- What results do you want/need?
- How will the project benefit customers, staff, and the organization?
- What concerns do you have about the project (risks)?
- Whose buy in is critical for the project's success?
- Project logistics
  - Date/Time
  - Team members
  - Venue

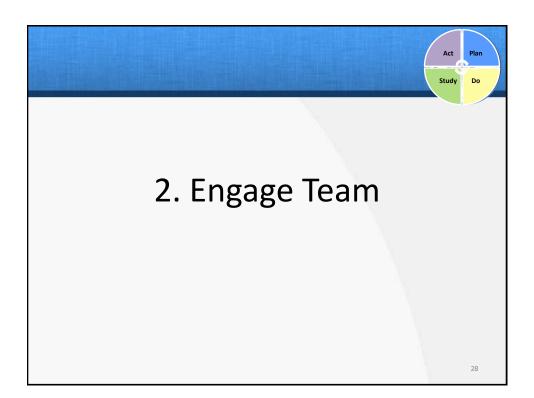


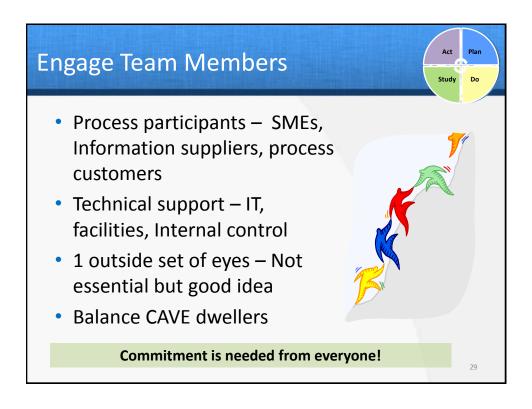


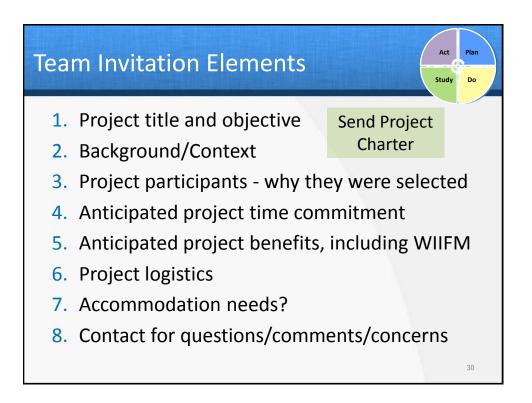
## **Project Charter Tips**



- Send the sponsor key questions to complete and schedule an initial meeting
- At initial meeting, discuss sponsor responses, conditions for project success, roles and responsibilities, and Kaizen process – Ask "Do you have a solution in mind?"
- Use an A3 form
- Confirm that the sponsor is at the right level
- Verify strategic alignment and available resources
- Ensure that the project has a SMART objective







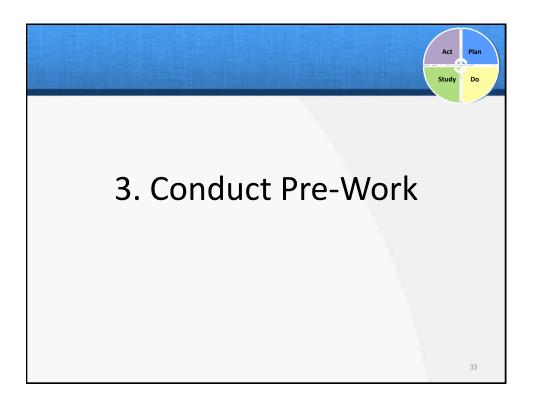
# Schedule Meetings

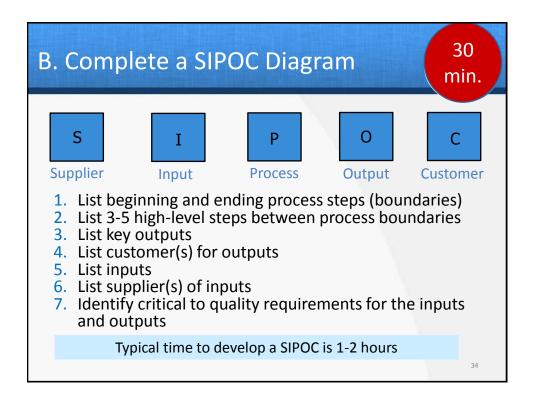


- Reserve rooms and people's schedules 4-6
  weeks prior to the event (kickoff, event, report
  out, check-in meetings)
- Event venue criteria:
  - Isolated quiet for work and not disturbing others
  - Lots of available wall space
  - Technology for training
  - Provides access to process materials and resources

Hold the event, check-in & report out meetings in the same room

	Study
Item	Price
Paper Bond, 36" X 150 ft. (white butcher block paper for swim lane map)	\$15.00
Mailing Tape (2 inch width) or 1" magic tape	\$2.50
Magic (blue) Tape or masking tape (1 inch width)	\$2.00
Fat Tipped Colored Markers (e.g., Mr. Sketch – 12 set)	\$6.70
Black Sharpie Fine Point Markers (6 markers)	\$4.00
Light yellow Post-it notes (3"x3" – 14 note pads)	\$14.40
Colored Value Pack Post-it notes (4 bright color not pack pads)	\$18.50
Easel Pad Poster Paper (post-it style 25"x30" – 40 sheet flip chart pad)	\$17.00
Scissors	
Laptop and projector with necessary chords – may need portable speakers, DVDs and DVD player, camera	
Name tents, paper, handouts, PowerPoint agenda, training, report out, sticky wall (ToP)	
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#### Collect Information and Data



#### Team leader collects process data:

- 1. Volumes (# processed per month, year)
- 2. Current metrics relevant to the process (time, %CA, rework/defects, customer satisfaction)
- 3. Forms/databases used in the process
- 4. Defects External, re-work
- Customer needs and requirements (CTQ)

For a deeper dive into defining and collecting metrics take the *Process Improvement Measurement* course

35

# C. Define Customer Requirements

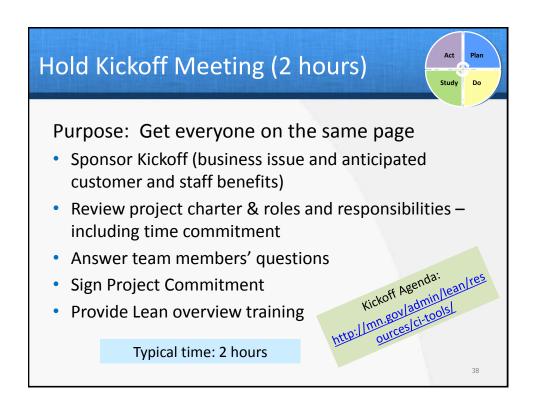
15 min.

Customer /Stakeholder Group **Needs and Preferences** 

- List end-user customers first who the product or service is for.
- You may need to segment end-user customers
- Define needs using data, surveys, interviews, focus groups, observation
- Collect customer requirements in advance of event

Typical time: 15-30 minutes





#### Lean Training (30 - 60 Minutes)



#### Lean Overview:

- Lean principles
- Lean methodology

#### Handouts:

- Lean Essentials
- 7 Wastes
- Lean tools (7 wastes, 5S, error proofing, visual management, kaizen, standard work, Five Whys, fishbone diagram)
- Show Meals Per Hour video
- Review Kaizen Agenda and Post Event Activities

Kaizen Facilitator Project Slides and handouts:

http://mn.gov/admin/lean/resources/ci-tools/

39

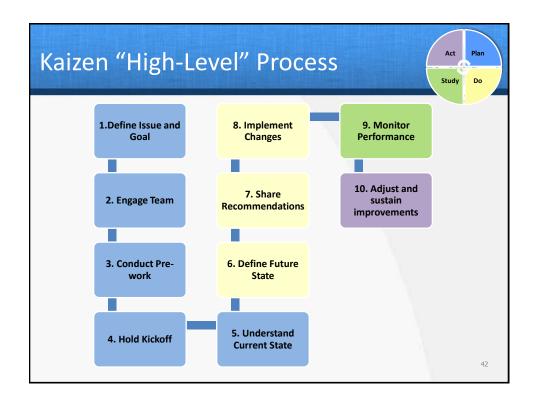
#### Conduct Kaizen Event (2-4 days)



Every Kaizen event is different. It follows a well-established script, but the flow, and outcomes are always different. Facilitators need to be flexible but consistent.







# Kaizen Agenda – Day 1



- 1. Set ground rules
- 2. Identify customer requirements
- Define success
- 4. Training: Process Mapping
- 5. Map current state process
- 6. Debrief (Plus / Delta)
- 7. Sponsor Check-in meeting

43

## Kaizen Agenda – Day 2



- 1. Review agenda, ground rules, and check-in report
- 2. Complete current state map
- 3. Assign task and wait time and characterize process
- 4. Identify value added steps, wastes, & pain points
- 5. Identify root causes of problems
- 6. Brainstorm ideas to improve the process
- 7. Debrief (Plus / Delta)
- 8. Sponsor check-in meeting

#### Kaizen Agenda – Day 3



- 1. Review agenda, ground rules, and check-in report
- 2. Evaluate and select improvements
- 3. Take Team photo
- 4. Map the future state process
- Assign task and wait time and characterize process
- 6. Identify performance measures
- 7. Prepare an Action Plan
- 8. Debrief (Plus / Delta)
- 9. Sponsor check-in meeting

45

## Agenda – Day 4



- 1. Review agenda, ground rules, and check-in report
- 2. Finish up work from the prior day
- 3. If there is time:
  - Identify project risks and prepare mitigation steps
  - Revise forms/templates
  - Prepare communication plan
  - Implement Quick Hits
- 4. Prepare report out presentation
- 5. Deliver report out presentation
- Celebrate!

#### Post Event Work



- 1. Facilitator follow-up: submit documentation
- 2. Implement action plan, including training
- 3. Conduct 30, 60, 90-day status reports
- Monitor progress and make needed adjustments
- 5. Document standard work
- 6. Sustain improvements

47



# 5. Understand Current State

# **Ground Rule Tips**



- Define ground rules and their purpose
- Inform participants that one of your facilitator responsibilities is to uphold the ground rules
- Do not force a group into a set list of ground rules
   but have a list in your back pocket if needed.
- Ask participants if they need any rules clarified
- Get visual agreement from participants to abide by and uphold the ground rules
- Establish a "Parking Lot" where you record items that are important, but off topic (define follow-up actions)

49

# D. Set Ground Rules (10 minutes)

10 min.

Facilitator records ground rules on poster paper

Typical time: 5-10 minutes

#### **Ground Rule Examples**



- 1. Be on-time and follow the agenda
- 2. Share your experience and knowledge
- 3. Listen first, evaluate later
- 4. Ask questions
- 5. Focus on the problem; not the individual
- 6. One person talk at a time; avoid private conversations
- 7. Set cell phones on silent; check messages at breaks
- 8. Keep an open mind to change
- 9. What is said here, stays here (Vegas Rule)
- 10. Voice your concerns; do not leave in disagreement
- 11. Be positive and supportive think about **how** to make improvement possible

51

# Review/Define Customer Requirements



- Who are process suppliers, customers and stakeholders?
- Who is/are the key customer(s)/end user(s)?
- What do they want/need/require?

# E. Define Success (20 minutes)

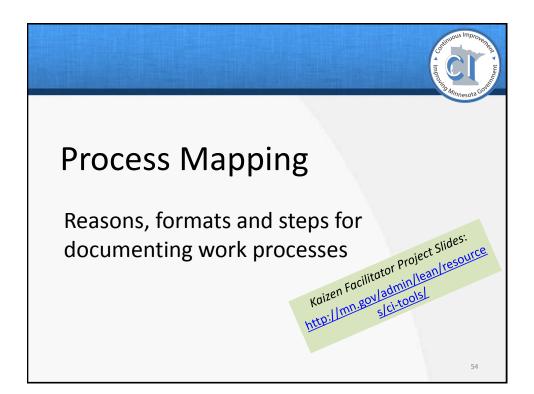
15 min.

If this process was exceptional, what outcomes or results would you see?

#### Consider:

- The needs/requirements of all process customers
- Prioritize the needs of end users
- The "Ideal" process and Lean Rules

Typical time: 20 minutes



#### What is a Process?



 Process = a series of steps/tasks to achieve a result.



55

#### **Benefits of Documented Processes**



- Staff and customer clarity on the content, timing, sequence, and outcome of each process step (i.e., standard work)
- 2. Staff clarity on who is responsible for each step and how long it should take to complete each step
- Standard work makes it easy to deliver consistent services/products to customers
- 4. Ability to measure progress and performance
- 5. Easier to onboard/train new employees
- 6. Easier to improve service quality and efficiency!

#### **Process Documentation Formats**



#### **Process documentation table**

 Good for capturing tasks, decisions, and process issues prior to a process mapping session and good for documenting standard work

#### Spaghetti map

Good for showing physical movement of people and materials

#### Flow chart

Good for showing tasks and decision loops

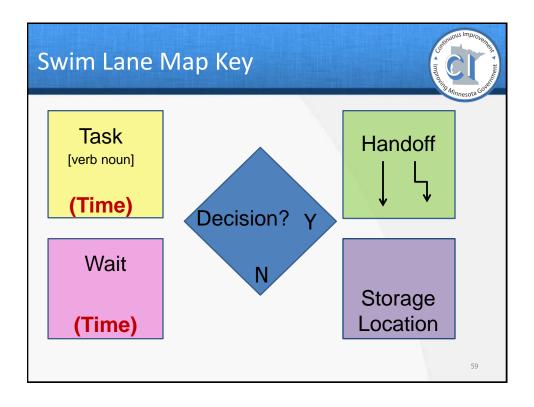
#### Value stream map

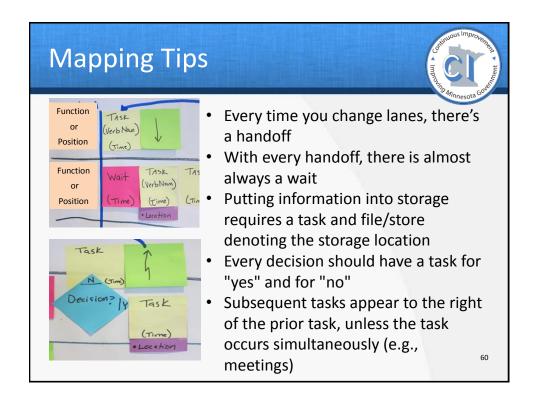
 Good for showing where "value" is created, highlighting improvement opportunities, and is linear

#### Swim lane map

 Combination of a flow chart and value stream map - good for showing who performs which tasks and when

Swim Lane Map Customer Service Customer sends e-mail to Sales Calls in order Sales person is assigned to order and Customer delivers paper copy of Customer Service order to Order Entry Sales An electronic order is sent to the supplier. Order Entry Accounting Order is now entered into Supplier the company's data base. Shipping 58





# **Mapping Tips**



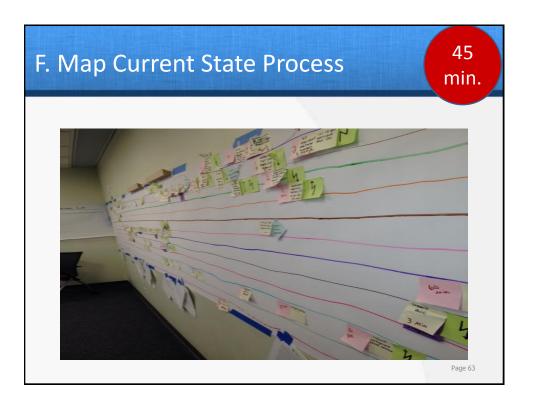
- After you have finished mapping assign average times, or use worst and best case scenarios for each wait and each task
- 90:10 Rule When mapping, consider what happens the majority of the time don't focus on the exceptions.
- Identify value added steps

61

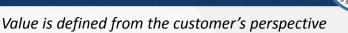
#### **Process Mapping Questions**



- 1. What is the purpose of the process  $\mathbf{?}$
- 2. Who is the end-user customer of the process and what are their product/service needs or requirements?
- 3. What is the first step ? What is the next step, etc.?
- 4. Do you use any physical or electronic forms for the step  $\mathbf{\gamma}$
- 5. On average, how long does it take to complete the step ?
- 6. What percent of information is complete and accurate ?
- 7. Where does the information go from here ?



#### How is "Value" Defined?



#### Value Added (VA) Process Steps

- Transform the product or service
- Directly benefit the end-user customer
- Done right the 1<sup>st</sup> time

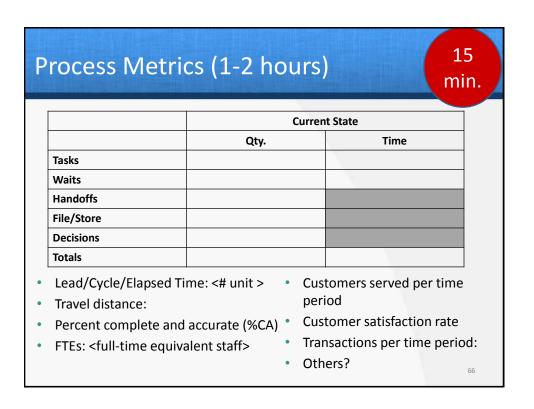
#### Non-Value Added, but Required (NVA-R) Process Steps

- Do not directly benefit the customer
- Are CURRENTLY required (e.g., legislation, audit, and risk requirements)

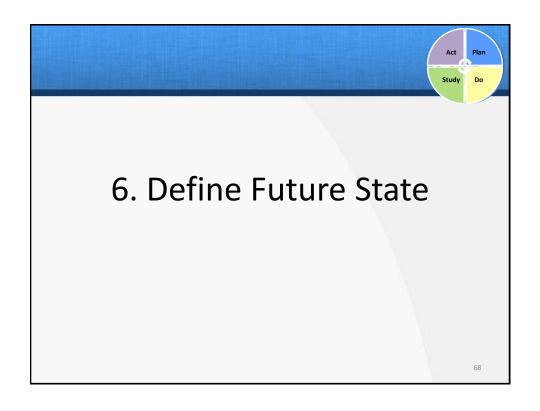
#### Non-Value Added (NVA) Process Steps

- Do not directly benefit the customer
- Can be eliminated without reducing product/service quality and functionality (e.g., 7 Wastes)

# G. Apply Metrics 1. What forms, tools, or systems does each step use? 2. How long does each task and wait take? 3. How many steps, waits, storage, handoffs, and decisions are there? 4. What steps are Value-Added?



#### 15 H. Analyze Current State (1-2 hours min. Strengths Weaknesses / Pain Points Where does the process Where are the 7 wastes? work well? 1. Defects 2. Overproduction What are value-added steps? Waiting 4. Non-utilized staff talent 5. Transportation 6. Inventory 7. Motion 8. Extra processing



#### Barriers to the Ideal Process



#### **Poor Information**

- Missing information
- Inaccurate information
- Assumptions

#### **Poor Information Flow**

- Hand-offs
- Waiting
- Poor sequence
- Confusion on flow
- Linear processing
- Organizational structure
- Information/Knowledge silos

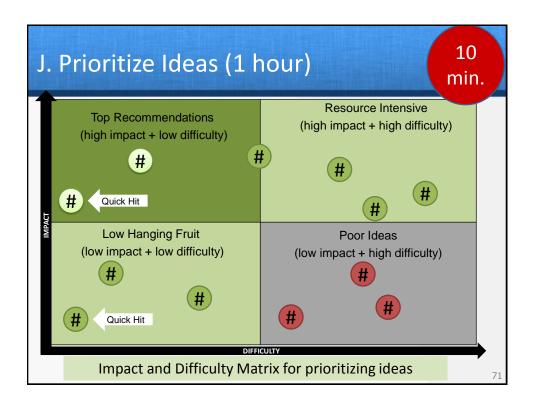
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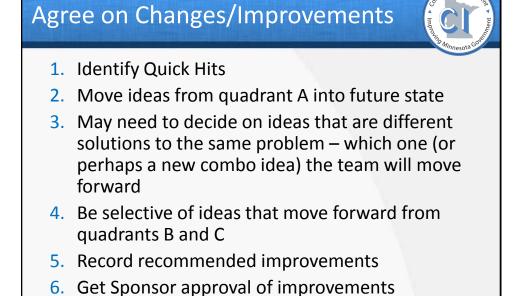
#### I. Brainstorming Process

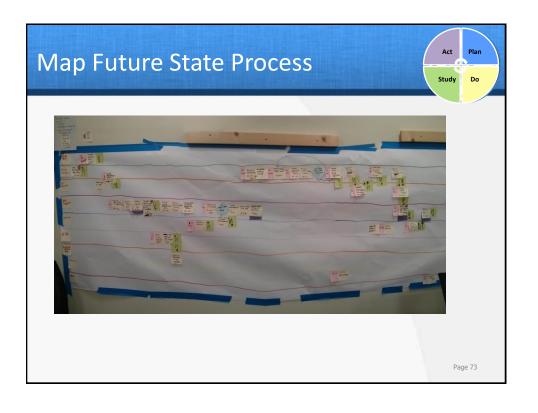
15 min.

- 1. Silently record as many ideas as you can think of that will help achieve the project objective, remove process wastes, and move the process towards your vision of success (10 minutes).
- 2. In a round robin fashion, state one of your ideas until the facilitator has documented all unique ideas from the team
- 3. Remove duplicate ideas from your list once they have been documented by facilitator
- 4. Ask questions and build on ideas

Number ideas for easy reference



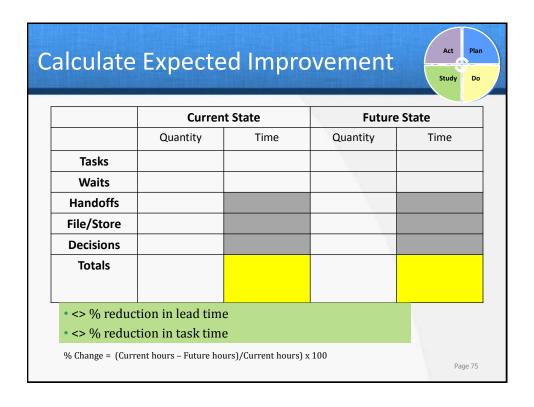


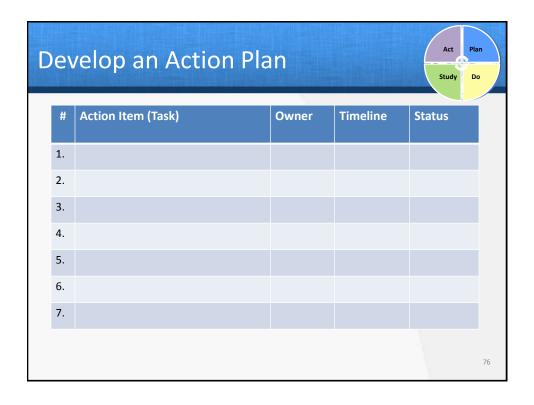


## **Future State Mapping Tips**



- Try to ensure every task is value-added.
- Challenge the "This is what we do now", with "How do you want to do it?"
- Make sure sequence contributes to getting good information as early in the process as possible
- Establish wait time based on what is reasonable, but aggressive and consistent

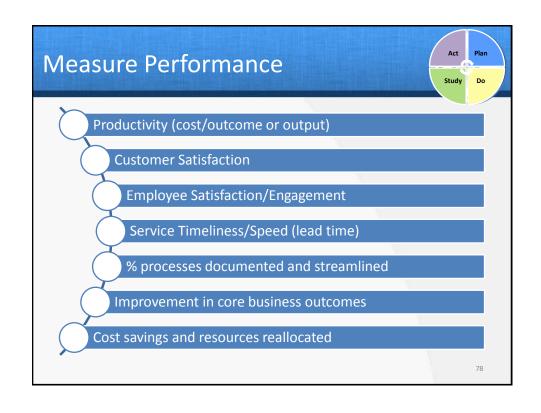


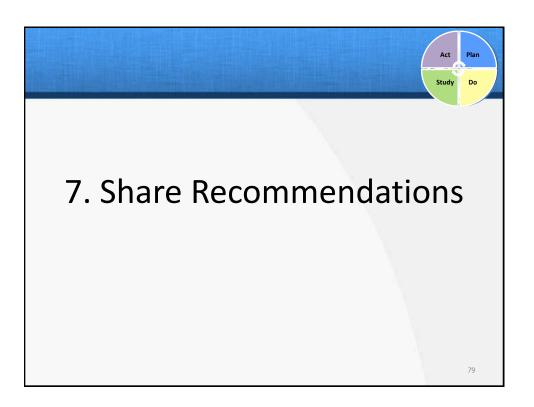


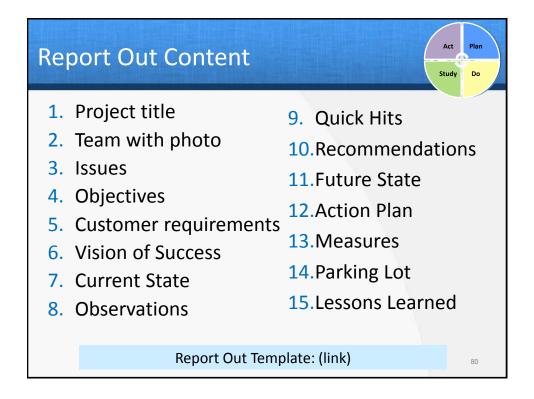
#### **Define Performance Measures**

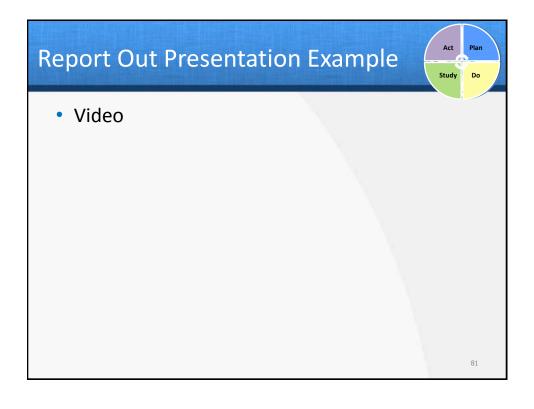


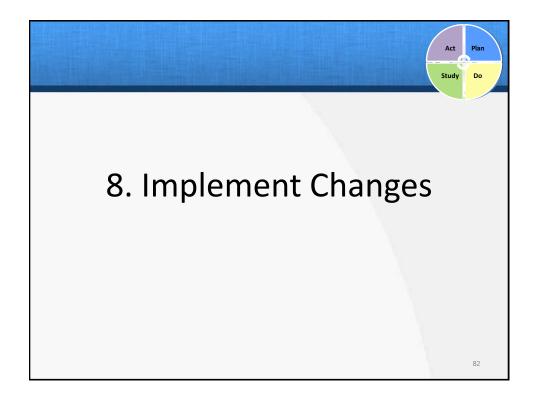
- What critical few measures will answer:
  - Did we achieve our goal?
  - How well did we do?
  - Is anyone better off? What was our impact?
- Use measures to:
  - Validate results
  - Inform decisions regarding adjustments
  - Set future targets for improvement
  - Communicate with stakeholders share success and lessons learned











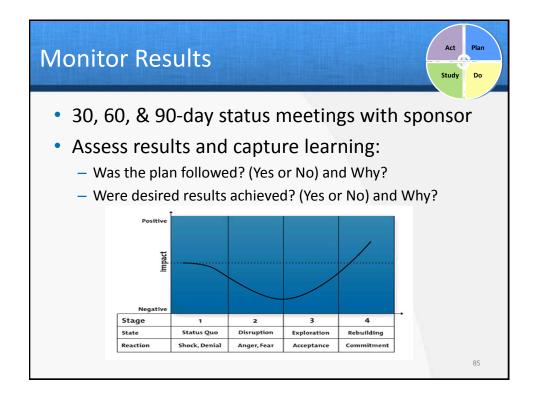
#### **Post Event Facilitator Actions**

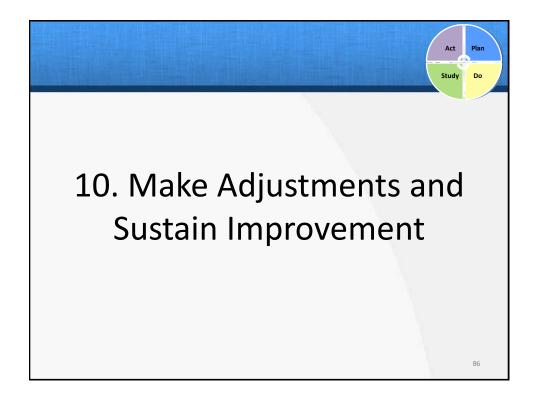


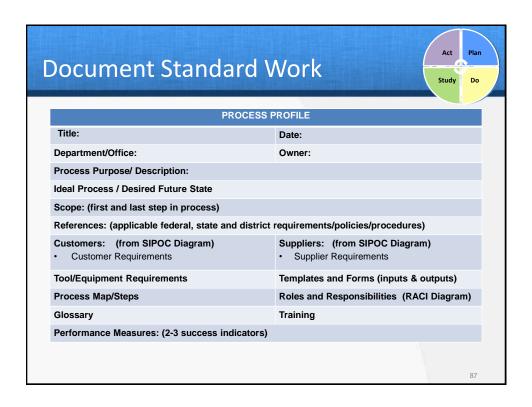
- 1. Deliverables: Give documentation to Team Leader (e.g., process maps, poster documentation, action plan, report out ppt)
- Send thank you/summary message may include project documentation (e.g., project summary, process handbook, etc.)
- 3. Implement action plan
- 4. Hold daily or weekly progress meetings
- 5. Establish a process for identifying and resolving issues
- 6. Conduct 30, 60, 90-day status reports with sponsor
- 7. Close action plan
- 8. Celebrate!

83

# 9. Monitor Performance







# **Parting Advice**



- Observe other facilitators
- Co-facilitate with someone more experienced until you are comfortable leading a project
- Have fun, if you're not having fun the team isn't having fun
- Questions?

#### Kaizen Resources



 Checklists, training PowerPoints, and other materials can be found on "Resources" tab at http://mn.gov/lean

Plus / Delta	Continuous Improvented to the state of the s
+ Plus	Δ Delta
What did you like?	<ul> <li>What didn't work for you (was difficult, unclear, etc.)?</li> <li>What changes should we make for the future?</li> </ul>
	90

#### Stay Connected!



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